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COGNITIVE BEHAVIORS IN INDONESIAN-ENGLISH TRANSLATION: EXPLORING TRANSLATION PROCESSES

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ABSTRACT

This present study investigated the cognitive behaviors in the processes of Indonesian-English translation. Two research questions were employed to find out; 1) what types of cognitive behaviors emerge in the translation processes, 2) and which types of cognitive behavior are the most dominant in the translation process? The data were taken from screen recording of translator activities in video supplemented by think-aloud protocols in TransCon6_ID.mp4 entitled "Panorama Sumba." The data were analysed qualitatively by following the steps: transcribing, identifying, classifying, and interpreting (Bailey, 2008). The result reveals that the translator uses several cognitive behaviors such as generating ideas, revising, elaborating, clarifying, retrieving, rehearsing, referencing or resourcing, and summarizing. However, the translator's most dominant behavior is referencing by seeking the dictionaries to solve the translation problem.

Keywords: Cognitive behaviors, Translation process

INTRODUCTION

Translation text is interrelated with the mental process of the translator called cognitive behavior. This notion is an essential factor behind the acceptability of translation products from the source text to the target text. Thoroughly, the translation outcome can be postulated as the translator's competency in linking each event and situation in the text by processing them into the brain. It means that understanding the translator's cognitive behavior means understanding the translator's working mind in creating meaning based on the situation in the text. Ironically, the emergence of this notion has not received much attention as the essential factor in the process of translation investigation. However, it provides valuable tools of concepts to understand the internal operations of translator in

creating contextual meaning while translation process. Concerning this issue, this present study provides the description the types translator mental activity used by the translator to create meaning in producing a reciprocal text.

Cognitive behavior is viewed as a mental activity of translation of all human translation processes (Angelone & Shreve, 2010 in Teimooriyan & Yusefi 2017). Moreover, Mu (2005) postulated cognitive behavior as cognition of all mental processes and abilities in which people engage daily such as memory, revising, learning, problem-solving, evaluation, reasoning, and decision making. However, Risku (2012) explains that cognitive behavior is an approach to understanding and explaining translators' minds' workings. Accordingly, through this behavior, the translator's strategy and activities to create meaning can be traced while working with the text.

Several previous studies have investigated the emergent of cognitive behavior in the translation process. Wang (2020) affirms that cognitive behavior helps the translator psychologically to clarify and reduce the translation bias occurring in this process. In another study, Tetiana (2016) contended cognitive behavior controls the organization and implementation of the translation discourse to integrate to the language and culture. Moreover, Ketola (2015) asserts that the framework of cognitive behavior can illustrate the technical text. In some fields, Mamadove (2016) postulated that cognitive behavior could be used metaphorically in the translation discourse. Thus, Walker (2018) stated that cognitive behavior could be used to compare the level of equivalence in the discourse in translation studies.

All the previous studies above mainly discussed the value of cognitive behavior in the translation process and translation product. However, the categorization of translator mental activity is rarely to discuss as the main topic in the translation process. This categorization is pivotal to postulate the types of the translator mental activities in creating meaning from the source text to the target text. Concerning this issue, the present study is aimed at investigating the translator's cognitive behavior in translating Indonesian-English text. Two research questions are used to investigate (1) What types of cognitive behavior used by the translator and (2) What is the dominant types of cognitive behavior used by the

translator. This study contributes to get a whole description of the activities and strategies of translator in producing reciprocal text.

REVIEW OF THE LITERATURE

Cognitive behavior and Translation process

Cognitive behavior emerged in Europe in the eighteenth century, concerned with the nature of knowledge, structures, and processes of acquiring human behavior in the field of psychology (Mu, 2005). Recently, cognitive behavior is a pivotal aspect in the translation process to investigate the translation activity process. This notion is defined as all mental processes and abilities in which people engage daily, such as memory, learning, problem-solving, evaluation, reasoning, and decision-making (Mu, 2005). Concerning translation, Angelone & Shreve (2010) in Teimooriyan & Yusefi (2017) stated that cognitive behavior is a mental activity of translating all human translation processes. In this regard, the process of translation is interconnected to cognitive behavior. It means the process of the production of acceptable text from the source text and target text can be analyzed from the translator's cognitive behavior.

