

## The Relation between Critical Thinking and Translation Quality

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#### Abstract

This determined whether there was any significant relation between **EFL** student's critical thinking and their translation quality. To this end, 60 male and female translation students took part in the study. The participants were chosen from among senior BA students and junior MA students. The subjects were given a translation production test and a critical thinking questionnaire (Honey, 2005) which were to be completed in 55 minutes. Then two raters evaluated the production test. The results of an analysis of correlation between the two variables indicated that there was a significant relation between critical thinking and translation quality. Furthermore, a regression analysis showed that critical thinking was a significant predictor of students' translation scores.

**Keywords:** Critical thinking, Critical thinker, Quality of translation, Translation

#### INTRODUCTION

#### Background and purposes

In a rapidly changing world in which knowledge is expanding at an unprecedented rate ,information transfer is coming to depend more and more on efficient and effective translation (Bell,1993,P.xiv). The importance of translation is acknowledged by many scholars around the world. For example Newmark (1998, p. 7) asserts "as a means of communication, translation is used for multilingual notices, for tourist publicity; for official documents such as treaties and contracts; for reports, papers, articles, correspondence, and

\*Corresponding Author's Email: Adnan.Satariyan@utas.edu.au textbooks to convey information, advice and recommendation for every branch of knowledge. "More attention should be given to translation since it is used for many purposes in any branch of knowledge. However, in the process of translation from one language to another a translator faces many challenges that affect the quality of translation. There are translations that entail mistakes which may damage the reputation of a well-known translator or the translation company. The mistranslation of the Japanese telegram sent to Washington just before the bomb dropped on Hiroshima (Newmark, 1998, p.7) is a good example that highlights the importance of translation.



Translation students at the same age and with the same degree of language proficiency translate a text differently. It has always been a question why some students outperform others. According toNewmark(1998, p.5)" translation is rendering the meaning of a text into another language in the way that the author intended the text". In other words "translation consists of transferring the meaning of the source language(SL) into the receptor language"(RL) (Larson, 1984,p.3).Since writers cannot possibly make explicit all the information in the text it is the duty of the translators to make necessary inferences in each case, and get the meaning in between. At times some of the translators cannot grasp the intended points that writers try to convey, and problems arise. To transfer the meaning from SL into RL a translator has to analyze, interpret carefully and thoughtfully to translate accurately not to have any mistakes. During the process of translating a translator faces some choices and problems .To solve these problems s/he has to make his or her decisions. AsHatim and Masón (1990, pp.3-4, as cited in Pedro, Oliver, & Sacristán 2001, p.47) claim, translation should be viewed as :"(...) a process, involving the negotiation of meaning between producers and receivers of texts. Therefore, the resulting translated text is to be seen as evidence of a transaction, a means of retracing the pathways of the translator's decision-making procedures". It is then a translator's job to endeavor to understand what the writer wishes to say and then express it clearly in the target language. "Translation is creative and not just an automatic process. It means that translators need to exercise their interpreting and editing skills since ,the person who has written the source text may not have been entirely clear in what he has written" (Samuelsson-Brown, 1993.p.xi).

How can one become a good translator according to the abovementioned characteristics needed for a translator to be able to translate well? S/he canfind the problematic area,ambiguity,deep meaning and the theme of the text during the process of translation. As MacCarty(1999 as cited in Munday, 2001.p.183)

states "in the study of the process of translating and interpreting, psychology and philosophy sciences play a leading role". One of the recent studies in Psychology and Philosophy is critical thinking . First of all one should be familiar with critical thinking and characteristics of a critical thinker then its relation with translation as follow:

## **Critical Thinking**

"In recent yearscritical thinking (CT) has become something a buzz word in educational circles. For many reasons educators have become interested in teaching thinking skillsin various kinds in contrast with teaching information andcontent"(Fisher, 2001.P.1). According Connor-Greene and Greene (2002, p. 324, as cited in Dunn, Halonen, and Smith, 2008, p.26)"critical thinking is not an academic fad; it is an essential skill for living in the information age". John Dewy the American philosopher, psychologist, and educator is widely regarded as the father of modern CT tradition. He called CT reflective thinking and defined it as "active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of the grounds which support it and the further conclusions to which it tends" (Dewy, 1909.p.9 cited in Fisher, 2001.p.2).Elder and Paul (2002, p.29) arguethat "Critical thinking provides the tools of mind you need to think well through any and everything that requires thought—at work and in all parts of life". Also, Ennis (1987.pp. 9-26)) holds "CT is reasonable, reflective thinking that is focused on deciding what to believe or do". So, CT has an important role in solving the problems and making the final decision. As Starkey (2004) mentions:

