

A translation analysis of a text entitled
The euro: how will it impact your software companies?
written by robin dalbergh translated by transtool version 5.0 program

By:
Margarita Nining Astuti
C.0301010

CHAPTER I
INTRODUCTION

A. Research Background

In the twenty first centuries, the cyberspace develops very fast. Computerized program interferes many branches of science in the world, including linguistic. Linguist together with computer specialist develops the sub discipline of linguistic called computational linguistics. As a part of linguistics, translation is also affected by those intense phenomena. Thus, machine translation is one of the objects of computational linguistics, which is concerned with meaning transference from one language (source language) into another (target language).

Machine Translation (MT) is a standard name for computerized system responsible for the production of translation from one language to another with or without any human assistance. MT system without any human assistance happens when the whole translation process is totally done by the computer. Meanwhile,

the MT with human assistance requires human's help, especially in pre-editing and post-editing stages.

Dealing with Machine Translation, TransTool (Translation Tool) program in computer is one kind of direct system of MT which is able to translate text from English into Indonesian or from Indonesian into English.

Many descriptions and definitions about TransTool can be found in the advertisement, Internet, magazine, or other media. TransTool is described as translation software which has a high ability to translate sentence, paragraph, or chapter smartly in a high rapid speed. Most of the description usually exaggerates the superiority of this program. They just list one weakness of this translation software.

However, Emily Delavenay in *An Introduction of Machine Translation* said that MT generally has some limitations. (1960: 103)

"Naturally, it (MT) will not at first be able to avoid displeasing repetitions of the same word; it will not clarify ambiguities in the original text: it will not always avoid facing the reader with a choice between several alternative translations of a single word."

Meanwhile, the outstanding MT pioneer Bar-Hillel argued that MT was not only practically, but also theoretically impossible (in Wills, 1982: 203).

"Expert human translator uses their background knowledge, mostly subconsciously in order to resolve syntactical and semantical ambiguities which machine will either have to leave unresolved, or resolve by some "mechanical" rule which will ever so often result in a wrong translation."

Thus, because TransTool is one kind of direct system of MT, the description that it has only one weakness is now questioned.

Dealing with the problem, the researcher will study the formal text entitled *The Euro: How It Will Impact Software Company?* written by Robin Dalhberg. The researcher tries to analyze the result of the translation of the text by using the TransTool 5.0 version. Economical text is chosen because the researcher sees the tendency that translation is commercially related to professionalism. In that case, TransTool is invented, made, and sold for business reasons as well. Then, economics is the branch of science which is closely related to the business world. This is used to anticipate whether the inventors of TransTool enlist words in economic field mostly in TransTool dictionary.

The examples of the translation produced by TransTool are given in the following. The result will be analyzed without any revision in both pre-editing and post-editing in order to get a true description.

The example is as follow:

(1.3) (SL): The transition will break some companies.

(TL): Transisi akan pecah;kan beberapa perusahaan

(03/02/01/A)

In the example above, the message of SL has been transferred correctly. The word “transition” is translated into “transisi”, the word “will” is translated into “akan”, while the noun phrase of “some companies” is translated into “beberapa perusahaan”. However, the TransTool translates the word “break” into “pecah;kan”, it is not a wrong translation, but it is better that the word should be

translated into “memecahkan” to match the formal style. Then, it is better to put the word “itu” after the word “transisi” in order to maintain the correlation with the previous sentence.

Then, the correction is as follow:

(1.3) (TL): Transisi itu akan memecahkan beberapa perusahaan

(03/02/01/A)



Another example is given below.

(1.10) (SL): Beginning in January 1999, doing business in these 11 countries means being able to conduct business in euro.

(TL): Permulaan pada bulan Januari 1999, berdagang di (dalam) ini 11 [alat/ makna] negara-negara menjadi mampu melakukan bisnis di (dalam) euro.

(10/04/04/D)

In the example above, there are few mistakes in the accuracy and intelligibility. In the accuracy, the phrase “beginning in January” is wrongly translated into “Permulaan pada bulan Januari”. Actually, it should be translated into “Mulai bulan Januari”. Meanwhile, the word “means” which is a verb is translated into “[alat/makna]” which is a noun. It makes the message of SL not transferred correctly in TL. The word should be translated into “berarti”.

Then in the intelligibility, the word “doing business” is better translated into “melakukan bisnis” rather than “berdagang”. Then the word “11 countries” must only be translated into “sebelas negara” rather than into “11 negara-negara”.

The translation should read as follows:

(CL): Mulai Januari 1999, melakukan kegiatan bisnis di dalam sebelas negara tersebut berarti juga melakukan bisnis dalam euro.

(10/04/04/D)

From the examples above, it can be seen that there are some mistakes in the translation produced by TransTool. In accordance with the phenomena, the researcher is eager to know about the ability of TransTool in translating text from English into Indonesian.

B. Research Limitation

The research limitation is needed to avoid the expansion of the problem. In this research, the researcher analyzes the translation result of economic text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg translated by TransTool version 5.0 program. The object of the research is limited to the quality assessment of the translation based on the intelligibility and accuracy and the kinds of error that occur in the result of the translation.

C. Problem Statement

The problems proposed in the research are:

1. How is the quality of the translation of the economic text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg translated by TransTool version 5.0 program based on the intelligibility and accuracy?
2. What kinds of errors occur in the result of the translation?

D. Research Objectives

The research is intended:

1. to describe the quality of the translation of the text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg translated by TransTool version 5.0 program.
2. to know the kinds of errors that occur in the result of the translation.

E. Research Benefits

Results of this research may give some benefits to:

1. English Department Student

The result of the research may give more knowledge to students, especially about the translation of a text by TransTool. Moreover, it is expected to broaden students' view in understanding about Machine Translation.

2. The TransTool Users

This research can become a reference to know more about the ability of TransTool version 5.0 program in translating text and to know the quality of the translation produced by it.

3. The Inventor of TransTool

The result of the research may give information about the real quality of TransTool. It can also be used as a foundation to make an effort in order to improve the TransTool's ability in translating the text.

4. Other Researchers

The research may give a description and a new perspective about TransTool and Machine Translation. Then, it may become a reference to other researchers who want to know deeper about TransTool and MT.

F. Thesis Organization

This thesis consists of five chapters and is arranged as follows:

CHAPTER I: INTRODUCTION covers Research Background, Research Limitations, Problem Statement, Research Objectives, Research Benefits, and Thesis Organization.

CHAPTER II : THEORETICAL REVIEW consists of The Definition of Translation, The Process of Translation, The Types of Translation, Machine Translation, TransTool Program, Message, and Varieties of The Language.

CHAPTER III : RESEARCH METHODOLOGY consists of Research Method, Data Source, Sample and Sampling Technique, Research Procedure, Technique of Collecting Data, and Technique of Analyzing Data.

CHAPTER IV : DATA ANALYSIS covers Analysis of the Quality of the Translation and Analysis of the Kind of Error of the Translation.

CHAPTER V: CONCLUSION AND SUGGESTION raises the conclusion and suggestions derived from the study.

CHAPTER II

THEORITICAL REVIEW

A. Translation

1. The Definition of Translation

There are a lot of definitions about translation given by some experts. Richard W Brislin states, “Translation is the general term referring to the transfer of thoughts and ideas from one language (source) to another (target), whether the languages are in written or oral form “ (1976, p.1).

Meanwhile J.C Catford in his book entitled *A Linguistic Theory of Translation* defines translation as, “ The replacement of textual material in one language (SL) by equivalent textual material in another language (TL).” Catford also writes, “Translation, as a process, is always uni-directional: it is always performed in a given direction “from” a source language “into” a target language (1965, p.20).

Mildred L Larson in his book *Meaning-Based Translation: A Guide To Cross-Language Equivalence* states, "Translation consists of transferring the meaning of the source language into receptor language. This is done by going from the form of the first language to the form of the second language by the way of semantic structure. It is meaning which is being transferred and must be held constant. Only the form changes." (1984, p: 2).

Furthermore D. Seleskovitch, states, "Translation is often considered as a code switching operation implying that a sequence of symbol from one language is substituted for a sequence of symbol in another language." Then, she adds, "Any substitution of one language component (be they phonemes, or in their written form, letter, grammatical mark, or lexical items) resulting in a correct linguistic equivalence could be termed translation." (in Brislin, 1976, p: 93).

Newmark in his book entitled *Approaches to Translation* also gives a description about translation. He states, "Translation is a craft in consisting the attempts to replace a written message and/or statement in one language by the same message and/or statement in another language." (1981, p: 7). Then, in *A Text Book of Translation*, he said, "What is translation? Often, though not by any means always, it is rendering the meaning of a text into another language in the way that the author intended the text." (1991, p: 5).

In the book *The Theory and Practice of Translation*, Nida and Taber states, "Translation consists in reproducing in the receptor language the closest natural equivalent of the source language message, first, in term of meaning and secondly in the term of style." (1974, p: 12-13).

From the definitions above, we can conclude that generally translation is a process that has to deal with two languages which are Source Language (SL) and Target Language (TL). The process between both languages is basically the transfer of message or idea contained in the Source Language into the Target Language. It means that the elements of SL (whether they are in written or oral form) are changed into the elements of TL thus resulting in a correct linguistic equivalence.

Meanwhile, the translator should also pay attention to the style of the text that is translated. It is in order to produce an appropriate translation in TL.

2. Process of Translation

Producing a good translation is not an easy task. There is a process that should be done by translator. Nida suggests three main activities in translation process; they are analysis, transfer, and restructuring. Nida illustrates the process into a scheme as follows:

The Process of Translation

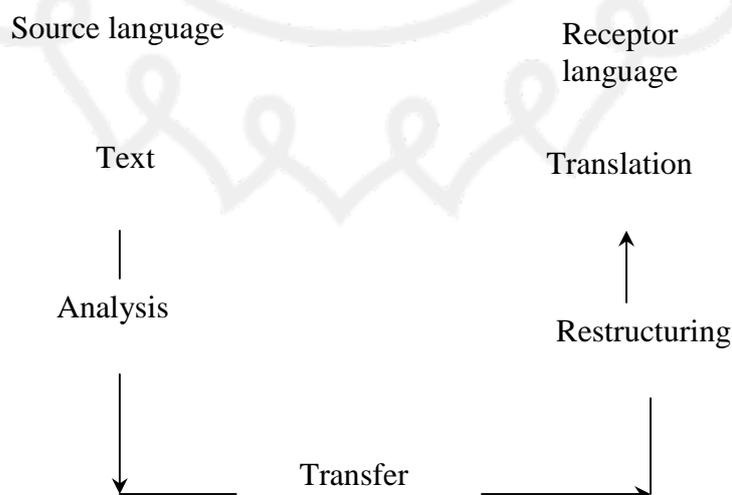


Figure 2.1 The Process of Translation

(Quoted from Humanika, 2002, p: 8)



The scheme can be analyzed as follows:

1. Source Language Text

In the first part, the translator must deal with the source language. He/she must read the text to understand the element in the sentence in order to understand the whole content or the meaning of the text.

2. Analysis

In order to get a full understanding about the entire content, the translator must do an analysis process. The analysis must cover the linguistic aspects of the text either grammatical or meaning analysis and it covers both referential and connotative meaning.

The analysis is conducted toward each element of the sentence. As Nababan stated in *Teori Menerjemah*; “Analisis kebahasaan yang dilakukan terhadap teks bahasa sumber menyentuh berbagai tataran, seperti tataran kalimat, klausa, frasa dan kata” (1997, p: 26).

3. Transfer

In this phase, called transfer, after understanding the meaning or message of Source Language into Target Language, the translator must try to find the correct and appropriate equivalence of the word in SL into TL so the translator is able to convey the meaning of SL into TL without any changes. Also, the translator must try to find the correct and appropriate strategy of message transferring. In this stage, even it is closely related to the last step, but the translation is not perfect yet, so the translation needs some restructuring.

4. Restructuring

Nida and Taber stated, “The transferred material is restructured in order to make the final message fully accepted in the receptor language.” (1974, p: 33)

Meanwhile, Kridalaksana said, “Penyelarasan atau restrukturisasi ialah pengubahan proses pengalihan menjadi bentuk stilistik yang cocok dengan bahasa sasaran, pembaca, atau pendengar.” (in Nababan, 1997, p: 19).

The translation in the transfer phase is not perfect yet, so it is necessary to handle some restructuring of the result of the message transferring. Restructuring is needed to make the text in TL is better as well as more acceptable. The activity done in this phase is the adjustment of the translation with the grammar of TL. It is also necessary for the translator, beside to maintain the meaning of SL, to pay attention to the style of the translation. The translator must find the best way to make the translation as natural as it can be when it is read by the reader (who is actually the user of the Source Language).

5. Receptor language

After the translator conducts a restructuring process, the translation task is completed. Then, the result of the whole process is the translation of the text from Source Language in the Target Language.

3. Types of Translation

There are a lot kinds of translation produced by translator. The difference can be caused by several factors which deal with SL and TL. According to Nababan the difference is caused by four factors : (1) the difference between the

system of SL and TL, (2) the difference of the kind of material in the text being translated, (3) the idea that translation is a kind of communication, and (4) the difference in the purpose of translating a text. (1997, p: 29).

The various type of translation can be mentioned as follows:

1. Word-for-word translation

Dealing with word-for-word translation, Catford in *A Linguistic Theory of Translation* states, “word-for-word translation generally means what it is says: i.e. is essentially rank-bound at word rank (but may include some morpheme-morpheme equivalence)” (1965, p: 25).

Meanwhile, Nababan says, “ Penerjemahan kata demi kata (word-for-word translation) adalah suatu jenis terjemahan yang pada dasarnya masih sangat terikat pada tataran kata” (1997, p: 30).

In word-for-word translation, the translator tends to translate every word of SL to TL without regarding the structure of TL. It means that the translator merely finds the equivalence of every word of SL to TL, and he/she does not do any further adjustment to the structure of TL. Then, as it is reflected from the term, this type is a kind of stiff translation.

For example:

SL (English) : His heart is in the right place

TL (Indonesian): Kepunyaannya hati adalah dalam itu benar tempat

(adapted from Nababan, 1997, p:33)

2. Free Translation

Free translation differs from word-word translation. In the last mentioned, every word of SL is rendered into TL without regarding the structure of TL. Meanwhile, free translation focuses on the whole context or message of the text.

Dealing with free translation, Catford states, “A free translation is always unbounded-equivalences shunt up and down the rank scale, but tend to be at higher ranks –sometimes larger units than sentence” (1965, p: 2)

In this type of translation, the main principal is the wider contextual meaning. Humanika in his book *Mesin Penerjemah: Sebuah Tinjauan Linguistik* states that “Kata-kata dalam Bsa secara individual tidak ekuivalen dengan kata-kata yang ada pada konstruksi dalam Bsu namun makna keseluruhan konstruksi tersebut dipindahkan dalam Bsa.” (2002, p: 17).

Free translation is not bounded in the effort to find the equivalence of every word of SL to TL. However, the translator underlines the idea of the whole content of the text being translated. In other words, the translator must understand the idea of all the sentences contained in one paragraph, or even one discourse as a whole.

For example

SL (English) : His heart is in the right place

TL (Indonesian): Dia baik hati.

(adapted from Nababan, 1997, p:33)

The translation of idiom and proverb also belongs to this kind of translation.

For example:

SL (English) : It's raining cats and dogs

TL (Indonesian): Hujan lebat sekali

(adapted from Humanika, 2002, p:18)

3. Literal Translation

Dealing with translation, Catford states, "Literal translation lies between these extremes; it may start, as it were, from a word-for-word translation, but makes changes in the conformity with TL grammar (e.g. inserting additional words, changing structure at any rank, etc.), this may make it a group-group or clause-clause translation." (1965, p: 25)

Larson in the book *Meaning Based Translation: A Guide to Cross-Language Equivalence* calls this type of translation as modified literal translation. He says, "Most translators who tend to translate literally actually make a partially modified literal translation. They modify the order and grammar enough to use acceptable sentence structure in the receptor language. However, the lexical items are translated literally." (1984, p: 16). He adds, "In a modified literal translation, the translator usually adjust the translation enough to avoid real nonsense and wrong meanings, but the unnaturalness still remains." (1984, p: 16).

In other words, in literal translation, the translator in the first place translates the word of SL literally to TL, and then he/she continues by adjusting

the translation according to the grammar of TL. The adjustment step is done to make the translation more acceptable in the TL.

For example

SL (English) : His heart is in the right place

TL (Indonesian): Hatinya berada di tempat yang benar.

(adapted from Nababan, 1997, p:33)

B. Machine Translation

The term machine translation is now a traditional and standard name of computerized system responsible for the production of translation from one natural language into another, with or without human assistance. The mechanization of translation has been a dream of everyone involved. Even in the twentieth century, it has been a reality when a computer programs is used for translating texts from SL into TL, but the reality is just not perfect.

