PRODUCT AND PROCESS PERSPECTIVES:
AN EMPIRICAL STUDY OF EXPLICITATION IN CHINESE-ENGLISH TRANSLATION

A dissertation submitted
to Kent State University in partial
fulfillment of the requirements for the
degree of Doctor of Philosophy

by
Zhewei Fan
December, 2012
Dissertation written by

Zhewei Fan

Approved by

Kelly Washbourne, Chair, Doctoral Dissertation Committee
Gregory Shreve, Member, Doctoral Dissertation Committee
Erik Angelone, Member, Doctoral Dissertation Committee
Meichen Lin, Member, Doctoral Dissertation Committee
Jill Folk, Graduate Faculty Representative

Accepted by

Keiran J. Dunne, Interim Chair, Department of Modern and Classical Language Studies
Raymond A. Craig, Associate Dean, College of Arts and Sciences
# TABLE OF CONTENTS

LIST OF FIGURES ........................................................................................................... VII

LIST OF TABLES ............................................................................................................... VIII

ACKNOWLEDGEMENTS ................................................................................................. X

CHAPTER 1: INTRODUCTION .............................................................................................. 1

1.1 Descriptive and Empirical Translation Study .......................................................... 1

1.2 Foci of the Study ....................................................................................................... 4

1.3 Research Methods ................................................................................................... 6

1.4 Significance of the Study ........................................................................................ 7

CHAPTER 2: BACKGROUND AND THEORETICAL FRAMEWORK OF THE STUDY .......................................................................................................................... 10

2.1 Literature Review .................................................................................................... 10

2.1.1 Definitions of Explicitation ................................................................................. 10

2.1.2 The Explicitation Hypothesis ............................................................................. 17

2.1.3 Categories of Explicitation ................................................................................ 21

2.2 Research Questions and Hypotheses ..................................................................... 26

2.3 The Theoretical Framework of the Study ............................................................... 29

2.3.1 Redefining Explicitation .................................................................................... 29

2.3.2 Triangulating Product and Process Research Methodologies ......................... 32

CHAPTER 3: RESEARCH METHODOLOGIES ................................................................ 36

3.1 Research Design ..................................................................................................... 36
3.2 Methods for Text Processing and Analyzing ........................................37
  3.2.1 The Annotation of Propositional Content in the Source and Target Texts ....37
  3.2.2 The Annotation of Areas of Interest in the Source Text .........................44
  3.2.3 Combining the AOIs and Propositional Data in the ST and TT ...............46
3.3 Methods for Studying the Translation Process........................................48
  3.3.1 Online methods ..................................................................................51
  3.3.2 Offline Methods ..................................................................................59
3.4 The Experimental Study ...........................................................................60
  3.4.1 Participants (Online survey) .................................................................60
  3.4.2 Source Text and Translation Brief .......................................................63
  3.4.3 The Translation Task ...........................................................................66
  3.4.4 Retrospective Interview and Questionnaire ...........................................70
  3.4.5 The Translation Product .......................................................................70
3.5 Evaluating the Translation Products..........................................................71
  3.5.1 The Readability Test ...........................................................................71
  3.5.2 The Readability Rating .........................................................................72

CHAPTER 4: ANALYSIS OF PRODUCT-BASED DATA: EXPlicitness

CASES IN THE TARGET TEXTS .................................................................74

4.1 Comparing the Propositional Content of the Source and Target Texts ........74
4.2 Association of AOIs with the Extra Propositional Content in the TTs ...........77
4.3 Categorizing Explicitness Cases ...............................................................82
4.4 Analyzing the AOI Corresponding Explicitness Cases ........................................99

CHAPTER 5: TRIANGULATING PRODUCT- AND PROCESS-BASED DATA103

5.1 Data of Source Text Processing ........................................................................103

5.2 Gathering and Selecting Data via Translog and Retrospective Interviews in the
Writing and Post-Writing Processes ........................................................................107

5.3 Results from the Questionnaires .......................................................................111

5.4 Triangulating Process- and Product-Based Data ..................................................117

5.4.1 Procedures ......................................................................................................117

5.4.2 Triangulation Analysis of Process- and Product-Based Data for Participant 1
.................................................................................................................................119

5.4.3 Triangulation Analysis of Process- and Product-Based Data for Participant 2
.................................................................................................................................128

5.4.4 Triangulation Analysis of Process- and Product-Based Data for Participant 3
.................................................................................................................................142

5.4.5 Triangulation Analysis of Process- and Product-Based Data for Participant 4
.................................................................................................................................149

5.4.6 Triangulation Analysis of Process- and Product-Based Data for Participant 5
.................................................................................................................................156

5.4.7 Triangulation Analysis of Process- and Product-Based Data for Participant 6
.................................................................................................................................162

5.4.8 Statistical Summary of Triangulation Analysis ..................................................168
5.5 Readability of the Target Texts ................................................................. 170

CHAPTER 6: DISCUSSION, CONCLUSIONS, IMPLICATIONS AND FUTURE DIRECTIONS ..................................................................................... 182

