

# THE COMPARISON BETWEEN PROFESSIONAL TRANSLATION AND MACHINE TRANSLATION OF DOYLE'S S. HOLMES THE SIGN OF THE FOUR FOR ITS LEVEL OF ACCURACY AND READABILITY

a final project

submitted in partial fulfillment of the requirements for the degree of Sarjana Pendidikan in English



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#### APPROVAL

This final project, entitled THE COMPARISON BETWEEN PROFESSIONAL TRANSLATION AND MACHINE TRANSLATION OF DOYLE'S S. HOLMES THE SIGN OF THE FOUR FOR ITS LEVEL OF ACCURACY AND READABILITY has been approved by the Board of Examination and officially verified by the Dean of Language and Arts Faculty of State University of Semarang on August 7, 2016.

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#### DECLARATION OF ORIGINALITY

I, Rury Restu Afifah, hereby declare that this final project entitled The Comparison between Professional Translation and Machine Translation of Doyle's S. Holmes the Sign of the Four For Its Level of Accuracy and Readability is my own work and has not been submitted in any form for another degree or diploma at any university or other institute of tertiary education. Information derived from the published and unpublished work of others has been acknowledged in the text and a list of references is given in the bibliography.

Semarang, July 2017

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Rury Restu Afifah

# MOTTO AND DEDICATION

"Feel the fear and do it anyway"

(Tamara Mellon)



To

Mama and Mimi

My Brothers

and

My Friends

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#### **ABSTRACT**

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Keywords: Professional Translation, Machine Translation, Holmes' the Sign of the Four, Accuracy, Readability.

This study attempted to compare the quality between professional translation and machine translation of Doyle's S. Holmes the sign of the four for its level of accuracy and readability. The objectives of the study were to describe the quality of both professional translation and machine translation of Doyle's S. Holmes the sign of the four for its level of accuracy and readability also to identify their similarity and differences in the accuracy and readability assessment result. This research was conducted qualitatively. This study applied the theory proposed by by Nababan (2012) about the accuracy and readability criteria of translation assessment. The results of the study showed that there were 50 sentences from both PT and MT from similar source text taken from Doyle's S. Holmes the Sign of the Four to assess their accuracy and rated by three expert of English language who is the native speaker of Bahasa also 43 paragraphs from both PT and MT from similar source text taken from Doyle's S. Holmes the Sign of the Four to assess its readability by twenty college student of UNNES with different study program who is the native speaker of Bahasa. The result of the study show that the percentage of accuracy level of PT is 66% very accurate, 30% accurate, 4% quite accurate, and 0% for less accurate and inaccurate and the readability level of PT is 55,82% very readable, 39,53% readable, 4,65% quite readable and 0% for less readable and unreadable. While, The percentage of accuracy level of MT show that 32% is very accurate, 22% is accurate, 32% is quite accurate, 14% is less accurate, and 0% inaccurate and the readability level of MT is 9.30% very readable, 46,51% readable, 39,53% quite readable, 4,66% less readable. In terms of similarity and difference in accuracy and readability of both data, it is found that for the accuracy there is 32% similarity and 68% difference and for readability show that 25,59% is similar and 74,41% is difference. The translation quality with the highest accuracy was professional translation, followed by machine translation. Also, the readability level was mostly highest in the professional translation and lower in this machine translation.

# **TABLE OF CONTENTS**

ACKNOWLEDGEMENT	V
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	ix
I. INTRODUCTION  1.1 Background of the Study	1
1.2 Reasons for Choosing Topic	
1.3 Statements of the Problem	
1.4 Objective of the Study	6
1.5 Significance of the Study	
1.6 Outline of the Study	7
II. REVIEW OF RELATED LITERATURE	
2.1 Review of Previous Studies	
2.2 Review of Theoretical Studies	
2.2.1 Definition of Translation	14
2.2.2 Criteria of Good Translation	15
2.2.3 Machine Translation	17
2.2.4 Professional Translation	20
2.2.5 Translation Quality Assessment	21
2.3 Theoretical Framework	30
III. RESEARCH METHODOLOGY	
3.1 Research Design	32

3.2 Object of the Study	33
3.3 Source of Data	34
3.4 Roles of the Researcher	34
3.5 Instruments for Collecting Data	35
3.5.1 Document Analysis	35
3.5.2 Questionnaires	36
3.6 Procedures of Collecting Data	43
3.7 Procedures of Analyzing Data	46
IV. FINDINGS AND DISCUSSION	
4.1 Findings	48
4.1.1 The Quality of Professional Translation	49
4.1.2 The Quality of Machine Translation	51
4.1.3 The Similarities and Differences	54
4.2 Discussion	56
4.2.1 The Quality of Pro <mark>fes</mark> si <mark>on</mark> al Translation	56
4.2.2 The Quality of Mac <mark>hine</mark> Translation	71
4.2.3 The Similarities and Differences	89
V. CONCLUSIONS AND SUGGESTIONS	
5.1 Conclusions	110
5.2 Suggestions	112
BIBLIOGRAPHY	113
APPENDICES	116