This scientific approach contributes significantly to translation study. Risku (2013) explains that cognitive behavior contributes to understanding and explaining the working of translators' minds. Accordingly, this mental activity can describe the translator activity in creating meaning, using strategy, relating context while translating the text. Therefore, Shlesinger (2000) and Thagard, (2005) conclude that cognitive behavior's primary goal is to explain the development and workings of the mental processes that make complex cognitive behavior like translation possible. However, in terms of significance towards translation discourse, Tatiana (2016), Ketola (2015), Mamadove (2016), and Walker (2016) postulated that the framework of cognitive behavior could be a function to integrate the symbolic aspect to the text. However, Wang (2000) confirms that cognitive behavior helps to clarify and reduce the translation bias occurring in translation.

Regarding the issue above, the contribution of cognitive behavior is significant. The process of the translation activity can be monitored from the cognitive behavior of the translator. It means that how the translator creating meaning, referencing, rehashing,

revising, and summarizing from source text to the target text seems to be possible to investigate based on this notion. As a result, the translator's bias problem in the translation text can be traced and solved by this scientific approach.

Cognitive behavior categories

In translating the text, the translator used several cognitive behavior categories to cope with the translation text. Wenden (1991) suggests some categories such as clarification, retrieval, and resourcing. Accordingly, clarification refers to self-questions, hypothesizing, defining terms, and comparing the source text to the target text. Then, retrieval refers to re-reading aloud or silently on the written text, re-reading the assigned questions, self-questioning, writing the idea, summarizing, defining rhetorical content, and thinking in one native language. However, resourcing refers to ask the researcher or refers to the dictionary, deferral, and avoidance.

Besides, Arndt (1987) in Mu (2005) proposed eight categories translator mental activities, i.e., generating ideas, revising, elaborating, clarifying, retrieving, rehearsing, referencing, and summarizing. Generating idea refers to repeating, lead-in, and inferencing to the target text from the source text. Meanwhile, revising refers to making changes in the planning of the translation of the written text. Then, elaborating means that the translator extends the meaning in the target text. However, clarifying refers to disposing of the confusion of translation problems from the ST to TT. Moreover, retrieving means getting the information from memory and referencing to outline the text from the dictionary. Lastly, summarizing refers to synthesizing what has been read in the ST to TT.

Moreover, Khezrlou (2012) postulated cognitive behavior in four categories: retrieval, rehearsal, communication, and coverage. In this regard, retrieval refers to calling up the material from the storage memory; however, rehearsal refers to writing the target language structures. Communication refers to extending constraints in the target language; meanwhile, coverage means creating an appearance of language ability.

Concerning the statement above, the conception of translator cognitive behavior seems to have a similar perspective. In this regard, the activity of the translator tends to vary from one category to another. In means that, all the translator activity almost involves

the categories of generating ideas, revising, elaborating, clarifying, retrieving, rehearsing, referencing and summarizing, communication, and coverage. As a result, this activity could foster the problem-solving of the translator during the translation process.

Translation process approach

The notion of translation process approach is very crucial in the human information processing. It needs some mechanisms to index the information from the source text to the target text. This process is performed at the word and clause level and is mediated by representing a semantic mechanism that is not restricted by a particular language. This notion has passed historical growth in some investigation, e.g., (Jääskeläinen & Tirkkonen-Condit 2010, Alves 2003, Shreve & Angelone 2010, Schwieter & Ferreira 2017). The majority of the study postulated the situation of the translator during the translation process under condition. As an example, Jääskeläinen (2012) conceptualized the human mind is a requisite for shaping the translation. The scientific approach is then used in cognitive translology (Muñoz 2010) to evaluate mental processes and the psychological experiences translators undergo during their translation performance of the professional translator.

