A Study on the Evaluation of College Students' Critical Thinking Ability in Translation Based on Think-Aloud Protocols

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ABSTRACT

This paper analyzes the composition of students' critical thinking ability in translation by using the audio thinking method in cognitive empirical research, and analyzes the thinking errors and defects in English-Chinese translation of students in translation majors. It thus puts forward translation improvement strategies and methods, with a view to promote translation teaching reform, improve translation quality and push qualified translators with critical thinking ability.

Keywords: think-aloud protocols, critical thinking ability in translation, teaching reform

I. INTRODUCTION

Since 1980s, scholars such as Gerloff, Kring applied think-aloud protocols to the study of translation process. This method requires translators to express their thinking process in language in the process of translation. At the same time, researchers record the translator's language expression and carry out text conversion and analysis, so as to study how translators analyze and solve problems in the process of translation, which facilitates the revelation of the translator's thinking process in translation and improvement of the cultivation of translation ability. With the help of this approach, the translation process is divided into different modules, such as: problem finding, language analysis, information storage and extraction, search and selection, text analysis and reasoning, text situational processing, translation monitoring, translation process monitoring, translation performance diagnosis, reference evaluation, syntactic reconstruction, back translation, retranslation, and translation quality inspection (Gerloff, 1986; Laukkanen, 1996; Lorscher, 2005; Ali Asghar Eftekhary, 2012; Julia Eka Rini 2014; John Schwieter, 2019). The study of think-aloud protocols was introduced into China at the end of the last century to study translation strategies, translation units, translation narratives and translation methods. Some scholars suggested that teachers should show their translation process intuitively to students by using think-aloud protocols, which is helpful to improve students' translation ability (Li Dechao, 2008). Up to now, the combination of think-aloud protocols and translation studies of different text types is of great significance for revealing translation strategies and studying translation process.

II. CRITICAL THINKING

As early as 1909, John Dewey put forward reflective thinking, which is a repeated, serious and continuous reflection on a certain problem. The term of critical thinking was first proposed by S. Stebbing, but it was not defined clearly. In 1962, educational philosopher R. H. Ennis defined critical thinking as correctly evaluating proposition, and discussed it in detail in his later research, pointing out that this thinking is rational and logical, and it is the subjective conscious reasoning thinking, and analyze the constituents of the quality. Since then, academic research has promoted the transfer of this thinking ability from theoretical research to practice, and at the same time promoted the rapid development of the item. The research focuses on the thinking composition, characteristics, purpose, skills and training methods under the multimedia teaching environment (J. E. Mcpeck, 1981; R.W. Paul, 1994; Michael Scriven 2000; Kalman, C.S., 2002; Dirk Jahn, Alessandra Kenner, 2018).

The combination of critical thinking and education began in America in the late 1980s when the educational reform focused on the evaluation and measurement of critical thinking. Since then, relevant research has been carried out in an orderly manner in educational process and characteristics, evaluation methods, teaching conditions, teaching objectives, etc., thus inspiring people's understanding of critical

thinking, which has become "the core element of 21st century ability" (Zhong Qiquan, 2020, March 16).

Translation critical thinking refers to the translator's critical attitude towards the subject and object of translation, which shows the translator's willingness and tendency to reflect one's own transition process independently, which is composed of evaluation, evidence collection, questioning and regulating. This thinking ability is an important indicator to distinguish novices from experts (Sirén, Hakkarainen, 2002; Hansen 2003; Shreve 2009). In China, translation critical thinking, as an important component of translation ability, has attracted wide attention. Scholars have made detailed research from theoretical concepts, teaching significance, curriculum, training mode, ability composition and its relationship with other translation abilities, and put forward that translation critical thinking should be the focus of translation teaching, which can guide students to make logical reflections in the whole translation process and break through the constraints brought by original language thinking. The ability to actively identify and evaluate various resources and solutions in the process of translation, diligently inquire, actively ask questions, conduct self — evaluation, adjustment and control, and then solve translation problems (Ouyang Lifeng, 2009; Chen Lang, 2011; Wen Jian, 2015; He Wei, 2016; Li Changshuan, 2017).