# LIST OF TABLES

Table	Page
3.1 Readability Indicators	36
3.2 Readability Questionnaire Form for PT	37
3.3 Readability Questionnaire Form for MT	
3.4 Accuracy Indicators	37
3.5 Accuracy Questionnaire Form for PT	39
3.6 Accuracy Questionnaire Form for MT	39
3.7 Recap of the Accuracy Assessment	39
3.8 Recap of the Readability Assessment	40
3.9 Data Tabulation Form of Accuracy	41
3.10 Data Tabulation Form of Readability	42
3.11 Data Tabulation Form of Similarity and Difference	43
4.1 Total and Percentage Number of Data (accuracy of PT)	49
4.2 Total and Percentage Number of Data (readability of PT)	50
4.3 Total and Percentage Number of Data (accuracy of MT)	52
4.4 Total and Percentage Number of Data (readability of MT)	53
4.5 Percentage of Similarity and Difference of Data in Accuracy	54
4.6 Percentage of Similarity and Difference of Data in Readability	55
4.7 Similarity of Assessment in PT and MT of Accuracy	90
4.8 Similarity of Assessment in PT and MT of Readability	93

#### **CHAPTER I**

#### **INTRODUCTION**

This chapter presents the background of the study, reasons for choosing the topic, statement of the problem, objective of the study, significance of the study and outline of the report.

#### 1.1 Background of the Study

In this 21<sup>st</sup> century we have to have some skills to be able to compete in this globalization those skills are creativity and innovation, communication and collaboration, digital citizenship, research and information according to Khun (2015). If we have those skills within ourselves we will not left behind by waves of modernization. Now let's drive our focus to the third point of 21<sup>st</sup> skills that is digital citizenship. This skill is apparently tangible in nowadays society. Digital Citizenship examines three aspects of participation in society online: economic opportunity, democratic participation, and inclusion in prevailing forms of communication (Mossberger, Tolbert and McNeal: 2007). We can see in so many places and everywhere we go in urban and even suburban peoples are now equipped by technology. We cannot deny that nowadays is a modern era, because everything can be done, reached, and conducted so easily with the help of technology. Peoples tend to leave the traditional or manual equipment and choose what technology has

invented to ease the process of doing. These facilities that offered to them have build peoples character and change their needs in life.

We have easy access to whatever we want through cyber world and there are no boundaries or limitations across continent. If we had internet access and tools that is required such as smart phone that would be enough for us to surf whatever information we need from many resources delivered from another part of the world and this facilities challenge us to acquire the second skill of 21st century that is communication. As we know, much information are delivered in English language since English is a global language, according to Crystal (2003:3) a language achieves a genuinely global status when it develops a special role that is recognized in every country. English language is a bridge to ease the communication between people from different part of the world that use different languages.

As the trend begins to move more and more to mobile devices, there is a new opportunity for access by individuals and groups (Ribble 2011: 18). This trend also cut down into educational process of learning, from college students who learn English as their major or others such as science, sport, social, economic and act as their major study. All of them use these online facilities to gain more knowledge and information about their major study in the internet. Here, Translation has played a central (though often unrecognized) role in human interaction for thousands of years (Crystal 2003: 11).

Translation is the act of rendering a language into another language without changing the message of the original language. The object of translation can be a

textbook, literary works, speech, and even song or movie subtitle. As stated by House (2015:1) Translation is both a cognitive procedure which occurs in a human being's, the translator's, head, and a social, cross-linguistic and cross-cultural practice. Means that the act of translation is occurs everywhere and bounded by its linguistic, social, and cultural barrier from each language that being translated. Every words has its soul that bring the harmonious convergent that has to be considered by the translator to communicate the meaning of the whole text.

Newmark (1988:4) stated that a translator has to have flair and a feel for his own language. There is nothing mystical about this 'sixth sense', but it is compounded of intelligence, sensitivity and intuition, as well as of knowledge. The translator has to acquire these criteria in order to become a good translator. Not only the knowledge of translation is needed to become a good translator but also there is a long process to achieve the skill of translation, practice is needed to sharpen the sense or feeling of translation, the more practice the better.

For the professional translator that dealing with translation work might has a little difficulty than that of common people that not involved in the translation work unless they require doing so in the specific purposes such as reading international journal as the reference of their research paper and finding important information related to what they need in the web page. Students that have no professional skills in translation will find it difficult to translate the text in source language into their target language even though they already use dictionary as the tools in translating the text.

As the modernization change the civilization into the digital citizenship the paper dictionary are mostly left behind by the students. Now they use electronic dictionary that is offline or even online dictionary that utilize the internet access which is called as machine translation. Because the lack of knowledge from the students who used this machine translation they give no changes to the result of the machine translation and accept it as what it is. This result leads to the confusing, misconception, and misunderstanding to the text that being translated by the students.