CT involves both problem solving and reasoning. In fact, these terms are often used interchangeably CT is the purposeful andreflective judgment about what to believe or what to do in response to <u>observations</u>, <u>experience</u>, <u>verbal</u> or <u>written</u> expressions, or arguments. (P. viii)



#### Characteristics of a critical thinker

A critical thinker is not a simple-mindedman to accept whatever s/he faces and does not make impulsive decision. Facion(2010) maintains good critical thinkers can be described in terms of how they approach specific issues, questions, or problems to the following characteristics:

a) clarity in stating the question or concern b)orderliness in working with complexity c)diligence in seeking relevant information d)reasonableness in selecting and applying criteria e)care in focusing attention on the concern at hand,f) persistence though difficulties are encountered, g)precision to the degree permitted by the subject and the circumstances(p.10)

Allen (2004, p.5) uses smart thinking instead of CT. He believes, "being a smart thinker is not about becoming a different sort of person, but about develops skills that you already have. The way to achieve this goal is to become explicitly aware of the analytical processes involved in reasoning". Furthermore, Starkey (2004, p.vii) maintains that "A critical thinker is willing to explore, question, and search out answers and solutions. These skills not only mean greater success at school and at work, but they are the basis of better decisions and problem solving at home, too".

With regard to the definitions of CT and characteristics of a critical thinker one understands how important may be the role of CT in the quality of translation.

#### **Translation Quality**

"In recent years, assessment has become an up and coming research topic within the field of translation studies" (Garant, 2001, p. 5). A number of studies on translation assessment theory:Newmark, 1988; Kussmaul, 1995; House, 1997 provide models for evaluating translation performance. Various terms have been used interchangeably to refer to the quality of translation, such as evaluation, assessment, criticism and analysis.

"A translator has to be a good judge of writing; s/he must respect good writing scrupulously by accounting for its language, structures and content, whether the piece is scientific or poetic, philosophical or fictional" Newmark( 1988,p.6). Translation quality assessment is an academic endeavor "where a more expert writer (a marker of a translation examiner or a reviser of a professional translation) addresses a less expert reader (usually a candidate for an examination or a junior professional translator)"Munday (2001, p.30).

The concept of equivalence has always had a significant role in translation quality assessment (TQA). Because of the subjective nature of translation, scholars have given different comments on TOA. House (2001) believes:

The question: what a good translation is? Should be "one of the most important questions to be asked in connection with translation". The answer to the question when a translation is good lies at the heart of all concerns with translation critics, not only as a means to assess the quality of a translation but also as the main concern of any theory of translation, i.e. the crucial question of the nature of translation or, more specifically, the nature of the relationship between a source text and its translation text. (p.243)

In evaluating translations, the main problem is, according to William (1989, as cited in Giraldo, 2005, p.130), "applying evaluation criteria consistently to an intellectual product that is often of uneven quality and heterogeneous in form and content may imply at some point making arbitrary choices". These arbitrary choices make the evaluation more difficult. Perhaps with different models in TQA or various textbooks in TQA evaluation of translation could be easier.In other words, as Farahzad (1992, p.271) pinpoints "Today translation courses are offered at many universities and institutions worldwide; Yet little work has been done in the field of assessing student's (or trainee's) achievements at the end of the courses, presumably because improvement is



taken for granted" Farahzad (1992, p.271).

To fulfill the purpose of the study, which was to explore the relation between CT and translation quality, the following questions were raised:

 $\mathbf{Q_1}$ . Is there any significant relation between CT and the quality of students' translations?  $\mathbf{Q_2}$ Can the students' CT scores significantly predict their translation scores?

## Accordingly, the following hypotheses were formulated:

 $H_{(1)}$ 1: There was relation between CT and the quality of students' translation.

H<sub>(2)</sub> 2: The students' CT scores could significantly predict their translation scores.