There is actually no “translating machine”, which is as easy as touching a few buttons and then producing a perfect translation in an instant minute, without any human assistance at all.

The major obstacles to translating by computer are, as they have always been, not computational but linguistic. They are problems of lexical ambiguity, of syntactic complexity, of vocabulary differences between languages, of elliptical and ‘ungrammatical’ construction, of extracting the ‘meaning’ of sentences and texts from analysis of written signs and producing sentences and text in another set of linguistic symbols with an equivalent meaning.

However, MT cannot apply linguistic theories directly: linguists are concerned with explanation of the underlying ‘mechanism’ of language production and comprehension, they concentrate on crucial features and do not attempt to describe or explain everything. MT system, by contrast, must deal with actual texts.

It is true that the development of MT program has achieved an important advance. However, what has been achieved is the development of program which can produce raw translation of text in relatively well-defined subject domains, which can be revised to high quality translated text. Then, in some cases, with appropriate controls on the language of input text, translations can be produced automatically that is of higher quality needing little or no revision.

The following will describe brief history of MT, the practical use of MT the process of MT, and evaluation of MT.

1. Brief History of MT

The use of mechanical dictionaries to overcome barriers of language was first suggested in the 17th century when Descartes and Leibniz speculated on the creation of dictionaries based on universal numerical codes. In subsequent centuries there were many more proposals for international languages (with Esperanto as the best known), but few are made attempts to mechanize translation until the middle of this century. The proposal by the Russian, Petr Smirnov-Troyanskii, was more significant in retrospect. He envisaged three stages of mechanical translation: first, an editor knowing only the source language was to undertake the ‘logical’ analysis of words into their base forms and syntactic

functions; secondly, a machine was to transform sequences of base forms and functions into equivalent sequences in the target language; finally, another editor knowing only the target language was to convert this output into the normal forms of that language.

Within a few years research had begun at a number of US centers, and in 1951 the first full-time researcher in MT was appointed: Yehoshua Bar-Hillel at MIT. A year later he joined the first MT conference, where the outlines of future research were already becoming clear. There were proposals for dealing with syntax, suggestions that texts should be written in controlled languages, arguments for the construction of sub language systems, and recognition of the need for human assistance (pre and post-editing) until fully automatic translation could be achieved.

For the next decade many groups were active: some adopts empirical trial-and-error approaches, often statistics-based, with immediate working systems as the goal; others took theoretical approaches, involving fundamental linguistic research, aiming for long-term solutions.

In a 1960 review of MT progress, Bar-Hillel criticized the prevailing assumption that the goal of MT research should be the creation of fully automatic high-quality translation (FAHQT) systems producing results indistinguishable from those of human translators. He argued that the 'semantic barriers' to MT could in principle only be overcome by the inclusion of vast amounts of encyclopedic knowledge about the 'real world'. His recommendation was that MT

should adopt less ambitious goals; it should build systems which made cost-effective use of human-machine interaction.

In 1964 the government sponsors of MT in the United States formed the Automatic Language Processing Advisory Committee (ALPAC) to examine the prospects. In its influential 1966 report, it concluded that MT was slower, less accurate and twice as expensive as human translation and stated that ‘there is no immediate or predictable prospect of useful Machine Translation’. It saw no need for further investment in MT research. The ALPAC report was widely condemned as narrow, biased and shortsighted — it was certainly wrong to criticize MT because output had to be post-edited, and it misjudged the economic factors— but large-scale financial support of current approaches could not continue.

However, in 1980, the revival of MT research began to rise again. Many researchers were once again interested in MT research because of further advances of computer technology, in Artificial Intelligence and theoretical linguistic, as well as different MT users’ profile. In the last decade, the significant development is the appearance of commercial MT system. This revival of MT research in the 1980s and the emergence of MT systems in the marketplace have led

to growing public awareness of the importance of translation tools.

There may still be many misconceptions about what has been achieved and what may be possible in the future, but the most fundamental problems of computer-based translation are concerned not with technology but with language, meaning, understanding, and the social and cultural differences of human communication.

2. Process of Machine Translation

In his book entitled *Terjemahan: Pengantar Teori dan Praktek*, Zuchridin Suryawinata explains about the process involved in Machine Translation. He explains:

Secara sederhana proses terjemahan dengan komputer dapat digambarkan sebagai berikut:

1. Ditetapkan terlebih dahulu bidang ilmu apa yang mendapat prioritas untuk diterjemahkan, dan kemudian ditetapkan buku mana yang pantas untuk diterjemahkan.
2. Disusun kamus istilah dari Bsu ke Bsa, khusus dalam bidang ilmu tersebut diatas.
3. Ditelaah terlebih dahulu tulisan-tulisan ilmiah di bidang ilmu itu, untuk kemudian disusun pola-pola pokok gaya penulisannya baik dalam Bsu maupun Bsa.
4. Ditelaah pola-pola dasar kalimat-kalimat yang ada dalam buku itu kemudian disusun kembali menjadi kalimat-kalimat sederhana dengan mengikuti pola-pola dasar tersebut. Ini yang disebut pre-editing (edisi awal, edisi takdim).
5. Semua hasil penyusunan di atas, baik mengenai istilah, kosakata, pola-pola dasar kalimat dan sebagainya dibuat sedemikian rupa dalam bentuk masukan komputer (dalam "bahasa" komputer). Semua itu berpasangan satu dalam Bsu dan satu perangkat dalam Bsa.
6. Percobaan penerjemahan, yang diikuti dengan revisi dan edisi.
7. Edisi pasca (post editor) oleh seorang ahli terjemahan. (1989, p:43)

Meanwhile, Arnold in his book entitled *Machine Translation: An Introduction Guide* represents about the most important non-human component in MT, which he called translation engine. This is the component of MT that does the automatic translation. The translation engine can be classified based on their architecture, which is defined by Arnold as “the overall processing organization or the abstract arrangement of its various processing modules” (1994, p: 59).

Based on the classification, MT is divided into two engines; they are transformer (direct engine) architectures and linguistic knowledge architecture (indirect engine). The last one is still divided into transfer system and interlingua system.

In this research, the researcher will only explain about the transformer rule (direct engine) further, because this is the system applied in the TransTool version 5.0 programs.

The transformer architecture or direct engine is a traditional system in early generation of MT, but it is widely use in commercial MT in the todays market.

The main idea of direct engine is that the input (Source Language) sentences can be transferred into output (Target Language) sentences by doing the simplest possible parse. It is done by replacing word in the input (SL) with the equivalent word of output

(TL) as specified in the MT bilingual dictionaries then re-arranging their order to suit the rule of output (TL).

The process of the engine can be illustrated as follow:

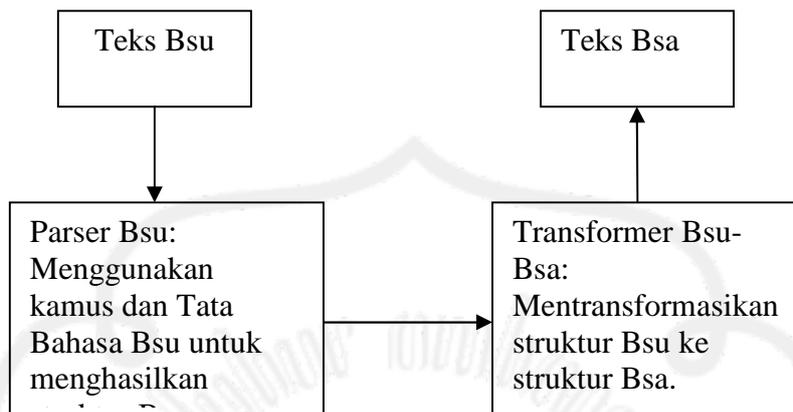


Figure 2.2 Process of Machine Translation In Direct Engine

(Quoted from Humanika, 2002, p: 61)

This approach seems rather sketchy and it ignores many details, even sometimes any analysis of the internal structure in the input (SL). For instance, it ignores the grammatical relation between the principal parts of the sentences. Then the ability of the engine in facing some ambiguity cases of a sentence is also questioned.

The translation result may be defined as well as word-for-word translation with only little local word-order adjustment. Sometimes, if the grammatical structure of input (SL) sentence is difficult to be recognized by the transforming rule of the engine, then the output (TL) sentence will come out without any adjustment at all. In other words, the output has same

linguistic feature with the input. Then with regard to the target language performance of the system, we can say since the system has no detail knowledge of the TL grammar, there is no guarantee that the transformed input sentence is actually a grammatical sentence in the TL (Arnold et. al., 1994, p: 64).

There are some restrictions in the direct engine that limit it on the development of additional language modules. First, the engine runs in one direction only, for example from English to Indonesian or from Indonesian to English. Then, second, the engine links a single pair of languages only.

3. The Practical Use of MT

There is a common view, represented in the figure below, which places human translator and MT at two ends of a spectrum of translation methods with various kinds of human-machine cooperation between them. At one extreme are fully computerized program without any human aid or assistance involved producing translation in a high quality, which is called Fully Automatic High Quality Translation (FAHQT). At the other extreme side is human translator involving no mechanical aids whatever as it has been practiced for many decades. Then, the terms of Human-Aided Machine Translation (HAMT) and Machine-Aided Human Translation (MAHT) are placed between those that are mentioned before. Both HAMT and MAHT cover a range system of types and methods: their

acronyms and names confusing, and also sometimes difficult to categorize system as one or the other. Therefore, the term Computer-Aided Translation (or Computer-Assisted Translation) is often used to covers all type. However, MAHT essentially includes the use of (generally) computer-based tool as aid for professional (human) translator, whereas HMT covers the use of MT system to produce translation with the assistance of human operator before, during, and after the computerized process.

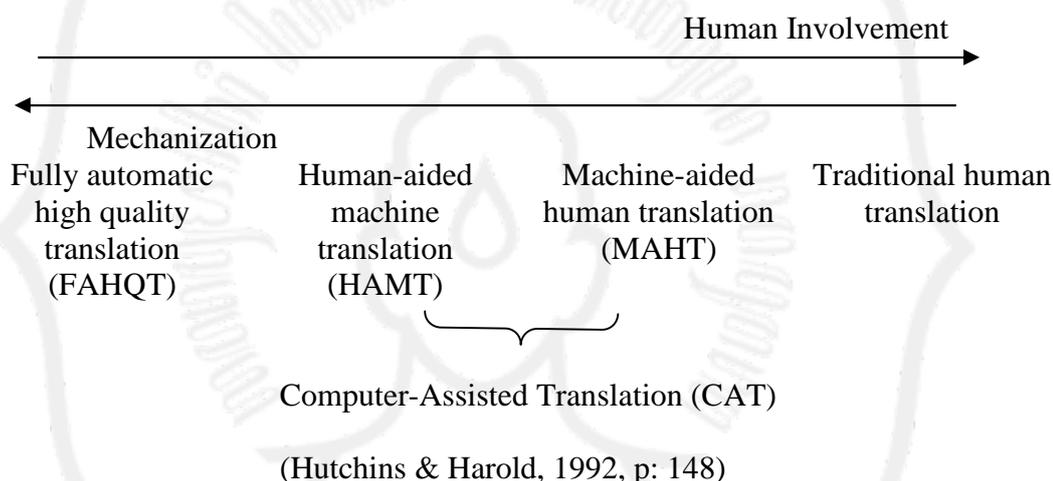


Figure 2.3 Human and Machine Translation

a. Fully Automatic High Quality Translation (FAHQT)

The term of fully automatic high quality translation (whose common acronym is FAHQT) is originated in the first time by Yehoshua Bar-Hillel, who consistently argued that fully automatic translation of a quality comparable to that of human translator was not merely an unrealistic aim for research but also impossible in principle. His arguments against FAHQT were that translation

involved certain human abilities which no computer could ever replicate. Specifically, he emphasized on the problem that known as 'real world knowledge', and his example was lexical ambiguity problem in the sentence. It is the ambiguity of the word "pen" in the sentence: "The box was in the pen". The sentence can be understood if we assume 'pen' here to mean 'a child playpen' rather than 'a writing utensil'.

Even given an appropriate context, it is the knowledge that we have about the relative sizes of typical pens and boxes which allow us to make the correct disambiguation and hence the correct translation. Bar-Hillel argued that we cannot envisage incorporating this kind of knowledge into an MT system, and that since this kind of knowledge is essential for FAHQT, the aim of FAHQT is itself impossible.

b. Machine-Aided Human Translation (MAHT)

Machine aid has been used and available for translator for a long time. It is computational linguistics which is changing the ways translator work, threatening (in the opinion of some) the image of translation as more an art, craft, or skill than a technique or job.

At the most basic level, the word processor (or word processing program for a microcomputer) may be regarded as a 'machine aid'. However, its use can hardly be called MAHT. At the very least, MAHT must involve a computer-based linguistic aid such as a program for checking spelling, grammar or style of the translation. Of more direct value are the increasing availability of on-line reference work such as dictionaries, thesauri, encyclopedias and other general

sources of information which translator may consult. However, generally, in MAHT the human translator is the one in charge, using machine aids or not is required or desired.

c. Human-Aided Machine Translation (HAMT)

In HAMT, it is the system itself which takes the most important role and responsibility in the translation activities, with human assistance to help the process when needed. Human involvement may be during the process, in 'an interactive' mode or outside the process, in 'pre-editing' or 'post-editing' stages.

The use of term 'interactive' may be confusing and it needs a classification. It refers strictly in human involvement during the actual processes of translation when the computer needs and seeks assistance in the interpretation of structures, the resolution of ambiguities and the selection of lexical item. It does not refer to any interaction between users and system before or after the translation process.

The term of pre-editing typically involves checking source text for foreseeable problems for the system and trying to eradicate them. It can include the identification of names (proper nouns), the marking of grammatical categories of homographs, indication of embedded clauses, bracketing of coordinate structures, flagging or substitution of unknown word, etc. In its extreme term, it involves the reformulation of the text using a "controlled language" in order to adapt source text to construction and vocabulary which the system can deal with. The writers of the text for translation are thus restricted to particular types of

construction and to the use of terminology and even words of common vocabulary in predefined meanings.

Whereas in the post-editing stage the task of the post editor is to correct output from the MT system to an agreed standard minimally in the case of texts wanted only for information purposes, by someone familiar with the subject matter, and thoroughly in the case of texts for widespread publication and distribution.

From the definition above, it can be concluded that TransTool 5.0 version program is categorized into Human-Aided Machine Translation that is needed human aid or assistance from human operator only in the post-editing stage.

4. The Evaluation of Machine Translation

The evaluation of Machine Translation is important for everyone involved: for instance, the researcher, commercial developers of MT, and the user. Those people have their own interest in evaluating MT. The researcher needs to know if their theories make a difference, commercial developers of MT want to impress customers, and the users have to decide which the system to employ. (Hovy et. Al, 2002, p: 43).

The International Organization for Standardization (ISO) together with The International Electro Technical Commission (IEC) has initiated an important effort towards the standardization of software evaluation. Through the ISO/IEC 9126 standard, they explain the definition about evaluation. It is stated:

Evaluation is the measure of the quality of a system in a given context, as stated by the definition of quality as “the totality of features and characteristic of a product or service that bear on its ability to satisfy stated or implied needs.” (ISO/IEC 9126, in Hovy et. Al., 2002)

Based on its purpose, White categorized the evaluation of MT into several kinds of evaluation. They are feasibility evaluation, internal evaluation, diagnostic evaluation, declarative evaluation, and operational evaluation (White in Humanika, 2000, p: 72).

This research will describe the declarative evaluation. It is because declarative evaluation the most common used evaluation and has a close relationship with linguistic feature since it is dealt with two linguistic characteristics, which are intelligibility and fidelity.

Declarative evaluation is addressed to measure the ability of MT in translating text through an actual way. The material dealt with declarative evaluation is the linguistic feature of output text viewed from the two important characteristics, which are the intelligibility and fidelity.

From the definition above, it is clear that the research is conducted to evaluate the translation produced by TransTool version 5.0 programs based on its intelligibility and fidelity. Another aspect that will be added is the error analysis regarding that this aspect also has close relationship towards linguistics.

A. Intelligibility

The traditional way of measuring a translation output is to give scores toward the output sentence. A common aspect that is scored is intelligibility,

where the intelligibility of a translation result may be affected by grammatical errors, mistranslation, and untranslated words. Intelligibility is the readability level of a text. The quality of a translation can be indicated by the reader's judgment toward the text. The less the readers understand the lower intelligibility scores. The assessment of intelligibility just deals with the Target Language text. It does not address to test whether or not the TL text is basically a correct and accurate translation from the SL

Scoring scales of intelligibility range from top marks into bottom marks. Top marks include those sentences that look like perfect and intelligible output (TL) sentence and bottom marks are for those sentence that are so badly degraded as to prevent the average translation/evaluator guessing what a reasonable sentence might be in the context. In between these two extremes, output sentence are assigned higher or lower score depending on the degree of awfulness (Arnold et. Al., 1994, p: 161).

