

Acceptability Translation Result of “KATAKU Version 1.1” and “Trans Tool 10 Rar”

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Abstract—This study aimed to analyze the quality of accuracy, readability and acceptability of translation result of “Kataku 1.1” and “TransTool 10 rar” software programs. The researcher gave 75 questionnaires distributed and 56 respondents completed the forms and returned them to the researcher. The method used to analyze the data is descriptive qualitative research using Spadley’s component analysis technique. The problem raised focused on the quality of translation from the perspectives of the accuracy, readability and acceptability using Nababan’s criteria-based sampling technique for evaluating three aspects of qualification. The texts to be translated are the introductions of twelve texts. The method in this study started from raw data and analyzed them based on their domain, taxonomies, components analysis which were then verified and concluded. Here, investigation was on the translation accuracy, readability and acceptability of 2 language-pair combinations produced by *Kataku version 1.1*. At a final level we compared source text with the target texts in explicit marking of error types of translation of individual machine translation systems. Specifically, what aspects of languages of both Tran stools output of target texts had good translations and poor translations; a situation experienced by users who did not understand the source language.

The results of this study seen from accuracy level of *Kataku V 1.1* and *TransTool 10 rar* showed that 45 sentences or 24% were accurate, 59 sentences or 32% were less accurate, and 81 sentences or 45% were inaccurate. At the acceptance level, 34 sentences or 18% were acceptable, 58 sentences or 31% were less acceptable, and 93 sentences or 50% were unacceptable. And at the level of legibility, 45 sentences or 24% has a high level of legibility, 59 sentences or 32% have a mid level of readability, and 81 sentences or 45% have a low level of legibility. While “Transtool 10 Rar” showed that 34 sentences or 18% were accurate, 59 sentences or 32% were less accurate, and 93 sentences or 50% were inaccurate. At the acceptance level, 23 sentences or 12% were acceptable, 57 sentences or 31% were less acceptable, 104 sentences or 56% were unacceptable. While the level of readability, 33 sentences or 18% had a high level of legibility, 49 sentences or 32% had a moderate level of readability, and 93 sentences or 50% had a low level of legibility.

Viewed from the error level, most errors were sequentially done at the level of semantics, syntax, phrase, word order, lexical, lost in contact, and word content. However, from the error rate made by both transtools, “Kataku V 1.1” had less errors than “Transtool 10 Rar”.

Whereas in terms of the equivalent types of “Kataku V 1.1 and Transtools V 10 rar” mentioned above showed little difference; both of them used more formal equivalents rather than grammatical equivalent. However,

“Kataku V 1.1” used one-digit more grammatical equivalents than “Transtools 10 rar”. Thus translation using “Kataku V 1.1” is reviewed a little better than “Transtool10 rar”.

Of the two Tran stools mentioned above *Kataku V 1.1* has a higher level of accuracy, acceptability, and readability than *Transtools 10 rar*; however, both have inaccurate, unacceptable translation and also have low readability of translation.

Keywords—FOTRAN77, *Kataku*, *Trans Tool*, *Indonesian*, *intralingual*, *interlingual* and *intersemiotic*, *computer-assisted translation*, *accuracy*, *readability* and *acceptability*.

I. INTRODUCTION

Since publication new design of Fortran 77 project into high performance of Transtools, computer-assisted computer (CAT) has become comprehensive and practical tool as a standard reference for translating. It is understandable since people get many constraints to receive English and other international languages so they try to find the easiest way to get the best translation they need. The last significant alternative is using computer –assisted translation and people use it as the way to understand the texts based on their need and interest. As a consequence of multi-languages in the world, translation study becomes a strategic issue for companies and many educational institutes to give their roles in an effort to bridge the multi language barriers by translating from source language (ST) to target language (TT) in the context of modern society [1]. The ultimate purpose of translation was to create a TT that was equivalent to the ST [2]. Translation corresponds to intralingual, interlingual or intersemiotic, the three categories of translation described by the Russo-American structuralist, [3]. Besides, Translations were studied, not as isolated texts, but within their cultural, literary and socio-historical contexts, and as ‘facts of target cultures’ [4]. Translation corpora are an important source for translation quality assessment as they provide a reliable methodological tool for clarifying hypothesized equivalences and for establishing reliable patterns of translation regularities [5]. Related to this, modern social communications, commercial companies and the other users of language are certainly looking for the best technique of translation to understand the texts needed by community. They are looking for a catalyst to build a multi-lingual communications through

inter-lingual communicative communication concept regardless of their geography and culture.

In regard to that issue, an Ex-CEO Trantex, one of the largest translation agencies in Europe, named Kaijas Poysti in Khalilove (2009: 1) states "you can always buy in your own language, but you must sell in your customers' language ". Implicitly Poysti emphasizes that when trying to sell products to consumers, manufacturers should use the media language that can be understood by consumers. In fact, it is not easy to be materialized due the human's ability in mastering more than one language [6].