Moreover, some studies have focused on a wide range of topics, such as the focus of ambiguity tolerance (Tirkkonen-Condit 2000; Angelone 2010), emotional stability, and coping strategies (Bontempo & Napier 2011), and translators' personalities (Hubscher-Davidson 2009). In addition, research into translation processes also employs a number of methodological contexts such as thinking aloud, which examines the processes of translation using the verbalizations of study participants during task performance, and is better known for the transcripts of the sessions (think-aloud protocols, TAPs). This method was widely used in the investigation of in translation studies to capture translators' internal mental processes. For example, Séguinot (1991), Aragian et al. (2018), and Teimooriyan et al. (2017) selected two groups of translation trainees at different levels of proficiency to translate two similar texts while employing TAPs. In this study, Two native speakers translated two texts of the advertisement from French into English. The result showed that

English speakers translating into L1 were more efficient in monitoring and revising strategies and their translations.

Concerning the use of technology innovation, some investigations have widely implemented this technology to gather data. For example, Shreve & Angelone (2010), Dragsted (2010) used keystroke logging and eye-tracking to investigate the translation process. Dragsted (2010) explore the neural e-imaging by using keystroke logging to have a deep understanding of translation stages. The outcome showed that different processing patterns are integrated with coordination of comprehension and production among professionals, and it's more Investigating problem-solving strategies of translation trainees. However, Shreve & Angelone (2010) used keystroke logging, eye tracking, and neural imaging to provide objectivity and enhance methodological power in the translation process. The result showed that the invention supports the quality, validity, and reliability of the joint results.

Previous studies on cognitive behavior in translation process

The studies on cognitive behavior in translation study have become an interesting topic to investigate. Several researchers have postulated their findings in a different view of the investigation. Concerning the issue, several previous studies have investigated cognitive behavior with a different result of the analysis. For instance, Shih (2017) found that six Chinese trainee translators use various web resources and idiosyncratic behaviors with varying resources of web in translating the scientific, technical text. Another example, Mellinger (2017), in his investigation of technical students, found that post-editing or revising is needed to solve the problems of technical terminology in translation practice courses that prepare students for the evolving market. Then, Schaeffer (2019) found the students in translating English German text use modeling revision and correction behavior towards different text by different types of events. Accordingly, this behavior affects their proficiency in the transition process.

Furthermore, Aragian et al. (2018) investigated two groups of Iranian university students found that revision has too many attempts to translate the text cognitive and metacognitive strategies that they chose to employ. Another significant investigation,

Teimooriyan et al. (2017), found that professional and nonprofessional translators have used the same cognitive processes. However, there was no significant difference between them at the comprehension level, memory processes, and problem-solving. Hvelplund (2019) found that 18 professional translators used drafting and revision as the most dominant translation behavior process in terms of cognitive behavior dominance.

Based on the previous study above, cognitive behavior is needed to capture the activity of the translator and translator used several strategies to translate the text. They mostly used the same process even though the participants have a different background. In this regard, they tend to use the cognitive approach proposed by Arndt (1987), such as generating ideas, revising, elaborating, clarifying, retrieving, rehearsing, referencing, and summarizing. Generating idea refers to repeating, lead-in, and inferencing to the target text from the source text. However, their level of proficiency has postulated make a different behavior in the translation process.

METHODOLOGY

This study employed a multi-method approach proposed by Dow and Perrin (2009) to capture the translation process (CTP) by observing the translator key events in the Translation Process Research (TPR). Translog II on keylogging software was used to capture the translator's cognitive behavior taken from recorded-video in *TransCon6_ID.mp4*. The data were taken from the transcription of the think-aloud protocol (TAP) indexed from the translator activity from the video screen recording of translog II software Version 2.0.1.222 copyright © 1995-2015 Copenhagen Business School. This program provides the complete information of the movement of the translator in the translation process from the source text into the target text, such as target text production, types of events, number of eliminations, and a particular area of interest by selecting the segment of the text.

Data analysis

The data were analyzed qualitatively by using descriptive approach proposed by Bailey (2008) to capture the translation process in translating text entitled "Panorama Sumba." The data source was analyzed through several steps, such as transcribing the

video, identifying the key events, classifying the events, and interpreting all the key events in the translation process to postulate all the events' general conclusions. The analysis focused on the translator's critical events from the cognitive translation process perspectives proposed by Mu (2005), such as generating an idea, revising, elaborating, clarifying, retrieving, rehearsing, referencing, and summarizing. In generating the dominant behavior of translation activity, a percentage computation is used to postulate the translator's most preferred types.