Therefore, the researcher found that the quality of the translated text that using machine translation with only little changing on its punctuation, spelling, and grammatical order are considered a less accurate and less readable for the reader. Concerning this problem of translation, the researcher intended to conduct a study comparing the accuracy and readability of the professional translation and machine translation of the English novel of Doyle's *S. Holmes the Sign of the Four* to know its similarity and difference. Here, the researcher using sederet.com as a tool to represent the machine translation as the device of translation because sederet.com is widely used by the students besides the Google translate.

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#### 1.2 Reasons for Choosing the Topic

The reasons for choosing the topic are stated as follows:

(1) The English novel of Doyle's *Sherlock Holmes* is the most well-known, with Guinness World Record listing him as the "most portrayed movie character" in history based on Wiki.

- (2) The English novel of Doyle's *Sherlock Holmes* is fictional detective novel that popular by its mystery writing therefore the translation of the novel has to be analyze in order to know its accuracy and readability to know whether the quality of translation can render the meaning of the source text or not.
- (3) As we know that translating the literary work is not an easy task to do even by the professional translator. They have to have the feeling and sense to transfer the meaning from the source language into the target language in the same language style.
- (4) The researcher wanted to compare the quality of the professional translation and machine translation of the English novel of Doyle's *Sherlock Holmes* to know its similarities and how far is the differences from the both side of translation work.
- (5) Machine translations such as Google translate, sederet.com, Bing.com, and others are widely used by people to translate paragraphs or even texts of the English language into their target language. But, sederet.com never used as the object of the research study and considered as ten best translation software that is why the researcher using this application in this study.
- (6) Here the researcher wanted to bring around the knowledge that *machine* translation is used for word-for-word translation only and not for the whole text translation and post editing of the translation result is necessary. This theory will be proven by comparing the quality of *Professional Translation* (professional translation) in the English novel of Doyle's *S. Holmes the Sign*

of the Four with the quality of Machine Translation (machine translation) using sederet.com.

#### 1.3 Statement of the Problem

In order to focus on the study, the researcher will limit the discussion of the study by presenting the following problems:

- (1) How is the quality of Professional Translation of Doyle's *S. Holmes the Sign* of the Four For the Level of Its Accuracy and Readability?
- (2) How is the quality of Machine Translation of Doyle's *S. Holmes the Sign of the Four* For the Level of Its Accuracy and Readability?
- (3) How are the similarities and differences between Professional Translation and Machine Translation of Doyle's S. Holmes the Sign of the Four For the Level of Its Accuracy and Readability?

#### 1.4 Objective of the Study

The following objectives are expected to be achieved in the study:

- (1) To explain the quality of Professional Translation of Doyle's *S. Holmes the Sign of the Four* for the Level of Its Accuracy and Readability.
- (2) To explain the quality of Machine Translation of Doyle's *S. Holmes the Sign* of the Four for the Level of Its Accuracy and Readability.

(3) To compare the similarities and differences between Professional Translation and Machine Translation of Doyle's *S. Holmes the Sign of the Four* for the Level of Its Accuracy and Readability.

#### 1.5 Significance of the Study

- (1) The result of the study will be useful for another researcher who interested to conduct the research under the same topic of translation's quality.
- (2) The result of the study will acknowledge the differences and similarities of translation quality between two different sources of *professional translation* and *machine translation* in Doyle's *S. Holmes the Sign of the Four*.
- (3) The result of the study will be useful for teachers especially English teacher who teach English as foreign language (EFL) or English as second language (ESL) to teach their students on how to use dictionary especially machine translation which are online or offline translation wisely as one of the tools to help the students in translating English text.

#### 1.6 Outline of the Report

The final Project consists of five chapters as follows:

Chapter I is the introduction, which has several sub-chapters consisting of: the background of the study, reasons for choosing the topic, statement of problem, objective of the study, and significance of the study.

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Chapter II is review of related literature, which presents a review of the previous studies and review of theoretical study. The review of theoretical study provides theories that support this study. There are definitions of translation, criteria of a good translation, definitions of machine translation, definition of professional translation, and translation quality assessment. The last is theoretical framework.

Chapter III is the method of investigation. Which contains of research design, rolesof reseracher, object of the study, source of data, procedures of collecting, procedures of analyzing, and instrument for collecting data.

Chapter IV is the findings and discussion, which consists of findings, and discussion.

Chapter V presents the conclusions and suggestions.



#### **CHAPTER II**

#### REVIEW OF RELATED LITERATURE

This chapter consists of three sections. The first section presents the review of the previous study, the second section presents the explanation about the theories related with this study, and the last section presents the theoretical framework.

#### 2.1 Review of the Previous Studies

There have been several studies conducted under the same field of translation qualities on its accuracy and readability. Roihanah (2016) conducted the studies for her final project entitled Indonesian Translation Quality on Kids' Song Lyrics in Barney and Friends the Emperors' Contest Episode. This research focuses on the analysis of the Indonesian translation quality of kids' song lyrics in Barney and Friends the Emperor's Contest episode. The objects of this study are to find out the accuracy, the acceptability, and the readability of the translation of the songs which are translated in Indonesian. Theory of translation quality which she used is from Nababan, he assesses the quality of translation by the accuracy, acceptability and readability.