Furthermore, not all academicians are in a habit of using foreign language either orally or in written. In context to this situation, academicians, especially students and lecturers who need some scientific books, try to find the best translation tools to be easily used instead of human translator because getting human professional translator in a small town is difficult to find. Generally, they can overcome these constraints using the help machine translator or computer-assisted translation (CAT) they can easily find. Although computer-assisted translation and machine translator still needs improving and have not been able to produce a perfect translation as human-resulted translations, at least, these Tran Tools can help solve the problem of translation to meet the increasing need for translation. The need for Trans Tools to produce a translation with a fast speed of translating happened not only in Indonesia but also prompted the European Community. Scientists in this field have tried to develop it into more and more perfect ones. Khalilove states:

MT is particularly attractive for European Union (EU) since it already experiences high demand in terms of translation; as of January 1, 2007. There are 23 Official EU working languages and the EU spends more than user 1,000,000,000 each year on translation costs [6].

Experts responded seriously to the need for a CAT in communications technology in Indonesia by creating a variety of translation software that can function as an automatic translator or as an aid of translating, especially from English to Indonesian and vice versa. Because human needs instantaneous - problem solving in their life in the one hand and has limited foreign language as well as translating skills on the other, the majority of Indonesian people tend to choose and use computer translation software that can serve as an automatic translator. The computer owner in Indonesia usually has software like "Kataku Version 1.1 or TransTool 10 Rar" installed to their computers. The question which arises is whether their responses in using of such software in performing the tasks of translation from English into Indonesian are good for the development of translation consumers in Indonesia.

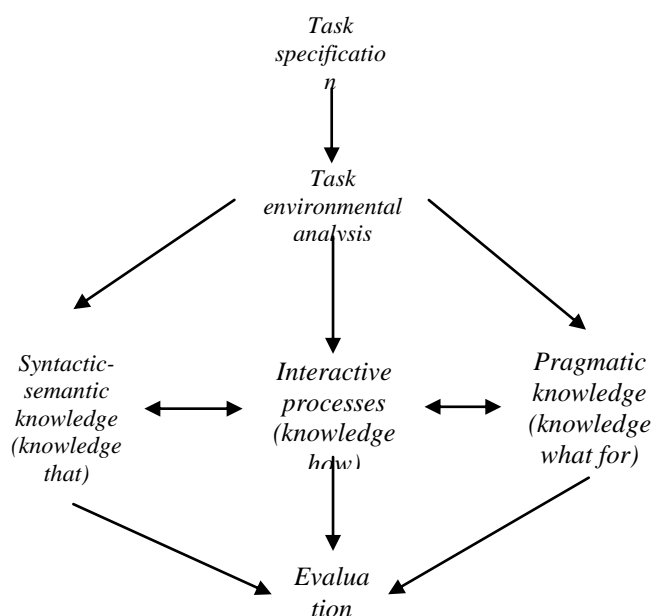
Translation is a multidisciplinary field as it involves many areas of science, especially the science of linguistics. In order to do well, one must have multi-competencies. It

does too to computer-assisted translation. On the one hand, compared to a human translator, computer-assisted translation has advantages in terms of speed. On the other hand, it has a weakness in terms of product quality. Bass (1999) states:

MT truly seems miraculous the first time you see it in action. You open a document, select the text you want to have translated and press the "Translate" icon. Depending on how much text you've selected, within a couple of seconds or minutes, there appears your translation in Spanish (or German, French, Italian, etc). Eureka! It works! Almost. If you are fortunate enough the language you have just translated your document into, you will quickly notice problems [7].

There are several CATs available in Indonesia: however, this study focuses specially on the two of Web-based CAT systems, "Kataku Versio 1.1 and Trans Tool 10 rar" comparatively studied from the perspective of their accuracy, readability and acceptability. While acceptability or naturalness is a reader-oriented approach and can be checked at both macro and micro structural level [8]. Beekman and Callow (1983) have offered another criterion for assigning the naturalness of translation. Their definition is based on the term 'ease'[9]. They say there is correlation between ease of understanding the meaning of a text and the level of naturalness which it has. Barnavel in his book "introduction to semantic and translation" (1980) says, for a translation to be acceptable is to use a natural form of target text. Nida and Taber (1969) consider a translation a good one when it doesn't show to be translation [2]. Venuti explain the same concept by the term 'invisibility'.