FINDINGS AND DISCUSSION

Types of translator cognitive behaviors

Based on the research's objectives and theoretical framework, the translation process is divided into three general categories: translator's activities, translator's behaviors (cognitive aspects), and translator's strategies. The translator's mental activity during the translation process was coded from the video transcription. The outcome revealed that the translator used eight cognitive behavior categories to solve the problems of translation. In this regard, in exploring the problematic issues of the translation problems, the translator used categories such as generating ideas, revising, elaborating, clarifying, retrieving, rehearsing, referencing, and summarizing proposed by Arndt (1987) and Mu (2015) were used as the strategy.

Generating ideas

In generating ideas, the translator tried to read the source text to comprehend all the ideas that come up from the text. In this event, the translator attempts to generate the concept by repeatedly reading all the source text. Moreover, leading into the topic and inferencing to the previous words is used to cope with the text. The translator uses these mental activities to comprehend the whole context of the source text to cope with the target text. The following excerpt is an example of how the translator's mental activities in generating ideas.

Excerpt 1.

Generating Ideas

No	Time	Event	Transcriptions	Coding Types
1	00:37	Comprehending	(start reading)... Panorama Sumba sungguh luar biasa tapi tanahnya kering ---	Generating ideas
2	07:04	Comprehending	Kita coba lihat kata sebelumnya...bing- bing...	Generating ideas

Excerpt 1 entails that the translator start to read aloud to comprehend the ideas of the text. Besides, recalling the previous words or phrases is also part of the translator behaviour to generate the ideas from the text. Moreover, in screen recorder from the computer, the translator moved the arrow of the cursor to the previous text. In this regard, recalling and memorizing is used to generate the ideas. This phenomenon has been well documented in other observational studies and can be attributed to the fact that the translator can verbalize processes that have become automatic (Aragian et al., 2018) and Teimooriyan et al. (2017). Accordingly, the translator used various cognitive behavior to comprehend the text to generate the target text's primary goals.

Revising

Concerning the revising activity, the translator tends to change the bias translation by editing and typing repeatedly. In this regard, in the event of transferring ideas, the written text was changed to get the source text's goal and target text. In translating the "from the earth and sea," the translator said "I think" to monitor the ST's suitable words or phrases to TT. As a result, some editing and retyping are used to cover the problems. The following excerpt 2 is an example of how the translator revises the text. (see Appendix 1)

Excerpt 2

Revision

No	Time	Event	Transcriptions	Coding Types
1	36.10	Transferring	live as their ancestor did for years.....use horses for transportation, and sacrifice buffaloes in prayers of... I think...they have got from earth and sea. (Editing)... from the earth and sea...(typing) from the earth to sea	Revising

Excerpt 2 describes transferring events of translator by reading the text and try to recall memory to revise the text by retyping and editing. Retyping activity is used while referencing to the dictionaries to get the suitable words to edit the text. Moreover, re-reading activity is also used to recall the previous word or phrases in the text. Thus, in the

final steps, the translator retypes the text by several changes to cope with the context. This phenomenon was well-documented in some investigations and it has been part of the strategy of translator cognitive behavior (Shreve & Angelone, 2010), (Dragsted 2010) and Longini (2002) in Mu (2005). Accordingly, all mental processes and abilities in which people engage daily, such as memory, revising, learning, problem-solving, evaluation, reasoning, and decision-making, were used to transfer ideas to cope with translation bias.

Elaborating

Elaborating cognitive behavior is also described in the translation process when the word or the phrases are difficult to translate. The translator uses this mental activity to cope with non-equivalence from the ST to TT by extending the meaning of TT. In this regard, the translator said, “Worship, oke aaaa...(comeback to translog) tr... tradition (typing) worshipping the ancestors” and...”(still in translog typing...) a very (erase) a very (erase again) very beautiful” (see excerpt 3).

