

A Psycholinguistic Investigation of Translation Strategies and Processes in Jordan

AL-HARAHSEH Ahmad ^{1*} AL ROUSAN Rafat ²

¹ *Yarmouk University, Jordan
harahsheh77@yu.edu.jo*

² *Yarmouk University, Jordan
rafat.r@yu.edu.jo*

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Abstract:

This study explored the psycholinguistic investigations of translation strategies and processes employed by Bachelor translation students at Yarmouk University, Jordan, while translating media texts into Arabic. The study used the Think-Aloud Protocol as a technique of collecting data. The subjects were given a political news text in English and were requested to translate it into Arabic. They were asked to videotape the translation process. Then, they were requested to respond immediately to a questionnaire explaining the cognitive processes and translation strategies they used during the translation process. The study drew on Gerloff's (1986) Text-processing Strategies model, which comprises features from Krings' and Lörcher's models, as a theoretical framework. The study found that the strategy of General Search and Selection at the text level was employed most frequently (i.e., language-based strategies), followed by Storage and Retrieval and Editing. On the other hand, other strategies, namely, Linguistic Analysis, Text Contextualization and Problem Identification were also used (i.e., linguistic-based strategies). This study recommends that undergraduate translation students need proper training to use these strategies in order to recognize, and use them at the larger textual levels.

Keywords : Contextualization ; Media Text ; Psycholinguistic ; Think-Aloud Protocol ; Training Translators ; Translation Strategies.

^{1*} **Corresponding author :** AL-HARAHSEH Ahmad, arahsheh77@yu.edu.jo

1. Introduction

In the field of translation, there is a need to gain more information about the mental or cognitive processes that take place during the production of the Target Text (TT). This information, which is obtained from the translators immediately after completing the translation task, may provide translation professors or instructors with knowledge about the challenges faced by novice translators, and thus develop appropriate strategies to overcome these challenges in the future. According to Munday (2006), translation studies have focused on product-oriented studies and process-oriented studies. The former examines, compares, evaluates and describes the existing translations. However, the later tries to find out what is going in the mind of translator during the translation process. Holmes' (1988/2004, as cited in Munday, 2006, p.18) model also refers to function-oriented studies i.e. 'socio-translation studies'. In other words, to describe the function of translation in the socio-cultural context.

Most translation studies focus on the final product of translation, and the challenges that translators encounter in rendering a Source Text (henceforth, ST) into Target Text (Henceforth, TT). These studies generate strategies and procedures to overcome these challenges. However, studying the final product alone "provides an incomplete and often misleading way into the translation process, hiding both successful strategies and problems" (Bernardini, 2001, p.241). Few studies in the Arab World have tackled the process-oriented approach, i.e., the mental processes that take place in the mind of the translators during the translation process (Attari, 2005). Knowing these processes is beneficial for professors or instructors of translation as well as students, because they will determine the orientation of the training process, including the strategies, skills and procedures that the student needs to improve his/her translation skills. However, knowing what is going in the translators' mind is an arduous task, it will provide researchers with data that help them to assess the product relying on their inferences, which open a room for mistakes (Attari, 2005 ; Gerloff, 1986).

To understand the mental processes of second language learning, experts used to employ introspective techniques. These techniques rely on long interviews with learners after finishing a task depending on their long-term memory in recalling the language processes (Gerloff, 1986). These techniques were found to be inadequate in translation because the subjects were unable to recall all the mental processes after a period of time. Therefore, the workable solution was to apply concurrent Think-Aloud Protocol (TAP), i.e. to collect the information immediately from the subjects upon finishing the task. The subjects report “exactly what they were doing while performing a language task” (Gerloff, 1986, p.244). This information can be helpful for professors of translation to realize the weaknesses or the challenges that their students encountered during the translation process.