#### Method

The present study sought to investigate whether there was any relation between CT and the quality of students' translation. The researcher tried to explain the above hypotheses adopting appropriate methodology including participants, instrumentation, procedures, design, and statistical analyses.

#### **Participants**

The participants of this study included 60 from among 150 students of English translation at MA and BA level. They were selected from among the students studying at Esfahan State University, Qazvin Alborz Institute of Higher Education, and Islamic Azad University Central Tehran Branch.

## Instrumentations

To respond to the research question of this study, two instruments were used: a test of English to Persiantranslation to assess their translation ability and the Waddington (2001) rubric to score the translation tests, a CT questionnaire to evaluate student's CT ability.

## **Honey's Critical Thinking Questionnaire**

The Honey (2005) CT questionnaire includes 30 items which evaluates the students' CT skills; analysis, inference, evaluation, inductive reasoning, and deductive reasoning. It explores what a

person might or might not do when one thinks critically about a subject. The questionnaire includes Likert type items, and every item is followed by five alternatives including *never*, *rarely*, *sometimes*, *often*, and *always*. In order to score the testees' performance on CT, every scale was given a value. *Never* was given the minimum since it showed the lowest CT ability *Always* on the contrary received the highestvalue. Hence, the other choices fell within these two values: Never = 1, rarely = 2, sometimes = 3, often = 4, and always = 5. Therefore, each testee's score could range from 30 to 150. The time allocated to the questionnaire was 15 minutes.

#### **Translation Production Test**

An English passage of 214 words, comprising two paragraphs, 10 sentences, and 24 propositions was selected from Rogers (2005)' TOEFL. This passage was used as the translation test in this study. It was given to participants to be translated from English into Persian. The difficulty of the text was calculated according to Readability Formulas.com (Fog Scale Level).It compares syllables and sentence lengths. A Fog score of 5 is readable; 10 is hard; 15 is difficult; and 20 is very difficult. The passage used in this research scored 14 according to the Fog scale level. This indicated that the passage was almost difficult, making it appropriate for testing university level students. The time allocated for the translation of this passage was 40 minutes.

#### **Procedures**

In this study a translation production test and a CT questionnaire were administered in the classroom environment. The production test was given to students for translation, and then the CT questionnaire was distributed among the students. The students were to fill in the questionnaires in the announced time. In order to assess the participants' translation performance, Waddington (2001)'s model, Method A was used. He explains that this method is based on error analysis and possible mistakes are grouped under the following headings



(i)Inappropriate renderings which affect the understanding of the source text; these are divided into eight categories: contresens, faux sens, nonsens, addition, omission, unresolved extralinguistic references, loss of meaning, and inappropriate linguistic variation (register, style, dialect, etc.).

- (ii) Inappropriate renderings which affect expression in the target language; these are divided into five categories: spelling, grammar, lexical items, text and style.
- (iii) Inadequate renderings which affect the transmission of either the main function or secondary functions of the source text. (p.312)

In each of the categories a distinction is made between serious errors (-2 points) and minor errors (-1 point). There is a fourth category which describes the plus points to be awarded for good (+1 point) or exceptionally good solutions (+2 points) to translation problems. In the case of the translation exam where this method was used, the sum of the negative points was subtracted from a total of 110 and then divided by 11 to reach a mark from 0 to 10 (which is the normal Spanish system). For example, if a student gets a total of -66 points, his result would be calculated as follows: 110-66=44/11=4 (which fails to pass; the lowest pass mark is 5) (Appendix III). In order to brief the second rater on the purpose of the study and the rating scales, atraining session was held in orderto reduce the variability of raters' judgment and also to increase the raters' levels of agreement with eachother. The two raters shared almost similar backgrounds in terms of qualifications and translation experience. The first rater was the researcher and second rater was another MA student. The CT questionnaires were rated according to the score designed in the questionnaire.

#### Design

This study was a correlational one. There was no treatment; therefore, it was a descriptive study. The objective of the research was to determine the relation between the two independent variables. The first variable was CT of the participants, while the second variable was the quality of the renditions produced by these participants in translation from English into Persian. Moreover, the degree of the predictability of the second variable about the first variable was also taken into consideration.

