Background Knowledge of Specific Field of Study and Quality of Translation

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Abstract

This article seeks to investigate the role played by background knowledge of technical subject in quality of translation. To this end, two classes of senior undergraduate students in translation studies were chosen and made comparable through administration of Nelson reading comprehension and vocabulary test to ensure validity of the results. Before attempting translation, the first class was informed of the necessary background knowledge about the context. In the other group, the students were asked to translate the text without raising their schemata on the topic. The result of the study show significant difference between the two groups. To triangulate the study, a questionnaire was also included. The outcome of the survey again verified the significant role of background knowledge of technical subject in the quality of translation in that it helped the students recontextualize the translated text in a far more sensible and functional manner. The results of the study offer safe proof for advocating the feeding of background knowledge as a necessary step in translation of specific texts as the organization of knowledge in SL is different from TL.

Key words: Background Knowledge, Quality of Translation. Text, Feeding. SL.

Introduction

Procedures are a form of knowledge. They are condensations of experience which emerges as typical mental or physical course-of-action used by actors to achieve results in the world of everyday life. Procedures are not just about doing things; they are also about knowing things and knowing what to do with things. In this case, any consideration of translation process and procedure must deal with what translators and other text processors must know in order to produce and understand texts. If translations are outputs of textual processes, what are the inputs? The answers to this question are: knowledge of language, knowledge of social interaction, knowledge of the world (and its domains), knowledge of texts, and knowledge of translation (Neubert & Shreve, 1992: 55). Through this, it

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might be safe to say that text comprehension is a complex cognitive skill in which the translators, as professional readers, should construct meaning by using all the available resources from both the text and previous knowledge. These resources assist translators in utilizing lexis and syntax, retrieving their meanings from one's mental lexicon, making inferences, and employing schemata. The correct implementation of these resources can help translators in the successful comprehension of the text (Donin et al, 2004; Fukkink et al, 2005). One of these important sources is background knowledge of a specific field.

The relation between background knowledge and text comprehension in native-language reading has been investigated extensively. Results in this area have consistently shown a facilitating effect on reading comprehension, in both adults and children, of having background knowledge of the topic of a text (see Anderson & Pearson, 1984; Weber, 1991). Research has also provided evidence for a substantial role of background knowledge in text comprehension in a second language. Steffensen, Joag-Dev, and Anderson (1979) found that familiarity with the topic helps the second- language reader to construct meaning.

The translation texts may range from simple items such as driving license, birth certificate, etc. to more complex written material, such as articles in specialized professional journals, business contracts and legal documents (B. T. Bao & D. X. Thu, 1999). Similarly, an interpreter may be asked to do his/ her job in various situations: an international conference on important issues, a press conference, a lecture, a meal or in a conversation between a customer and a salesman. Therefore, it is essential for a translator/ an interpreter to have knowledge of every field, both the knowledge of current issues, important issues and knowledge of daily life. To be successful in his/ her work, a translator/ an interpreter needs to acquire as much knowledge as possible.

Nonetheless, it does not mean that translators/ interpreters have to specialize in every field since it is almost impossible. According to Rubrecht (2005), both full time and freelance translators/ interpreters should have knowledge in specialized content areas which should, of course, be an area that cultivates in them some interests.

Field specific knowledge plays a critical role in successfully recognizing and understanding the concepts and the linguistic tools that translators use to convey information, to introduce a particular concept, or to argue a certain position. With sufficient background knowledge, one may build upon an accurate analysis of a sentence to establish the main points of the sentence. In particular, the translator must reexamine the source text, consult additional references, or (preferably) both when the apparent meaning (based on textual analysis) of the source text conflicts either with the translator's field-specific knowledge or with information gathered from reliable references (James 2002).

Research Question
Building upon this notion, the present paper attempts to unfold the correlation between the extents to which the translators' background knowledge is effective

in the final product of translation. Thus, the following research question was formulated along with two null hypotheses as follows:

Is there any relationship between translators' background knowledge of specific field of study and quality of translation?

H0: There is no relationship between translators' background knowledge of specific field of study and quality of translation?

H1: There is a significant relationship between translators' background knowledge of specific field of study and quality of translation?

Translation and Background Knowledge

Translation in Nida's words is said to "consist in reproducing in the receptor language the closest natural equivalent of the source language message, first in terms of meaning and secondly in terms of style" (Nida, 1984). According to Newmark: "Translation is rendering a written text into another language in the way that the author intended the text" (Newmark, 1988, p. 5). These two definitions are treated here as two pivotal ones signifying the basics of any satisfactory attempt under the name of translation. Next will be the clarification of the second key term, i.e. background knowledge. The following definitions serve our purpose.