To measure the quality of translation, shifts are important to consider in measuring the quality of translation. Catford (1965) considers two kinds of shift: (1) shift of level and (2) shift of category: Level shifts are shifts between grammar and lexis. Level shifts are subdivided into structure shifts, class shifts, unit shifts and intra-system shifts [1]. Additionally, The translator can be considered a manifestation of the process tool of information consisting of (i) lexical, phraseological, syntactic, and pragmatic processing of the textual input; (ii) lexical, phraseological, syntactic, and pragmatic transfer of the ST into the TT environment, with the translator having in mind the need of achieved functional equivalence; and (iii) the assessment of the translation product in a more or less detailed evaluation phase. Of course, in the process of translation it is necessary to understand the foundation of knowledge and skills deeply about the language so that the translation can be acceptable, accountable and understandable (readable) [10]. The process can be seen in the following picture 1:



Picture 1 : Translation Process by Wils

Related to picture 1, there are two things to know in translation as a process, that is, the process done by man (human translation (HM)) and carried out by the machine. Both have differences in the translation process, especially in making mistakes both qualitatively and quantitatively. Based on the references above, it is still questioned whether 'Kataku' Version 1.1 and 'Trans Tool 10 Rar', as two of the computer-assisted translations, are able to proceed the translation from a source language to another language based on the criterion mentioned above.

II. METHOD

This study used descriptive qualitative research using Spreadly's component analysis technique in analyzing the data consisting of some forms of stages (1997: 181). First stage was a domain analysis intended to separate the data used from the unused ones. Second stage was in the form of taxonomic analysis. At this stage, the data were classified based on their nature or characters. The purpose of the analysis was to determine the relationship between one component to the other components, for example, the quality of the translation linked to the type of equivalence and type of errors committed by 'Kataku' version 1.1 and TransTool 10 Rar. The last stage was the analysis of the theme which provided a general overview of the results of this study. In the stages of this cultural theme, for example, it would reveal or explain why certain equivalence affected to the quality of translation and so forth. Related to the quality, producing an interpretation that fulfils the communicative needs and expectations of the intended addressee is arguably the interpreter's primary task – and the principal yardstick for measuring the quality of an interpreter's product and performance [11]. The problem raised focused on the quality of translation from the

perspectives of the accuracy, readability and acceptability using Nababan's criteria-based sampling technique for evaluating three aspects of qualification. Furthermore, this research also raised the quality evaluation of translation from the perspectives of the accuracy, readability and acceptability using Nababan's criteria-based sampling technique for evaluating three aspects of qualification.,

This study also took the data from many genres of the texts consisting of religious text, medical text, and biological text.

The texts are then evaluated to know the quality of both CAT as the main considerations for corporations as well as large and small language service providers in Indonesia, and issues such as errors and inconsistencies of their products need to be minimized to save time and money. The evaluation of translation products were taken from some experts belonging to "House J., Lambert, J. and van Gorp, H., Al-Qinai, Jamal, Mollanazar, H. [5, 8, 12, 13, 14], formulated in the table 1, 2 and 3. The evaluation was to measure the quality of translation holistically. Matrix of evaluating translation quality consisted of three parts, that is, score, category and qualitative parameter set out in table 1 below:

Table 1: Instruments for Evaluating of Translation Accuracy

Translation Category	Score	Qualitative Parameter
Accurate	3	The meaning of words, technical terms, phrases, clauses or sentences accurately transferred from source language into the target language; absolutely no distortion of meaning
Less accurate	2	Most of the meaning of words, technical terms, phrases, clauses or sentences of the source language has been transferred accurately into the target language. However, there is still a distortion of meaning or having double meaning (ambiguous) or there are still some eliminated meanings, which disturb to the integrity of the message.
Inaccurate	1	Meaning of words, technical terms, phrases, clauses or sentences of source language inaccurately transferred into the target language or eliminated

Table 1 showed that the level of accuracy of translation assessing instruments took a scale from 1 to 3. The higher the score was given to the assessor, the more accurate the translation was produced. Conversely, the

lower the score was given to the translation, the lower the level of accuracy of the translation was.

Table 2: Instruments for evaluating Translation

Translation Category	Score	Qualitative Parameter
Acceptable	3	Translation looks natural; the technical terms are commonly used and familiar to the reader; phrases, clauses and sentences that are used are in accordance to the rules of Indonesian
Less acceptable	2	In general, the translation already looks natural; but there is little problem with the use of technical terms or a few grammatical errors still happens in it.
Unacceptable	1	Translations are not natural or feels like the work of translation; technical terms used are not commonly used and unfamiliar to the readers; phrases, clauses and sentences used do not conform to the rules of Indonesian

The same as table 1, the table 2 was a guideline for the assessor in determining the level of acceptability of the translation. The scale was provided ranging from 1 to 3. Each scores given were the reflection of the level of acceptability of the translation. The third instrument was the instrument used to determine the readability level of translation, which was also based on a scale of 1 to 3 (see Table 1)