Excerpt 3

Elaborating

No	Time	Event	Transcriptions	Coding Types
1	16:25	Restructuring	Worship, oke aaaa...(comeback to translog) tr... tradition (typing) worshipping the ancestors,---	Elaborating
2	16:52	Restructuring	(still in translog typing...) a very (erase) a very (erase again) very beautiful	Elaborating

Excerpt 3 entails that the translator is trying to elaborate by extending the meaning of TT. The meaning word “worship” is extended by retyping phrases “worshipping the ancestor”. Besides, the meaning of “very” is extended by retyping the “a very beautiful” phrases. In this regard, to restructure the phrases, retyping the new phrases and erasing the previous text from the ST to TT were used during elaborating process. Then, as the final touch, erasing is used to edit the previous text to get the acceptability of text by moving the arrow or the cursor to online dictionaries. As a result, the problem of translation difficulties is solvable. This cognitive behavior has been indexed from several investigations (Khezrlou, 2012) and (Wanden 1991). Accordingly, this phenomenon is called

communication and clarification, which refers to extending the target text's extending constraint.

Clarifying

Clarification is also part of the translator's behavior in the translation process. The translator used this strategy to memorize the inequivalence word from the ST to TT. In terms of this issue, excerpt 4 affirms the situation of clarification. The translator said, "Tatis (not clear) terpal ... kain tik kenapa kain tenun gak ada," and m saya stop... screen reader...Nah itu (back to to computer des...stop)... kok bisa... nah itu finally stop. This excerpt entails clarification behavior by disposing the self-question for the confusion of terms for a moment (see Appendix 1)

Excerpt 4

Clarificating

No	Time	Event	Transcriptions	Coding Types
1	18:29	Comprehending	Tatis (not clear) terpal ... kain tik kenapa kain tenun gak ada	Clarification
2	41.48	Comprehending	Bel...m saya stop... screen reader...nah itu (back to computer des...stop)... kok bisa... Nah itu finally stop	Clarification

Excerpt 4 postulates the clarification process by using self-questions to cope with the translation problem. The question “kok bisa” means “how come” and “why kain tenun is not available?” is triggered as the way of the translator to clarify the difficult phrases in the text. This action also happens with the moving arrow or the cursor of the computer to the left and right to refer to the online dictionaries. Concerning this issue, some of the investigations postulated this typical behavior, such as Shlesinger (2000) and Thagard, 2005). Accordingly, in the complexity of translation problems, self-questioning is made to clarify the problem of text to get possible solutions to cope with the text's complexity.

Retrieval

Retrieval refers to how the translator gets the information from memory available in the mind of the translator. In this regard, the translator used this behavior when restructuring the context while pausing the moment for a while to get the context of the meaning. It is indexed from excerpt 5 taken from Appendix 1. In this context, the translator tries to

memorize the untranslated word by pausing a moment to get the information from the mind by saying, "euh.....panorama sumba... (pause)... is extraordinary".

Excerpt 5

Retrieval

No	Time	Event	Transcriptions	Coding Types
1	01.50	Restructuring	Euh.. ... (erase 'the view of')... (typing)... panorama of Sumba... (pause)... is extraordinary... (pause)... but the land is dry	Retrieval
2	02.24	Restructuring	Euh... (typing)... which is reflected... (erase and change 'reflected')... which is shown... in the kind Of... ag... (hesitating)... (erase 'ag')... farming... (pause)... there	Retrieval

Excerpt 5 described that erasing, retyping, and pausing is used by the translator to solve the structure of the sentence of the text. In the events of re-structuring, retrieval is used by erasing text repeatedly and pausing for a moment to memorize the previous text and retyping to get more acceptable words. This phenomenon commonly happens when the translation process is part of cognitive behavior strategy (Arndt, 1987) and Mu (2005). Accordingly, retrieval is significantly contributed to solving the problem of phrases non-equivalence between linear text. At the same points, Mu (2005) suggested in different terms, namely covering strategy.

Rehearsing

Rehearsing refers to trying out ideas or language (options of equivalence in TT). In this study, the translator used this behavior to comprehend events by trying out pictures from the target text to the source text by saying, "Let's check, I am not sure.....what is the most suitable words ya...." (see excerpt 5). The expression "Let check, I am not sure" entails that the translator is trying to recalling the memories to put the new option of the phrases of TT by typing "view" inferred from the dictionary. Using this category, the comprehension of the translator revealed the objectives of the target text.