There is an assessment standard in 4-scale of intelligibility proposed by Arnold. The standards are as follows:

- 1) The sentence is perfectly clear and intelligible. It is grammatical and reads like ordinary text
- 2) The sentence is generally clear and intelligible. Despite some inaccuracies or infelicities of the sentence, one can understand (almost) immediately what it means.
- 3) The general idea of the sentence is intelligible only after considerable study. The sentence contains grammatical error and/or poor word choices.
- 4) The sentence is unintelligible. Studying the meaning of the sentence is hopeless; even allowing for context, one feels that guessing would be too unreliable. (Arnold et. Al., 1994, p: 162)

Once devised, scoring scale need to be tested, to make sure that scale description are clear and do not contain any expression that can be interpreted differently by different evaluators.

B. Fidelity

Only by measuring intelligibility, the measuring task is not completed yet. Translator/evaluator will get only a partial view of translation quality. A highly intelligible output sentence need not be a correct translation of the source text. It is needed to check whether the meaning of the SL sentence is preserved in the translation. This assessment is called fidelity or accuracy.

Fidelity is basically the measurement of the correctness of the information transferred from the source language to the target language (Halliday in Van Slype 1979). Furthermore, Van Slype in his *Critical Study of Methods for Evaluating the Quality of Machine Translation* says that fidelity is 'the subjective evaluation of the degree to which the information contained in the original text

has been reproduced without distortion in the translation (Van Slype, in Hovy et al., 2002)

The fidelity test is done in combination (but usually after) with intelligibility text (Arnold, 1994: 63). In his book, however, Arnold did not describe the standard of fidelity explicitly. Therefore, Humanika in Mesin Penerjemah: Suatu Tinjauan Linguistik summarized the standard as follows:

1. Ide yang ada pada kalimat Bsa sama dengan yang ada pada Bsu, informasi yang ada pada teks Bsu telah dipindahkan secara lengkap dalam teks Bsa.
2. ide dan informasi yang ada pada kalimat Bsa secara umum sama dengan yang ada pada Bsu, meskipun terdapat kesalahan kecil pada keduanya.
3. Kesalahan makna yang terjadi dan informasi Bsu yang tidak dipindahkan ke Bsa relatif banyak.
4. Ide dalam teks Bsa sangat berbeda dengan yang ada pada Bsu, sangat banyak informasi Bsu yang tidak dipindah ke teks Bsa. (2002, p: 76)

C. Error analysis

In the context of post editing, Roy Green in his presentation entitled *The MT Errors which Cause Most Trouble to Post Editor*, defines an error as “any feature of the translation which causes the post editor to put pen to paper” (in Lawson, 1982, p: 101). Such definition covers a multitude of sins, of both commission and omission.

Various attempts have been made to classify and quantify errors in MT texts and this process must form the basis of any useful examination of errors. For this purpose Roy Green argues the three categories of the errors. The categories are based on the amount of trouble which the errors cause trouble to the post editor. Dealing with the term trouble, Roy defines it as “The amount of physical and mental effort required to correct error” (in Lawson, 1982, p: 101). They are:

i. Category 1—Minor Errors

This error is categorized as a blatant error, a kind of errors which quite easy to find. Hence these errors are easy to post edit as well. Particularly, to post edit this error, the editor only needs to delete, supply, or replace one or two word from the translation result. This category includes the misuse or omission of the definite article, wrong preposition, wrong personal pronoun or the wrong choice of translation (usually of a noun) when the alternatives translation is possible. These kinds of errors do not cause most trouble to the post editor since he/she just makes few adjustments to make the translation more perfect. The examples of this kind of error are:

- a. There are some incorrect translations of plural noun. The error occurs when MT fails to distinguish whether a noun is categorized into plural or singular noun. MT tends to translate incorrectly a plural noun into singular.
- b. There are some untranslated words in the translation. The errors occur when MT fails to find the meaning of a certain word. Thus, MT does not translates the word of SL sentence in TL. Usually, it is because the word is not listed in the TranTool's dictionary.
- c. There are some useless words in the translation. The kind of errors appears when there are a lot of superfluous word in the translation resulted by MT. The word usually makes the translation confusing.
- d. There are some incorrect translations of ambiguous words or phrases. The error may appear when MT cannot recognize the homography characteristic of the word. Then, the kind of error in the category can also be caused by transfer

ambiguity, which is when a single word can be ambiguous in the perspective of TL.

- e. There are many wrong word choices in the translation. The translation of the word in TL does not conform to the SL. Then, the word should be replaced by another word. This error sometimes is because the word may have more than one meaning or it is homograph with another word.
- f. There are some incorrect translations of preposition. This error belongs to the translation in which MT confuses in looking for the meaning of preposition. MT tends to translate the preposition incorrectly or the editor is left by two or more alternatives translation.

ii. Category II—Major Error

This category includes some more complex as well as substantial errors. These errors may deal with the word-for-word translation of an idiomatic translation. Then, these errors appear as well when the computer identifies a part of speech incorrectly. Another cases of these errors are the inability of the MT in changing the active verbs into passive verb. These errors often appear and contaminate the rest of the sentence translated with disastrous result.

However, this category is basically threatened almost similarly with the version of Category I errors, but in more complex situation. Again it is obvious that something has gone wrong, and there is no problem in identifying the word which has to be deleted, supplied, or replaced. Often, the fastest remedy toward the translation is to cross out the whole clause or sentence and write in one's own translation from scratch. In other word, basically, to post edit this category of

errors, the post editor need the same technique as of the Category I errors, that are the deletion or replacement of a word or clause, or sentence with the correct translation, but with the larger scale. The examples of this error are:

- a. There are some incorrect translations caused by the wrong identification of part of speech. A word may be assigned to more than one grammatical or syntactical category. Thus, this error occurs when MT fails to identify in which category the word is assigned.
- b. There are many incorrect translation caused by the different grammatical structure of SL and TL. This category also covers the error of idiomatic expression in translation. In structural differences, MT tends to transfer the message of SL accurately. However, the structure of TL is not appropriate in SL (Indonesian). Meanwhile, MT tends to translate the idiomatic expression word-for-word.
- c. There are many inverse word orders in the translation. This error appears when MT translates the noun phrase in SL sentence into incorrect word order in TL sentence. MT translates the noun phrases word by word and does not arrange them into correct noun phrases in the TL. Thus, this error may disturb the accuracy of the translation.

iii. Category III—Grey Areas

This category includes what might be termed as ‘doubtful translation and near misses’. On better days, or when feedback has had the desired impact, the computer sometimes provides reasonably intelligible phrases, clauses, and even whole sentence. Paradoxically, this is precisely what causes most trouble. It is

because there will be decision that appears more subjective made by the post editor than that of the first and second category. Initially, the post editor must make a yes/no decision, for instance whether or not to alter the text. Then, he/she must decide how far to go with his improvement. Should he 'patch up', salvaging as much as possible, should he cross it all out and substitute his own translation, or should he choose one of several possible middle courses? Even if the translation had been produced by a human translator these decision would be subjective, when MT is involved a further factor comes into play to affect one's judgment.

This factor is the post editor's general attitude toward MT. A post editor who sympathize MT generally will make as small as possible alterations. He/she tends to support the development of MT and wants MT to be successful, and so he/she may accept a lower standard of translation particularly when any alteration concern style rather than accuracy.

However, not all the post editor is willing to sacrifice their ideal by letting trough translation which they consider it to be unsatisfactory. A post editor who generally does not put much sympathy toward MT, will tend to find his/her worst suspicions confirmed at any turn, and will end up by condemning all MT out of hand and rewriting whole pages from scratch. The examples of the error are:

- a. There are some improper translations caused by incorrect placement of translation's element. It happens when MT places the translation's element in an incorrect word order. Actually, the incorrect placement does not change the

message of SL. However, it is still incorrect because the inverse word order is not appropriate to the TL.

- b. There are many improper translations needing a replacement by other word. This category occurs when one or more words in TL are needed some replacement by another word or they must be added by proposition. It is in order to adjust the formal style of the sentence and also to make the translation understandable. However, the replaced word may be synonymous with the substitute, so the replacement will not change the meaning of the sentences.
- c. There are some incorrect translations of a certain term. The error occurs when MT translates a certain term in TL improperly with the common one. Indonesian government has standardized the common usage of the term. Then it is improper when MT translates the term into another that is not appropriate with the common ones.

C. TransTool Version 5.0 Programs

TransTool is a Machine Translation program designed by TranTool Research and Development. This program is designed to do automatic translation for a text from English into Indonesian or from Indonesian into English. In the market, TransTool had been released in three version; V22KA (Windows version combining English-Indonesian and Indonesian-English translation); V22KB (English-Indonesian Version), and V22KC (Indonesian-English Version).

Transtool was designed to translate word-to-word, phrase-to-phrase, sentence-to-sentence, paragraph(s) to paragraph(s), from English into Indonesian

or from Indonesian into English with very rapid speed. The speed of Transtool in translating text depends on the ability of the processor of the CPU, more sophisticated the processor, faster the translation could be.

Transtool has dictionary to support its translation process. Its dictionary consists more than 100.000 words/idioms from English into Indonesian and more than 60.000 words and idioms from Indonesian into English. Besides, the user can edit, add, or subtract the entry of TransTool dictionary as needed.

Furthermore, in some ads, there are stated that TransTool version 5.0 program can produce the better translation compared with others previous version of TransTool. It is because there were several improvements in the TransTool program dealing with the translation of technical, medical, economical, law, agricultural, biological, socio-political language. (<http://www.transtool.web.id>)

A. The Specification of TransTool

TransTool version 5.0 program belongs to V22KA version. It can translate a text from English into Indonesian or from Indonesian into English. The physical form of this program is a Compact Disk (CD), which must be installed into the computer hard disk. This program requires AT486DX4 processor or Pentium, the memory RAM minimum 32 MB, memory capacity left for at least 100MB.

The hardware requirement of the program is a CD, so it is required for the computer to have a CD drive, particularly in the first installment of the program/ besides, the mouse is also needed to move the cursor in the entire direction in the monitor screen. A scanner with OCR is an optional requirement in

the TransTool. Indeed, it can make the replacement text process easier, because since language text can be directly copied into the screen, so that it is not needed to write the entire text into the screen.

Beside the hardware requirement, TransTool version 5.0 programs require some softwares, which are Windows 9x, 2000, NT, ME, or XP and Word Processor to edit the file. The other software is Paradox 9 or Paradox Runtime, which is supplied in the package.

The descriptions of TransTool capabilities and limitations belows are the common description listed most in the advertisement about the program.

1. Transtool can recognize the grammatical structure of both Indonesian and English language. TransTool translates the sentence of 'I have a good house' into 'Saya mempunyai suatu rumah baik' rather than into 'Saya mempunyai suatu baik rumah'
2. It works automatically and tireless.
3. Its data input can be in form of text in ASCII file/text format or Rich Text Format, copy and paste in Windows, and a text directly typed into the screen.
4. The data output can come out in Target Language text or in Source Language text followed by Target language text.
5. The programs have more than 100.000 words and idioms (English-Indonesian) and more than 60.000 words and idioms (Indonesian-English).
6. It has the ability to find meanings of a word which is not listed yet in its dictionary.

7. If a word has more than one meaning, the Transtool program will try to choose the most appropriate context compared to the context of the sentence.
8. If the program fails to find the meaning of a certain word, the word will not be translated and will be written in the original word.
9. There is a facility for the user to add or change the entries in the dictionary.

B. The Operation of Transtool

For first installation of the TransTool, the user must insert the TransTool CD into CD-drive; if it is possible, the program set up will start automatically. However, if the automatic start does not work, the user can open the windows explorer program then clique the CD-drive option, then clique the SETUP 32 option, thus the user must follow the instruction displayed in the screen.

The user must follow the instruction displayed in the screen simultaneously until the end of installation process. Then, in the end of the process, the user must clique the YES option to restart the computer.

If the user is not operating the Win 9x program, after the restart process he must make the folder named C:\ TransTool shareable using the folder setting facility.

The process of TransTool installation will automatically direct the program for entering itself into the C:\ TransTool folder. However, if the user had changed the setting of the program, he/she must do the adjustment process as follow: (1) Clique Start/Setting/Control Panel option, (2) Double clique the BDE

Administrator option, (3) Clique Databases option, (4) Clique TransTool option, then change the PATH adjusted to the user's TransTool folder choice, and (5) Clique the Transinit option, then change the PATH adjusted to the user's TransTool folder choice.

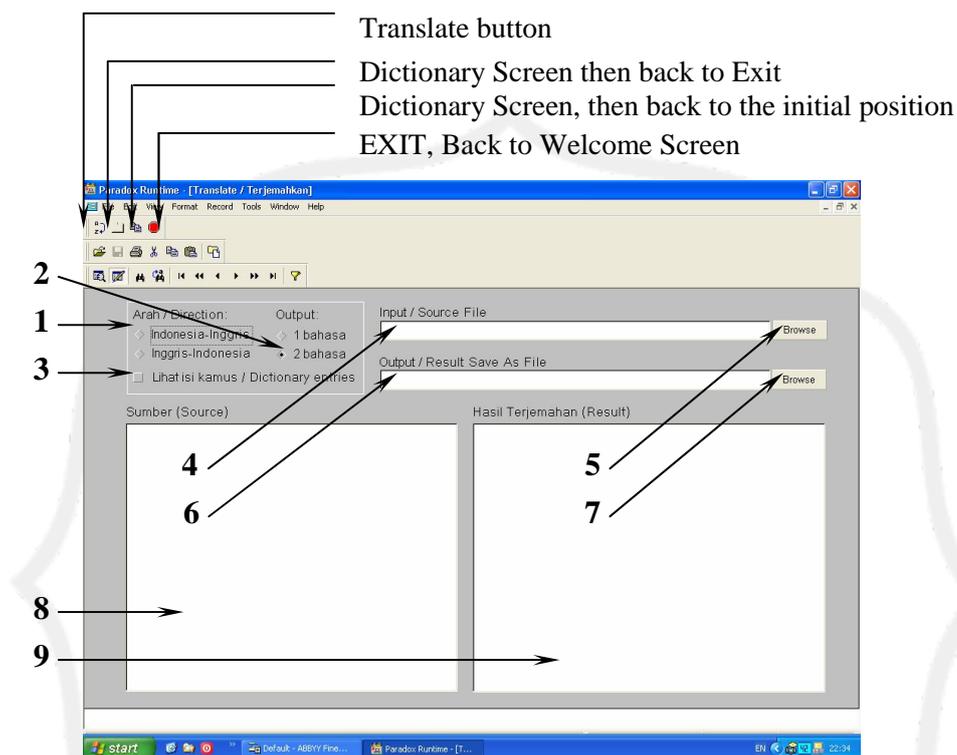
Finally, the user can continue to the operation of TransTool.

In the First operation of TransTool, the screen will appear on the monitor. Then the user will be asked to enter the PASSWORD. The user can get the PASSWORD by calling the contact listed in the CD.



If the user has gotten the Password, he/she must insert the userID, then insert the Password into the screen. Then, the user must clique the OK option, a while longer the screen of "Password Authority OK!" will appear. Thus, the user must clique the TransTool icon, not long afterwards the "Welcome" screen will appear. For the next operation, the screen will be disabled.