The present study aims to investigate the process-oriented translation strategies used by undergraduate translation students when translating media texts from English into Arabic. To achieve its aim, it employs Gerloff’s (1986) text processing model to investigate the most frequent strategies used by translators during the process of translation. Additionally, this study aims to enhance the students’ performance in translation by highlighting the linguistic and mental challenges encountered by translators, and suggesting appropriate strategies to address these challenges. Therefore, the study aims to answer the following questions:

1. What process-oriented translation strategies do translators adopt when translating TT?
2. To what extent can the use of TAP strategies enhances the translators’ performance in translation?

2. Think-Aloud Protocol (TAP)

TAP was initially used as a data collection tool in psychology in 1930s and 1940s. By 1950s, psychologists redirected the emphasis of “experimentation to participants own cognitive processes” because of “the ideological shift away from behaviorism” (Bowles, 2010, p.5). After the TAP has been used in different disciplines, such as marketing, anthropology, medicine, software engineering, etc. The use of TAP in

translation started in the late 1980s, because there was a need to develop empirical and inductive models of the translation process to complement the normative and deductive models. TAP in translation studies aims to “asking a translator to translate a text and, at the same time, to verbalize as much of his or her thoughts as possible” (Jääskeläinen 1998, p. 266). In addition, TAP is used in translation studies to investigate “problem-solving and decision-making processes” (Jääskeläinen, 2000, p.71). The researcher’s role is to analyze the on-going thoughts of the subjects (Jääskeläinen, 2000).

Empirical research focused on error analysis and translation criticism to anticipate what happened in the mind of the translator during the translation process. These inferences relied on probabilities while other problems were hard to anticipate (Kusssmaul and Tirkkonen-Condit, 1995). Therefore, there will be inaccurate inferences about the competency of the translator if the focus is only on the product rather than the process. The use of TAP as a model has two pedagogical purposes: it helps to provide an adequate translation, and it shows the weak competences of the subjects who will be the prospected translators. Therefore, the trainers can tell the trainees which strategy is the most adequate to use to overcome a certain problem (Kusssmaul and Tirkkonen-Condit, 1995).

There are two methods of TAPs, monologue and dialogue (Kusssmaul and Tirkkonen-Condit, 1995). In monologue, the subject can talk to himself or herself normally when translating a text. In dialogue method, the subjects can talk and discuss the translation in pairs. This method is artificial, and it may affect the translation process because when translators start talking during the translation process. This may distract their attentions, and negatively affect the translation process. Hence, “monologue protocols are still predominantly the main tool for gaining access to the translation process” (Kusssmaul and Tirkkonen-Condit, 1995 :180). The use of monologue and dialogue protocols were debated. House (1988), as cited in Kusssmaul and Tirkkonen-Condit (1995), indicates that dialogue protocols provide more data than monologue protocols. However, Kusssmaul and Tirkkonen-Condit (1995:180) argue that the productivity of the data depends on the type of subjects themselves, the translation brief, and “the

priorities of the researcher.” Another criticism is highlighted by Ericsson and Simon (1980: 242), as cited in Kussmaul and Tirkkonen-Condit (1995), that is when the subjects fall in deep thinking, "they tend to stop verbalising or they provide less complete verbalisations." On the other hand, the subjects stop verbalizations when they do little thinking. The third method of TAP is retrospective interviews, i.e., the subject reports about the task, and the actions they have done during the translation process (Ericsson and Simon, 1980).

Toury (1995, p. 235) raises a concern that there may be an interference between oral and written translation. He indicates that “the need to verbalize aloud forces the subjects to produce not just mental, but spoken translation before the required written one ; and there is a real possibility that spoken and written translation do not involve the exact same strategies.” Actually, translators verbalize the written text in order to evoke their memories to produce a proper written translation rather than a spoken translation.

Seguinot (1996, p.79) divides the strategies of “translation-in-process” into four kinds based on function: Firstly, interpersonal strategies, which include phatic function, correction and brainstorming. Secondly, search strategies are strategies used when the translator is looking for the meaning of a word. It consists of two search types: external which includes dictionary, encyclopaedia and glossaries, and internal that includes knowledge and word search using paradigmatic and syntagmatic strategies. Thirdly, inferencing strategies includes rereading the ST and the TT and consulting a colleague. Finally, “monitoring strategies which also includes reading the ST and TT text, consulting other colleague and comparing text” (p.79).