6.1 Discussion ............................................................................................. 182

6.2 Conclusions ......................................................................................... 195

6.3 Implications ........................................................................................ 199

6.4 Future Directions ................................................................................ 202

APPENDIX A: THE PARTICIPANTS .............................................................. 205

APPENDIX B: INSTRUCTION SHEET ......................................................... 206

APPENDIX C: TOTAL NUMBER OF PROPOSITIONS ................................. 208

APPENDIX D: PROPOSITIONAL ANNOTATION ......................................... 217

REFERENCES ............................................................................................ 269
LIST OF FIGURES

Figure 3.1: Translog User Working Window ................................................................. 54
Figure 3.2: Translog Supervisor Working Window ...................................................... 54
Figure 5.1: Symbols Used in Translog ........................................................................... 108
Figure 5.2: Questionnaire on the Translation Process .................................................. 115
Figure 5.3: Triangulation of Process- and Product-Based Data In Each Category per
   Participant .................................................................................................................. 169
Figure 5.4: Percentage of Association of Explicitness Cases to Translog Data and
   Retrospections per Participant ................................................................................ 169
Figure 5.5: Numbers of Explicitations in Each Category per Participant ...................... 170
Figure 5.6: Kendall's Coefficient of Concordance I ...................................................... 175
Figure 5.7: Kendall's Coefficient of Concordance II ...................................................... 177
Figure 5.8: Kendall's Coefficient of Concordance III .................................................... 179
Figure 5.9: Triangulation of Explicitation Data and Readability Rankings .................. 180
LIST OF TABLES

Table 2.1: Categories of Explicitation.................................................................26
Table 3.1: AOI Categories....................................................................................47
Table 3.2: Flesch Reading Ease Scale ..................................................................72
Table 4.1: Propositional Annotation Conventions and Examples in ST and TT ........75
Table 4.2: Total Numbers of Propositions and Word Count per Text ....................76
Table 4.3: An Example: ST and TT AOI Sentence Alignment, Proposition Annotation and Explicitness Cases.................................................................81
Table 4.4: Numbers of AOI-Corresponding Explicitness Cases per Text ...............82
Table 4.5: Categories of Explicitness Cases Corresponding to AOI 1 .....................85
Table 4.6: Categories of Explicitness Cases Corresponding to AOI 2 .....................87
Table 4.7: Categories of Explicitness Cases Corresponding to AOI 3 .....................88
Table 4.8: Categories of Explicitness Cases Corresponding to AOI 4 .....................91
Table 4.9: Categories of Explicitness Cases Corresponding to AOI 5 .....................93
Table 4.10: Categories of Explicitness Cases Corresponding to AOI 6 .................94
Table 4.11: Categories of Explicitness Cases Corresponding to AOI 7 .................97
Table 4.12: Categories of Explicitness Cases Corresponding to AOI 8 .................98
Table 4.13: Numbers of Explicitness Cases on Micro- and Macro-Levels .............100
Table 5.1: Occurrences of ST AOI Processing Activities per Participant .........................104
Table 5.2: ST Processing Data: Occurrence of Activities and Questionnaire Results ....105
Table 5.3: Results of Questionnaire ........................................................................116
Table 5.4: Translog Data and Retrospection Corresponding to Sentences with AOIs:
   Participant 1 ........................................................................................................124
Table 5.5: Translog Data and Retrospection Corresponding to Sentences with AOIs:
   Participant 2 ........................................................................................................137
Table 5.6: Translog Data and Retrospection Corresponding to Sentences with AOIs:
   Participant 3 ........................................................................................................147
Table 5.7: Translog Data and Retrospection Corresponding to Sentences with AOIs:
   Participant 4 ........................................................................................................155
Table 5.8: Translog Data and Retrospection Corresponding to Sentences with AOIs:
   Participant 5 ........................................................................................................161
Table 5.9: Translog Data and Retrospection Corresponding to Sentences with AOIs:
   Participant 6 ........................................................................................................165
Table 5.10: Flesch Reading Ease Scores of TTs .........................................................171
Table 5.11: Ranking of Reading Ease per TT ..........................................................174
Table 5.12: Ranking of Meeting Readers’ Expectations per TT .........................176
Table 5.13: Ranking on Cultural Specific Items per TT ..............................................178
ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude to my dissertation advisor, Dr. Kelly Washbourne, for his patience, support, guidance, encouragement and inspiration not only in the process of the preparation, development and completion of this dissertation, but also throughout the years of my doctoral studies at Kent State University. Many of the merits of the following pages owe much to him and to him alone.

I would like to thank the members of my dissertation committee for their time and patience in reviewing the dissertation, and I would say a special “thank you” here to Dr. Gregory Shreve for his careful reading, critical comments and invaluable suggestions.

To a great number of individuals who generously volunteered as research participants and target text readers I am happy to record a debt of gratitude. Without them it would not have been possible to conduct much of the research that informs this dissertation.

I would like to thank Dr. Françoise Massardier-Kenney and Dr. Judy Wakabayashi for their assistance and guidance in getting both my graduate and academic career started on the right foot, and my friends and fellow students for helping to make my doctoral studies at Kent State University the most memorable and rewarding experience of my life.

I am grateful to my special friend, Dr. David Barry, for everything he has contributed to the dissertation and to my life and career in the U.S.
To my family, for their love and support during my time in the U.S. and through all the years of my life, I am forever thankful.