#### Results

## **Statistical Analyses**

A series of descriptive and inferential statistics were employed in this study to either confirm or else to reject the hypotheses. The scores of the students in both the CT questionnaire and the translation test underwent descriptive statistics. Since two raters participated in this research, the inter-rater reliability of the two was also measured. To respond to the first research question, a correlation coefficient was estimated and used. In order to find answer to the second research question, a linear regression analysis was conducted to determine any predictability power between CT and translation quality. Two raters corrected the translation papers .Then the scores given by raters, were correlated in order to find the interrater reliability of them which is shown in Table1.

Table 1
The Inter-Rater Reliability of the Two raters

		Rater 1	Rater 2	
	Pearson Correlation	1	.702 **	
Rater 1	Sig(2-tailed)		.000	
	N	60	60	
Rater 2	Pearson Correlation	.702 * *	1	
	Sig(2-tailed)	.000		
	N	60	60	
** Correlation is significant at the 0.01 level (2-tailed				

Evidently, the correlation between the two raters was .702 meaning that the average score of their marking could be safely used as the translation quality. Table. 1 shows that the correlation coefficient of .702 was significant with less than 1% error (p value of 0.000 being far less than 0.01) allowing the researchers to use them for marking translation papers.

# **Table2-Descriptive Statistics:** Critical questionnaire

Following the conducting inter-rater reliability itymeasures the CT questionnaire was administered among 60 participants. Table 2 presents the descriptive statistics.

Table2

Descriptive Statistics of the CT Scores

	N	Minimum	Maximum	Me	ean	Std	Skew	ness
	Statistic	Statistic	Statistic	Statistic	Std.Error	Statistic	Statistic	Std.Err
CT Valid N (listwise)	60 60	77.00	129.00	101.5000	1.1848	9.17716	.312	.309

#### **Translation Test**

Next, the descriptive statistics of the quality of

the participants' translation was assessed. Table 3 illustrates the results of this analysis:

**Table 3 Descriptive Statistics of the Translation Scores** 

	N	Minimum	Maximum	Mean	Std	Skew	ness
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std.Err
Translation Valid N (listwise)	60 60	16.40	19.49	18.1030	.76540	242	.309

The above scores are the mean values given by the two raters.

## **Testing the Hypotheses First Hypothesis**

In order to test the first hypothesis, the Pearson

Correlation Coefficient had to be calculated. Prior to this, the linearity and the normality of the two distributions of scores had to be evaluated. To show the linearity, the researcher used a scatter plot of the two variables of the study, which is shown in Figure 1



19.5 
19.0 
18.5 
18.0 
17.5 
17.0 
16.5 
16.0 0 20 40 60 80 100 120 140

Critical Thinking

Figure 1.ScattePlot of the Scores on the CT questionnaire and translationScores

As shown in this scatter plot, there was no nonlinear relation between the scores of both tests. Hence, the relation between the two variables was assumed to be linear. The Skewness ratio of both distributions fell within the acceptable range of  $\pm 1.96$ , and this indicated the normality of the distribution.

Then with the assumptions of correlation having been met, the researcher could run the parametric correlation analysis to test the relation between the two variables.

Table 4
Results of Correlation Analysis between CT and TQ

		Translation Test	CT Question nar
Translation	Pearson Correlation	1	.550**
	Sig. (2-tailed)		.000
	N	60	60
Critical	Pearson Correlation	.550**	1
Thinking	Sig. (2-tailed)	.000	
	N	60	60

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

The researcher used Pearson Product Moment Correlation Coefficient and the correlation coefficient between the two variables was estimated to be  $\pm 0.550$ .

As illustrated by Table4 above, the correlation was estimated to be significant at the 0.01 level (r= .550, p=0.000 < 0.05). Table.5 below presents R and R square for this regression analysis.

Table 5
Correlation Report

No. of Cases	R	Sig. (2-tailed)	$\mathbb{R}^2$
60	.550	000	.303

According to Table.5 above, R<sup>2</sup> (or common variance) which is theeffect size for correlation came out to be .303. This is an almost medium size effect. The results confirmed the first hypothesis which stated that there is a relation between CT and students' translation quality

#### **Second Hypothesis**

In order to test the second hypothesis, a linear regression was used as shown in Table 6.