Transtool has some options that can be used by the user to support the translation process. The picture below shows the option listed in the Transtool:



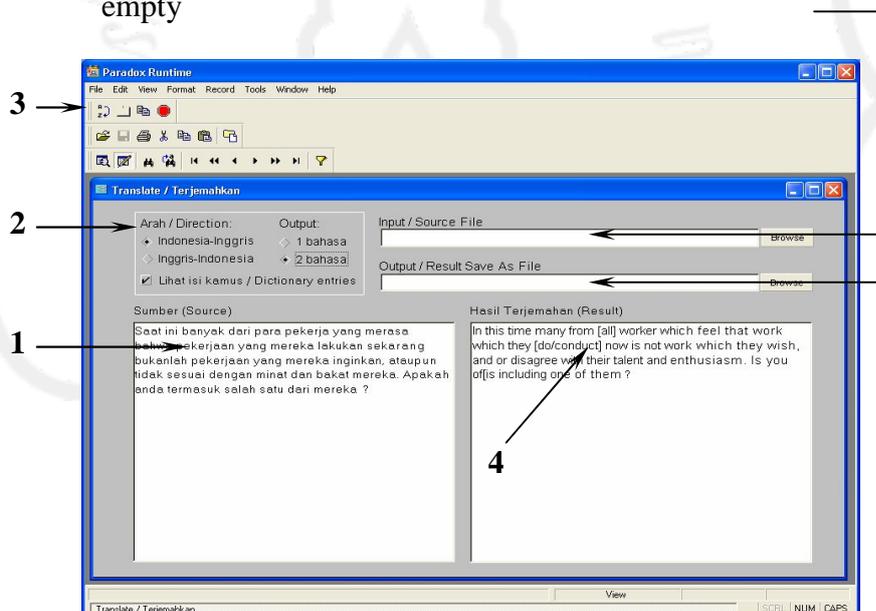
The number of the picture describes the option of Transtool, which can be explained as follow

1. The direction of translation process (from English into Indonesian or from Indonesian into English)
2. The output option, which can be in form of TL only or in SL together with TL
3. The check mark to see the supporting words/idioms
4. The input file name that will be translated
5. The facility to search the input File name

6. The name of file output of translation result location
7. The facility to search the output File name
8. The column for the Source Language text or sentence
9. The column for the Target Language text or sentence

There are many kinds of translation in Transtool. They are (1) the screen-to-screen translation; (2) screen-to-file translation; (3) clipboard-to-screen translation; and (4) file-to-file translation. In this research, the researcher uses the first kind of translation process of TransTool, which is screen-to-screen translation. The screen-to-screen translation can be illustrated below:

Note: The Input File and Output File column must be empty



In the first step, the researcher types the Source Language sentence to the screen (illustrated in number 1). Second, the researcher determines the direction of the translation process. In this case, the researcher chooses the English into Indonesian translation (illustrated in number 2). Then, the researcher cliques the

“Translate” button (illustrated in number 3) to make the TransTool doing the translation process. Finally, the result of the translation will be displayed in the screen (illustrated in number 4).

D. Message

Dealing with message, in *Dictionary of Scientific and Technical Term*, Lapedes defines the term as, “message of communication is a series of word or symbol transmitted with the intention of conveying information” (Lapedes in Nababan, 1997, p: 52).

Meanwhile, Nida states, “The message...represents the verbal elements which are communicated” (1964, p: 121). Then Kridalaksana also states, “Amanat (message) ialah keseluruhan makna atau isi wacana, konsep dan perasaan yang hendak disampaikan pembicara untuk dimengerti dan diterima oleh pendengar” (Kridalaksana in Nababan, 1997, p: 52).

In the translation process, the important point is the transferring message from SL into TL. Dealing with this matter, Sadtono in his book *Pedoman Penerjemahan* says, “Hal yang paling penting dalam penerjemahan ialah isi berita. Ini berarti bahwa perubahan yang radikal dalam persamaan bentuk dengan persamaan arti, bukan saja boleh dilakukan melainkan wajib dilakukan”(1985, p: 10).

Furthermore, he explains that, “Penerjemah yang teliti tentu menyampaikan berita dari teks yang diterjemahkannya dengan arti atau maksud yang tidak menyimpang dari berita asal” (ibid, p: 10).

From the definition above, we can conclude that message is basically anything that is communicated by a writer, a speaker, to the reader or listener. Message is generally a set of sign possessing any meaning. Then, those sign is addressed by written or oral form to the people who use the language as the reader or listener.

E. Varieties of Language

Dealing with varieties of language, Martin Joos in his book entitled *The Five Clock* defines five of varieties in English language which is also applied in Indonesian language. The varieties are:

1. Ragam beku (frozen) ialah ragam bahasa yang paling resmi dipakai dalam situasi yang paling khidmat dan upacara-upacara resmi.
2. Ragam pidato (formal) ialah ragam bahasa yang dipakai dalam pidato-pidato resmi, rapat dinas, surat-surat dinas dan sebagainya.
3. Ragam usaha (consultative) ialah ragam bahasa yang sering digunakan dalam transaksi bisnis, rapat-rapat dunia usaha. Ragam ini berada pada tingkat yang paling operasional.
4. Ragam santai (casual) ialah ragam bahasa yang sering dipakai dalam berbagai kegiatan yang bersifat santai, rileks, misalnya antara penyiar dengan para pendengarnya di radio.
5. Ragam Akrab (intimate) ialah ragam bahasa yang dipergunakan dalam pergaulan rumah tangga (antar anggota keluarga), sehingga menunjukkan hubungan yang sangat akrab (in Nababan, 1984, p: 22-24).

From the explanation above, the variety used in the text entitled **The Euro: How It Will Impact Your Software Company?** written by Robin Dalhberg is the formal style.

Therefore, the text has some characteristics, which are one-way participation, with no interruption as well as careful, correct, accurate, complete, and neutral. One more characteristic of the formal text, which is technical vocabulary, 'fussy semantic' or exact definition are important point, is also applied in this text.

CHAPTER III

RESEARCH METHODOLOGY

Type of Research

In this research, the researcher employs a qualitative mode. The phrase qualitative methodology refers in the broadest sense to research that produces descriptive data, people's own written or spoken words and observable behaviors. (Taylor and Bogdan, 1984: 5)

From the explanation above, it is clear that this research employs an descriptive method, which is started from collecting the data, classifying the data,

analyzing the data, and then draw conclusions. The data used as the samples of research are not figures, but might be some words or description of something. (Hadi, 1983, p:2).

By using the descriptive method, the researcher tries to describe the quality of the translation of the text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg and translated by TransTool 5.0 version. The analysis is conducted based on the intelligibility and accuracy and the kinds of error in translation.

Data Source

Data source is the subject from which a researcher gets the data. The data of a research can also be in the form of a text or other documents.

In this research, the data were taken from the economical text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg and its translation produced by TransTool program.

Sample and Sampling Technique

Dealing with sample, Brian Allison states, "This is the group of subjects from whom you actually intend to collect information by interviewing, observing, or measuring, etc"(1996, p: 30). Meanwhile, according to him, subject is "each instance in the given group which is being studied and on which data is being collected"(1996, p: 24).

In this research, the researcher uses total sampling. It means that all the data are used as the sample. The sample is the economical text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg and its translation produced by TransTool 5.0 version program. The text consists of twenty paragraphs which amount 69 sentences. As mentioned before, the researcher uses total sampling, which means all the paragraphs and sentences of the text, was taken as the sample of the research.

Research Procedures

In the research, the researcher uses the following procedures:

1. Taking the paragraph of the text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg and its translation produced by TransTool 5.0 version program as the object of this research.
2. Giving code to each datum.

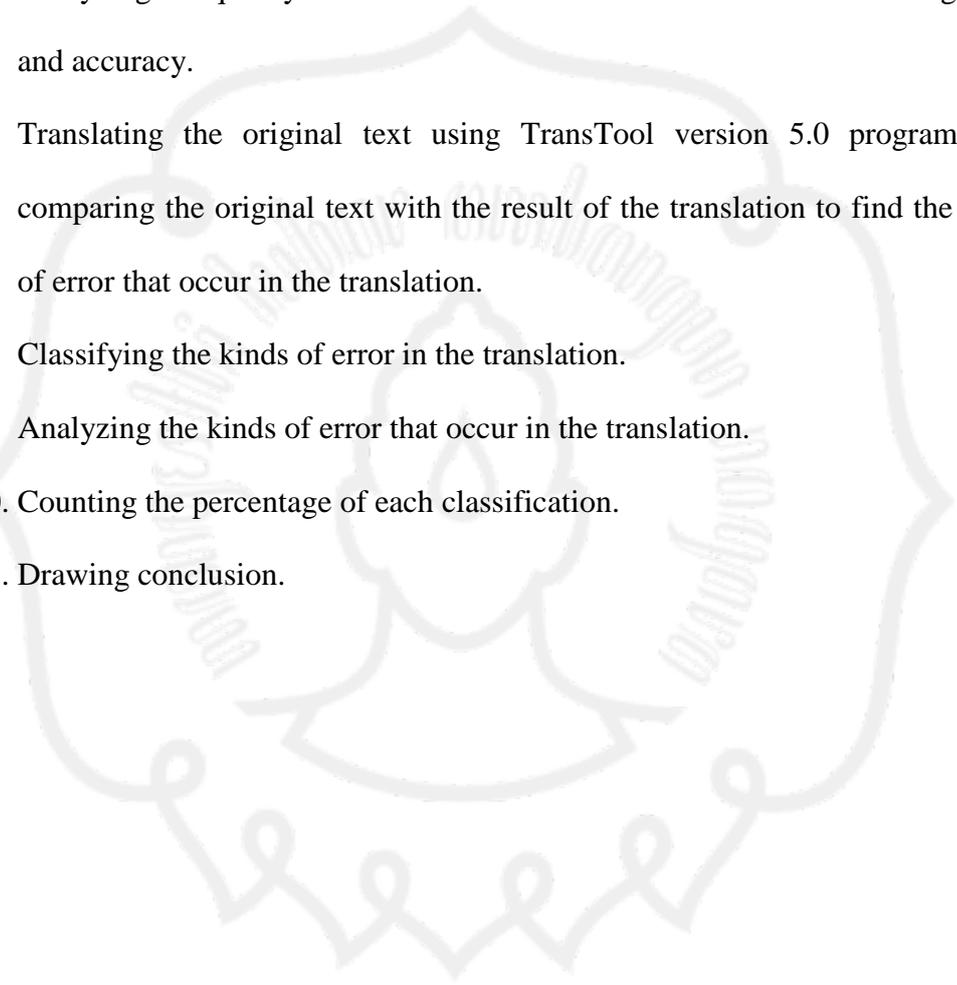
(2.1) (SL): The transition will break some companies.

(TL): Transisi akan pecah;kan beberapa perusahaan.

(03/02/01/A)

From the example, 03 is the number of the datum, the number 02 shows the paragraph while 01 is the number of the sentences in it. The last code, A, is the kind of classification in the data analysis.

3. Making a list of data in the form of questionnaire and giving the questionnaire into three respondents to rate the intelligibility and accuracy of the translation.

4. Checking the questionnaires and collecting the rating of intelligibility and accuracy.
 5. Classifying the data based on the rating given to know the quality of the translation produced by TransTool program.
 6. Analyzing the quality assessment of the translation based on the intelligibility and accuracy.
 7. Translating the original text using TransTool version 5.0 program then comparing the original text with the result of the translation to find the kinds of error that occur in the translation.
 8. Classifying the kinds of error in the translation.
 9. Analyzing the kinds of error that occur in the translation.
 10. Counting the percentage of each classification.
 11. Drawing conclusion.
- 

Technique of Data Collection

The text being analyzed in the research is entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg. It consists of twenty paragraphs. The researcher takes all the paragraphs of the text as the sample. Each paragraph consists about 3-7 sentences, so there are 69 sentences as the data.

In collecting the data, the researcher takes the following steps:

1. Collecting the data which are paragraphs of the text entitled **The Euro: How It Will Impact Your Software Company?** written by Robin Dalhberg and its translation by TransTool program.
2. Taking the entire paragraphs, which are about twenty paragraphs that amount 69 sentences as the samples of the research.
3. Giving code to each datum. For example;

(2.1) (SL): The transition will break some companies.

(TL): Transisi akan pecah;kan beberapa perusahaan.

(03/02/01/A)

From the example, 03 is the number of the datum, the number 02 shows the paragraph while 01 is the number of the sentences in it. The last code, A, is the kind of classification in the data analysis.

Technique of Data Analysis

1. To know the intelligibility, the researcher makes a questionnaire given to the three respondents. The respondents rate the intelligibility of the translation by filling the questionnaire. They can rate the intelligibility based on 1-4 scale.

The scales are as follows:

- a. Scale 4: The sentence is perfectly clear and intelligible. It is grammatical and reads like ordinary text.
- b. Scale 3: The sentence is generally clear and intelligible. Despite some inaccuracies or infelicities of the sentence, one can understand (almost) immediately what it means.
- c. Scale 2: The general idea of the sentence is intelligible only after considerable study. The sentence contains grammatical errors and/or poor word choices.
- d. Scale 1: The sentence is unintelligible. The meaning of the sentence is not clear at all, even allowing for context, one feels that guessing would be too unreliable.

Then, the researcher does a statistical calculation done by finding the mean. The mean is achieved by counting the average scores given by the respondents. The researcher counts the mean by first adding up each rating given by respondents to find the total rating, and then the total rating is divided by the number of the respondents (in this case is three). The mean is counted by:

$$\text{Mean} = (\text{total rating}) : \text{numbers of respondents}$$

For example, for the data number 16, respondent A values it 3; respondent B values it 2, whereas respondent C values it 2. Then, the data number 16 has the mean of 2,3 derived from $(3 + 2 + 2) : 3$. Therefore, the data is considered to get the value of 2

2. To know the accuracy, the researcher makes a questionnaire given to the three respondents. The respondents of accuracy are the same respondents of intelligibility, but the accuracy is rated after the intelligibility. The respondents rate the accuracy of the translation by filling the questionnaire. They can rate the accuracy based on 1-4 scale. The scales are as follows:
 - a. Scale 4: The idea of SL text is exactly the same with the idea in TL text. The information contained in the SL text is completely transferred into TL text.
 - b. Scale 3: The idea of SL sentence is generally the same with the idea in TL sentence. However, there are few mistakes due to the mistake of the transfer of the information from SL into TL, even the mistakes do not quite disturb the accuracy.
 - c. Scale 2: There a lot of information contained in the SL sentence which is not transferred into TL sentence. There are also a lot of mistakes in meaning of the TL sentence
 - d. Scale 1: The idea of SL is totally different with the idea of TL sentence. The idea contained in the SL sentence is not transferred at all into TL sentence.

Then, the researcher also does a statistical calculation done by finding the mean. The mean is achieved by counting the average scores given by the respondents. The researcher counts the mean by first adding up each rating given by respondents to find the total rating, and then the total rating is divided by the number of the respondents (in this case is three). The mean is counted by:

Mean = (total rating): numbers of respondents

3. The researcher then analyzes the quality of the translation based on its intelligibility and accuracy. In analyzing the quality of the translation, the researcher makes four classifications. The analysis is further explained in the next chapter.
4. To know the kinds of error that occur in the translation, the researcher translates the original text using TransTool version 5.0 program. Further, the researcher compares the result of the translation produced by it with the original text to find the kinds of error in the translation. Then, the researcher classifies the kinds of error by relating them to the theoretical context of the study. For analyzing the kinds of error, the researcher makes three categories based on amount of trouble which the error causes to the post editor. Each category, then, is divided into several sub-categories.

CHAPTER IV

DATA ANALYSIS

In analyzing the data, the researcher makes the classification in two parts. The first part is the classification based on the quality assessment of the translation. Meanwhile, the second part is the classification based on the kind of error that occurs in the translation. Then, the classification is as follow:

1. Classification based on the quality assessment
 - a. Classification A

The translation provides both the accuracy and intelligibility in the original work.

b. Classification B

The translation has the improper intelligibility but it provides the accuracy in the original work

c. Classification C

The translation has the intelligibility of the original work but the accuracy is improper.

d. Classification D

Both the accuracy and intelligibility of the translation are improper.

2. Classification based on the kind of error in the translation

The classification based on the kind of error of the translation is divided into three basic groups. Each group, then, is divided into several classifications. The classifications are as follows:

2.1. Category I: Minor Error

The kind of error which belongs to this classification is the blatant error. It is easy to identify and easy to post edit, particularly since one or two words have to be deleted or supplied. These errors do not cause much trouble to the translation.

a. Category I.1

The error occurs when MT fails to distinguish whether a noun is categorized into plural or singular noun. MT tends to translate incorrectly a plural noun into singular. Hence, the errors tend to affect the meaning of the sentence, and thus give a wrong impression in TL.

b. Category I.2

The errors occur when MT fails to find the meaning of a certain word. In the translation, the word is remained untranslated. Usually, it is because the word is not listed in the TranTool's dictionary. This generally proves that the MT vocabulary of word is limited.

c. Category I.3

The kind of errors comes when there are a lot of useless word in the translation resulted by MT. The word usually makes the translation meaningless. Sometimes, the wasted words also disturb the accuracy of the translation, since it causes the translation for being difficult to understand.

d. Category I.4

This error happens when MT fails to recognize an ambiguity of words or phrase in the sentences. The error may appear when MT cannot recognize the homograph characteristic of the word. Some words have homograph characteristic when two words or more with quite different meaning have the same spelling. Then, the kind of error in the category can also be caused by transfer ambiguity, which is when a single word can be ambiguous in the perspective of TL.

e. Category I.5

This error occurs if there are many wrong choices of word in the translation done by MT. The translation of the word does not conform to the SL. Then, the word should be replaced by another word. This error sometimes is because the word may have more than one meaning or it is homograph with another word.

f. Category I.6

This error belongs to the translation in which MT confuses in looking for the meaning of preposition. MT tends to translate the preposition incorrectly or the editor is left by two or more alternatives translation.