Last, but not least, I would like to thank my husband, Honglei Sun, for his quiet patience and tolerance, for his great support and unconditional love, and for being the most important presence in my life over the past ten years.
CHAPTER 1: Introduction

1.1 Descriptive and Empirical Translation Study

Translation Studies (TS), starting as a sub-discipline of traditional linguistics, philology and literature studies, has developed into and become legitimated as an independent academic discipline over the last four decades (Neubert and Shreve 1992). Descriptive translation studies (DTS), coined by Holmes (1972, 1988) as a branch of the discipline, constantly maintains close contact with empirical phenomena (Neubert and Shreve 1992) and has been invigorated by new ideas from sister disciplines such as cognitive science, information science and psycholinguistics, to name just a few. Having abandoned the concern with exclusively linguistic issues and embraced ideas and methodologies on an interdisciplinary basis, research in translation studies has shifted its focus from the text and translation product to the translator and translation process. These two major approaches have been designated by Holmes (1972, 1988) as product-oriented and process-oriented research.

Product-oriented DTS focuses on the description or comparative and contrastive analysis of translation products. It is based on describing the features of individual translations or comparing the similarities or differences between the source text (ST) and target text.
(TT), or the multiple TTs produced by different translators from the same ST (Holmes 1972, 1988). Corpus-based translation studies, pioneered by Mona Baker (1995) and Sara Laviosa (1998), are the representative product-oriented DTS that have used new technologies since the late twentieth century. Facilitated by the linguistic analysis of a large number of electronically stored texts and using computer-assisted tools and programs, they examine the features of translations, such as explicitation, simplification, normalization/conservatism and leveling out (Baker 1996). Corpus-based studies nevertheless make assumptions about the nuances of certain translation features and strategies based solely on the texts, without any support from process-based empirical data.

Process-oriented DTS emphasizes the translation process itself: namely, what is happening in the “black box” of the translator’s mind as he or she conducts a translation task (Holmes 1972, 1988). Inquiries about how the ST is processed and comprehended, how the translation task is planned and conducted, and how the TT is produced and revised can all be registered and analyzed by certain process research tools and programs. The empirical data gleaned from the translation process provide greater validity to the investigation into why some procedures or strategies in particular are employed by translators and how certain features of translation emerge. Process-oriented DTS enlists the fruits of computer science, cognitive science, psycholinguistics, cultural studies and sociology, thereby reflecting the interdisciplinary nature of translation studies.

Translation is a cognitively complex text processing and production task. Its primary procedures include processing the ST, task planning and producing the TT: the
translator’s cognitive activities and subjectivity; his or her comprehension of the ST; regard for the target language (TL) readers and the situation in which the translation is completed; professional experience and the ability to use tools and aids; all of these have considerable effect on TT production. Other factors, such as socio-cultural views and concepts as well as ideological differences, also influence the production of the TT and its acceptability in the TL culture. The translation product, on the other hand, is “tangible evidence of the translation process that precedes it and leads to it” and, as such, adds validity to the study of the translation process (Dimitrova 2005: 3). This integrated quality of the task of translation strongly suggests that researchers should consider the texts, process and translators as one rather than as separate entities.

Translation theories, as Neubert and Shreve (1992: 8) point out, should be based on the observation of actual translation practice and behavior with the support of solid, specific data: “When theory is divorced from the observation of reality, then confusion and ambiguity arise” (1992: 11). They further claim that “translation studies should describe the ways that translators respond to variability in the translation situation…and explain actual translation products” (1992: 11). Although over the past two decades, process-oriented translation research has attracted increasing interest among translation researchers and scholars, it still, according to Jääskeläinen (2000: 72), “may lack the explanatory power required to draw reliable generalizations which are necessary for building viable theories and creating testable hypotheses.” To fully understand certain phenomena in translation, mere descriptions are not enough; we need to dig more deeply into the translator’s motivations for using certain strategies and the relations between a
translation and the translator’s cognitive activities. Only by working from the empirical data of the translation process and product can we form hypotheses as to what is happening in the translator’s mind and as to why and how certain specific decisions are made in the translation process.

1.2 Foci of the Study

Within this theoretical context, the current study focuses on investigating the explicitness phenomenon in translated texts and the implementation of explicitation in Chinese-English translation from both the product and process perspectives. Explicitation is one of the hypothesized universals\(^1\) of translation posited by Mona Baker (1996: 176). The phenomenon can refer to either “a higher degree of explicitness in translated texts than in non-translated texts” (Puurtinen 2004: 166), or to the procedure or strategy applied in the translation process “to introduce information from the source text (ST) that is implicit from the context or the situation” (Vinay and Darbelnet 1958) so as to make the translated text both easier to comprehend and more readable. It has been observed that translators adopt an explicitation strategy by including additional explanatory phrases, spelling out implications, adding connectives, repeating previous details, etc. (Dimitrova

---

1 Others, as noted above, include simplification, normalization/conservatism and leveling out. Within Baker’s definition, simplification is conceived as “the idea that translators subconsciously simplify the language or message or both”; normalization is defined as “the tendency to exaggerate features of the target language and to conform to its typical patterns and practices;” and leveling out is glossed as “the tendency of translated text to gravitate towards the center of a continuum” (Baker 1996: 183-184).
2005; Vanderauwera 1985) (see further Section 2.1.1). The definition of explicitation, however, is not unproblematic and has caused confusion and controversy among translation researchers and scholars. The current study therefore starts with a re-defining of explicitation that considers both process and product perspectives. In so doing, it achieves a more complete understanding of explicitation and sheds some light on larger studies of this phenomenon as well as, potentially, other hypothesized universal features of translation.