Table 3: Instruments for evaluating Translation

Translation Category	Score	Qualitative Parameter
High Readability Level	3	Words, a technical term, phrase, clause, and sentence translation can be understood easily by the reader
Middle Readability Level	2	In general, the translation can be understood by the reader; but there are still certain parts that should be read more than once to understand the translation.
Low Readability Level	1	Translation is difficult understood by the reader

To determine the overall quality from a translation produced by '*Kataku version 1.1*' and TransTool version 10 rar, the value of each aspect of quality was evaluated, then multiplied and divided by the total weight of the values

given to every aspect of quality. Aspects of accuracy weighed 3, aspects of acceptability weighed 2 and aspects of legibility weighed 1, as shown in the table 4:

Table 4: Weighing Aspect of the Assessed Quality

No	Quality Aspects valued	Weight
1	Accuracy	3
2	Acceptable	2
3	Readability	1

Determining the weight value as it is should be based on the following ideas. First, the main problem was to find equivalence of translation, both of meaning equivalence and form equivalence. Meaning equivalence is associated with the accuracy of the transfer of the meaning or message while form equivalence of language was related to the problem of acceptance.

The low weight given to aspects of legibility is highly related to thought that translation problems do not directly relate to the issue of whether or not the translation is easily understood by the target audience. However, since the target readers generally do not have access to the source-language text, they are expecting that the translation they read can be easily understood.

Of a total 75 questionnaires were distributed and 56 respondents completed the forms and returned them to the researcher. Of these, 19 were male respondents and 37 were female respondents. The age of respondents varied; 46 respondents aged between 20-30 years and 7 respondents aged 31-40 and 3 respondents aged over 40 years. Their works also varied, such as students (46), lecturers (9) and teachers (1). The data showed implicitly that the main targets of the questions in the questionnaire were the students and professors, who regarded as the main users of '*Kataku*' and TransTool.

When asked if they had difficulties in translating English text into Indonesian or vice versa, their majority answers or 50 of them had trouble and 6 respondents had ever experienced having the trouble. According to them, the best way to resolve the issue was to (1) ask help to a friend who were not as a translator (2 respondents), (2) ask assistance to a translator (5 respondents), and (3) using computer-assisted translation (49 respondents). From these responses it was clear that all the respondents had difficulty in translating English text into Indonesian and most of them utilized CAT to overcome the difficulties.

All these surveyed respondents were already familiar with TransTool. In contrast, there were 12 respondents who did not know '*Kataku*' at all. Even, 36 respondents had already installed TransTool on their computers. The amount of respondents who installed Trans tool were more the '*Kataku*', that is, as many as 14 respondents. That makes sense because the TransTool program was launched earlier in the market than '*Kataku*' program. Generally, the respondents got Information about

both computer-assisted translation from mouth to mouth and advertisement on the internet.

Compared with “*Kataku*”, TransTool Program was used more often by respondents in translating English text into Indonesian. The main reason they used both computer programs of translating was to obtain translations quickly and at very low cost and even free of charge. Their statements were apparently in line with the views of most respondents that ‘*Kataku*’ and TransTool could translate well enough and the performance of both the translators of computer program was in accordance with their expectations.

III. FINDING AND DISCUSSION

Equivalence was the core of the theory of translation. It was so called because the main purpose of the translation from the process was the search for the source language equivalence in the target language. Equivalence itself can refer to the message equivalence and form equivalence. Message equivalence was closely related to how accurate the source language text message was transferred into the target language. Form equivalence was associated with the level of translation conformity with the system, culture and norms in the target language.

Equivalence could occur at various levels, ranging from word level to textual one. The diversity of equivalence levels gave an opportunity to the translators to choose an appropriate equivalence in term of both the message and form language of the translation. If the translator could produce optimum message equivalence, he or she had produced a translation that had a high degree of accuracy. Similarly, if a translator was able to produce a translation that its form was not contrary to the system, culture and norms in the target language, he had produced a translation that was acceptable to the target audience.

In this study it was found that both ‘*Kataku*’ and TransTool tends to produce the equivalence at the level of words without considering the co-text and context of the words, as shown in the examples 1 below.

The source language sentence (example 1) was translated in the same way by TransTool and “*Kataku*”. At the source language, the word ‘*order*’, in a sentence, was maintained to be translated into Indonesian “*order*” at one hand, and on the other hand the word ‘*order*’ simultaneously was translated into ‘*pesanan*’.