2.2. Category II: Minor Error

This category covers more substantial and complex error. These errors often manage to contaminate the rest of the sentences with disastrous result. However, these are just more complex version of Minor Error category. In other word, it needs the same technique as for Category I errors, but on a larger scale.

a. Category II.1

This error occurs when MT identifies part of speech incorrectly. A word may be assigned to more than one grammatical or syntactical category. Thus, this error occurs when MT fails to identify in which category the word is assigned.

b. Category II.2

The error occurs because of the structural differences between English (SL) and Indonesian (TL). This category also covers the error of idiomatic expression in translation. In structural differences, MT tends to transfer the message of SL accurately. However, the structure of TL is not appropriate in SL (Indonesian). Meanwhile, MT tends to translate the idiomatic expression word-for-word.

c. Category II.3

This error occurs when there is incorrect placement or inverse word order. The error makes the sentences become confusing and meaningless.

2.3. Category III: Grey Area

This category includes what might be termed of "doubtful translation and near misses". The computer sometimes provides reasonably intelligible clauses and even whole sentences. Paradoxically this is what precisely what causes most trouble.

a. Category III.1

The error of the category occurs when MT places the translation's element in an incorrect word order. Actually, the incorrect placement does not change the message of SL. However, it is still incorrect because the inverse word order is not appropriate to the TL.

b. Category III.2

This category occurs when one or more words in TL are needed some replacement by another word or they must be added by proposition. It is in order to adjust the formal style of the sentence and also to make the translation understandable. However, the replaced word may be synonymous with the substitute, so the replacement will not change the meaning of the sentences.

c. Category III.3

The error occurs when MT translates a certain term in TL improperly with the common one. Indonesian government has standardized the common usage of the term. Then it is improper when MT translates the term into another that is not appropriate with the common ones.

A. Analysis of The Quality of The Translation

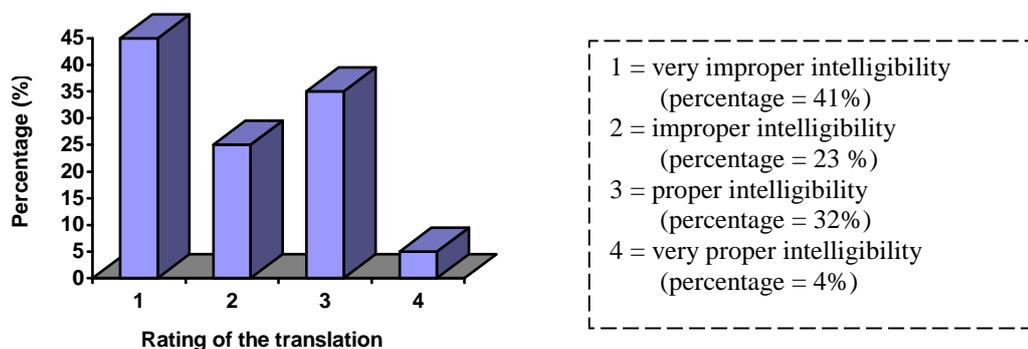
In this chapter, the researcher describes the analysis of the data. The analysis is conducted to know about the quality of the translation and the kinds of error in the translation.

In analyzing the data, the researcher makes classification of the data according to the quality of the translation and the kinds of error in the translation. Then, the analysis will be described below.

In analyzing the quality of the translation, the researcher makes a questionnaire and ask three respondents to rate the translation of the text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg translated by TransTool program according to the intelligibility and the accuracy of the text.

In the intelligibility, the respondents are asked to examine the target language text only. The respondents can rate the intelligibility in a 1-4 scale. The rating of the intelligibility of the translation of the text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg translated by TransTool program is illustrated in the figure below.

Figure 4.1
The Intelligibility of The Translation



In the figure above, the numbers in horizontal line are used to point out the rating of the intelligibility of the translation. The scale of 4 is used to the sentence which has a very proper intelligibility. In other words, the sentence is perfectly clear and intelligible. It is grammatical and reads like ordinary text. The scale of 3 is used to the sentence that has a proper intelligibility. It means that the sentence is generally clear and intelligible. Despite some inaccuracies or infelicities of the sentence, one can understand (almost) immediately what it means.

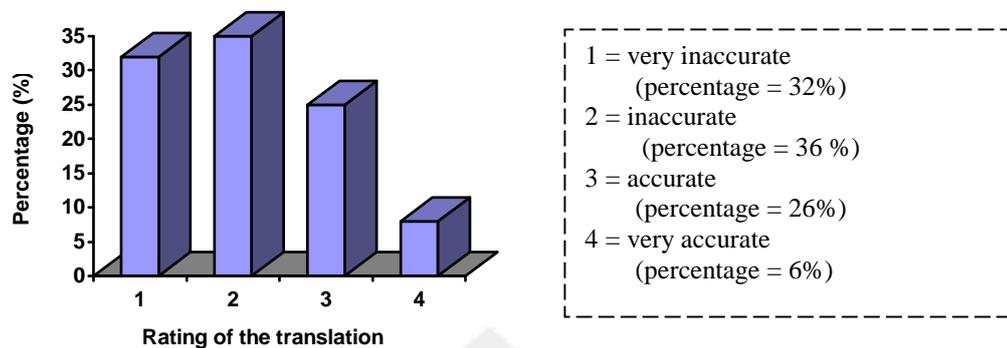
Then, the scale of 2 is used to the sentence which has an improper intelligibility. In other words, the general idea of the sentence is intelligible only after considerable study. The sentence contains grammatical error and/or poor word choices. Meanwhile, the scale of 1 is used to the sentence that has a very improper intelligibility. It means that the sentence is unintelligible. The meaning of the sentence is not clear at all, even allowing for context, one feels that guessing would be too unreliable. Hence, in the analysis of the quality of the translation, the data with the rating of 3 and 4 is regarded as the sentence which has proper intelligibility. Meanwhile, the data with the rating of 2 and 1 is regarded as the sentence which has improper intelligibility.

Meanwhile, the numbers in vertical line is used to point out the percentage of each rating of the translation of the data. It illustrates that there are 3 (4%) data which get 4, 22 data (32%) which get 3, 16 (23%) data which get 2, and 28 data (41%) which get 1.

In the accuracy, the researcher applies the same method. The questionnaire is also given to the three same respondents in order to rate the accuracy of the translation. The respondents are asked to examine the SL sentence as well as the TL sentence in order to rate the accuracy of the translation. The respondents can also rate the translation in 1-4 scale.

The rating of the accuracy of the translation of the text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg translated by TransTool program is illustrated in the figure below.

Figure 4.2
The Accuracy of The Translation



In the figure above, the numbers in horizontal line are used to point out the rating of the accuracy of the translation. The scale of 4 is used to the sentence which is very accurate. In other words, the idea of SL sentence is exactly the same with the idea in TL sentence. The information contained in the SL text is completely transferred into TL text. Then, the scale of 3 is used to the sentence that is accurate. It means that the idea of SL sentence is generally the same with the idea in TL sentence. However, there are few mistakes due to the mistake of the transfer of the information from SL into TL.

Then, the scale of 2 is used to the sentence which is inaccurate. In other words, there is a lot of information contained in the SL sentence which are not transferred into TL sentence. There are also a lot of mistakes in meaning of the TL sentence. Meanwhile, the scale of 1 is used to the sentence that is very inaccurate. It means that the idea of SL is totally different with the idea of TL sentence. The idea contained in the SL sentence is not transferred at all into TL sentence. Hence, in the analysis of the quality of the translation, the data with the rating of 3 and 4 is regarded as the sentence which has proper intelligibility. Meanwhile, the data with the rating of 2 and 1 is regarded as the sentence which has improper intelligibility.

Meanwhile, the numbers in vertical line is used to point out the percentage of each rating of the translation of the data. It describes that in the accuracy, there are 4 data (6%) which get 4, 18 data (26%) which get 3, 25 data (36%) which get 2, and 22 data (32%) which get 1.

In analyzing the quality of the translation, the researcher gives four classifications to define the quality of the translation. Then, the analysis of the quality of the translation of the text entitled *The Euro: How It Will Impact Your Software Company?* written by Robin Dalhberg translated by TransTool program according to the intelligibility and the accuracy of the text are as follows:

1. Classification A

In this classification, the translation produced by MT provides an intelligible as well as an accurate translation. The intelligibility of the text is proper, the sentence is understandable and the idea of the translation is generally clear. Then, in the accuracy, MT translates the text accurately and the idea of SL text is transferred correctly. However, both in the accuracy and the intelligibility, there is still some editing process needed to make the translation more perfect.

The examples of the classification are as follows:

(3.2) SL: The transition will break some companies.

TL: Transisi akan pecahkan beberapa perusahaan

(03/02/01/A)

In the text above, the sentence of TL is very understandable, the idea of the sentence is quite clear. However, there is a change that should be done. The word “transisi” is quite clear, but it is better to add the word “tersebut” after the word “transisi” in order to keep the relation between the sentence and the previous one. It also makes the translation more flexible.

Meanwhile, in the accuracy, TransTool almost produced a perfect translation. The idea of SL sentence is transferred correctly to the TL text. The

word “transition” is translated into “transisi”, the word “will” is translated into “akan”, and the noun phrase “some companies” is translated into “beberapa perusahaan”.

However, the TransTool translates the word into “pecah;kan”. It is quite disturb the accuracy of the translation. Actually the word “break” is an active verb and it must be translated into “memecahkan” to conform to the idea in SL sentence.

Then, the correction is as follows:

(3.2) CL: Transisi tersebut akan memecahkan beberapa perusahaan
(03/02/01/A)

Another example is given below:

(18.2) SL: This is a fundamental change for Europe (except for the UK and Ireland).
TL: Ini adalah suatu perubahan pokok untuk Eropa (kecuali UK dan Irlandia).
(56/18/02/A)

In the intelligibility, TransTool produces a quite understandable sentence. The idea of the sentence is not difficult to catch. However the word “ini” should be replaced into “hal ini”. It will make the sentence more flexible.

Then, in the accuracy, the translation produced by TransTool is accurate enough. However, there is a mistake done by TransTool in translating the word “U.K”. In fact, the word “U.K” stands for “United Kingdom”, which is the

country of British, and it is better to translate into “Inggris”. Then, the word “poko” in “perubahan pokok” is better translated into “yang fundamental”.

Then, the correction is as follows:

(18.2) CL: Ini adalah suatu perubahan yang fundamental untuk Eropa (kecuali Inggris dan Irlandia).

(03/02/01/A)

The number of the data which are belong to the classification are:

2.1	4.3	5.2	6.3	9.3	7.2	9.3	10.1	10.3	13.5
16.2	17.1	18.1	18.2	20.1	20.3	21.3	21.4		

2. Classification B

In this classification, the translation produced by TransTool has improper intelligibility. The sentence is not understandable and the idea of the sentence is not clear and the readers can hardly catch the meaning. There are a lot of useless word, incorrect grammatical structures, and wrong word choices that disturb the intelligibility of the translation. However, there is no significant mistake in the accuracy. The TransTool transferred the message of SL text accurately and correctly into TL text. Hence, the there are still some editing processes in the accuracy.

The examples of the translation are as follows:

(1.1) SL: On January 1, 1999, a new currency will be born: the euro.

TL: Pada [atas] Januari 1, 1999, suatu mata uang baru akan [jadi] dilahirkan: euro [itu].

(01/01/01/B)

In the example above, there are a lot of mistakes in the intelligibility that make the sentence need some editing process. For example, the word “[atas]” in “Pada [atas] Januari” and the word “[itu]” in “euro [itu]” must be deleted because it only makes the translation meaningless. The date of “Januari 1, 1999” is not common in Indonesian structure. It must be written as 1 Januari 1999. Then, the word “[suatu]” in “[suatu] mata uang baru” and the word “[jadi]” in “akan [jadi] dilahirkan” must be deleted. The useless word only makes the sentence become confusing.

In the accuracy, however, there is no significant problem. TransTool generally transferred the idea of SL into TL accurately. The noun phrase of “a new currency” is transferred correctly into “suatu mata uang baru”. Then the verb “will be born” is translated into “akan [jadi] dilahirkan”.

Then, the correction is as follows.

(1.1) CL: Pada 1 Januari 1999, suatu mata uang baru akan dilahirkan: euro.

(01/01/01/B)

Another example is given below:

(21.2) SL: Before the euro, the national currencies partly hid the price differences in the different countries.

TL: [Sebelum/Di depan] euro, mata uang yang nasional sebagian sembunyi[kan] perbedaan harga [itu] di (dalam) negara-negara yang berbeda.

(67/21/02/D)

In the example above, it can be seen that the structure of the sentence is not good enough. The editor must do a lot of editing process to make the translation understandable. First, he must choose between the words “sebelum” and “di depan” to match the meaning of the translation. Then, the word “sebelum” is more suitable with the context of the text. The word “yang” in “mata uang yang nasional” and the word “[itu]” in “perbedaan harga [itu]” must be deleted because it only makes the sentence confusing. The word “sembunyikan” does not disturb the meaning of the sentence, but it must be replaced by the word “menyembunyikan” to adjust with the formal style of the text.

Meanwhile, in the example above, it can be seen that actually the idea in TL sentence is generally the same with SL sentence. However, there are mistakes done by TransTool in translating the words “currencies” and “differences”. Both the word “currencies” and “differences” which are plural noun are translated into “mata uang” and “perbedaan” which are singular noun. Therefore, the word should be translated into “semua mata uang” dan “perbedaan-perbedaan”.

Then, the correction is as follows:

(21.2) CL: Sebelum euro, semua mata uang nasional secara terpisah menyembunyikan perbedaan-perbedaan harga di dalam negara-negara yang berbeda.

(67/21/02/D)

3. Classification C

In this classification the translation produced by TransTool provides the intelligibility in the original work. The idea of the sentence is clear and understandable. There are still some editing processes done in the intelligibility, but it does not disturb the intelligibility of the sentence. However, in the accuracy, TransTool does not transfer the message of SL accurately into TL.

The example of the classification is:

(8.2) SL: Banks are obliged to convert between their national currency and euro.

TL: Bank boleh;berkewajiban mengkonversi antar[a] mata uang nasional mereka dan euro.

(22/08/02/C)

In the example above, the sentence is understandable. The idea is clear and the meaning is easy to catch by the readers. The editor only needs to choose between “antar” and “antara” to make the translation more appropriate. In this case, it is better to choose the word “antara” which is more suitable with the context.

However, in the accuracy, there are a lot of mistakes done by TransTool when translating the sentence. The word “banks” is translated into “bank”. It is wrong since “banks” is a plural noun, while “bank” is a singular noun. It better translates the word into “semua bank”, to make the equivalence between the idea in SL and TL.

Then, the verb “are obliged” is a passive verb, so it is not right to translate it into “boleh” or “berkewajiban” which is an active verb. The verb should be translated into “diwajibkan”. Then, TransTool translated “to convert” only into “mengkonversi”. It means that TransTool does not translate the preposition “to”. Actually, it should be translated into “untuk mengkonversi” rather than only into “mengkonversi”.

Then, the correction is as follows:

- (8.2) SL: Semua bank diwajibkan untuk mengkonversi antara mata uang nasional dan euro.
(22/08/02/C)

Another example is given below:

- (12.2) SL: With the euro pricing, these discrepancies will be transparent to all.
TL: Dengan euro [yang] menetapkan harga, pertentangan ini akan [jadi] transparan [bagi/kepada] semua.
(36/12/02/C)

In the example above, the idea is sufficient enough and the sentence has a proper intelligibility. However, the editor must choose between the words “bagi” or “kepada” to make the sentence clear.

In the accuracy, there are some mistakes done by MT that make the message of SL is not transferred correctly in the TL. For example, MT translates “euro pricing” into “Euro [yang] menetapkan harga”. Actually, the word “euro pricing” does not mean “euro which is pricing”, since “pricing” is a gerund functioning as a noun. Then the word “pricing” must be translated into “penetapan

harga”. Therefore “euro pricing” should be translated into “penetapan harga euro”. Then, the word “discrepancies” is translated into “pertentangan”. It is wrong since “discrepancies” is a plural noun whereas “pertentangan” is a singular noun. The word “discrepancy” itself is better translated into “ketidaksesuaian”. Therefore, “discrepancies” should be translated into “semua ketidaksesuaian”. Then, the word “these” is better translated into “tersebut”. It is because the word “tersebut” is a more suitable translation to keep the relationship between the sentence and the previous one rather than “ini”. Then, the verb “will be transparent” is better translated into “akan menjadi transparan” rather than “akan [jadi] transparan”.

Then, the correction is as follows:

(12.2) CL: Dengan penetapan harga euro, semua ketidaksesuaian tersebut akan menjadi transparan bagi semuanya.

(36/12/02/C)

The data that are belong to this classification are:

5.3 8.5 8.5 12.2 14.1 18.3

4. Classification D

In this classification, the translation produced by MT has improper intelligibility. The sentence has a very unclear idea. There are a lot of incorrect grammatical structure and wrong word choices in the sentence which disturb the intelligibility of the sentence. The translation produced by TransTool is also inaccurate. There are a lot of ideas in SL which are not transferred in the TL. Even, the whole message is not transferred at all.