Due to the abundance of explicitation and its central significance for translation, it has spawned many research projects, such as corpus-based studies of the phenomenon (Shlesinger 1995; Olohan/Baker 2000; Olohan 2001; Øverås 1998; Klaudy/Károly 2005). However, to date these and similar studies have been founded on comparative textual analyses and are limited to the quantitative investigation of certain linguistic features of the translation product, such as word count or the frequency of specific linguistic items. In fact, extended text length (high word count), which can result from the addition of morphemes or the repetition of certain words, modifiers or qualifiers, does not necessarily lead to higher transparency of the target text, or to better readability from the target reader’s perspective. On the contrary, it may sometimes increase the cognitive load for target readers, so that the readability of the target text is relatively low compared with that of the non-translated text. This issue will be addressed below through an empirical assessment of the readability of the TTs produced in a translation task designed specifically for the current study (see Sections 3.5 and 5.5).

In addition to the limitations mentioned, some other important aspects of explicitation
have barely been investigated or even registered: for instance, the association between the amount of cognitive effort on the part of the translator and the level of explicitness in the TT; the motivation or causes for a translator’s adoption of an explicitation strategy; the ways in which explicitation is achieved; whether explicitness affects the processability of target texts and leads to easier cognitive processing by target readers; and whether, during the translation process, professional translators show a higher level of awareness than their novice counterparts in applying explicitation. In this study, I investigate these questions from both a product and a process perspective, which is to say that I move beyond a merely quantitative analysis of the translation product by triangulating the process and product data.

1.3 Research Methods

For the purpose of data collection and analysis a variety of research methods are employed here. First, the ST is annotated with areas of interest (AOIs), those sentence segments in which explicitation is assumed to occur in the translation process, producing explicitness in the TTs. The annotation of propositional content in both the ST and TTs is also carried out for the purpose of a comparative analysis of explicitness cases on a macro-level. The ST, accompanied by a translation brief, is assigned to two groups—professional and novice/student translators—as a real-life translation task. In order to collect the process data, computer logging of the respective translator’s writing/typing process is conducted. These results are then examined beside data gathered
through retrospection reports and interviews, before the readability of the TTs is tested against the level of explicitness. An important aspect of this study, therefore, is that it triangulates different research methods—computer logging, retrospection report and interview, online survey and readability testing—while also combining process and product data analysis (see further Chapters 3, 4 and 5).

1.4 Significance of the Study

While providing a cognitive framework for understanding the process of explicitation, heretofore studied only from the corpus perspective, this study also aims to yield some useful insights into translation pedagogy and training. While pursuing a deeper understanding of how the context of the translator’s situation is processed, how the source text is comprehended, and how the target text is produced, it regards the investigation of cognitive translation processes as necessary for the establishment of realistic learning objectives and pedagogical outcomes for translator training courses and programs (Kiraly 1995: 63). Empirical studies can provide both theoretically and practically sound foundations for translation teaching and training. The examination of translators’ cognitive processes and their performance provides a platform where potential solutions to translation teaching and training problems can be explored. With respect to imparting translation competence, it would be more realistic if students were to develop their competencies based on their experience throughout the learning process rather than having certain rules and strategies imposed upon them. The inclusion
of a comparative study on the performance of professionals and novice/student translators in this project is intended to serve this purpose. The engagement of professional translators in the research of translators’ mental processes will help students of translation to understand this phenomenon more deeply, as a complex cognitive process rather than as a mere bilingual skill. This approach can also help translation students develop a clearer sense of the translator’s role in the translation process as well as shift attention from contrastive linguistic features to cultural pragmatic factors. In this respect, the study should enhance the translator’s learning and training by providing actual data from practitioners at various levels of experience, rather than by offering simple imitations of experts or theoretical models. Translation classrooms can also benefit from the use of certain process research tools and technologies. As Pym (2009: 141) notes, thanks to Translog software and retrospection reports, students have direct access to their own translation performance and are thus in a position to analyze and discuss their decision-making strategies as well as draw their own conclusions.

The thesis is structured according to the following outline:

Chapter 2 describes the background and theoretical framework of the study, while offering a new definition of explicitation and proposing a series of research questions and hypotheses.

Chapter 3 presents the research methodologies, including methods for text processing and analysis, methods for investigating translation processes and the experimental design.

Chapter 4 reports and analyzes the product-based results from the experiments elucidated in Chapter 3.
Chapter 5 focuses on the gathering and analysis of process data and triangulates these with product-based results of the experiment. Finally it offers an assessment of the translation products.