In addition, Kiraly (1995:99), views translation as both an “external communicative social activity and an internal cognitive activity”, and proposes two translation models: a social model and a cognitive model based on psycholinguistics. The translator's mind, according to Kiraly's cognitive model, is an information-processing system in which a translation

is produced by the interaction of intuitive and controlled processes using linguistic and extralinguistic data. His paradigm is made up of three parts: (1) information sources, including “long-term memory and source text input” (p.100) (2) an intuitive workspace, “which is relatively uncontrolled and subconscious” (p.102); and (3) a controlled processing centre. According to Kiraly (1995), the translator has three key sources of information at his/her disposal: long-term memory, source text input, and external resources. Long-term memory may store mental networks containing physical world knowledge, source and target culture knowledge, L1 and L2 lexico-semantic information, morpho-syntactic frames, and relevant source and target language signs, as well as L1 and L2 lexico-semantic information, morpho-syntactic frames, and relevant source and target language signs. The translator's awareness of translation standards and learning procedures, quality assessment criteria, and potential sources of error when translating are all examples of translation-related schemata (Kiraly,1995).

Finally, using TAP while translating is beneficial to students, especially without teacher guidance and criticism, as they can evaluate their own translations (Chi, 2019). In addition, translation teachers can "demonstrate the translation process, encourage students to ask questions and comments about the translated content, and even suggest another translation" (Chi, 2019, p.731). Therefore, this study hypothesizes that the use of TAP in translation studies is beneficial and can help translators to develop their abilities in performing proper translations.

Methods and procedures

The sample of this study consisted of 16 volunteered BA translation students, seven males and nine females. They were all fourth-year students, who have studied several translation and linguistic courses such as media translation, legal translation, literary translation, discourse analysis, semantics and pragmatics, advanced grammar, paragraph and essay writing, etc. It was supposed that the participants have very good translation and linguistic competencies. Those students were purposefully selected to

participate in the study based on their academic performances. Because this study is a process-oriented approach, the Think Aloud Protocol (TAP) was used to reveal the mental processes of the translation process, and the strategies employed by the undergraduate translation students. Particularly, the method used in the study was the TAP monologue protocols. That is, “experiments where one subject talks to himself or herself while translating a text. Since talking to oneself is normally not a natural thing to do, the subjects are given a chance to get used to this behaviour in a warming-up phase” (Kusmaul and Tirkkonen-Condit, 1995:179). Krings (1986) emphasizes that TAP monologue method is adequate for process-oriented translation studies because there is a strong relation between translation and TAP.

The current study relied on this method in eliciting data from the subjects. It is noteworthy that the atmosphere of the experiment was tension-free. The subjects were given 45 minutes to translate and to think-aloud the task individually. They were informed to videotape the translation process, and to send the recordings along with the translation and the drafts to the researchers. The subjects were informed that the adequacy of their translations would not be evaluated in order to eliminate any tension or pressure.

The subjects were also informed that they should take the test seriously, and to be precise in completing the questionnaire because this will help in achieving real results and conclusions. Informed consents were obtained from the participants before they started the task. In addition, they were assured that their identities would be kept confidential. The subjects were given a short media text (167 words) in English, and they were asked to translate it into Arabic. Then, they were asked to fill in a questionnaire adopted from Gerloff's (1986) model. The researchers did not attend the translation test to avoid causing any disruption or distraction for the subjects. The study relied on the results of the questionnaire, observations from the videotapes and the paper sheets of the translation task to study the mental processes that were going on in the minds of the participants during

the process of translation. The study also observed the eye-tracking of the participants based on the recordings.