A translation studies by Anggriawan (2016) entitled Translation Techniques and Readability of the Culture Specific Items in the Case Of the 2009 Indonesian Translation of Alice's Adventures in Wonderland, Alice in Wonderland.

This study was about the translation technique and the level of readability of the culture specific items in the 2009 Indonesian translation of Alice's Adventures in Wonderland, Alice in Wonderland. The aim of this study were to explain what translation techniques (based on Mollina and Albir's categorization) used in translating culture specific items (based on Peter Newmark's categorization) in the 2009 Indonesian translation of Alice's Adventures in Wonderland and to find the readability level of the translated culture-specific items in the 2009 Indonesian translation of Alice's Adventures in Wonderland.

There is another study by Sari (2016) entitled Translation Procedures And Accuracy Of Physics Terms In The Physics Bilingual Book For Senior High School Year XI. This study attempted to analyze the use of translation procedures and their accuracy. The objectives of the study were to describe the translation procedures used to translate the Physics terms and to identify their accuracy in Physics Bilingual Book for Senior High School Year XI. This research was conducted qualitatively. This study applied the theory proposed by Vinay and Darbelnet (in Hatim and Munday 2004:30) about translation procedures and the accuracy criteria of translation assessment by Nababan (2012:50).

A study by Bargas-Avilaa and Bruhlmanna (2015) entitled Measuring User Rated Language Quality: Development and Validation of the User Interface Language Quality Survey (LQS) aGoogle / YouTube User Experience Research. The researcher argues that the global context, where software has to run in multiple geographical and cultural regions, requires software developers to translate their

interfaces into many different languages. This article presents the development of a questionnaire to measure user interface language quality (LQS). The application to three different products (YouTube, Google Analytics, and Google Ad Words) revealed similar key statistics, providing evidence that this survey is product-independent.

The Master's diploma thesis by Nerudová (2012) entitled Quality of Translation: Approaches and a Field Survey. The objective of the final Master's thesis was to map the current situation on the translation market in the Czech Republic and the United Kingdom and the interaction between TSPs, clients and translators with respect to translation quality assurance, to outline any similarities and differences and compare individual perspectives in order to propose comprehensive strategies towards further translation services' development. The survey has demonstrated an enormous complexity of the translation process where a number of interrelated factors come into play. One of the most interesting findings of the survey is the fact that the human aspect is underlying the whole translation process: the person of a PM is crucial in setting priorities, designing the project's schedule and distributing the work to individual suppliers so that the desired outcome is achieved. The research showed that the PM is a pivotal figure in translation processing both in the United Kingdom and the Czech Republic and largely influences the success of any translation project.

A journal by Jiménez-Crespo (2015) entitled Translation quality, use and dissemination in an Internet era: using single-translation and multi-translation parallel

corpora to research translation quality on the Web. The researcher said that among the many changes induced by this revolution; this corpus-based study focuses on the impact of the immediacy afforded by the Internet on the fuzzy notion of translation quality. In order to research this issue, this paper contrasts the quality in a corpus of White House official translations of Obama's speeches to a parallel corpus of similar translations released by online media immediately after their delivery.

Other journal by Yolanda and Yuliasri (2016) entitled Technique and Quality of English – Indonesian Translation of Pun in Tolkien's *The Hobbit*. This study is carried out in order to find out the kinds of translation techniques used, and to assess the quality of English – Indonesian translation English – Indonesian Tolkien's The Hobbit. The object of this study is English - Indonesian pun translation of J.R.RTolkien"s *The Hobbit.* The result of the analysis shows that there are 243 puns found in J.R.R Tolkien *The Hobbit*. There are three kinds of pun are found in this novel. Paronymy dominates in 231 data, Homonymy with 11 data, Homophony with 1 datum. The analysis on translation techniques shows that there are six techniques used. Pun to Non Pun technique, Punoid, Pun to Pun, Non Pun to Pun, then Pun in ST is copied to Pun in TT and Pun to Zero. The analysis on the translation quality shows that 56 translations are considered as accurate, and 187 translations are considered as less accurate. In acceptability level, 116 translations belong to acceptable, and 127 translations belong to less acceptable. Readability level shows that 133 translations are categorized as high readability, and 110 translations are categorized as sufficient readability.

A journal by House (2001) entitled Translation Quality Assessment: Linguistic Description versus Social Evaluation. The paper first reports on three different approaches to translation evaluation which emanate from different concepts of "meaning" and its role in translation and finally the important distinction between linguistic analysis and social judgment in translation evaluation is introduced, and conclusions for the practice of assessing the quality of a translation are drawn.