Chapter 6, while attempting a systematic response to the questions and hypotheses advanced in Chapter 2, first considers some of the results of the analysis conducted in Chapters 4 and 5. By way of conclusion, it also reviews some of the findings of the dissertation and discusses the implications of combining process and product analysis for pedagogical and training purposes within translation studies.
CHAPTER 2: Background and Theoretical Framework of the Study

2.1 Literature Review

2.1.1 Definitions of Explicitation

Even a cursory review of the literature on explicitation will reveal some of the difficult issues that it has raised for translation studies. Since it was first used as a term in the discipline in the work of Vinay and Darbelnet (1958), its definition has presented researchers with a particularly thorny problem. Vinay and Darbelnet speak of a “procedure” that introduces information inferred from the context or situation of the source text; they categorize explicitation and implicitation as an opposing pair among several other translation procedures. Nearly forty years later, in Shuttleworth and Cowie (1997: 55), it has become “the phenomenon” which frequently effectively brings about the more explicit statement of ST information in the target text than in the original. In

---

2 According to Vinay and Darbelnet, these also include borrowing, economy, calque, reinforcement, literal translation, condensation, transposition, crossed transposition, modulation, generalization, equivalence, particularization, adaptation, articulation, compensation, juxtaposition, dissolution, grammaticalization, concentration, lexicalization, amplification and inversion.
Baker (1996: 176), who claims explicitation to be one of the hypothesized universal features of translation irrespective of the given source language (SL) or target language (TL), the term is defined as “an overall tendency to spell things out in translation.”\footnote{It is worth noting at the outset that if we have consideration for the readability of the target text, “spelling things out” may not necessarily result in explicitation at all. On the contrary, as Heltai (2005: 50) points out, spelling out the meaning components of simple words may result in circumlocutions that may be more difficult to process than straightforward lexical items. Without experimental evidence, defining explicitation as a tendency to spell out is a risky business, just as it is to engage in any form of generalization on the term.} Delisle, Lee-Jahnke and Cormier (1999, cited in Dimitrova 2005: 25) define explicitation in similar fashion as a translation procedure that, for the purposes of greater precision, introduces semantic details into the target text. They also make the assumption that explicitation procedures are carried out for the sake of “clarification,” because of “the constraints of the target language,” or on account of details specified by the translator as having been derived from knowledge of the context or situation. Although some of the labels that emerge from these attempts at defining explicitation—procedure, phenomenon, feature, tendency—may alert us to a certain vagueness on the part of their authors, they have been used repeatedly by many researchers and often effectively overlap with one another. Much the same is true when Saldanha, (2008), Molina (2002) and Delisle (1993) use the terms “technique” or “strategy” to describe explicitation as it is applied during the process of translation. Likewise in Heltai (2005: 46) explicitation is a strategy which, in the TT, gives expression in linguistically coded form to information that has not been thus expressed.
but is nevertheless implicit in the ST. Explicitness, meanwhile, is a matter of “having an overt linguistically coded form for every piece of information (meaning or meaning component).”

Unlike some of the other labels, a translation strategy tends to suggest a potentially conscious plan that translators devise in order to solve a concrete problem or to fulfill a particular translation task (Krings 1986, Lörscher 1991). This notion of consciousness is not only helpful in distinguishing, for example, between translation procedure and translation strategy; it is also useful in defining explicitation itself. For, if this is described as a translation strategy, it follows that explicitation is a conscious procedure performed by translators. Moreover, it is above all for this reason that any rigorous definition of explicitation should have careful regard for the translator’s cognitive process. Nevertheless, it has been the general lack of such regard, I would contend, that accounts in large part for the fundamentally problematic nature of most existing definitions of explicitation. Again and again, these focus merely on the microstructural or linguistic and textual level and are unsupported by empirical data from the actual translation process. The issue of whether or not translators use these techniques deliberately therefore becomes hard to investigate. In other words, if explicitation is understood as a strategy for implementing a set of translation techniques, it has to be performed consciously by translators driven or motivated by certain goals or purposes. In this respect, the concept of consciousness or awareness becomes crucial since novice translators especially, when adding, expanding and repeating details during the translation process, may unconsciously use certain of those “[explicitation] techniques” categorized by
Vanderauwera (1985) and elaborated below. Furthermore, whether or not these techniques lead to a higher level of explicitness in the TT should likewise be tested or assessed by TL readers. As already indicated in note 2, extensive additions or repetitions can sometimes cause redundancy; and providing more information than is needed can distract target readers or increase their cognitive load, thus reducing the readability of the TT.

The first attempt at a definition of explicitation in terms of both translation process and translation product was made by Pápai who introduces an important differentiation between explicitation and explicitness. In terms of process, explicitation is a technique that involves a shift in substance and in structure from the source text. It serves to resolve ambiguity as well as enhance the cohesiveness of the ST while adding linguistic and extra-linguistic information. Finally, according to Pápai (2004: 145), it is driven by the translator's conscious or subconscious attempt to respond to the expectations of target readers.\(^4\) Regarding product, she sees explicitation as heightening the level of explicitness relative to non-translated texts. Such can manifest itself through the more frequent use of certain linguistic features or through the addition of linguistic and extra-linguistic information (Pápai 2004: 145).

This differentiation between explicitness in the translated text and explicitation in the translation process has been further discussed by Hansen-Schirra (Hansen-Schirra et al.\(^4\) Target readers, as discussed by Neubert (Neubert et al. 1992: 126), have a set of textual expectations which control their response to the target text. Furthermore, their social relations to the text, their world knowledge, cultural background, domain-specific knowledge and even experience all affect the quality of their access to the text.
2007: 243), according to whom explicitness is “a property of lexicogrammatical or cohesive structures and configurations in one text,” whereas explicitation is “a process or a relationship between intralingual variants and/or translationally related texts.” Explicitation, for Hansen-Schirra, is assumed when the meaning of the translation is realized with a higher level of explicitness than that of the source text, which is to say meaning that is implicit in the ST, “in a theoretically motivated sense,” though not (yet) realized. By extension, the texts resulting from explicitation are “more explicit than their counterparts in terms of their lexicogrammatical and cohesive properties.”