The example is given below:

(6.2) SL: After 3 p.m. on December 31, 1998, the exchange rates between the national currencies and the euro will be fixed, so there will no longer be exchange rate fluctuations between the 11 countries' currencies.

TL: Setelah 3 p.m. pada [atas] Desember 31, 1998, nilai tukar antar[a] mata uang yang nasional dan euro akan [jadi] ditetapkan;perbaiki, maka akan ada tidak lagi jadilah fluktuasi nilai tukar antar[a] yang 11 mata uang countries'.

(16/06/02/D)

In the example above, the sentence is not understandable. The idea is not clear; there are a lot of incorrect grammatical structure and many wrong word choices which disturb the intelligibility of the sentence. There are also many useless words that must be deleted.

First, the word “[atas]” in the “pada [atas]” as well as the word “[jadi]” in the “akan [jadi]” must be deleted. Moreover, the word “yang” in “mata uang yang nasional” and in “yang sebelas mata uang” must be deleted. The words will only make the sentence confusing. Then, the words “akan ada tidak lagi jadilah” are definitely incorrect in Indonesian grammar. They serve nothing as a verb, even has no meaning. The words should be arranged into “tidak akan ada lagi” then the word “jadilah” is better deleted.

Then, in the accuracy, the message in the SL text is not transferred well. It starts when TransTool does not translate the adverb of “3 p.m.” The word should

be translated into “pukul tiga sore” since “p.m.” is used to address the time from one o’clock in the afternoon until twelve o’clock in the night.

Meanwhile, the verb “is fixed” is translated into “ditetapkan;perbaiki”. The two alternatives force the editor to choose one of the translations. Since the verb “is fixed” is a passive verb, then it is not right if it is translated into “perbaiki” which is an active verb. Therefore, it should be translated into “ditetapkan”. Then the first “between” is correctly translated into “antara” while the second is better translated into “antar”.

Then, the TransTool cannot translate the noun phrase “11 countries’ curriencies”. It is wrongly translated into “11 mata uang countries”. TransTool fails to recognize the possessive pronoun signed by the mark ['] in “countries”. Actually the noun phrase means “the currencies which belong to the eleven countries”. Therefore, the translation should be “mata uang sebelas negara”. Since “currencies” is a plural noun, it must be translated into a plural noun also in Indonesian.

Then the correction is as follows:

- (6.2) CL: Setelah pukul tiga sore pada 31 desember 1998, seluruh nilai tukar antara semua mata uang nasional dan euro akan ditetapkan, jadi tidak akan ada lagi fluktuasi nilai tukar antar mata uang-mata uang sebelas negara.

(16/06/02/D)

Another example is given below:

(19.3) SL: It is also permitted, though not required, to convert other currencies to and from the 11 national currencies via the euro, even in the U.K.

TL: Ini juga mengizinkan, meskipun [demikian] tidak memerlukan, untuk mengkonversi lain mata uang ke dan dari yang 11 mata uang nasional via euro, bahkan di U.K.

(62/19/03/D)

In the intelligibility, there are some useless words that should be deleted. The word “ini” in “ini juga mengizinkan”, the word “[demikian]” in “meskipun “[demikian]” as well as the word “yang” in “yang 11 mata uang nasional must be deleted. The words above only make the sentence becomes unclear. Then, the word “via” is better replaced into “melalui” to make the sentence more natural.

Then, in the accuracy, the word “permitted” and “required” is wrongly translated into “mengizinkan” dan “memerlukan”. Since TransTool cannot recognize that the words are passive verb, it translates them into active verb. The translation should be “dijinkan” and “diperlukan”. Meanwhile, the nounprash “other currencies” is translated into “lain mata uang”. It is wrong since in Indonesian the head of the word (in this case “mata uang”) must be placed before the modifier (in this case “lain”). Then the word “currencies” is better translated into “semua mata uang”. Then, the word “UK” shoul be translated into “Inggris”

Then, the correction is as follows:

(19.3) CL: Juga diperbolehkan, meskipun tidak diperlukan, untuk mengkonversi semua mata uang lain ke dan dari sebelas mata uang nasional melalui euro, bahkan di Inggris.

(62/19/03/D)

The number of the data which are belong to the classification are:

1.2	2.2	3.1	3.2	4.1	4.2	4.4
5.2	5.4	6.1	6.2	7.1	7.3	8.1
8.3	8.4	9.1	9.2	10.2	11.1	11.2
11.3	11.4	12.1	12.3	13.1	13.2	13.3
13.4	14.2	15.1	15.2	15.3	15.4	16.1
16.3	17.2	18.4	18.5	19.1	19.2	19.3
20.2	21.1					

TABLE 4.1

Quality of The Translation

Classification	Number of datum	Amount	Percentage
----------------	-----------------	--------	------------

Classification A	(03/02/01/A) (12/05/02/A) (19/07/02/A) (29/10/01/A) (43/13/05/A) (53/17/01/A) (56/18/02/A) (65/20/03/A) (69/21/04/A) (09/04/03/A) (17/06/03/A) (28/09/03/A) (31/10/03/A) (51/16/02/A) (55/18/01/A) (63/20/01/A) (68/21/03/A)	17	25%
Classification B	(01/01/01/B) (67/21/02/A)	2	3 %
Classification C	(13/05/03/C) (25/08/05/C) (44/14/01/C) (22/08/02/C) (37/12/02/C) (57/18/03/C)	6	9%
Classification D	(02/01/02/D) (35/11/04/D) (04/02/02/D) (36/12/01/D) (05/03/01/D) (38/12/03/D) (06/03/02/D) (39/13/01/D) (07/04/01/D) (40/13/02/D) (08/04/02/D) (41/13/03/D) (10/04/04/D) (42/13/04/D) (11/05/02/D) (45/14/02/D) (14/05/04/D) (46/15/01/D) (15/06/01/D) (47/15/02/D) (16/06/02/D) (48/15/03/D) (18/07/02/D) (49/15/04/D) (20/07/03/D) (50/16/01/D) (21/08/01/D) (52/16/03/D) (23/08/03/D) (54/17/02/D) (24/08/04/D) (58/18/04/D) (26/09/01/D) (59/18/05/D) (27/09/02/D) (60/19/01/D)	44	63%

	(30/10/02/D) (32/11/01/D) (33/11/02/D) (34/11/03/D)	(61/19/02/D) (62/19/03/D) (64/20/02/D) (66/21/01/D)		
	TOTAL	69	100%	



B. Analisis Of The Kind of Error That Occurs in the Translation

In this analysis, the researcher categorizes the error of the translation produced by MT in three classifications. The classifications are based on the amount of trouble which error causes to the post editor. Dealing with the term trouble, Roy Green defines it as “The amount of physical and mental effort required to correct error” (in Lawson, 1982, p: 101). The classifications are Minor Errors, Major Error, and Grey areas. Then the analysis of the error of translation will be described in the following description.

1. Category I: Minor Error

The kind of error that is included to this classification is the blatant error. It is easy to identify and easy to post edit, particularly since one or two words have to be deleted or supplied. These errors do not cause much trouble to the translation.

a. Category I.1

This category occurs when MT fails to distinguish whether a noun is categorized into plural or singular noun. MT tends to translate incorrectly a plural noun into singular noun. Hence, the errors tend to affect the meaning of the sentence, and thus give a wrong impression in TL.

The example of this category is as follow:

(5.1) SL: Although *members* of the European Union, the following four countries will not be adopting the Euro in January: Denmark, Greece, Sweden, and the United Kingdom.

TL: Walaupun anggota Perserikatan/Pipa sambung Yang mengenai Eropa, yang berikut empat negara-negara tidak akan mengadopsi Euro [itu] pada bulan Januari: Denmark, Yunani, Sweden, dan Kerajaan Britania I.

(11/05/01/D)

In the example above, it is clear that MT incorrectly translates the word “members” into “anggota”. It is an inappropriate translation since the word “members” is a plural noun while “anggota” is a singular noun. Moreover, the word “members” here refers to several things, in this case, the four countries; Denmark, Greece, Sweden, and United Kingdom. So, if the word “anggota” is chosen to be the translation of “members”, it can give the impression that only one country to become the member of the “European Union”. It can be concluded that the word “members” should be translated into “anggota-anggota”.

Then the correction is:

(5.1) CL: Walaupun anggota-anggota Uni Eropa, namun empat negara berikut ini tidak akan mengadopsi Euro pada bulan Januari: Denmark, Swedia, Yunani, dan Inggris.

(11/05/01/D)

Another example is given below:

(7.2) SL: Customers can choose to use euro and may demand that companies supply the goods in euro.

TL: *Pelanggan* dapat memilih untuk menggunakan euro dan boleh menuntut bahwa *perusahaan* menyediakan barang-barang [itu] di (dalam) euro.

(19.07/02/A)

In the example above, MT incorrectly translates plural noun into singular noun when the word “customers” is translated into “pelanggan” and the word “companies” is translated into “perusahaan”. Both “customers” and “companies” are plural noun, and it must be translated into “pelanggan-pelanggan” and “perusahaan-perusahaan”. However, a plural noun in English may not be translated into reduplicative word. It is sufficient if the noun is added by a word which can show the noun’s pluralism. It means that it is not necessary to translate both “customers” and “companies” into a reduplication. The word “companies” can be translated into “perusahaan-perusahaan”, while the word “customers” is better translated into “para pelanggan”. Generally, it is also in order to make the translation more flexible.

Then the correction is as follow:

(7.2) CL: *Para pelanggan* dapat memilih untuk menggunakan euro dan dapat meminta *perusahaan-perusahaan* untuk menyediakan barang-barang dalam euro.

(19.07/02/A)

The numbers of data which are included in this kind of error are:

2.2	3.1	3.2	4.1	5.1	6.1	6.2
6.3	7.1	7.2	7.3	8.1	8.2	8.4
8.5	9.1	9.2	10.1	10.2	10.3	11.1
11.2	11.4	12.1	13.2	13.3	14.1	14.2
15.2	15.3	16.1	16.2	16.3	17.1	17.2
18.1	18.5	19.1	19.3	20.4	21.1	

b. Category 1.2

The errors occur when MT fails to find the meaning of a certain word. In the translation, the words are remained untranslated. Usually, it is because the word is not listed in the TransTool's dictionary. This generally proves that the MT vocabulary of word is limited.

The example of the kind of error in that category is given below:

(6.2) SL: After 3 p.m. on December 31, 1998, the exchange rates between the national currencies and the euro will be fixed, so there will no longer be exchange rate fluctuations between the 11 countries' currencies.

TL: Setelah 3 p.m. pada [atas] Desember 31, 1998, nilai tukar antar[a] mata uang yang nasional dan euro akan [jadi] ditetapkan;perbaiki, maka akan ada tidak lagi jadilah fluktuasi nilai tukar antar[a] yang 11 mata uang countries'.

(16/06/02/D)

In the example above, there are two words which remain untranslated by MT: the word “3 p.m” and “countries”. In English, “p.m” is the acronym of “post meridiem” and it is used to point out a certain time in the afternoon. In other words, “3 p.m” means “three o’clock in the afternoon”. Then, the word “3 p.m.” should be translated into “pukul tiga sore” in Indonesian. Then the word “countries” of the phrase “11 countries’ currencies” is also left untranslated. MT fails to recognize the mark “[’] “ placed after the word “countries”. Actually, the mark functions as a possessive pronoun. It is to explain that “the currencies” belong to the countries (in this case, the eleven countries). Then, the word “countries” must be translated into “negara”, while the phrase “11 countries’ currencies” should be translated into “mata uang-mata uang sebelas negara.”

Then, the correction is as follows:

(6.2) CL: Setelah pukul tiga sore pada 31 Desember 1998, seluruh nilai tukar antara semua mata uang nasional dan euro akan ditetapkan, jadi tidak akan ada lagi fluktuasi nilai tukar antar mata uang-mata uang sebelas negara.

(16/06/02/D)

Another example is given below:

(11.2) SL: If you are a U.S. exporter, you can insist on doing business in dollars.

TL: Jika kamu adalah suatu U.S. eksportir, kamu dapat meminta dengan tegas pada [atas] berdagang di (dalam) dolar.

(33/11/02/D)

In the example above, the word “U.S.” remains untranslated by MT. The word “U.S” actually stands for “United States (of America)”. Then, in Indonesian, “United States” is usually translated into “Amerika Serikat” or it is sufficient to be written as “A.S”.

Then the correction is as follows:

(11.2) **CL:** Jika anda seorang eksportir AS, anda dapat meminta dengan tegas untuk melakukan kegiatan disnis dalam harga-harga dolar.

(33/11/02/D)

The number of data belonged in this category are:

3.2	4.3	5.1	5.4	6.2	7.1	8.3
10.2	11.2	11.3	13.2	14.1	14.2	15.4
16.3	18.1	18.2	18.3	18.4	19.2	19.3

c. Category 1.3

The kinds of errors appear when there are a lot of useless words in the translation done by MT. The word usually makes the translation to be meaningless. Sometimes, the wasted words also disturb the accuracy of the translation, since they make causes the translation for being difficult to understand.

The example of the category is:

(1.1) **SL:** On January 1, 1999, a new currency will be born: the euro.

TL: Pada [atas] Januari 1, 1999, suatu mata uang baru akan [jadi] dilahirkan: euro [itu].

(01/01/01/B)

In the example above, there are three useless words which should be deleted to make the translation more effective and appropriate. Even the useless word does not cause too much trouble, but they still make the sentence became in disorder. The first word that should be deleted is the word “[atas]” in the phrase “pada [atas] Januari, 1999”. The word “[atas]” is useless, because by using the word “pada”, the TL has already transferred the message of SL correctly. It also happens in the word “jadi” in the phrase “akan [jadi] dilahirkan”. The word “[jadi]” because the idea of the phrase “will be born” has been presented by the phrase “akan dilahirkan”.

Then the next superfluous word is “[itu]” in the word “euro [itu]”. It is actually a translation of a definite article (which is customarily used to point out things individually or certainly) that is the word “the”. However, the definite article in English may not always be translated into Indonesian. The most important point is that the conception of the thing has been obviously determined, both from the situation or the context of the sentence. Then, the word “the” in “the euro” must not translated into “[itu]”, because the concept of the thing has already been known in the sentence, that is the euro currencies. So, it means that “the euro” should only be translated into “euro”, without “[itu]”.

The correction is given below:

(1.1) CL: Pada 1 Januari 1999, suatu mata uang baru akan dilahirkan: euro.

(01/01/01/B)

Another example of the classification is:

(20.2) SL: Many companies are expected *to fail* to adjust in time and may go out of business.

TL: Banyak perusahaan diharapkan *untuk gagal* untuk melakukan penyesuaian pada waktunya dan boleh keluar bisnis.

(64/20/02/D)

In the example above, there is one unnecessary word in the translation done by MT. The word “untuk” in the phrase of “untuk gagal” is better to be deleted. Actually, this word does not disturb the accuracy of the sentence. However, it still makes the translation sound less flexible. So, the phrase “to fail” is better translated into “gagal”.

Then the correction is given below:

(20.2) CL: Banyak perusahaan diperkirakan *gagal* dalam melakukan penyesuaian pada waktunya dan mungkin bangkrut.

(64/20/02/D)

The numbers of data which belong to the classification are:

1.1	1.2	2.2	3.1	3.2	4.1	4.2
4.3	4.4	5.1	5.3	5.4	6.1	6.2
6.3	7.1	7.2	8.1	8.3	8.4	9.1
10.2	10.3	11.1	11.2	11.3	11.4	12.1
12.2	13.2	13.3	13.5	14.1	14.2	15.2

15.3 15.4 16.1 16.2 16.3 18.1 18.4
19.1 19.3 20.2 20.4 21.2 21.3

d. Category 1.4

This error happens when MT fails to recognize an ambiguity of words or phrase in the sentences. The error may come when MT cannot recognize the homograph characteristic of the word. Some words have homograph characteristics when two words or more with quite different meaning have the same spelling. Then, the kind of error in the category can also be caused by transfer ambiguity that is when a single word can be ambiguous in the perspective of TL. Then, it is translated by a number of different TL words or expressions by MT. Both homograph and transfer ambiguity makes MT find the difficulties in selecting the translation of the word which match with the sentence. The post-editor is left by two or more alternative choices, and he/she should choose the appropriate one.

The example of this classification is:

(11.1) SL :For most of us, the first impact of the euro will appear in prices.

TL: Karena kebanyakan dari [kita/kami], dampak yang pertama euro akan nampak di (dalam) harga.