There is also another journal from Mujiyanto (2015) entitled Comparing the Readability Levels of a Source Text and Its Back-Translations. He said that comparing a source text and its back-rendering, it is possible to assess whether or not translation undertaking achieves certain levels of equivalence. This study intends to compare English texts and their two versions of back-translation from Bahasa in order (1) to show their similarities as well as differences in readability levels, (2) to point out the reasons for such existence, and (3) to assess the equivalence in readability between the source texts and their translation in Bahasa by utilizing the results of rendering the translation in Bahasa back to English employing *Google Translate*.

Another journal from Shahraki and Karimnia (2011) in Roihanah (2016: 9-10) Waddington's model of translation quality assessment: a critical inquiry explains that to assess a translated work, just like marking a translation, is a highly subjective task. There is not any objective index according to which, reviewers can assess or mark a translation. They apply Waddington's model of translation quality assessment on the Persian translation of George Orwell's 1984, by Baluch. They choose twenty

paragraphs randomly and compared and contrasted precisely with their parallel translations to assess the quality of translation.

From explanation above, there are many expert that propose model for assessing the quality of translation and the researcher of this study uses Nababan's criteria for assessing translation quality which widely used by another researcher who conduct a study under the same field of translation quality. Also, Nababan criteria of translation quality covering accuracy, acceptability, and readability of translation which are going to be analyzing in this study especially its accuracy and readability. But, little changes are made in the indicator part to make the level classification is more specific in its criteria.

#### 2.2 Review of the Theoretical Studies

In this section, the researcher would like to talk about four areas of studies: (1) translation (2) criteria of good translation (3) machine translation (4) professional translation and (5) translation quality assessment.

#### 2.2.1 Definition of Translation

There is several definition of translation which differs with one another because the experts of translation studies have their own vision about what translation is.

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Before we discuss the definition of translation in specific let us understand the meaning of a word "Translation" itself, according to Oxford English Dictionary translation is: Translation (noun) 1. The process of translating words or text from one

language into another 1.1.[count noun]A written or spoken rendering of the meaning of a word or text in another language.2. The conversion of something from one form or medium into another. The Origin of a word Translation is came from Middle English: from Old French, or from Latin translation (n-).

House (2015: 1) Translation can be defined as the result of a linguistic-textual operation in which a text in one language is re-contextualized in another language.

Susan Bassnett in Roihanah (1980:12) adds that translation involves the rendering of a source language (SL) text into the target language (TL) so as to ensure that (1) the surface meaning of the two will be approximately similar and (2) the structures of the source language (SL) will be preserved as closely as possible but not so closely that the target language (TL) structures will be seriously distorted.

From those quotations above the researcher conclude that translation is the process of transferring the source text into the target text form without changing the meaning that carried in the source text.

#### 2.2.2 Criteria of Good Translation

This topic has been discussed for long ago and it still is a hot topic that attracts the expert of translation studies to excavate it in depth to know in what condition that the result of translation is considered as a good translation. Then, the criteria of a good translation pop out to measure the quality of translation.

According to Doty (2016) on his article, It is generally acknowledged that there are four qualities of a good translation—accuracy, clarity, naturalness, and

acceptability. In this article, he briefly describes these qualities and shows the kinds of problems that result when a translation fails to achieve one or more of these qualities.

Here Criteria for a good translation describe clearly by Massoud (1988):

First, a good translation requires full understanding of the text to be translated including knowledge of the grammar and vocabulary of the source language. So, the translator of a text not only is mastering the target language but also the structure of the source language in order to construct the meaning well of source text in the new form of the target language. Then, a good translation is easily understood. Means that the reader of the translation text will easily understood the content of a text in only one times of reading the text. This explanation has no relation with the difficulty of the content of the text where the text is not a light topic of a study but more to its structure which fully adapted to the target language rules and this related to the readability of a text. Next, a good translation is fluent and smooth. Means that a text not sounds like a translation work, it has to be natural and accepted by the target language people. The naturalness of the text will be assessed here. Then, a good translation is idiomatic. The translator often come across idiom in a source text especially when the translator translating the literature works which idiom highly used, here the skill of the translation is tested to translate these idioms wisely considering the purpose, function, and the culture carried by the idiom and not only considering to precisely translate it word-for-word. The next is a good translation distinguishes between the metaphorical and the literal. The metaphorical and the

literal meaning sometimes difficult to differentiate by those who did not master the source language well because the meaning of a word in English is differ based on its context. By understanding the context of a text the translator will know whether the meaning of a text would be metaphorical and literal. Then, a good translation reconstructs the cultural/historical context of the original. Here the culture specific item of a source text has to be maintained to keep its originality. Next, a good translation makes explicit what is implicit in abbreviations and in allusions to sayings, songs, and nursery rhymes in order to make it clearer for the reader of the translation. The last, a good translation will convey, as much as possible, the meaning of the original text. This point is very important where the message of the source text is transferred to the target text with no addition or decreasing of meaning. Therefore, the translation should consider those points to meets its criteria as a good translation.

#### 2.2.3 Machine Translation

The use of machine translation is a hot topic especially in the translation studies.