Excerpt 6

Rehearsing

No	Time	Event	Transcriptions	Coding Types
1	00:56	Comprehending	Kita cek...ga yakin... (open CIED and typing panorama)...apa yang tepat... kita liat di Stevens Schimdgall... euh sama di google translate... (open GT) oh view...	Rehearsing
2	03:10	Comprehending	Apakah bisa dibilang cassava... atau... (searching)... kita liat... (pause)... di kamus... (keep searching)... clicking 'next' again and again)... sama... masih di huruf... ah mana ya...	Rehearsing

Excerpt 6 confirms that retyping, pausing and inferencing is used to comprehend all the non-equivalences of the translation. In other word, it is postulated that the translator used this behavior to solve the non-equivalence phrases by trying out the new expressions from the dictionary. Regarding this issue, Teimooriyan et al. (2017) confirm rehearsing is used to make a difference in comprehension, memory processes, and problem-solving.

Referencing

Referencing means indexing the meaning of the untranslated word or phrases by seeking the intention from the dictionaries. In this regard, the translator passing through several steps to seeking multiple online dictionaries. It is seen from excerpt 7 that the translator uses several online dictionaries. The translator said that "why...oh.. let see google translate...and others choice (CIED)" (see excerpt 7 in Appendix 1)

Excerpt 7

Referencing

No	Time	Event	Transcriptions	Coding Types
1	07.15	Constructing	Kenapa..google translate... (clicking CIED ...typing) menggemballa...(reading CIED) to guide lead...pikiran rakyat...(inaudible)...to rear ...(inaudible) ...and...(back to translog) rear ...buffaloes...(click BT..typing 'kerbau') ---	Referencing

Excerpt 7 entails that in constructing the text, the translator re-read the text and retype while taking an inference from the dictionary. In this regard, the translator always refers to dictionaries such as google translate, Meriam webster dictionary, and CIED to infer the suitable meaning. The translator used the three dictionaries to compare the meaning of each words or phrases. Concerning the result, it is in line with the investigation

of some researchers such as Risku (2013) and Tatiana (2017). In this regard, referencing may contribute to the translation process by conforming source of data from dictionaries. However, in this study, referencing and rehearsing are postulated in the same occurrence due to some similar events. Therefore, *Moindjie (2015) affirms that* reference in translation often depends on certain language peculiarities not in the translator choices to get more cohesive and enhance meaning in translation process.

Summarizing

Summarizing is the activity of the translator by synthesizing what has been read before. The objective of this activity is to convince the equivalence of the paired translation text. The result shows that the translator uses this behavior in restructuring the sentence. This occurrence is taken from excerpt 8 (see appendix 1). The translator said, "So... non pedigreed chicken...is...pedigreed....and it has done pedigreed chicken". Through this excerpt, the translator tried to restructure the sentence by summarizing all the mind and dictionaries' preferences.

Excerpt 8

Summarizing

No	Time	Event	Transcriptions	Coding Types
1	39.31	Restructuring	Jadi non pedigreed chicken... click Collin (typing) pedigreed...back to translog... (pausing) - and ...jadi deh..	Summarizing

Excerpt 8, embedded that retyping and re-reading is used to summarize the text to get an acceptable text for the reader by taking the conclusion of the preferable meaning from the whole context. During the summarizing, pausing activity also used to recall the previous text to link with the recent text. Regarding this activity, Pragman and Pragmon (2009) found summarizing allows them to concentrate on the text's central ideas within a short time, and translation focuses on the word-level without seeing the general picture. However, Shrieve (2006) stated that summarizing processes emerge in the normal full translation task because this cross-language task's final result is a summary and a translation. Therefore, the summary of translator must effectively integrate the component cognitive processes of both summarization and translation.

Concerning the categories of cognitive behaviour, all the translator activities have been monitored based on the transcription from the video recording. In translating the text Indonesian into English, the translator postulated some cognitive activities ranging from generating ideas to summarizing. This activity is always used in comprehending, restructuring, and transferring the possible phrases and words to cope with the text. However, the translator used this behavior as an integrated activity, not in a separate one. It means that this behavior is used simultaneously while translating the text.