Kreckel (1981; cited in Hinds, 1987: 7) defines background knowledge as "that knowledge which two or more people have in common as a result of being brought up under similar conditions such as culture, subculture, region, and education". Biemans and Simons' (1996) definition of background knowledge is slightly more complicated "background knowledge is all knowledge learners have when entering a learning environment that is potentially relevant for acquiring new knowledge". Dochy and Alexander (1995) provide a definition describing background knowledge as "the whole of a person's knowledge, including explicit and tacit knowledge, metacognitive and conceptual knowledge. In addition to the above definitions, the term quality of translation needs a clarification as follows.

Quality in general is a judgment from comparing something done to something desired to be done. With respect to translation, we work with two significant factors: speed of delivery, and accuracy of the finished work, defined as the equivalence of the two texts, and meaning the ratio of "translation errors" in comparison with an ideally well-formed (faithfully rendered) product (Ferenc Kovacs, 2008). Therefore, quality of translation can be defined as the extent to which translation is 'accurate', 'faithful', and 'natural'. Beekman & Callow (1989:33) believe that faithful translation is a translated text which transfers the meaning and dynamism of the original text. They also believe that a translator could be faithful to the original text just in the situation that he himself has understood the text.

Manafi Anary (2004) defined the 'accuracy' as exactitude or precision of the translated text. Actually, in this definition accuracy consists of compatibility of the translated text with the original one. He also believes that accurate translation

is the one which is considered as "recreation of the source text". According to Newmark (1988: 111), accuracy in translation of a text is related to the source text. Therefore we can consider the accuracy of a text as realization of faithfulness in translation. It can also tell us how much the translator was successful in transferring the message of the source text. Larson (1984:485) also believes that in each translation, accuracy, clearness and naturalness are very important components. In case of accuracy of translated text, he said, sometimes translators try to understand the meaning of the source text and then transfer it to the target text but in the process of analyzing the text or transferring the meaning, s/he makes mistakes and therefore it is necessary that his translation be examined. Yazdanpanah (2007) investigates the interaction of a reading comprehension test with gender in a formal testing context and also the performance of males and females on reading test items with regard to demands on strategy use. Having worked with 187 international participants at The School of Foreign Languages in North Cyprus, she conducts the study by three reading comprehension passages with 25 questions given to the participants as the final exam of the course. The questions were classified into 6 categories: identifying main idea, reading for specific information, guessing meaning from context, identifying referential information, matching titles with paragraph, and text coherence. The findings of the study suggest the females' supremacy over males on identifying main idea, guessing meaning from context, and text coherence questions. Conversely, males outperformed females in reading for specific information, identifying referential information, and matching titles with paragraph. However, the overall performance of males and females on the reading test does not show any significant difference which is an implication of the fact that text topic did not influence male and female performance on the reading comprehension test.

Method
For any act of translation to be reasonably satisfactory, a thorough analysis of knowledge and skills in the background of social and cultural context is required. The translator is thus expected to make best understanding of the content from every single sentence to the entire text as a whole. To this end, he must be able to properly use dictionaries and general reference books. According to Kim (2006: 330) 'it is during this process that references such as dictionaries, glossaries, encyclopedias and websites prove their worth... The students should be provided with instruction specially dealing with background information pertinent to the translation topic at hand'.

Design
In this study, we used both experimental and descriptive design. On the one hand, the subjects were divided into a control group and an experimental group and checked against the role of background knowledge on the quality of the final translated text.
On the other hand, we also conducted a survey. There we used a questionnaire consisted of 10 questions to touch on students' awareness of the important role of

background knowledge, their difficulties in doing translation and interpreting and their ways of improving their knowledge. The purpose of open-ended choices is to collect extra details and information about the quality of translation.

1. Participants

The participants were chosen from among available students at Islamic Azad University, Ramsar Branch. They consisted of 20 senior English-major students, both male and female, in 22 to 25 years of age who were randomly selected from available students. They were selected in compliance with the scope of study which required participants to have, in the first hand, a good command of English, which we pretested though administration of Nelson test, and be no specialist in translation of any specific field of study in the second.