Theoretical Framework

TAP is a useful tool for collecting data about understanding the translation process, the challenges encountered by translators, and the translation strategies used during the process of translating a text. Lörcher (1996) suggests a model of translation process that consists of three levels: The first level consists of elements of translation strategies that are “the smallest detectable problem-solving steps.” The second level “captures the manifestations of translation studies.” The third and highest level “includes translation version.” Lörcher (1996 : 27) also explains that:

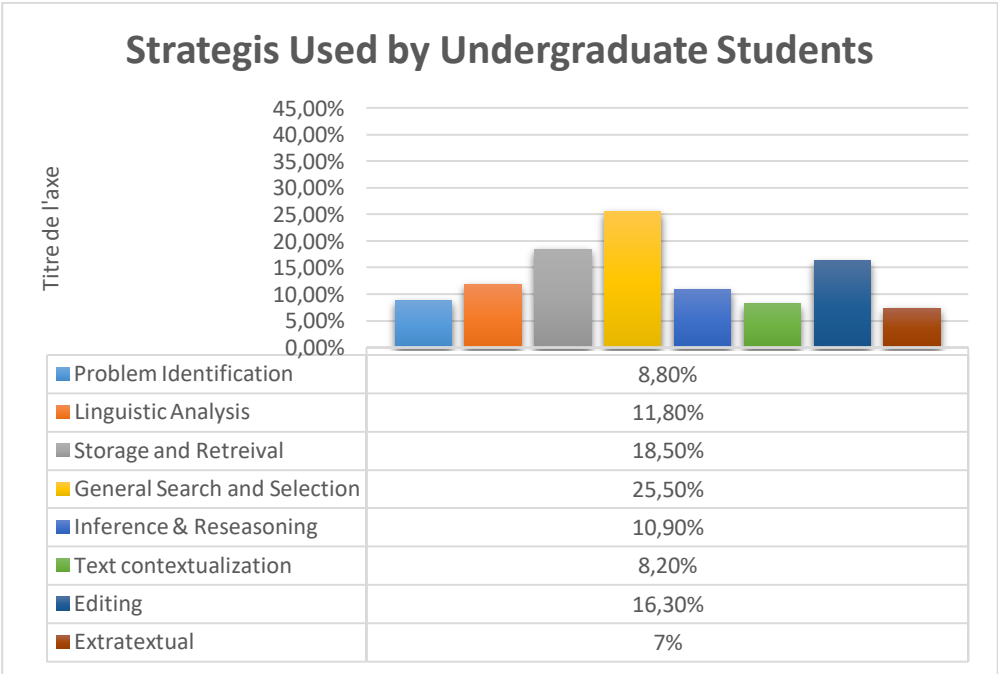
Translation strategies have their starting-point in the realization of a problem by a subject, and their termination in a (possibly preliminary) solution to the problem or in the subject's realization of the insolubility of the problem at given point in time. Between the realization of a translation problem and the realization of its solution or insolubility, further verbal and/ or mental activities can occur which can be interpreted as being strategy steps or elements of translation strategies.

This study is guided by Gerloff's (1986) model of Text- processing Strategies. The study adopted Gerloff's (1986) coding categories and subcategories. Gerloff's (1986) model of translation consists of eight categories that cover ST comprehension and TT production strategies, namely: problem identification, linguistic analysis, storage and retrieval, general search and selection, inference and reasoning, text contextualization, editing and extratextual or language use and task monitoring. This model is called Text-processing Strategies; it has been oriented toward the study's objective.

Findings and Discussion

This section aims to provide the analysis and findings of the empirical study. Firstly, it presents a summary chart that indicates the percentages and means of the strategies used by the subjects during the translation process. Secondly, general observations about the overall strategies used by all the subjects are revealed. Finally, this section gives a detailed discussion of the findings.

Chart (1): Translation Strategies Used by Undergraduate Students



General Observations

The subjects started the translation process immediately. They were highly concentrated on the ST and TT. Their eyes were moving interchangeably between the ST and TT. They were reading and thinking of the appropriate rendition of the ST. Some subjects put a pen in their mouths several times while looking at the ST during the translation process. Also, ten of the subjects verbalised the ST and the TT inaudibly while one subject verbalised the ST and TT audibly several times during the translation