(32/11/01/D)

In the example above, it is clear that MT is confused in deciding the meaning of the word “us”. In Indonesian, the word “us” can be translated into “kami” or “kita”, and both of them function as the personal pronoun of the first

person plural. However, there is a difference between them. The word “kami” excludes the person addressed, while “kita” includes the person addressed.

In the sentence, the word “us” must be translated into “kita”. It is because the writer obviously included the person addressed, in this case is the reader, to participate in the context of the sentence.

Then the correction is given below:

(11.1) CL: Bagi kebanyakan dari *kita*, dampak yang pertama euro akan nampak di dalam harga-harga.

(32/11/01/D)

Another example is as follows:

(13.4) SL: Nevertheless, the "Financial Times" publishes a synthetic Euro rate table based on current exchange rates.

TL: Meskipun demikian, " Yang keuangan Waktu" menerbitkan suatu buatan Euro [Tabel;Meja] Tingkat tarip berdasar pada nilai tukar sekarang.

(42/13/04/D)

In the example above, MT translates the word “table” into two alternative translations. It means that MT is confused to select between the word “table” which means “tabel” and the word “table” which means “meja”, even both of the words have a different meaning but they have the same spelling. MT puts two translations of the word “table” and the post editor must choose one of them. Then, in order to match with the context of the sentence, the word “table” should

be translated into “tabel” since it is related with the phrase of “Euro Rate” and “exchange rates”.

Then the correction is given below:

(13.4) CL: Meskipun demikian “Financial Times” menerbitkan sebuah tabel kurs euro buatan yang berdasar pada nilai tukar sekarang.

(42/13/04/D)

The data that are included in the category are:

3.2	6.2	6.3	8.1	8.2	8.5	10.2
11.1	11.4	12.2	13.4	15.2	21.2	

e. Category 1.5

These errors occur if there are many wrong choices of word in the translation done by MT. The translation of the word does not conform to the SL. Then, the word should be replaced by another word. This error sometimes is because the word may have more than one meaning or it is homograph with another word.

The example of the classification above is:

(5.1) SL: Although members of the European Union, the following four countries will not be adopting the Euro in January: Denmark, Greece, Sweden, and the United Kingdom.

TL: Walaupun anggota Perserikatan/Pipa sambung Yang mengenai Eropa, yang berikut empat negara-negara tidak akan mengadopsi Euro [itu] pada bulan Januari: Denmark, Yunani, Sweden, dan Kerajaan Bntania I.

(11/05/01/D)

There are two wrong choices of word of the translation done by MT in the example above. The first is the translation of “European Union” which is translated into “Perserikatan/Pipa Sambung yang Mengenai Eropa.” In fact, “European Union” is used to name an international organization in which the countries in Europe are integrated. The translation “Pipa Sambung yang Mengenai Eropa” is definitely incorrect. Through this translation, the idea of SL is obviously not transferred into TL at all. Meanwhile, the phrase “Perserikatan Yang Mengenai Eropa” as the translation of “European Union” is inappropriate. It is because in Indonesian, the word “union” is costumarily translated into “Uni” when it refers to be especially used in names of political entities. Consequently, it is more flexible to translate the phrase “European Union” into “Uni Eropa” rather than into “Perserikatan Yang Mengenai Eropa”.

Then, the second mistake in the translation is when MT translates the word “United Kingdom” into “Kerajaan Bntania I”. It is because in Indonesian, the word “U.K.”, which refers to the country of English, is usually translated into “Inggris Raya” or “Inggris”.

Then, the correction is given below:

(5.1) CL: Walaupun anggota-anggota *Uni Eropa*, namun empat negara berikut ini tidak akan mengadopsi Euro pada bulan Januari: Denmark, Swedia, Yunani, dan *Inggris*.

(11/05/01/D)

Another example is given below:

(12.2) SL: With the euro pricing, these discrepancies will be transparent to all.

TL: Dengan euro [yang] menetapkan harga, pertentangan ini akan [jadi] transparan [bagi/kepada] semua.

(37/12/02/C)

In the example above, the translation of the word “discrepancies” is translated incorrectly into “pertentangan”. The word “discrepancies” is not used to point out a condition when one is being an opposition to the other. Actually, the word “discrepancies” is better translated into “ketidaksesuaian.”

Then the correction is given below:

(12.2) CL: Dengan penetapan harga euro, ketidaksesuaian ini akan mejadi transparan bagi semuanya.

(37/12/02/C)

The data that belong to the classification are:

2.2	4.2	5.1	5.3	5.4	6.1	7.3
8.1	9.2	10.2	12.2	12.3	13.2	13.4
13.5	15.1	15.2	16.3	19.2	20.2	21.1
21.4						

f. Category 1.6

This error belongs to the translation in which MT confuses in looking for the meaning of preposition. MT tends to translate the preposition incorrectly or the editor are left by two or more alternatives translation.

The example about the kind of error is:

(3.1) SL: The issues for software companies are caused both by the birth of the euro and by the slow, timed death *of* the 11 existing currencies.

TL: Isu untuk perusahaan perangkat lunak disebabkan baik melalui kelahiran euro dan oleh yang lambat, kematian [yang] diatur waktu yang 11 mata uang ada.

(05/03/01/D)

In the translation above, MT translates the preposition “of” into “yang”. It is incorrect translation since the preposition “of” does not have the same meaning with the word “which or that”, which in Indonesia means “yang”. Moreover, if the preposition “of” is translated into “yang”, it will not match with the context of the sentence, and it also makes the sentence become confusing. Thus, the preposition “of” should be translated into “dari”

Then the correction is as follows:

(3.1) CL: Persoalan-persoalan bagi semua perusahaan perangkat lunak disebabkan baik oleh kelahiran euro maupun oleh kematian yang diatur waktunya dan lambat dari sebelas mata uang yang ada.

(05/03/01/D)

Another example of the kind of error is as follows:

(19.1) SL: *For* conversions between the 11 national currencies, the conversion must be via the euro, which is known as "triangulation."

TL: *Karena* konversi antar[a] yang 11 mata uang nasional, konversi harus via euro, yang mana [adalah] dikenal sebagai " triangulasi."

(60/19/01/D)

MT translates incorrectly the preposition "for" into "karena". This shows that MT fails to recognize the homography of the preposition. The preposition "for" has some comparison in Indonesian, such as "untuk", "bagi", "selama", "atas", or "karena". However, in relation to the message of SL, it is not appropriate if the preposition "for" is translated into "karena" because it distrubs the transfer of the SL idea, and it rather makes the sentence loose its meaning. The preposition "for", then, should be translated into "untuk".

Then the correction is given below:

(19.1) CL: *Untuk* konversi-konversi antara sebelas mata uang nasional, konversi tersebut harus melalui euro, yaitu yang disebut "triangulasi".

(60/19/01/D)

The numbers of data which belong in this classification are:

3.1 8.5 9.1 11.1 11.2 18.1 18.3

19.1 21.1

2. Category II: Major Error

This category covers more substantial and complex error. These errors often manage to contaminate the rest of the sentences with damaging result. However, these are just more complex version of Minor Error category. In other word, it needs the same technique as for Category I errors, but on a larger scale.

a. Category II.1

This error occurs when MT identifies part of speech incorrectly. A word may be assigned to more than one grammatical or syntactical category. Thus, this error occurs when MT fails to identify in which category the word is assigned.

The example of this category is:

(9.1) SL: Euro cash comes into existence on January 1, 2002, and will circulate in parallel with *existing* national currencies through June 2002 at the latest.

TL: Euro Tunai menjadi ada pada [atas] Januari 1, 2002, dan akan beredar;kan di (dalam) paralel dengan mata uang nasional *ada* melalui/sampai Juni 2002 paling lambat.

(26/09/01/D)

In the example above, MT fails to determine in which category of part of speech the word “existing” is assigned. MT incorrectly translates the word “existing” into “ada”. It is not appropriate since the word “ada” functions as a verb in Indonesian. Meanwhile, depending on the structure of the sentence in SL, the word “existing” does not belong to the verb, since it does not become the predicate of the sentence. In SL, the word “existing” functions as an adjective of the noun phrase “national currencies”. It means that this word must also be

translated into an adjective in TL. Then, the word “existing” must be translated into “yang ada” in Indonesian.

Then the correction is given below:

(9.1) CL: Euro tunai ada pada 1 Januari 2002, dan akan beredar secara paralel dengan seluruh mata uang nasional yang ada sampai akhir Juni 2002.

(26/09/01/D)

Another example as follows

(18.4) SL: This is often incorrectly reported as six decimal places.

TL: Ini adalah sering salah melaporkan [ketika;seperti] enam posisi decimal.

(58/18/04/D)

In the sentence above, MT translates the phrase “is reported” incorrectly. The phrase “is reported” has the pattern of “to be + V₃” which belongs to the passive voice category. Then, it should also be translated into passive voice in TL as well. However, in the sentence above, MT translated the phrase “is reported”, which is a passive verb, into “melaporkan”, which is an active verb. It means that the idea of SL definitely transferred improperly to TL. So, the word “is reported” must be translated into “dilaporkan” which functions as the passive verb in Indonesian sentence.

The correction is given below:

(18.4) CL : Hal ini seringkali dilaporkan dengan salah sebagai enam posisi desimal.

(58/18/04/D)

The numbers of data which belong to the classification are:

2.1	2.2	3.1	3.2	4.2	4.4	7.3
8.2	8.4	8.5	9.1	9.2	10.2	12.1
12.2	13.2	15.2	15.3	15.4	16.2	16.3
18.4	18.5	19.3	21.1			

b. Category II.2

The error occurs because of the structural differences between English (SL) and Indonesian (TL). This category also covers the errors of idiomatic expression in translation. In structural differences, MT tends to transfer the message of SL accurately. However, the structure of TL is not appropriate in SL (Indonesian). Meanwhile, MT tends to translate the idiomatic expression word-for-word.

The example of this kind of error is:

(7.3) SL: So, from January 1999, if you have a subsidiary registered in one of the 11 countries, then your customers may demand goods be priced and paid in Euro.

TL: Maka, dari Januari 1999, jika kamu mempunyai suatu cabang mendaftarkan di (dalam) salah satu [dari] yang 11 negara-negara, kemudian pelanggan mu boleh menuntut barang-barang dihargai dan disetor ke rekening Euro.

(20/07/03/D)

The error of the translation in the sentence above occurs in the translation of the word “11 countries”. MT translates “11 countries” into “11 negara-negara”. The translation generally does not disturb the accuracy of the sentence, but still it is incorrect since the structure is not appropriate in Indonesian. There is a difference in structure between English as the SL and Indonesian as the TL which causes those kind of error in translation occurs. English, and other languages such as France and Netherlands, deals with nominal concord or agreement. Nominal concord or agreement is the adjustment of the form between numbers that clarify pluralism, or in other words which point out the pluralism, with the thing. It usually represents in the form of “-s” placed after the noun.

However, Indonesian does not deal with such nominal concord. It means that if before the noun there is a word (for example: “semua”, “seluruh”, or “beberapa”) that shows the pluralism, and then the noun must not be translated into reduplicative form. In this case, the number of “11” in the word “11 countries” has already shown the pluralism. It expresses that the things (here is “negara”) mentioned are more than one in number. Then, the phrase “11 countries” is better translates into “11 negara”.

Then, the correction is as follow:

(7.2) **CL:** Jadi, mulai Januari 1999, jika anda mempunyai suatu cabang yang terdaftar pada salah satu dari sebelas negara, maka para pelanggan anda dapat meminta barang-barang untuk ditetapkan harganya dan dibayar dalam euro.

(20/07/03/D)

Another example is given below:

(12.3) **SL:** And you have until January 1, 1999, to figure out how you will address the issue.

TL: Dan kamu mempunyai sampai Januari 1, 1999, untuk menggambarkan ke luar bagaimana kamu akan menunjuk isu [itu].

(38/12/03/D)

In the example above, MT makes a mistake in the idiomatic expression translation. In this case, MT translates “to figure out” which is an idiomatic expression word by word into “menggambar keluar”. The translation is incorrect since as an idiomatic expression, “to figure out” has some comparison in Indonesian, which is “memahami”, “memikirkan”, or “mempelajari dengan teliti”. Then, to match with the context of the sentence, the idiomatic translation of “to figure out” must be “memikirkan”.

Then, the correction is given below:

(12.3) CL: Dan anda mempunyai waktu sampai 1 Januari 1999 untuk memikirkan cara anda menghadapi persoalan itu.

(38/12/03/D)

The number of data which belongs to the classification are:

3.1	4.3	4.4	5.1	7.3	8.2	8.3
12.1	12.3	13.1	13.2	13.4	14.1	15.4
16.1	16.2	16.3	17.2	18.3	19.3	20.2
20.4	21.4					

c. Classification II.3

This error occurs when there is incorrect placement or inverse word order.

The error makes the sentences become confusing and meaningless.

The example of the category is:

(3.2) SL: For *U.S. software companies* doing business in Europe, the euro will have major strategic significance for pricing, taxation, and accounting practices.

TL: Untuk/Karena *U.S. perusahaan perangkat lunak* yang berdagang di (dalam) Eropa, euro akan mempunyai arti strategis utama untuk menetapkan harga, perpajakan, dan akuntansi praktek.

(06/03/02/D)

There are two mistakes which belong to these kinds of error. The first is the translation of the word “U.S. software companies” and the second is the

translation of “pricing, taxation, and accounting practices”. MT translates those word in an incorrect placement or inverse word order. The translation of the word “U.S. software companies” into “U.S. perusahaan perangkat lunak” since the head of the phrase is “companies” and not “U.S.”. So, the translation of the noun phrase should be “perusahaan perangkat lunak AS”.

Then, the translation of “pricing, taxation, and accounting practices” is also incorrect. The placement of the word that functions as the head of the phrase (in this case; “practices”) is wrong, and the incorrect placement definitely disturbs the accuracy of the translation. Thus, the translation of those phrase should be “praktek-praktek penetapan harga, perpajakan, dan akuntansi”.

Then, the correction is as follow:

(3.2) CL: Untuk perusahaan-perusahaan perangkat lunak AS yang melakukan kegiatan bisnis di Eropa; euro akan mempunyai arti strategis yang signifikan terhadap praktek-praktek penetapan harga, perpajakan, dan akuntansi.

(06/03/02/D)

The other example is given below:

(13.3) SL: The definitive conversion rates for euro to the 11 participating currencies will not be known until December 31, 1998.

TL: Kurs konversi yang pasti untuk euro kepada yang 11 yang mengambil bagian mata uang tidak akan dikenal sampai Desember 31, 1998.

(41/13/03/D)

In the example above, the translation of “11 participating currencies” is inappropriate, since it is translated in an incorrect word order into “sebelas yang mengambil bagian mata uang”. Moreover, the phrase actually can be said in other word as “eleven countries which is participating”. The head of the phrase is the word “currencies” and the number “11” refers to it. The number of “11” does not refer to the word “participating”. It means that “11 participating currencies” must be translated into “sebelas mata uang yang berpartisipasi”.

Then the correction is given below:

(13.3) CL: Kurs-kurs konversi euro terhadap sebelas mata uang yang berpartisipasi tidak akan diketahui sampai 31 desember 1998.

(41/13/03/D)

The data that belong to the classification are:

3.1	3.2	4.4	5.1	5.4	6.2	7.1
9.1	10.2	10.3	12.2	13.2	13.3	13.4
14.1	14.2	15.2	15.4	16.3	18.5	19.2
21.1						

3. Category III: Grey areas

This category includes what might be termed of "doubtful translation and near misses". The computer sometimes provides reasonably intelligible clauses and even whole sentences. Paradoxically this is precisely what causes most trouble.

a. Category III.1

The error of the category occurs when MT places the translation's element in an incorrect word order. Actually, the incorrect placement does not change the message of SL. However, it is still incorrect because the inverse word order does not appropriate to the TL.

The example of this classification is:

(9.3) SL: After June 30, 2002, only euro will exist.

TL: Setelah Juni 30, 2002, hanya euro akan ada.

(28/09/03/A)

In the example above, MT translates the date “June 30, 2002” into “Juni 30, 2002”. Actually, the translation is accurate since the message of SL is transferred correctly to TL. However, it is still inappropriate since the word order in the translation is not correct in the view of TL structure. In Indonesian, the elements of date must be arranged in term of day, month, and year (dd-mm-yy). It is different with English which sometimes arranges the element of a date in term of month, day, and year (mm-dd-yy). Then, the translation of “June, 30, 2002” should be “30 Juni 2002”.

Then the correction is given below:

(9.3) CL: Setelah 30 Juni 2002, hanya euro yang akan ada.

(28/09/03/A)

The other example is as follows:

(12.1) SL: Because your subsidiaries and resellers probably price now in the 11 national currencies, you probably have charged different amounts for your software.

TL: Sebab pengecer dan cabang mu [yang] mungkin menghargai sekarang di (dalam) yang 11 mata uang nasional, kamu mungkin sudah membebankan sejumlah berbeda untuk perangkat lunak mu.