Dominant types of translator cognitive behaviors

Regarding the second research question related to the dominant cognitive behavior, the translator used several strategies/types ranging from generating ideas up to summarizing. Each cognitive behavior has each portion in the process of the translation; referencing (33,6 %), rehearsing (25,76%), elaborating (22.4%), retrieving (21,28%), generating ideas (11,2 %), revising and clarifying (4,48%) and summarizing (2.24%) (see table 9).

Table 9 Dominant Types of Translator Cognitive Behavior

NO	Behaviors	Total	%
1	Generating Ideas	10	11,2
2	Revising	4	4,48
3	Elaborating	20	22.4
4	Clarifying	4	4.48
5	Retrieving	19	21,28
6	Rehearsing	23	25.76
7	Referencing	30	33.6
8	Summarizing	2	2.24
	Total	112	100

Table 9 showed that cognitive behaviors get the highest portion in referencing rather than the other action. The translator prefers to use this behavior to translate the text whenever the non-equivalences exist in the text. Through the TAPs activities, the translator always seeks a particular meaning by referring to the online dictionary. Moreover, in the second portion, the translator's behavior is rehearsing. It means that trying out TT's ideas is often used to rehearse the option of the equivalences as the translator's strategy. However, summarizing has the lowest portion to use by the translator. In other words, the translator is

rarely for synthesizing what has been read from the ST to ST to convince the acceptability of the translated text.

Concerning this issue, both of the cognitive behavior is useful to help the problems of the translation. Mu (2005) suggests that referencing is pivotal in outlining the text from the dictionary as the key to seeking the equivalences of the phrase or words. However, in terms of summarizing, Shrieve (2006) convinces the pivotal of summarizing as an effective way to integrate the component cognitive processes of both summarization and translation. Accordingly, the summarizing process is needed in the translation process as the final touch to cope with the acceptable translation text. However, the translator is rarely to be involved process in the translation process. As a result, it may influence the acceptability of translation products in the target text.

CONCLUSION

From the data findings and discussions above, it can be concluded that the translation process done by the translator by using several cognitive behavior categories/types proposed by Wenden (1991), Arndt (1987) in Mu (2005), and Khezrlou (2012), such as generating ideas, revising, elaborating, clarifying, retrieving, rehearsing, referencing and summarizing. These behaviors were overlapping each other and reoccurred throughout the translation process. It means that each action does not occur individually in each event, but it seemingly happened simultaneously.

In generating the idea, reading the source text repeatedly used to generate the text's contextual and textual meaning while referring to the dictionary. Then, revising is also done by retyping and re-reading for making changes to the contextual meaning in TT. Moreover, the translator elaborates the text by extending TT's meaning by searching the other's meaning from several dictionaries to refer to the equivalences. Meanwhile, clarifying was done by throwing the unnecessary word or phrases for a moment while searching and referring to the suitable meaning in several dictionaries. However, in retrieving, the translator tries to relate the previous translation text by recalling her memory to refer to the appropriate words in line with meaning in the present term. In rehearsing activities, the translator read the target text repeatedly while retyping, researching, and

referring to the dictionary. Interestingly, referencing is done while rehearsing. It means the translator seeks meaning from online dictionaries while recalling what has been written in the previous text. Lastly, summarizing was done by confirming through reading the last text repeatedly and re-writing with different words or phrases based on the reference and interpretation.

Concerning the most dominant categories or types used by the translator, referencing has the highest portion in translation process. It means that the translator is often using this activity to translate the ST to TT. This activity is crucial for the translator to always keep in touch with the dictionary to solve the translation process's problematic issue. However, summarizing has got the lowest portion used by the translator. It signified that the translator rarely uses this activity as one of the crucial activities of the translation process. It means that the final touch of the translation process's final steps relies on this significant mental activity.

In brief, the translator's cognitive behavior process has been significantly applied to various events and activities simultaneously. However, each activity's portion seems imbalanced when the translation processing—in this regard, summarizing, revising, clarifying needs to have more attention to develop or construct the acceptable translation text as part of the translation process to achieve the goal of the target text meaning. Therefore, the translation product's acceptability is achieved by using his/her competency by combining the whole cognitive activities during the translation process.

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