Many of them think that machine translation is inferior to professional translation.

But, in this globalization era the use of machine translation is wider than that before.

According to Papula (2012: 3) Machine translation is a piece of text which has been rewritten from one language into another language by a machine (i.e. a computer). The basic functionality of a machine translator is simple: you just write a text segment and the machine gives you a translation.

The desire to get a machine to perform this complex human activity has a long history that has been spurred on at various stages during its development. In times of war machine translation has been used to accelerate the translation of large volumes of monitored content. More recently the growth of the internet and globalization has driven the need for more cost effective methods of translation (SDL.com).

As stated by Papula (2012:6) Professional translators often oppose any use of machine translators. They see machine translation as a grammatical disaster. The common people however have a different point of view. For many people online machine translators are the only way to get something translated. The good enough translation quality combined with quick and easy access can result in satisfactory perceived quality. People know that machine translation is seldom flawless, but in certain cases it's the best choice for them.

There are many kinds of translator application or software that had been invented. Since this study is take place in Indonesia so the researcher will only mention some of the online translator application that widely used by Indonesian people in translating text, some of them are:

# (1) Google translate TYPERSITAS NEGERI SEMARANG

Google Translate is a free multilingual machine translation service developed by Google, to translate text, speech, images, sites, or real-time video from one language into another. It offers a web interface, mobile apps for Android and iOS, and an API that helps developers build browser extensions and software applications. Google Translate supports over 100 languages at various levels and as of May 2013, serves over 200 million people daily stated by Wikipedia (2017).

#### (2) Bing Translator

Bing Translator is a web-based statistical machine translation system developed by Microsoft. Microsoft Translator is a cloud service that translates between 45+ languages. In addition to powering Bing translation for Search, Bing Bar and Bing.com/translator, it powers translations in Microsoft products such as Microsoft Office, Yammer, Skype Translator, Internet Explorer and many others. Microsoft Translator uses an automatic translation engine that employs machine learning to generate statistical translation models as stated by Wikipedia (2017).

#### (3) Nice translator

Nice translator is make used of google translation technology API, actually Nice translator will get the same outcome like Google translate, but the application is more interesting and easy to navigate. You will only choose the language and type the text in the prepared column to help you in translating the language into the intended language no more than a second. This application is made in 2008, mobile application is already served so it can be accessed anytime and this served in 34 languages.

#### (4) Sederet.com

Sederet.com is one of the digital dictionaries that can be accessed online and connected to the internet. In this dictionary you can translate words, sentences, or even paragraph from Indonesia to English or vice versa. Some good features or facilities are available in sederet.com such as:

- (a) there is a feature called "Word by word match" in which separate and split the text that we translate into some smaller part and give some suitable word as its translation to give us some option in deciding the perfect meaning based on the context of the text.
- (b) There is also synonym feature which give us the probability to find the translation result that match perfectly to what you are intended.

Above the three translator applications that already explain the researcher chooses Sederet.com as the machine translation in translating sentences and paragraphs used as the object of the study because sederet.com has simple appearance and easy to applied. Besides, sederet.com has a good translation result compared to others sites because sederet.com combined the translation engine of Google translate and Microsoft translator. But now sederet.com itself tries to develop its own engine. Not only translating words but sederet.com also translating sentences or even paragraph of text.

#### 2.2.4 Professional Translation

Many people still think that translating is an easy task and can be done by whoever interested in doing so. They think that even a student who only gets a little sufficiency on the target language knowledge and in their trial of translating a text can be called as translator, but the real "Translator" is more than that. The qualified professional translator is highly skilled technical expert that mastering the multi-language in rendering the meaning of their translation text.

Robinson said that (2007:33) some business consultants become millionaires by providing corporate services that are not substantially different from the services provided by translators. Robinson also added that (2007:24) for the translator or interpreter a higher consideration than money or continued employability is professional pride, professional integrity, and professional self-esteem. So, it is clear that involvement in the profession helps us realize that translation users need us as much as we need them: they have the money we need; we have the skills they need (Robinson, 2007:25).

Therefore, professional translation is a cornerstone of multilingual communicating that has a major role in this globalization era.

#### 2.2.5 Translation Quality Assessment

There are many models in assessing translation quality proposed by the experts, here the researcher choose Nababan instrument in assessing translation quality.

#### (1) Accuracy

The first aspect is accuracy. As said by Hartono (2013:81-82) in Roihanah (2016: 14) accuracy test means to check whether the meaning is transferred from Tsu is the same as the one in Tsa. Translator goal is to communicate meaning accurately. Translators should not ignore, add or subtract the message contained in Tsu, because influenced by the shape of formal Bsa. As said by Nababan in Hartono (2013:92) in Roihanah (2016: 14) on his accuracy level grading scale, accurate means that the meaning of words, phrases, clauses, and sentences from source language (SL) are transferred accurately into the target language (TL), there is no distortion. Therefore it can be

concluded that the accuracy of a translation related to the accuracy of the transfer of the original message or the meaning contained in the source language text into the target language text.