(36/12/01/D)

In the example above, MT translates the phrase “your subsidiaries and resellers” into “pengecer dan cabang mu”. The translation generally does not disturb the accuracy of SL. However, still it is incorrect since the element of the sentence is placed in an incorrect word order and it is not appropriate in TL structure. In Indonesian, “subsidiary” means “cabang” while “reseller” means “pengecer”. Then the translation of “your subsidiaries and resellers” must be “cabang dan pengecer anda”. And since both “subsidiaries” and “reseller” are plural noun, then they should also be translated into plural noun in Indonesian.

Then the correction is given below:

(12.1) CL: Karena cabang-cabang dan para pengecer anda sekarang mungkin menetapkan harga dalam sebelas mata uang nasional, maka anda mungkin juga telah membebankan jumlah-jumlah yang berbeda untuk perangkat lunak anda.

(36/12/01/D)

The data that belong to the classification are:

1.1 6.2 7.1 9.1 9.3 12.1 12.3
13.3 13.5 14.2 17.2 18.4

b. Category III.2

This category occurs when one or more word in TL that needs some replacement by another word or they must be added by proposition. It is in order to adjust the formal style of the sentence and also to make the translation understandable. However, the replaced word may be synonymous with the substitute, so the replacement will not change the meaning of the sentences.

The example of the classification is:

(18.2) SL: This is a fundamental change for Europe (except for the UK and Ireland).

TL: Ini adalah suatu perubahan pokok untuk Eropa (kecuali UK dan Irlandia).

(56/18/02/A)

In the example above, there are two words that should be replaced by another words in order to match the formal style of the sentence. First, the word “this” must be translated into “hal tersebut” rather than into “ini”. This is in order to keep the connection with the previous sentence. In other words, the word “this” basically refers to the idea of the previous sentence. Moreover, the sentence will sounds more formal if “this” is translated into “hal tersebut”. The second is the translation of the adjective “fundamental” that is translated into “yang pokok”. The translation is correct since the idea of SL has been transferred in TL.

However, it is better if the word is translated into “yang fundamental” since the word “fundamental” has been one of Indonesian word, and it is also used more often in a formal text.

Then, the correction is given below:

(18.2) **CL:** Hal tersebut adalah suatu perubahan yang fundamental untuk Eropa (kecuali Inggris dan Irlandia).

(56/18/02/A)

Another example of the classification is as follow:

(19.1) **SL:** For conversions between the 11 national currencies, *the conversion* must be *via* the euro, *which is known* as "triangulation."

TL: Karena konversi antar[a] yang 11 mata uang nasional, *konversi* harus *via* euro, *yang mana [adalah] dikenal* sebagai " triangulasi."

(60/19/10/D)

In the example above, there are two words and one phrase that should be replaced with another word. First is the noun “the conversion”, which is translated into “konversi”. However, it is better to be translated into “konversi tersebut” since “the conversion” is used to represent the idea of the another word of “conversion” that emerges early in the sentence, which represents the idea of. conversion between national currienccies.

Then, the word “via” is better to be translated into “melalui” since the translation is more commonly used in Indonesian. The phrase that should be replaced is “is known” which is translated into “yang dikenal”. The translation is correct, but in order to match with the formal style it can be translated into “yang

disebut”. For the better structure of sentence in TL, it is better to put the word “yaitu” before that phrase. Then, the sentence will sound more flexible.

The correction is given below:

(19.1) CL: Untuk konversi-konversi antar sebelas mata uang nasional, *konversi tersebut* harus *melalui* euro, yaitu *yang disebut* “triangulasi”.

(60/19/10/D)

The number of data which are included in this kind of error are:

1.1	1.2	2.2	3.1	4.1	4.2	4.4
5.1	5.2	5.4	6.2	6.3	7.1	7.2
7.3	8.1	8.2	8.3	8.4	8.5	9.1
9.3	10.2	10.3	11.2	11.3	11.4	12.1
12.2	12.3	13.2	13.3	13.4	13.5	14.1
15.1	15.2	15.4	16.1	16.2	16.3	17.1
17.2	18.1	18.2	18.3	18.4	18.5	19.1
19.2	19.3	20.1	20.2	20.3	21.1	21.2
21.3	21.4					

c. Category III.3

The error occurs when MT translates a certain term in TL improperly with the common one. Indonesian government has standardized the common usage of the term. Then it is improper when MT translates the term into another that do not appropriate with the common ones.

The example of the classification is:

(9.2) SL: During that period, one can pay and be paid in Euro or in *national notes and coins*.

TL: Selama yang periode, seseorang dapat membayar dan disetor ke rekening Euro atau di (dalam) koin dan [nada/catatan] nasional.

(27/09/02/D)

In the example above, MT translates “national notes and coins” into “koin dan [nada/catatan] nasional”. This translation is incorrect since the comparison word of the term is not customarily used in Indonesian. The term “national notes and coins” is actually addressed to point out the denominations of the currencies which is circulated and used nationally within a country. Then, in Indonesian, “mata uang kertas nasional” has been standardized to correspond the term “national notes”. Meanwhile, the comparison of the term “national coins” is “mata uang logam nasional.” It means that the term “national notes and coins” must be translated into “mata uang kertas dan logam nasional”.

Then the correction is given below:

(14.2) CL: Selama periode itu, seseorang dapat membayar dan dibayar dalam euro atau dalam semua *mata uang kertas dan logam nasional*.

(27/09/02/D)

Another example is given below:

(16.3) SL: Interestingly, even though the U.K. is not going to replace pounds with euro, the U.K. government will accept *statutory (tax) returns* in euro from 1999, but not *VAT returns*.

TL: Dengan menarik, sungguhpun U.K [itu]. tidaklah akan (ke) menggantikan memukulkan dengan euro, U.K [itu]. Pemerintah akan menerima *statutory (pajak) kembali/kan* di (dalam) euro dari 1999, tetapi bukan *TONG kembali/kan*.

(52/16/03/D)

In the sentence above, MT translates the term of “statuory (tax) returns” and “VAT returns” incorrectly. The term “statuory (tax) returns” must not be translated into “statuatory (pajak) kembali[kan]”, because the translation is not the standardized comparison. Moreover it also does not represent clearly the idea of SL. The term should be translated into “formulir-formulir (pajak) wajib”. Meanwhile, the term “VAT returns” is also translated incorrectly into “*TONG kembali/kan*”. Actually, “VAT” stands for Value Added Tax and in Indonesian it is called “Pajak pertambahan Nilai” or “Ppn”. So, the term “VAT returns” should be translated into “formulir-formulir Pajak Pertambahan Nilai.”

The correction as follow:

(16.3) CL: Menariknya, sekalipun Inggris tidak akan mengganti harga-harga pon dengan euro, namun pemerintah Inggris akan menerima semua formulir (pajak) wajib dalam euro sejak tahun 1999, tetapi tidak untuk formulir-formulir Pajak Pertambahan Nilai.

(52/16/03/D)

The numbers of data which are included in this kind of error are:

1.2	5.4	6.1	8.3	9.2	13.1	14.2
15.2	15.3	16.1	16.3			

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

In this research, the researcher studies the formal text that is economical text entitled *The Euro: How It Will Impact Software Company?* written by Robin Dalhberg and its translation produced by TransTool verion 5.0 program. The researcher wants to know about quality assessment of the translation and the kinds of error that occur in the translation. Dealing with the two problems, the conclusion is divided into two sections. First, the researcher concludes the data

analysis of quality assessment of the translation. Second, the researcher concludes the kinds of errors that occur in the translation.

A. Analysis of Quality Assessment of the Translation

In examining the quality of the translation, the researcher examines the translation result based on its intelligibility and accuracy. The researcher conclude the analysis of the quality of the translation as follows:

1. From the total numbers of data which are amount 69 sentences, 17 sentences (25%) are considered to provide the intelligibility and the accuracy in the original work.
2. From the total numbers of data which are amount 69 sentences, 2 sentences (3%) are considered to has the improper intelligibility, but the accuracy is proper.
3. From the total numbers of data which are amount 69 sentences, 16 sentences (9%) sentence are considered to provide intelligibility in the original work but the accuracy is improper.
4. From the total numbers of data which are amount 69 sentences, 44 sentences (64%) are considered to have both improper intelligibility and accuracy.

From the explanation above, it can be concluded that the translation of a text produced by MT can be categorized into bad translation since most of the sentences are considered to have both improper intelligibility and accuracy. There are several data considered to have proper intelligibility and accuracy.

However, those data still need further revision to make the translation more acceptable.

B. Analysis of Kinds Error That Occur in the Translation

In the translation of the text *The Euro: How It Will Impact Software Company?* written by Robin Dalhberg, there are about 457 errors that occur in the translation produced by TransTool version 5.0 program. There are several kinds of error that occur in the translation. The researcher concludes the kinds of error as follow:

1. There are some incorrect translations of plural noun. Those errors are about 62 in number or 14 % of the total errors.
2. There are some untranslated words in the translation. Those errors are 24 in numbers or 5% of the total error.
3. There are some useless words in the translation. Those errors are about 91 in numbers or 20% of the total error.
4. There are some incorrect translations of ambiguous words or phrases. The errors are about 16 in number or 4% of the total error.
5. There are many wrong word choices in the translation. They are about 26 in numbers or 6% of the total error.
6. There are some incorrect translations of preposition. The errors are about 8 in numbers or 2% of the total error.
7. There are some incorrect translations caused by the wrong identification of part of speech. The errors are about 30 in numbers or 7% of the total error.

8. There are many incorrect translation caused by the different grammatical structure of SL and TL. These errors are about 20 in numbers or 4% of the total error.
9. There are many inverse word orders in the translation. The errors are about 29 in numbers or 6% of the total error.
10. There are some improper translations caused by incorrect placement of translation's element. The errors are about 16 in numbers or 4% of the total error.
11. There are many improper translations needing a replacement by other word. Those errors are about 124 in numbers or 27% of the total error.
12. There are some incorrect translations of a certain term. The errors are about 11 in number or 2% of the total error.

In the explanation above, it is clear that there are a lot of errors that occur in the translation produced by TransTool. The error makes the sentence confusing and meaningless. Actually, there are several errors which do not disturb the meaning of the sentence, but they make the translation does not appropriate enough in the TL perspective. Hence, the editing process is still required to make the translation more perfect and suitable.

B. Suggestion

The translation of the text produced by TransTool version 5.0 program can be considered into improper and inaccurate translation since it needs a lot of revision before the use. Besides, there are a lot of errors that occur in the

translation which make the translation is not acceptable enough to be used before some editing process. In this case the researcher try to make suggestion as follows:

1. Basically, the gist translation produced by TransTool is caused by the limited dictionary entries of this program, as well as the inability of TransTool in recognizing the structural differences of SL and TL. According to the phenomena, it is suggested to conduct some effort to add the words/idioms contained in the dictionary entries of the TransTool. It is also better to enlist some idiomatic translation in the program, so that the program will be able to recognize some idiomatic translation in SL and then translates it accurately into TL. It is also suggested to modify TransTool so that it can recognize the structural difference of SL and TL. It can be done, for example, by setting the indirect engine rather than direct engine into the program. Direct engine have more structural rules from both SL and TL.
2. Most of the errors that occur in the translation are the improper translation needing some replacement with other words. Then it is suggested that the user of TransTool must involve another tool of translation such as manual dictionary during the translation process in order to choose the more appropriate translation. Dealing with other kinds of errors, it is also suggested to conduct an effort to modify the TransTool so that it can do better adjustment of the translation toward the context of TL perspective.
3. TransTool generally have a disadvantage when it is used by people. The translation produced by TransTool can be categorized as a bad translation and

there are a lot of errors occur in the translation. Hence, is suggested that someone must do a precise and careful examination before using the translation. Using the translation produced by TransTool merely without any revision will lead to trouble since there is a lot of errors occur in the translation.

4. The rule and system applied in the MT, in this case TransTool, is a reflection of the result of the translation produced by it. In other words, if MT has more complex rule and system, the result will be better and the problem will less occur in the translation. According to the fact, it is suggested that the other researchers can conduct deeper studies about MT in order to find the best way for improving the rule and system of MT. Hence, it will also improve the quality of the translation produced by MT.
5. TransTool has a lot of limitation in its capability in translating text. However, this machine cannot be considered to be useless at all. Many people still choose to use TransTool due to their time constraint because generally this machine has an advantage in its high speed when translating text. TransTool can translate sentences, paragraphs, and even text much faster than human translator can do. Nevertheless, it is suggested that even people have limited time, but they still need to examine and revise the translation produced by MT before the use since there are many mistake done by MT in translating text.

BIBLIOGRAPHY

- Allison, Brian, Tim O'Sullivan, Alun Owen, Jenny Rice, Arthur Rothwell, Carol Saunders. 1996. *Research Skills for Students*. London: Kogan Page.
- Arnold, Douglas, Lorna Balkan, Siety Meijer, R. Lee Humphreys, Louisa Sadler. 1994. *Machine Translation: An Introductory Guide*. London: NCC Blackwell Ltd.**
- Bogdan, Robert. Steven J. Taylor. 1984. *Introduction to Qualitative Research Method: The Search for Meaning*. New York: John Wiley and Sons.
- Brislin, Richard. 1976. *Translation: Application & Research*. New York: Gardener Press.
- Catford, J.C. 1965. *A Linguistic Theory of Translation*. London: Oxford University Press.
- Dalhberg, Robin. 1998. The Euro: How Will It Impact Your Software Companies?<http://www.culpepper.com/eBulletin/1998/dec98dahlberg.asp>. Last up date: August 21, 2006
- Delavenay, Emile. 1960. *An Introduction to Machine Translation*. London: Thomes and Hudson.
- Echols, John M. and Hassan Shadily. 2002. *Kamus Inggris-Indonesia: Edisi Ketiga*. Jakarta: PT Gramedia Pustaka Utama.
- Guritno, T. 1994. *Kamus Ekonomi-Bisnis-Perbankan: Inggris-Indonesia 10.500 Kata 736 Singkatan*. Yogyakarta:Gadjah Mada University Press.
- Hadi, Sutrisno. 1983. *Metodologi Research I*. Yogyakarta: Psycho
- Hovy, Eduard H., Margaret King and Andrei Popescu_Belis. 2002. "Computer-Aided Specification of Quality Models For MT Evaluation". In *LERC 2002: Third International Conference on Language Resources and Evaluation*, Las Palmas de Gran Canaria, Spain.
- Humanika, Eko Setyo. 2002. *Mesin Penerjemah: Suatu Tinjauan Linguistik*. Yogyakarta: UGM Press.

- Hutchins, W. John & Samers. Harold L. 1992. *An Introduction to Machine Translation*. London: London Academic Press.
- Larson, Milderd L. 1984. *Meaning-Based Translation: A Guide to Cross-Language Equivalence*. Boston: University Press America.
- Lawson, Veronica. 1982. *Practical Experience of MT*. Netherlands: North-Holland Publishing Company.
- Moeliono, Anton M. et al. 1988. *Tata Bahasa Baku Bahasa Indonesia*. Balai Pustaka, Jakarta.
- Nababan, M.R. 1997. *Teori Menerjemah Bahasa Inggris*. Yogyakarta: Pustaka Pelajar.
- Nababan, P.W.J. 1984. *Sosiolinguistik: Sebuah Pengantar*. Jakarta: PT Gramedia.
- Newmark, Peter. 1981. *Approaches to Translation*. Oxford: Pergamon Press.
- Newmark, Peter. 1991. *About Translation*. Philadelphia: Multilingual Matter.
- Nida, Eugene A. 1964. *Toward A Science of Translating*. Leiden: E.J. Brill.
- Nida, Eugene A. and Charles R. Taber. 1974. *The Theory and Practice of Translation*. Leiden: E.J. Brill.
- Sadtono, E. 1985. *Pedoman Penerjemahan*. Jakarta: Pusat Pembinaan & Pengembangan Bahasa Depdikbud.
- Suryawinata, Zuchridin. (1989). *Terjemahan: Pengantar Teori dan Praktek*. Jakarta: Direktorat Jenderal Pendidikan Tinggi Proyek Pengembangan Lembaga Pendidikan Tenaga Kependidikan Depdikbud.
- Van Slype, Georges. 1974. *Critical Study Of Methods For Evaluating The Quality Of Machine Translation*, European Commission/Directorate for General Scientific and Technical Information Management (Dg XIII), BR 19142. <http://www.issco.unige.ch/projects/isle/van-slype.pdf>. Last up date: September 22, 2006.
- Widyamartaya, A. 1989. *Seni Menerjemahkan*. Yogyakarta: Kanisius.
- Wills, Wolfarm. 1982. *The Science of Translation: Problem and Method*. Germany: Gunter Narr Verlag Turbingen.