Table 6
Variables of the Regression

lMode	Variables entered	Variables removed	Method
1	Translations		Enter

a. All requested variables entered

b.Dependent variable

Table 7

Model summary- R and R Square

Model	R	R Square	Adjusted R Square	Std. Er- ror of the Estimate
1	.550(a)	.303	.291	.64460

a. Predictors: (Constant), CT

As shown in Table 7, the R came out to be .550 and R square .303. Hence, the determined R square is .303; it shows that CT can account for 29% of students' translation scores.

Table 8 presents the results of the ANOVA ( $F_{1, 58}$  =24.100, p =0.000 <0.05) which proved significant.

Table 8
Regression output: ANOVA Table

Model 1	Sum of Squares	Df	MeanSquare	F	Sig
Regression	10.464	1	10.464	25.184	.000a
Residual	24.100	58	.416		
T0tal	34.564	59			

a.Predictors:(Constant), Critical Thinking

This showed that critical thinking can be a significant predictor of translation scores.

Table 9 shows the standardized beta coefficient (B = 0.550, t = 5.018, p =000 < 0.05) which

reveals that the model was significant, meaning that students' CT could predict significantly their translation quality.

Table 9
Regression output: Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig
	В	Beta		
Constant	15.173	550	25.726	,000
CT	.029	.550	5.018	.000

This showed that the students' CT could significantly predict their translation quality.

## **Conclusions and Discussions**

The relation between critical thinking skills and translation quality appears to be a discussed subject in the field of translation studies; yet not many empirical researches have addressed the topic in detail. The present research was an attempt to explore the relationship between critical thinking and translation quality. This research studied the relation between the critical thinking and translation quality in subjects of 60 students. To investigate the relation between translation quality and students' CT the researcher ran two regression analyses. The findings of the egression were

concluded that the students' CT could significantly predict their translation quality.

The high correlation between the variables means that translation is a process of thinking, rethinking and conscious self-assessment. In fact, it seems that the CT ability governs the process from the beginning, from the time the translator starts reading the ST, until the end, which is the production of the end-result, the TT.

A translator who has the ability to think critically does indeed have the ability to examine her/his given choices and their implications. This translator makes choices pertinently and decides on how to use her/his various competences. To achieve this, s/he should have the power of higher order thinking or in other words have the ability to think critically. CT helps a translator to go

b. Dependent Variable: Translation

further than just the surface of the text and to think deeply, to have an overview on a text and find whys and whats in the text. Therefore s/he can easily analyze, interpret, evaluate, and make decisions. In translation, it is very important how a translator transfers messages from the linguistic and textual systems of the source culture into the linguistic and textual systems of the target culture. If s/he knows how to use the strategies needed and avoid the strategies not needed, s/he will be successful in having a fluent translation in favor of the readership. To this end, a translator should have the ability to monitor all her/his competences to achieve the purpose aimed and produce a TT with the taste and creativity s/he wishes. This does not happen unless a translator has a plan in her/his mind and follows it in the process of translation.

#### **Pedagogical Implications**

The results of this study showed the importance of CT in translation quality. Scholars seek ways to foster this worthwhile skill in children. According to Schafersman (1991), children are not born with the power to think critically, nor do they develop this ability naturally beyond survival level. CT is a learned ability that must be taught .Most individuals never learn it .CT cannot be taught reliably to students by peers or by parents. Trained and knowledgeable instructors are necessary to impart the proper information and skills.

As mentioned before, this study showed a significant relation between CT and translation quality; i.e. students with higher CT scores had better translation quality. Thus, in order to improve students' CT ability/skills, there could be courses in colleges and universities in Iran to teach CT techniques. Students often are passive receptors of information, teaching students to think critically in or outside the classroom improve their abilities to observe, infer, question, decide, develop new ideas, and analyze arguments.

Hence, first of all trained instructors are required to have knowledge of CT and its ad-

vantages in order to train translation students. Then the effectiveness of students' CT can be also put into consideration in syllabus designing on how to improve their CT ability in TTC (Teachers Training Courses) classes. CT could also gain a place in teaching material such as teachers' books and textbooks. Teachers may moreover apply different strategies such as expressing emotions, summary writing (encouraging student to understand material), creating problems, and some tests in order to improve students' CT skills. Students should be taught to improve their thinking to live successfully in the society.

Furthermore, CT can be applied to other fields. Facion (2010) believes different fields can be used in colleges and universities in order to teach students to be critical thinkers.

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