Table 5: Example 1

Source Text (ST)	Islam is at once a religion and a civilization and social order based upon the revealed principles of the religion. (001/TXT -1/TT)
Target Text 1 (TT)	<i>Islam dengan segera suatu agama dan suatu order; pesanan social dan peradaban mendasarkan atas prinsip [yang] yang diungkapkan [menyangkut] agama [itu].</i>

Table 5. Cont

Target Text 2	<i>Islam dengan segera suatu agama dan suatu order; pesanan social dan peradaban mendasarkan atas prinsip [yang] yang diungkapkan [menyangkut] agama [itu].</i>
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The translation of the word “at once” to “*dengan segera*”, if back translated, was equal to to the word ‘*immediately*’ without looking at the context of the sentence by both ‘*Kataku*’ and TransTool. If seen from the context of the sentence above, the word ‘at once’ should be translated into a “*dulunya*”. This process showed that the translation using both software tended to take place at the level of words. The same case also happened to the phrase “social order” which both software translated it into “*pesanan sosial*”. The word “order” in the context of this sentence should be translated into “*tatanan*” meaning orderliness, or discipline so that the phrase should be translated into “*tatanan sosial*”.

Table 6: Example 2

Source Text (ST)	Vernon Stiers and I were grateful for the acceptance of the first edition, which appeared under the title of Biology: Observation and Concept.
Target Text 1 (TT)	<i>vernon Stiers dan aku adalah berterima kasih untuk penerimaan dari cetakan pertama, yang (mana) nampak di bawah jabatan Biologi: dan Pengamatan Konsep.(09/TXT -2/TT)</i>
Target Text 2	<i>Vernon Stiers dan saya berterima kasih untuk penerimaan edisi pertama, yang muncul di bawah hak Biologi: Pengamatan dan Konsep.</i>

In the example 2, the equivalence error occurs in translating the word “I” in the TransTool. The word “I” translates to “*aku*”. This translation was contextually inappropriate. Properly, this word should be translated into “*saya*”, as in the translation of “*Kataku*”, because the context of the sentence above was a type of informal language. For the word “were”, TransTool and ‘*Kataku*’ gave different equivalence in providing counterpart. The word in the context of the above sentence should be translated as done by ‘*Kataku*’ because this sentence was the type of nominal relational sentence types in Indonesian which, in Indonesian, did not require any form of predicative. Equivalence that did not fit to the next context happened to the word “title” in the phrase “the title of Biology”. Both ‘*Kataku*’ and TransTool gave equivalence that did not fit to the context; the word “title” was translated

into “*jabatan*” which means ‘incumbency’ by TransTool and “*hak*” which means ‘the rights’ by ‘*Kataku*’. Both of them were translated the word “title” in the form of literal translation without seeing its context.

Table 7: Example 3

ST	Pediatrics is concerned with the health of infants, children, and descents; their growth and development; and their opportunity to achieve full potential as adults. (019/TXT -3/TT)
TT 1	<i>Ilmu kesehatan anak-anak mempunyai kaitan dengan kesehatan bayi, anak-anak, dan pendaratan; pengembangan dan pertumbuhan mereka; dan kesempatan mereka untuk mencapai potensi penuh [sebagai/ketika] orang dewasa.</i>
TT 2	<i>Pediatrri terlibat kesehatan bayi, anak, dan f: turun; pertumbuhan dan perkembangan mereka; dan kesempatan merek auntuk mencapai potensi penuh sebagai orang dewasa</i>

In the example 3, the equivalence error occurs in translating the word “descents” which TransTool translated it into “*pendaratan*” meaning ‘landing’. This translation was contextually inappropriate. It should be translated into “*keturunan*”. While ‘*Kataku*’ translated ‘descents’ into “*turun*” meaning “get down or go down”.

Based on the above example, both translation tools can only translate the sentences at the level of word or context of word.

C.1 Accuracy

The results are analyzed using the score with criteria proposed by Nababan., et al’ in the table 1 ranging from 1 (one) up to 3 (three):

Based on the 200 sentences being translated, the accuracy of “*Kataku*” on religious text got 90 sentences or (45 %), scoring 1,80 sentences (40 %) scoring 2 and 30 sentences (15%). scoring 3. The comprehensive assessment on “*Kataku*” was empirical because to gain the valid data analyzed from two languages (English to Indonesian). Similar scores were also given by the raters. While TransTool got 120 sentences (60 %) with score 1, 60 sentences (30 %) got score 2 and 20 sentences (10%) got score 3. In biological text, “*Kataku*” gained scores 1 (114 sentences) or (57%), gained score 2 ((270 sentences) or (35%) and gained 3 (8%) or (18 sentences), whereas “*Tran Tool*” got score 1 or 130 sentences or (65 %), score 2 or 60 sentences (30%) and score or 10 sentences 3 (5%). The method took into account the number of words and the same passages as well as their word order. In medical text, the score showed that ‘*Kataku*’ translated 80 sentences with score 1 (40%), 110 sentences with the score 2 (55%) and 10 sentences with the score 3 (20 %), and Trans Tool translated 90 sentences with score 1 (45 %), 100 sentences with the score 2 (50 %) and 20 sentences with the score 3 (10 %).