Hansen-Schirra’s continuation of the discussion on the differentiation between explicitation and explicitness is, however, flawed in that it constrains definition of the latter to the textual level and, as a result, overlooks significant cultural, pragmatic and situational factors.

Pápai’s definition of explicitation is nevertheless deserving of further close attention, not least because it represents, in my view, an important advance on its predecessors in each of the following respects:

First, she includes the translation process in the scope of her definition. She moves beyond consideration of explicitation as a merely textual feature and places emphasis on explicitation as a process and not just as a characteristic effect of the translation product.

Second, she contends that this process is a conscious one that translators go through: explicitation of the target text or bringing to the surface linguistic as well as non-linguistic information contained in the source text is the consequence of efforts at
“resolving ambiguity, improving and increasing cohesiveness.” Moreover, these efforts have been undertaken with certain goals in mind, such as ensuring “easier or more secure interpretation” (Pápai 2002: 488, translated by Heltai 2005). That is to say that explicitation is a purpose-driven process characterized by the decisions which translators make. Third, Pápai’s definition involves target reader expectations, which have gradually become a central issue in explicitation studies. Meeting these expectations is assumed to be a primary motivation for a translator’s adoption of an explicitation strategy. It serves as an important factor in the different phases of the translator’s working process, such as the ST processing, strategic and global planning and TT production and revision. Whether or not the translated text meets target reader expectations can also act as a criterion to assess the quality or success of the translation. In other words, only once adequate provision has been made for the transfer of both linguistic and non-linguistic information from the source text to the target text and the latter is as readable to target readers as the ST to SL readers, only then can the translation be considered truly successful.

Since explicitation is a purposeful decision-making process, translator expertise plays an important role, and the differences in this regard between expert and novice are deserving

---

5 Pápai makes no distinction between intended and unintended ambiguity. It is nevertheless important to note that there are certain source texts in which ambiguity may be entirely intentional. The case of legal texts, for example, is cited by P.P. Dorrit: “… explicitation and implicitation will be relatively rare in legal translation because of the risk of unintended change of legal meaning or an unintended specification of an intended source-text vagueness” (109).

of careful consideration. As Dimitrova (2005: 14) argues, professional translators demonstrate a higher degree of consciousness or awareness regarding textual features, global strategies, the purpose of the translation and the TL’s pragmatic and stylistic considerations. They also show a higher level of consistency than student/novice translators in their attention to these issues.

The active, controlled, strategic use of cognitive resources in progressing toward successful completion of any complex cognitive task such as translation is known as metacognition. The two constituent components of metacognition, metacognitive knowledge and metacognitive regulation (Flavell 1979), are developmental and will therefore have implications for translator training and pedagogy. Professional translators, based on their prior working experience, have typically developed an awareness of their habitual working procedures and the ability to externalize them through verbalization (Dimitrova 2003: 137). Novice translators, on the other hand, due to lack of experience, tend to be unaware of the working procedures and thus display a lesser ability when it comes to verbalization.

Metacognitive regulation involves the ability to coordinate cognition via planning (or the selection of appropriate strategies), monitoring (or the ability to register errors or indicators of the success or failure of task progression and performance) and evaluation (or the appraisal of the products and regulatory processes of one’s task performance) [Jacobs and Paris 1987, cited in Schraw and Mashman 1995: 354-55]. All three metacognitive regulatory skills are interrelated in coordinating the task performer’s cognitive process and help to distinguish the level of the translator’s expertise.
Explicitation is a complex cognitive process; it requires higher-level cognitive skills, including planning, reasoning, decision making, problem solving, self-reflection and evaluation. For these reasons, metacognition and its sub-concepts—metacognitive knowledge and regulation—will play an important role in the concluding discussion (Chapter 6) of the hypotheses and outcomes of this study, facilitating as they do the examination of the translators’ cognitive processes.

To sum up, defining explicitation requires consideration for both translation process and product, for the fact that translation is a purposeful activity and a complex cognitive process, and for target reader expectations and satisfaction. In this context, it is necessary to proceed beyond the surface linguistic level and look at the macro-structure: we should dig more deeply into the translation process, investigating the translator’s cognitive activities and conducting TT readability assessment and evaluation.

2.1.2 The Explicitation Hypothesis

In 1986 Blum-Kulka formulated the axiom generally known as the “Explicitation Hypothesis,” which has been applied by a number of researchers writing on “translation universals”:

The process of translation, particularly if successful, necessitates a complex text and discourse processing. The process of interpretation performed by the translator on the source text might lead to a TL text which is more redundant than the SL text. This redundancy can be expressed by a rise in the level of cohesive explicitness in the TL text.
This argument may be stated as “the explicitation hypothesis”, which postulates an observed cohesive explicitness from SL to TL texts regardless of the increase traceable to differences between the two linguistic and textual systems involved. It follows that explicitation is viewed here as inherent in the process of translation. (Blum-Kulka 1986: 19)

A discussion of Blum-Kulka is essential to any attempt at defining explicitation, not least because her hypothesis has often served as a means for evading the issue of definition. Kamenická observes that many researchers have avoided strict definition of the term by referring to Blum-Kulka’s statement as a given while failing to note that it concerns cohesive explicitation only (Kamenická 2007: 46).