As the researcher has mention before in the review of the previews studies that this study uses Nababan's criteria for assessing translation quality especially its accuracy and readability. But, little changes are made in the indicator part to make the level classification is more specific in its criteria. Here the scale is widened by the researcher from 5 up to 1. The data of the accuracy in this study using sentences that has been chosen by the researcher under the systematic process that the researcher has going through. Since the data of the accuracy is using sentences so the researcher decided to classify the data based on syntactic structure specifically on its sentence length. Here is the classification based on sentence length:

Telegraphic – < five words long Medium - ~ eighteen words long

Short -  $\sim$  five words long Long - > 30 words long

#### (2) Acceptability

As said by Larson in Hartono (2013:84) in Roihanah (2016: 15) stated that the purpose of the translation is to produce idiomatic translation, which is the translation that has the same meaning with the source language (SL) which stated in reasonable form in the target language (TL).

The researcher does not use this second criterion of translation quality because although this criterion is more important than readability but the object of this study

is to compare the quality of professional translation to machine translation in which machine translation is not equipped with the sense of naturalness as professional translation has in their brain. So, even without being tested machine translation will definitely lose in its quality. The naturalness and acceptability is something that machine translation does not handle. According to Lionbridge Marketing (2015) Machine translation doesn't handle tone very well either, Bernier says. For example, it's not going to differentiate between the nuances of how you speak to someone with whom you're familiar versus someone you've never met.

#### (3) Readability

Larson states in Hartono (2013:83) in Roihanah (2016: 16) that the readability test is intended to express the degree of ease of a text. In this case, it needs to be examined whether a text translation results it is easy to understand the point or not.

According to DuBay (2004:3) Readability is what makes some texts easier to read than others. It is often confused with legibility, which concerns typeface and layout. George Klare (1963) in DuBay (2004:3) defines readability as "the ease of understanding or comprehension due to the style of writing." This definition focuses on writing style as separate from issues such as content, coherence, and organization. In a similar manner, Gretchen Hargis and her colleagues at IBM (1998) state that readability, the "ease of reading words and sentences," is an attribute of clarity.

Pikulsiki (2002:1) stated that A more reasonable definition of readability that is in keeping with more recent research and theory is *the level of ease or difficulty* with which text material can be understood by a particular reader who is reading

that text for a specific purpose. Readability is dependent upon many characteristics of a text and many characteristics of readers. Therefore it can be concluded that readability is the ease of reading a piece of work that suit to the reader interest and knowledge. In the classic readability studies in DuBay (2006) he compiled all classic scholars' studies about readability and in this study the researcher will only attached three of those classic readability studies that relevant to this study, there are:

#### (a) Vogel and Washburne (1928): The Winnetka Formula

The Winnetka formula, the first one to predict difficulty by grade levels, became the prototype of modern readability formulas. Their new formula correlated highly (r = .845) with the reading test scores. They studied ten different factors including kinds of sentences and prepositional phrases, as well as word difficulty and sentence length. Since, however, many factors correlated highly with one another, they chose four for their new formula.

#### (b) Patty and Painter (1931): The Vocabulary Burden

In 1931, W. W. Patty and W. I. Painter discovered the year of highest vocabulary burden in high school is the sophomore year. Believing that the length of a text affects the vocabulary burden, they questioned the Lively and Pressey method of sampling 1,000-word passages from a text, They believed that taking a percentage of words from each text would give a better sample. The new method they devised took the words from the third line of each fifth page.

#### (c) Flesch Scale

According to the Flesch formula (1948) in Dubay (2006:96-97) the second part of Flesch's formula predicts human interest by counting the number of personal words (such as pronouns and names) and personal sentences (such as quotes, exclamations, and incomplete sentences). The formula for the updated Flesch Reading Ease score is:  $Score = 206.835 - (1.015 \times ASL) - (84.6 \times ASW)$  Where:

Score = position on a scale of 0 (difficult) to 100 (easy), with 30 = very difficult and 70 = suitable for adult audiences.

ASL = average sentence length (the number of words divided by the number of sentences).

ASW = average number of syllables per word (the number of syllables divided by the number of words).

This formula correlated .70 with the 1925 McCall-Crabbs reading tests and .64 with the 1950 version of the same tests.