The result of translation based on the accuracy level can be seen in the Chart 1:

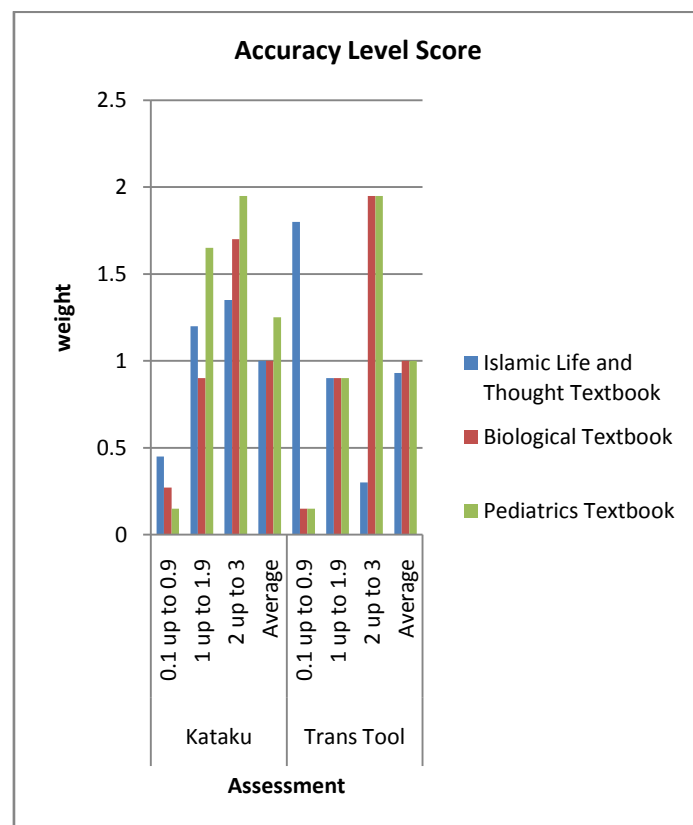


Chart 1: Accuracy

The graph 1 above shows that the best accuracy in translating use ‘*Kataku*’ occurring to Pediatrics textbook. While Trans tool, the best accuracy in translating is to both Biological and Pediatrics. From the average value of the accuracy of the translation, *Kataku* is more accurate than

Trans tool. However, both software are inaccurate in translating three Textbooks because they gets average score only 1.1.

C.2. Acceptability

Acceptability or naturalness is a term used in measuring the quality of translation. This criterion is very needed in using formal language. It is to know whether or not the translation is done naturally and accepted by the users of target language. The chart 2 below shows the result of translation based of its acceptability.

For the rate of acceptability, the table 9 shows that, of 200 translated sentences in Islamic Life and Thought Textbook, 42.5 % of the total number sentences were rated unacceptable, 43.5 % sporadically acceptable and 14% appropriately acceptable. The appropriateness of translating also happened to simple sentences, while

compound and complex sentences were mostly sporadic. Compound and complex sentences were totally translated in inaccurate. Similar results also occurred to Biological Textbook and Pediatrics Textbook. However, in pediatrics text, the result was a little better than in translating the other two texts 50 % for Transtool and 62.5 % for Trans tool

getting sporadic accurate. Based on the table 9 above, the acceptability level score can be described in the chart 2

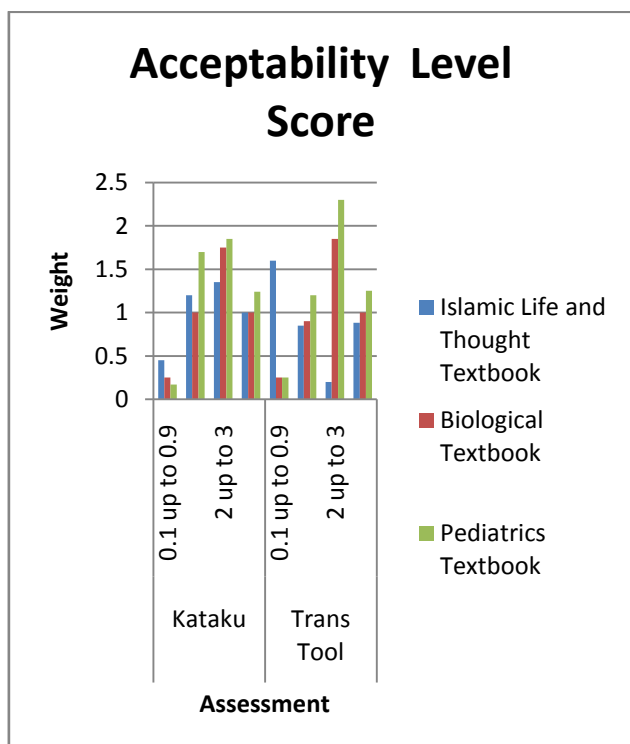


Chart 2: Acceptability Level Score

From the graph 2 above (chart 2) it could be seen that Trans Tool got the highest score in its acceptability in translating Pediatric textbook, while the lowest score of acceptability is in translating Islamic Life and Thought Textbook. The highest average score was done on pediatrics Textbook so that it can be concluded that the use of CAT in translating pediatrics textbook was easily understood by its reader. However, as in accuracy, both software programs were still inaccurate in translating three Textbooks because they only got average score only 1.1.