2. Instruments

The selection of the text, a legal one, was done on the criteria of (1) the number of new words and technical terms, (2) the degree of difficulty in style of writing, and (3) the subject matter. There is no need to emphasize however that such criteria have proportionately been observed with the text having been piloted beforehand. Through this, the comprehensibility of instructions, and the instructor's skillfulness could be certified. The text was given to two groups of senior undergraduate students in translation studies. In experimental group, before the students started translating, the instructor first of all talked about overall context and explained the general style of legal texts; beside that, wherever necessary, she helped them in finding appropriate equivalents of technical terms and stylistic patterns. In control group, the students were asked to translate the text just by using their dictionaries. Here the instructor didn't say anything about the text and the students were just allowed to get help from their dictionaries.

To triangulate the study, a questionnaire was also included. The questionnaire consisted of 10 multiple choice questions. The purpose of that was to touch on students' awareness of the important role of background knowledge, their difficulties in doing translation and interpreting and their ways of improving their knowledge. The purpose of open-ended choices was to collect extra details and information about the effectiveness of background knowledge.

3. Procedure

Analyzing the translated texts was based on three components: (1) lexical elements (2) syntactic structures (3) evaluating their works from a holistic vantage point. The pretest which was administered for evaluating the students' level of reading proficiency consisted of 60 questions. The students were given a task of translating a legal text into Persian. The translations, collected from the two groups, were then mixed in random order and graded by three university teachers, including the main author who is specialized in English translation, and two others who are well-experienced in translating English legal texts. Judges were also asked to assess the quality of the background information given to the

experimental group. Here we followed Kim's (2006) model of assessment, namely a scale from 1 (little association with the topic) to 5 (perfect match with the topic).

The results of Nelson test indicated an almost equal knowledge of reading proficiency in the two groups. Also, the assessment has been done on two scales, namely the quality of translated texts, and the quality of the background knowledge provided to the experimental group. (See Appendix A for the criteria of the background knowledge, taken from Kim 2006).

Descriptive Data Analysis

Since there was only one text and two groups of students, using t-test was found the most conducive way to determine whether there was any meaningful difference between the groups of subjects. According to the results of the test and based on what the two groups of subjects revealed, we have:

t observed: 3.17

In this study, the degree of freedom (d.f) for the first group equals 1.50 and for the second group equals 2.77. And if level of significance $\alpha \leq 0.05$, we have t critical=2.101. So by comparison we see t observed > t critical ; then, H0 would be rejected and H1 will be supported, which means there is a significant difference between the two groups of subjects or in other words, there is a significant positive relationship between translators' background knowledge of specific field of study and quality of translation.

As mentioned before, to triangulate the results of the study, we used a questionnaire to see whether these would- be translators and interpreters are aware of the significance of background knowledge and what kind of problems concerning background knowledge they face when they are translating and so on. The result of the survey goes as follows:

Question 1: "In your opinion, how important is background knowledge in doing translation and interpreting?"

Option	Number of students	Percentage
a. Not important at all	0	0%
b. Not very important	0	0%
c. Important	8	40%
d. Very important	12	60%

The majority of the students chose options (c, d) while no one chose (a, b). This shows how all of the students are aware of the importance of background knowledge.

Question 2: "When studying translation and interpreting, how often do you use your background knowledge?"

Option	Number of students	Percentage
a. Never	0	0%

b. Seldom	0	0%
d. Often	9	45%
e. Regularly	4	20%
f. Always	7	35%

Except (a, b), other options were chosen. However, there exist differences between numbers. The mass went for "often", which means that the frequency of students' application of background knowledge into their translation/ interpreting process is quite high.

Question 3: "How does your background knowledge help you in doing translation and interpreting?"

Option	Number of students	Percentage
a. It doesn't help me at all. I only use my language skills to do translation and interpreting	0	0%
b. Background knowledge helps me to understand the ideas of the original text or speech better and faster	7	35%
c. Sometimes when I do not know all the words of the original text or speech, background knowledge helps me to guess the ideas expressed	5	25%
d. With good background knowledge, I can use equivalent terminology in my translated version	5	25%
e. With cultural background knowledge, I can deal with non-equivalent words due to cultural differences	3	15%

As it is clear, majority of the students attested this point that background knowledge helps them understand the text better. The insignificant difference

between these numbers means that background knowledge helps them much and in various ways: from understanding the source text (choice b) to choosing suitable words (choice d) and even in solving problems (choice c, e).

Question 4: "What difficulties do you meet when you do translation and interpreting?" (You can choose more than one option)

In translation:

Options	Numbers of students	Percentage
a. New words	9	45%
b. Complex sentence structures	7	35%
c. Reading comprehension	8	40%
d. Way of expression in target language	12	50%
e. Background knowledge	10	60%

The purpose of this question was to find out major difficulties that students face with when they do their translation and interpreting. Another purpose was to put the difficulty caused by poor background knowledge in comparison with other difficulties confronting students during their process of practicing translation and interpreting.