In The Art of Readable Writing, Flesch, described his Reading Ease scale in this way:

Reading Ease	Style Description	Estimated	<b>Estimated Percent</b>
Score		Reading Grade	of U.S. Adults
			(1949)
0 to 30:	Very Difficult	College graduate	4.5
30 to 40:	Difficult	13th to 16th grade	33
50 to 60:	Fairly Difficult	10th to 12th grade	54

60 to 70:	Standard	8th and 9th grade	83
70 to 80:	Fairly Easy	7th grade	88
80 to 90:	Easy	6th grade	91
90 to 100:	Very Easy	5th grade	93

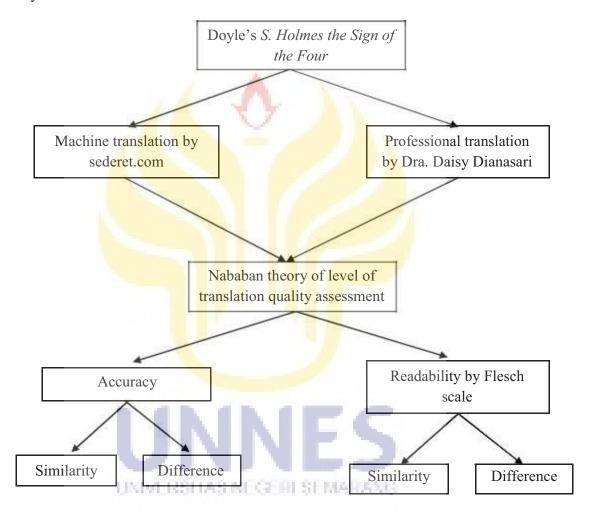
Flesch's Reading Ease formula became the most widely used formula and one of the most tested and reliable (Chall 1958, Klare 1963).

From all of the three scales that have been explained above, the most widely used of all is Flesch scale. Also, Flesch Reading Ease Formula is considered as one of the oldest and most accurate readability formulas. That is why the researcher use flesch scale in classifying paragraphs in readability level above the others formula.

#### 2.3 Theoretical Framework

Doyle's *S. Holmes the Sign of the Four* is the object of this study to campare the translation quality of machine translation by sederet.com and professional translation by Dra. Daisy Dianasari which published by shira media. In assessing both translation quality the researcher using Nababan theory of translation quality which consist of accuracy, acceptability, and readability. Yet, in this study the researcher will analyse only for the accuracy and readability of data. The accuracy data here will be classified on the syntactic level of translation while for the readability the scale of classification will be derifed from Flesch scale in the readability level. Afterwards, the result of comparing thus two translations will show through their similarity and difference in the level of accuracy and readability.

The following diagram shows the role of translation quality assessment in the process of comparing between machine translation and professional translation in this study.



#### **CHAPTER V**

#### CONCLUSIONS AND SUGGESTIONS

This chapter is the last chapter for this study. With regard to the findings and discussions presented in Chapter IV, there are some important points. They are presented through conclusions and suggestions.

#### **5.1 Conclusions**

To answer the first research question of this study, the researcher provides the explanation of the quality of professional translation of Doyle's S. Holmes the sign of the four for the level of its accuracy and readability. The result of the study show the percentage of accuracy level of professional translation is 66% very accurate, 30% accurate, 4% quite accurate, and 0% for less accurate and inaccurate. Means that the accuracy of professional translation in Doyle's S. Holmes the Sign of the Four is mostly acceptable and the sentences are transferred accurately. While the readability level of professional translation is 55,82% very readable, 39,53% readable, 4,65% quite readable and 0% for less readable and unreadable. It means except the high accuracy level gain by professional translation there is also high readability level found in the paragraphs that make the reader easily understand the translation work.

Answering the second research question of the study, that is to explain the quality of *machine translation* of Doyle's *S. Holmes the sign of the four* for the level of its accuracy and readability. The researcher provide conclusion that the percentage

of accuracy level of *machine translation* show that 32% is very accurate, 22% is accurate, 32% is quite accurate, 14% is less accurate, and 0% inaccurate. Means that some of *machine translation*'s translation is accurate and some still has distortions that annoy the meaning of translation. While the readability level of *machine translation* is 9.30% very readable, 46,51% readable, 39,53% quite readable, 4,66% less redable. The result show that there are equal assessment between high level of accuracy and low level accuracy found in *machine translation* and it also occur in the readability as well.

The last research question of this study is to compare the similarities and differences between *professional translation* and *machine translation* of Doyle's *S. Holmes the sign of the four* for the level of its accuracy and readability. The researcher concluded that after comparing the result of accuracy and readability of *professional translation* and *machine translation* here the researcher can draw some conclusion. Although the accuracy and readability of *professional translation* is higher than *machine translation* but they still have similarity out of their differency. For the accuracy there is 32% similar and 68% different and for readability show that 25,59% is similar and 74,41% is different in some point of assessment which define their quality.

#### **5.2 Suggestions**

After drawing conclusions related to the study, the researcher would like to recommend some suggestions as follows:

#### (1) For translators

All translator even it is professional or not should aware with some aspect that affecting their translation quality, choose proper diction, not omit and add translation that will ruin the source text, and look for the naturalness of the translation that can make the translation more acceptable in the target language and ease the reader in understanding the translation. The last for students or whoever seems to use machine translation are adviced to reread and give the post editing of the machine translation work in order to make their translation more accurate, acceptable, and readable for the reader.

#### (2) For future researchers

The results of the study hopefully become useful as the reference for the next researcher who is interested in conducting the same translation quality study. Also, the researcher suggests widening the study into the acceptability aspect of translation quality.

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