C.3. Readability

For the rate of readability, the table 10 shows that, of 200 translated sentences in Islamic Life and Thought Textbook, 45 % of the total number sentences were rated unreadable, 47.5 % sporadically readable and 7.5 % appropriately readable. The appropriateness of translating also happened to simple sentences, while compound and complex

sentences were mostly sporadic. Compound and complex sentences were totally translated in inaccurate. Similar results also occurred to Biological Textbook and Pediatrics Textbook. However, pediatrics text still got better score than the other texts. See chart 3:

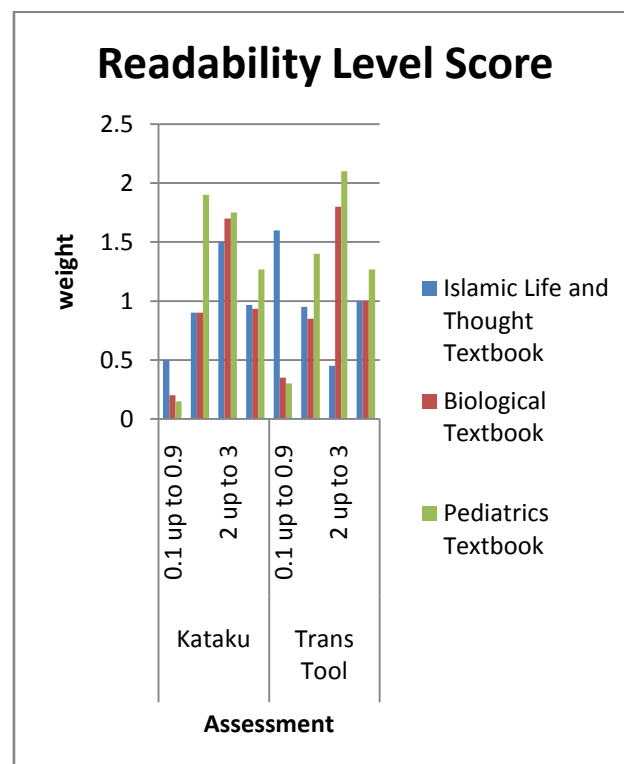


Chart 3: Readability Level Score

Seen from the above graph (chart 3), Pediatrics textbook got highest score in its readability. Trans Tool also had the highest scores related to its readability in translating than *Kataku*. It could be proved that Trans Tool's ability to read pediatrics textbook got the highest score. In fact, of the two software of CAT, they were still poor in translating to get its readability. In this level, both software only got score 1. to 1.2 of grade level.

Because of the low result of both software to produce qualified result of translation, it is recommended to use back translation (BT) as a technique for quality control [15]. As known that in more recent research, translation and cross-cultural adaptation of questionnaires generally include BT as part of the quality control methodology [16, 17] In addition, they describe a translation methodology in which two independent translators produce two translations (TT) of a source text (ST) [17].

Furthermore, based on the findings that, in general, the community, especially among students have known *Kataku* and TransTool. Even ,most of them have already used both computers translators to complete their tasks. They think that TransTool and *Kataku* can give an instant solution to the problems in understanding English

they face. On the one hand they get tasks to understand texts in English, on the other hand they lack or can not digest the contents of the texts in English.

From the perspective of the theory of translation, target audience are ordinary people, who do not have access to the source language text. Their mastery of the source language is very weak, which requires bridge to enable them to connect to its original author. In such case, the presence of an translator has a very important role. They do not care about the process of translation done by a translator. The most important thing for them is they get a translation that they can use.

The results also showed that nearly half of respondents who have ever used “*Kataku* and TransTool” expressed their doubts about the ability of both computer translators in translating English texts into Indonesian. In fact, all respondents noted that the power of both computer translators lie on their very high rate of speed in producing translations. Through their open-ended answers, they found both “TransTool and *Kataku*” have a lot of weaknesses in the aspects of translation accuracy as well as from the point of acceptance level translation. According to them, those computer-generated translation programs are generally elusive.