The evaluation system of translation critical thinking ability needs to be improved. Translation critical thinking ability is a cognitive ability that runs through the whole translation process. It involves different links such as analysis, judgment, reasoning, creation, evaluation and reflection, showing strong repetitiveness, purposefulness, logicality, continuity and criticism. However, the evaluation of this ability lacks a stable and unified quantitative analysis model, and there are loopholes and drawbacks which fail to form a detailed evaluation system. Moreover, problems such as the composite elements, core elements, thinking types and thinking paradigms of this ability need further research.

III. A STUDY ON THE EVALUATION OF COLLEGE STUDENTS' CRITICAL THINKING ABILITY IN TRANSLATION BASED ON THINK-ALOUD PROTOCOLS

By setting different quantitative elements, this paper intends to monitor the implementation of the process and the key points of translator's critical thinking in translation, and deeply analyze the concrete representation and research paradigm of this thinking ability in the translation process. The critical thinking ability of translation is embodied in the analysis and judgment of translation problems, the control and adjustment of translation steps, the evaluation and selection of translation resources, and the reflection and adjustment of translation quality. In this paper, an empirical study is carried out by setting specific quantitative elements, as shown in the following "Table I":

TABLE I.   EVALUATION OF COLLEGE STUDENTS' CRITICAL THINKING ABILITY

Composite Elements	Contents	Grade				Corpus
		1	*2*	*3*	*4*	
Semantic analysis of the source language	Denotation					
	Connotation					
	Associative meaning					
Logical analysis of the source language	Logic of source text					
	Logic thinking of the author					
Analysis of source language culture	Analysis of cultural information					
Analysis of source text type	Communicative element					
	Informative element					
	Evocative element					
	Aesthetic element					
Analysis of reading effect of source language readers	Source text reader cognitive element					
Construction of the scene according to the source text	Scene construction					

Composite Elements	Contents	Grade				Corpus
		1	*2*	*3*	*4*	
Information search	Vocabulary usage					
	Cultural background					
	Parallel text					
Information evaluation	Information correlation degree					
Information selection	Accuracy					
	Matching degree with source information					
	Authority					
	Authenticity					
Monitoring and adjustment of translation ideas and strategies	Source text analysis					
	Information integration					
Translation evaluation	Translation style					
	Diction					
	Sentence pattern					
	Text cohesion and coherence					
	Cultural connotation					
	Translation effect					
Judgment of reading effect of target language readers	Reading effect of target language readers					
Translation adjustment	Translation content					
	Translation strategies					
	Translation methods					
	Translation effect					
Translation verification	Semantic information					
	Cultural connotation					
	Reading effect					

- Semantic analysis of the source language — the translator analyzes denotation, connotation and associative meaning of the source text, and attempts to fully and accurately understand the semantic information of the source text;

- Logical analysis of the source language — the translator analyzes the logic of the source text and the logic thinking of the author, which can help the translator master the true meaning behind the text;

- Analysis of source language culture — the analysis of cultural information of the text helps the translator better grasp the information conveyed by the source language, overcome the cultural barriers between the source language and the target language, and faithfully reproduce the source language information;

- Analysis of source text type — the text type directly determines the language information, such as communicative element, informative element, evocative element, aesthetic element, etc., which is helpful for translators to accurately

grasp the content and structure of the source language information;

- Analysis of reading effect of source language readers — considering the factors of source readers, translators can make flexible and appropriate choices of text information and translation strategies, which is helpful to improve translation quality;

- Construction of the scene according to the source text — building a bridge across two languages and cultures through scenes to realize the dynamic equivalence of information expressed in different languages;

- Information search — searching for information involves vocabulary usage, cultural background, parallel texts and other contents, which helps translators to fully grasp the key information related to the translated content and reproduce the source text accurately.