In interpreting:

a. New words	15	75%
b. Listening comprehension	12	60%
c. Memory capability	10	50%
d. Misallocation of concentration power	7	35%
e. Note taking	5	25%
f. Way of expression in target language	10	50%
g. Background knowledge	9	45%

More difficulties were given out and the results reveal the fact that difficulties lie in every areas. However, like in translation section, differences in the numbers can be seen. This can be explained by the fact that translation requires more perfection in sentence and word whereas interpreting focuses more on ideas.

Question 5: "How often does poor background knowledge cause difficulties to you in doing translation and interpreting?"

Options	Number of students	Percentage
a. Never	0	0%
b. Seldom	3	15%
c. Sometimes	5	20%
d. Often	7	35%

e. Regularly	3	15%
f. Always	2	10%

These statistics bring us to the conclusion that all students have problems in translation and interpreting process due to poor background knowledge and for the majority, the frequency of facing with difficulties is quite high.

Question 6: "What are the difficulties?"

Options	Number of students	Percentage
a. I know the meaning of all words but I fail to understand the ideas of the text or the speech	9	45%
b. I cannot find the equivalent words due to cultural differences	5	35%
c. I cannot find the equivalent terminology	6	30%
d. Others:		

What can be inferred is that with poor background knowledge, students tend to get trouble with understanding the meaning of the written/ spoken text rather than dealing with words.

Question 7: "Is poor background knowledge the biggest hindrance to your capability in doing translation and interpreting?"

Yes	8	40%
No	12	60%

The results of this question are in line with the findings in question 4. From question 4, it is known that background knowledge is only the second biggest difficulty in translation and it ranks the third in the list of difficulties in interpreting.

Question 8: "At which level do you think your background knowledge is?"

Options	Number of students	Percentage
a. Bad	3	15%
b. Not very good	8	40%
c. Good	5	25%
d. very good	3	15%
e. excellent	1	5%

The above statistics provide us with a general view of the low level of students' background knowledge. Besides that, it also shows the students are not that much confident about their background knowledge. This can be related to their naïveness.

Question 9: "Do you think that it is necessary to improve your background knowledge?"

Options	Number of students	Percentage
Yes	20	100%
No	0	0%

All of the students chose option (a) which means background knowledge is very essential component in the course of translating.
If yes, how often?

a. Seldom	1	5%
b. Sometimes	3	15%
c. Often	8	40%
d. Regularly	6	30%
e. Always	2	10%

The purpose of this part was to work out the students' opinion on the frequency that one should improve background knowledge. This brings us to the conclusion that almost all of the students recognize the need and the importance of frequently improving background knowledge.

Question 10: "In what way do you improve your background knowledge?"(you can choose more than one option)

Options	Number of the students	Percentage
a. Read newspapers everyday	12	60%
b. Watch TV everyday	9	45%
c. Listen to the radio everyday	7	35%
d. Read books in many fields	13	65%
e. Practice translation and interpreting	15	75%
f. Learn in daily life	8	40%

The students' opinions were distributed between all of the options. What can be inferred from the statistics above is that students upgrade their knowledge of all fields in various ways.

Discussion and Conclusion

The research question of the present study indented to determine to what extent background knowledge of the specific field of study and quality of translation correlate with one another. In order to provide answer to this research question, a

technical text was given to two classes of senior students. It was found out that those students with background knowledge of the text achieved higher scores. Employing an independent sample t-test, it was revealed that there was a statistical difference between the two groups. The outcome of the survey, including the questionnaire's results, again verified the significant role of background knowledge of technical subjects in the quality of translation text. It can be concluded that background knowledge has an undeniable role in understanding a text as a first step in the process of translating. Therefore, it is recommended for novice translators to be in contact with specialists while there are translating a specific text.

This paper concentrated on the effects of background knowledge in specific field of study on quality of translation for beginners. There are other areas still to be tested in further research. One can, for instance, investigate the effect of background knowledge in specific field of study for practicing translators. That is, the experiment can be carried out with other participants at different levels and with other features.

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Appendix A

Background Information Quality Assessment Criteria

Score	Criteria
0	No relationship with the topic.
1	Little relationship with the topic.
2	Deals with the area of the topic in a broad sense but does not touch upon the topic.
3	Corresponds with the topic in a broad sense (e.g., Fast food chains)
4	Deals specifically with the topic.
5	Almost exact match.

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