The opinions expressed by users of “*Kataku* and TransTool” are in symmetric proportional line to the empirical data found and analyzed in this study that in terms of equivalence of the message and form, both computer-assisted translation tools have many weaknesses. Even translations produced by TransTool and *Kataku* are difficult to understand by the target audience. The same opinion is also expressed by Mohamed Amine Chérargui (1999) as follows:

“However, perfection is still far away. If the translators have today reached a level of reliability and efficiency in a technical text, perfection is still a long way in the literary text, overwhelmed by the intricacies, the puns and colorful expressions [18]

Olivia Craciunescu et al. (2004 p. 3) also stated that to understand the essential principles underlying machine translation it is necessary to understand the functioning of the human brain. The first stage in human translation is complete comprehension of the source language text. This comprehension operates on several levels:

- Semantic level: understanding words out of context, as in a dictionary.
- Syntactic level: understanding words in a sentence.
- Pragmatic level: understanding words in situations and context.

Furthermore, there are at least five types of knowledge used in the translation process:

- Knowledge of the source language, which allows us to understand the original text.

- Knowledge of the target language, which makes it possible to produce a coherent text in that language.
- Knowledge of equivalents between the source and target languages.
- Knowledge of the subject field as well as general knowledge, both of which aid comprehension of the source language text.
- Knowledge of socio-cultural aspects, that is, of the customs and conventions of the source and target cultures.

They stated that given the complexity of the phenomena that underlie the work of a human translator, it would be absurd to claim that a machine could produce a target text of the same quality as that of a human being [18].

In learning English, learner can benefit from verification of the translation output using native speaker intuition. English → Indonesian present specific problems for learners with lower skill levels and should be addressed much later.

Based on algorithm used as the concept of aligning the words into sentence, the learner read sentences aloud as they are being typed in the system and write them cursorily later. This clearly implies that a prior beginning skill level will be needed to work through the learning algorithm.

IV. CONCLUSION AND RECOMMENDATION

This study has found the variety of inaccuracy, unreadability, and unacceptability of translated texts of Islamic Life Thought Textbook, Biological Textbook and Pediatrics using *Kataku* and Trans tool of Computer-Assisted Translation. The common causes that make both translating software have low qualified translated texts are the lack ability to align the sentences into good word order in the form target language.

Based on the result and discussion above, the researcher can draw the following conclusions:

D.1 Conclusion

1. In general, the respondents of this study highly depend on “TransTool or *Kataku*” to overcome the obstacles of language they face in understanding the source language text. Their dependency on “TransTool and *Kataku*” forces them utilize these two CATs though they realize that the translations produced by both are woefully inadequate if viewed either from their accuracy, acceptability and legibility.
2. In matching equivalence of the English text into Indonesian, “*Kataku* and TransTool” tend to apply a bottom-up approach in which a series of words in the source language text are treated as something separated to each other as a result of not considering both co-text and context, which become a major clue in determining equivalence matching to be most appropriate and natural.
3. Both computer programs either “TransTool or *Kataku*” are not able to translate English texts in the field of social sciences and exact sciences into Indonesian well. The quality of the translations

produced by both is very low either seen from of its accuracy and acceptability as well as of legibility.

4. The power of both “TransTool and *Kataku*” only lies in its ability to quickly process the texts in English translated into Indonesian. Speed ability is not accompanied by the ability to produce high quality translation. Meanwhile, both “TransTool and *Kataku*” has many weaknesses. In finding equivalence, both computers translators ignore the co-text and context, and it arises as a result of the inability of both computer translators in recognizing the sentence elements, categories of words, forms of active and passive, singular and plural forms of formal and informal, collocations, core elements and explanatory, and even they do not have adequate vocabularies that can be utilized in a variety of contexts and situations.
5. In addition, machine translators proved better at translating simple sentences and subject-verb-object order than translating complex sentences. Morphological errors/wrong word endings were the most common error, followed by untranslatable/omitted words and lexical errors/wrong translations.

D.2 Suggestions

The results of this study indicate that “TransTool and *Kataku*” are not able to translate English texts into Indonesian well. So, the author provides suggestions below

1. “TransTool and *Kataku*” should not be used anymore in translating English texts into English. The reason is that because the quality of the translations produced by both computer programs are very low having very fatal consequences especially if used in the fields of sciences, such as law, engineering, medicine, religion and so forth.
2. There should be a massive effort for the activists of translation to make the public not utilize both computer programs of translators in a practical translation activities.
3. The results of this study indicate that both TransTool and *Kataku* are not able to translate English texts into Indonesian well. Therefore, there should be further research efforts required from both translating experts and computer experts to work together to overcome the weaknesses of “TransTool and *Kataku*”.

All in all, English-to-Indonesian MTs and Trans tools have been a challenging research issue for many of the researchers in the field of Indonesian Natural Language Processing (NLP). The accuracy of any MT system is usually evaluated by comparing its outputs to that of professional human translators, or professional human translators can manually evaluate the quality of translation. There is no standard Indonesian -English corpus that can be used for such evaluations, therefore, it is better to construct

a corpus and release it for free on the Internet to be used by the researchers in this field.

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