process. Eight of the subjects used paper dictionaries, whereas the rest used electronic ones. At the beginning of the translation task, eight of the subjects tended to keep silent for (2 minutes or more) before starting the translation process. During the translation process, the periods of silence ranged from (5 seconds to 50 seconds). Some subjects read, compared and repeated the ST and the TT audibly more than the other subjects. In addition, other subjects kept doing editing from time to time even after finishing the translation. Moreover, the subjects compared the ST (English version) with the TT (Arabic version) several times. They edited the TT immediately during the translation process. The subjects did not search for the meaning of words in the context. However, they relied on the dictionary to check the words' meaning. Hence a few of them wrote the meaning of words and expressions in Arabic on the ST sheet. While they deleted others when not sure of the meaning. In this case, they provided alternatives or generate synonyms. Furthermore, the subjects used filler words during the translation process, such as "tayyib"(Okay), "no" and "I say."

Specific Observations

Based on chart (1), the highest strategy used by the subjects is General Search and Selection accounting for 25.5 % of the overall strategies. The strategy includes repeating a linguistic unit (word/phrase) while translating, looking for general synonyms, giving alternative meanings, giving tentative meaning, writing a filler word (any word) or skipping the item, and comparing Arabic and English word. The subjects repeated a word or phrase to ignite the memory to find the equivalent Arabic word or phrase; synonyms seem to be problematic for the subjects because complete synonyms do not exist in any language. Therefore, the subjects tend to give a tentative or alternative meaning for the word or phrase and continue the translation process. In the revision process, they can check the suitability of the contextual meaning of this word or phrase. It was seen that the subjects compared the meaning of English words and phrases with their Arabic equivalences one by one. This process was time consuming because the memory had to process and analyse the meanings of words and phrases of the whole sentence, then it retrieved the Arabic equivalent meaning.

The second highest strategy used by the undergraduate students is Storage and Retrieval with 18.5%. The subjects searched the memory for Arabic or English equivalence and identified a word to emerge into “consciousness.” This strategy consumed most of the specified time for the translation task by the subjects because the purpose of translation is to produce an equivalent product for the Source Text (ST) into the Target Language (TL). In addition, this strategy includes dictionary usage. Most of the subjects used the dictionary from three to twenty-six times to find the equivalent or suitable meaning. This strategy does not only aim to find the meaning of a word but to find the correct contextual meaning of the word in the text to keep the text coherent and readable. It has been also found that the students were heavily dependent on dictionary meaning rather than the contextual meaning because they think it is easier and more attainable than the contextual one. This is a major challenge that professors should take into consideration during translators training.

The third strategy was Editing, which includes immediate correction, congruity assessment, punctuation check, product quality assessment and change written product; the mean was 16.3%. This strategy received less attention from the subjects; most of them did immediate correction during the process of translation. This explains why translators may have different semantic, syntactic and stylist problems in their translation. Furthermore, it was noticed that the subjects did direct assessment for their translations. It is important to note that the editing process is as important as the translation process because a translator may add, omit, change or amend the translation to have a final acceptable product.

The fourth highest strategy was Inference and Reasoning accounting for 10.9%. This strategy includes world knowledge, personal experience, refer to author intent (intended meaning), and construct explanatory context and text structure. Undoubtedly, world knowledge and personal experience are crucial in the translation process; they help the memory generate the adequate equivalence for a word, a phrase or an idea. Translators may encounter culture-specific words or concepts that are tied with a certain historical, religious or political event. Therefore, this knowledge helps the

memory to produce an adequate meaning. In addition, most of the subjects preferred to analyse the text structure and to explain the context to have a better understanding of the complex structure of the text by using the strategy of splitting and chunking.

The fifth strategy is Problem Identification that includes finding errors in the ST and not knowing the meaning of a word in the ST; the mean was 8.8%. Regarding errors, most of the students did not find errors in the ST and the TT. However, they had a problem in finding the meaning of some words in the ST as most of them would use the dictionary to find the meaning of these words. It was observed that the translator looked for the words, phrases or expressions that s/he does not know their meanings. The reason could be that these items are not stored in the memory, and that the memory needs a source of help, such as a dictionary to be able to recognize and process the meaning aligned with other meanings in the text.