In Blum-Kulka’s research, only the textual and linguistic features of the target texts, or translation products, have been studied. That is to say, although she claims that explicitation is inherent in the translation process, she has little regard for that process herself. Furthermore, as Pym (2005) points out, Blum-Kulka restricts her claim to cohesive explicitness in a rather vague fashion. Her concern with explicitatory shifts of cohesion is motivated by an understanding of the latter as “an objectively detectable overt textual relationship, which lends itself to quantitative analysis, an aspect of explicitation which has since attracted the attention of researchers” (Kamenická 2007: 47). Some researchers interested in explicitation phenomena follow Blum-Kulka’s hypothesis without questioning its validity and, like her, focus merely on explicitness at certain textual levels, such as those of cohesive (Schirra 2007; Øverås 1998; Laviosa 2002) or lexical explicitness (Baker 1996). Others challenge Blum-Kulka’s hypothesis, basing

However, in light of linguistic differences between some language pairs, text length or simple word/morpheme count, as examined in earlier corpus-based studies of explicitation, do not necessarily demonstrate the explicitness of a translated text. For instance, the number of words is always larger in an analytic language such as English than in a synthetic language such as Chinese. In other words, even if translated English texts are longer than Chinese source texts, it does not follow that longer English texts are more explicit than the Chinese texts. The key is to see if the implicit information in the source text is made explicit in the target text and if the target text is more readable and processable for target readers. In other words, the target text is considered explicit only if the cognitive load and the number of possible interpretations have been reduced (Kusztor and Atayan 2003, quoted in Heltai 2005: 47).
Besides, Blum-Kulka maintains that explicitation means the redundancy\(^7\) of the target text, a claim which has been criticized by Séguinot who, while drawing no distinction between explicitness and explicitation herself, finds Blum-Kulka’s definition too narrow and states that “explicitness does not necessarily mean redundancy” (Séguinot 1988: 108). She further asserts not only that the term “explicitation” should be reserved for those additions which cannot be explained by structural, stylistic or rhetorical differences between the two languages, but also that addition is not the only device of explicitation (Séguinot 1988: 108).

By focusing on the translation product, Blum-Kulka observes individual instances or fragments of explicitation rather than the full process as it evolves, the rendering of something implicit explicit (Pym 2004: 2). By contrast, Pym offers the following useful alternative statement on the explicitation hypothesis:

> Explicitation is marked out as the process of interpretation performed by the translator,

---

\(^7\) Redundancy, according to Miller (1963, quoted in Heltai 2005: 54), can be defined as “superfluous information due to iteration of message components and their interdependence.” It has also been defined by Gillette and Wit (1998) as overdetermination or predictability. Heltai, based on Miller’s definition, further explains that “redundancy is the expression of the same information or meaning component more than once, or the expression of a piece of information or a meaning component that is felt to be so self-evident that it is best left to be inferred from other linguistic items in the utterance or from the situation and/or general world knowledge...” Or, alternatively, “the message components that are irrelevant for communicative intention can also be redundant” (Heltai 2005: 54). Redundancy can be considered at word, utterance, discourse and situational levels (Heltai 2005; Chenov 1992). Miller’s definition is function-oriented, which means the linguistic repetition that comes from the language structure and that is not for communicative purposes is not necessarily perceived as redundancy. Therefore, if no information has been emphasized or repeated through redundancy/linguistic redundancy, the text may not be considered explicit, for the processing cognitive effort is not reduced.
even though actual research then has to refer to the linguistic qualities of source texts and target texts. In order to explain this process, we would have to work out the cognitive churnings of interpretation, not just the statistics of textual occurrence. (Pym 2004: 2)

Pym’s claim is much in keeping with the goal of the current study, which aims first to examine explicitation by investigating the cognitive process that underpins the translator’s interpretation of the source text, and then to uncover the motivations for using explicitation as a strategy in the production of the translated text.

2.1.3 Categories of Explicitation

2.1.3.1 Existing Explicitation Categorization

Vanderauwera (1985) describes and categorizes explicitation techniques and the principal other procedures that translators apply in the translation process as follows: a) use of interjections to express more clearly the progression of the characters’ thoughts or to accentuate a given interpretation; b) expansion of condensed passages; c) addition of modifiers, qualifiers and conjunctions to achieve greater transparency; d) addition of extra information; e) insertion of explanations; f) repetition of previous details for the purpose of clarity; g) precise rendering of implicit or vague data; h) more accurate descriptions, naming of geographical locations and disambiguation of pronouns with precise forms of identification. Vanderauwera’s categories, according to Dimitrova (2005:
40), seem to be more like using an “umbrella term to label certain phenomena of differences between the ST and the TT,” not explicitation per se.

Klaudy (1996 and 1998) provides a relatively more comprehensive and systematic review of the different types of explicitation that can be found in translated texts and distinguishes four categories including obligatory, optional, pragmatic and translation-inherent (translation-proper) explicitation.