- Information evaluation — in order to obtain the information resources that are most relevant to translation, translators need to identify and evaluate all the information which is helpful to improve translation quality and translation efficiency.

- Information selection — the selection criteria should be based on the principles of accuracy, so as to maximize the accuracy of the translation.

- Monitoring and adjustment of translation ideas and strategies—in the process of translation, mature translators can monitor their own translation process to detect their own problems in the process of source language analysis and information integration, and make timely adjustments to make correct judgments.

- Translation evaluation — A good translation requires the translator to evaluate and judge the style, choice of words, sentence patterns, texts, cultural connotations and translation effects of the translation, so as to control the translation quality.

- Judgment of reading effect of target language readers — readers' awareness is the basis of translators' translation judgment, which can improve the acceptability and influence of translations, which paves the way for strong translation competence.

- Translation adjustment — translation adjustment involves adjusting the translation content, strategies, methods and effect. Accurate control of the above elements can reflect the translator's critical thinking ability.

- Translation verification — translation requires the translator to constantly verify the translation in order to obtain the equivalence between the target text and the source text in terms of semantic information, cultural connotation, reader effect, etc. The verification method and the verification tools greatly reflect the translator's translation critical thinking ability.

In this paper, 236 students are examined in their translation practices. They are divided into three groups in terms of their scores: high, medium and low, and their critical thinking ability in translation is evaluated and compared with the professional translators. The analysis of the differences among the four groups of translators prove that the core of critical thinking ability in translation lies in the logic analysis of source language, the analysis of reading effect of source language readers, the construction of source language scene, information search, the monitoring and adjustment of translation ideas and strategies, the judgment of reading effect of target language readers and the verification of translation. In contrast, translators with low translation quality concentrate on semantic analysis in the process of translation thinking, and even make the original semantics independent of the text type, cultural background, reader's reading effect and other categories, which makes the translation difficult to understand, poor in logic and difficult to read.

IV. CONCLUSION

In this paper, the empirical research method of vocal thinking method and its research results on translation process are applied to the evaluation of translation critical thinking ability, deepening students' cognitive mechanism, digging out the forms and grades of thinking, constructing the evaluation system of translation critical thinking ability, analyzing the thinking errors and defects existing in English—Chinese translation of translation majors, and then proposing improvement strategies and methods, with a view to promoting the reform of translation teaching, improving the translation quality and pushing qualified translators with critical thinking ability for the industry.

In this paper, the translation process is dissolved into a series of elements to appraise and study translation critical thinking, and different evaluation points are graded, which provides an operable path for this thinking ability. The theoretical configuration will help promote the research of translation ability to develop in a dynamic and systematic direction. In addition, this thesis is conducive to strengthening the accuracy and objectivity of the evaluation of translation critical thinking ability, perfecting the traditional evaluation model based on text analysis, and highlighting the key points and weaknesses of the

cultivation of this thinking ability through hierarchical quantification, thus providing a breakthrough point for translation teaching reform and promoting the research and development of teaching reform.

References

[1] Chen Lang. "On Translation Education in MTI Teaching from the Perspective of Translation History". Foreign Language and Foreign Language Teaching, 2011(01):45-48.

[2] He Ying. "Research on Translation Problem Solving Mechanism of Advanced Thinking Mode". Foreign Language Teaching, 2016,37(05):86-90.

[3] Li Changshuan. "Critical thinking manifested in the process of translation". Shanghai Translation, 2017(05):32-36+95.

[4] Ouyang Lifeng. "On the Translator's Critical Thinking". Foreign Language and Foreign Language Teaching, 2009(08):50-53.

[5] Yu Guoliang. "Research on the Cultivation Mode of Critical Thinking in Translation Teaching". Journal of Foreign Languages, 2010(05):101-104.

[6] Zhong Qiquan. "Critical Thinking: Concept and Teaching Strategy". Global Education Outlook, 2020,49(01):3-16.