The sixth strategy is Text Contextualization that includes restarting prior information, sentence context, paragraph context and larger context, the mean was 8.2%. All the subjects studied Discourse Analysis course, in which they learned the importance of context in determining the meaning of a linguistic expression. Understanding the context will enable the memory to anticipate the meaning of any strange or new words in the text. The translation process should be context-dependent since the same word or expression can have different meanings in different contexts. It was noticed that most of the subjects did not pay enough attention for the context in the translation task given to them. It seems that the subjects tended to save time and effort by consulting the dictionary rather than relying on analysing and anticipating the meaning within its context. The major interest in this strategy was restarting prior information they have about the meaning of words.

The seventh strategy was Extratextual that involves certitude comments e.g. declares own certainty about product, offers personal opinion on information in the text, laughs, etc. During the translation process, one subject used expressions “*tayyib*” (Okay), “*No*” and “*I say*”. This supports

the notion of monologue protocols. The subjects were highly concentrated during the translation process, and they verbalise the ST and TT inaudibly. They used hands' movements, rubbing nose and putting a pen in a mouth as an indication of thinking of the appropriate rendition.

The least used strategy was Linguistic Analysis, which includes syntactic analysis of the ST, grammatical analysis of the ST, lexical analysis of the ST and analogy to English. Undoubtedly, linguistic analysis is very essential and helpful in the translation process because it helps translators to understand the complex structure, grammar and lexes of the ST. This will lead to adequate and straightforward rendition of the ST. It was noted that some subjects lacked the linguistic competence that enable them to do the linguistic analysis of the ST. Therefore, the trainees needed more practice on linguistic analysis strategies.

Conclusion

The study has revealed that the strategies of General Search and Selection Strategy at the text level (i.e. language-based strategies) were employed most frequently, followed by Storage and Retrieval and Editing, whereas other strategies, namely, Linguistic Analysis, Text Contextualization and Problem Identification (i.e. linguistic-based strategies) were the least frequently used. The findings of the study agree with Attari's (2005) that more than one strategy may be used at the same time by the subjects when they had a translation problem, i.e., they generated synonyms, gave alternative meanings, and did self-corrections immediately. The study has also concluded that the subjects highly depended on the storage and retrieval strategy. That is, they relied on dictionary meaning of words, phrases and sentences, and they neglected the context in which they were used. Therefore, the trainees should take special practices or exercises on synonyms and near-synonyms to help them determine the right synonym for a word in context. Furthermore, the study has found that TAP is a very useful approach in exploring the challenges that the translators faced during the translation process, and it helps suggesting workable solutions and strategies for these challenges.

Therefore, exploring the mental processes of the translators will provide the trainers with the exact information and knowledge required for developing the performance of translators. Moreover, general knowledge and personal experience are very crucial in the translation process not only in written translation but also in oral interpretation, such as consecutive and simultaneous interpretations. Trainees should be trained to employ this background knowledge and expertise in translation. Hence, trainees should keep their knowledge, information and experiences up-to-date. Trainees should also be trained to correct linguistic problems such as grammar, spelling and punctuation after finishing the translation process and should attend intensive linguistic courses about linguistic analysis.

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Appendix

1. Translation Test.

Translate the following text into proper Arabic:

Paris (CNN):US President Donald Trump began his 48-hour visit to Paris on Saturday meeting with his host, French President Emmanuel Macron, a onetime friend who he chided on Twitter within minutes of landing in the French capital.

The men worked to paper over their differences during a morning meeting. But the effusive expressions of bonhomie that once

colored their interactions were gone, replaced by businesslike handshakes and wooden declarations of cooperation.

Seconds after Air Force One touched down at Orly Airport outside Paris on Friday, Trump vented on social media about a proposal for more robust European military cooperation floated by his French counterpart days earlier.

"President Macron of France has just suggested that Europe build its own military in order to protect itself from the U.S., China and Russia," Trump wrote. The message appeared before he'd even gotten off his plane. "Very insulting, but perhaps Europe should first pay its fair share of NATO, which the U.S. subsidizes greatly!"