Obligatory explicitations originate in the structural differences between languages. For example, syntactic and semantic explicitation are obligatory because without them TL sentences would be ungrammatical (Klaudy 1998: 82). The lack of articles, auxiliaries and modal verbs in Chinese, for instance, will result in a great number of additions and extended text length in Chinese-English translations. Another case cited by Klaudy (1998: 82) is that of translation from the preposition-free Hungarian into languages such as Russian and English, which entails numerous additions of prepositions. Semantic explicitation consists of choosing more specific words in the target text (Klaudy 1998: 82). A good example of this is the translation of kinship terms from Chinese into English. Chinese has more detailed kinship terms than English. “Brother,” for instance, in English cannot be translated into Chinese without the specification of “younger brother” (didi) or “older brother” (gege); or “grandmother” has to be distinguished as “maternal grandmother” (waipo) or “paternal grandmother” (nainai).

Optional explicitations may be attributed first to differences in text-building or text-organizing strategies, what Shreve (1992: 141) calls “retextualization,” or the
reordering of sentences. Secondly, they may owe to “stylistic” or textual\(^8\) preferences between languages. These are optional in the sense that without them some sentences, though grammatically correct, could sound unnatural in the TL. Stylistic or textual explicitations can therefore involve the addition of connective elements to strengthen cohesive links and of emphasizers to clarify the sentence perspective (Klaudy 1998: 83, cited in Dimitrova 2005: 36). An example of this classification is:

Original Chinese sentence: 其山、海、关、城结为一体的自身特点独一无二。

Literal gloss: its / mountain / sea / pass / city / become one entity / itself / feature / unlike any other

English translation: The mountains, the sea, the pass **between them** and the city itself become one entity **in a marriage of elements** unlike any other.

There are two instances of stylistic/textual explicitness here (highlighted in bold type). While each may be said to enhance the overall rhythm of the description, their omission would do nothing to disturb the grammatical correctness of the sentence.

Pragmatic explicitations are due to the cultural differences between the source and the target languages, differences in world knowledge of SL and TL readers or different communicative situations. For example, “Mother River” (*muqin he*) can be interpreted as the Yellow River by Chinese readers, but is hard for English readers to comprehend\

\(^8\) “Stylistic” is Klaudy’s term. Although, like “textual,” the word is susceptible of more general interpretation as well, I have understood it, in the classification that I attempt below and in later chapters, in the narrow sense intended here by Klaudy as pertaining to lexical or cohesive explicitness. Furthermore, based on the comparable, widespread use of “textual” in the literature on explicitation (see, for example, Schirra 2007, Øverås 1998, Laviosa 2002 and Baker 1996, as cited above, page 18), I have chosen to use the two terms interchangeably.
without any explanation; “Meng Jiang Nv” (Lady Meng Jiang), the heroine of an ancient folktale on the Great Wall of China, is a household name in Chinese culture, but could sound strange to readers from other cultures who lack the necessary background information. Besides cultural-specific items and geographic names, translating for a different target audience under different circumstances or with different purposes also entails pragmatic explicitation. For instance, translation of children’s literature, in contrast to adult literature, could require more connectives to signify more explicit logical relations or lower lexical variation so as to achieve a higher level of comprehensibility and readability (Shih 2008).

Translation-inherent or translation-proper explicitations derive from the translation process per se and are attributed to the nature of the process itself (Séguirot 1988: 18), “the inevitable result of the act of mediation” (Shuttleworth and Cowie 1997: 55). According to Klaudy (1998: 83), this type of explicitation owes to a pervasive feature of translation activity that is language-independent: “the necessity to formulate ideas in the target language that were originally conceived in the source language.”

2.1.3.2 Discussion and categories proposed in this study

Although Klaudy attempts usefully to classify explicitation strategies in a systematic framework, the distinctions between her four categories are not always clear-cut. The category of pragmatic explicitations, for example, is actually a subcategory of optional explicitation. Due to the communicative situation, cultural differences or different world
knowledge background of TL readers and ST readers, or depending on various target audiences, translators may choose which ST segments and items to explicitate as well as determine to what extent these should be explicitated. The vagueness of Klaudy’s “explanation” of “translation-inherent” explicitation in particular prompts its exclusion from the classification used below.\(^9\) Besides, the cited restricted focus of those who would support the Blum-Kulka hypothesis that explicitation is “inherent in the process of translation,” is generally unhelpful, and of especially questionable value to most of the research questions that I propose for this study (see Section 2.2). By a similar token, I have excluded Klaudy’s obligatory (linguistic) category from my framework for AOI annotation of the source text. This seemed appropriate, given the fact that the identification of explicitations described in Chapter 3 is based on the comparison of numbers of propositions in the source text and target texts and that features such as additional articles, auxiliary or modal verbs were not counted as extra propositions. Finally, once again in view of the research questions and hypotheses advanced below and of this study’s overriding concern to pursue a macro-structural approach to translation as a process, I would also propose two further umbrella concepts of micro- and macro-level explicitation (cf. PACTE 2003: 56), where micro- includes stylistic/textual and macro-covers text-organizational, pragmatic-communicative and pragmatic-cultural explicitation.

\(^9\) See Viktor Becher (2010: 1), who argues persuasively for the outright “abandon[ment]” of the “notion” of translation-inherent explicitation. Becher (2010: 23) also notes the potentially “misleading” nature of Klaudy’s labels, including the overlap between optional and pragmatic.
With such considerations in mind, then, and based on the assumed causes of explicitation, I would suggest that Klaudy’s classification be reconfigured in the following way:

<table>
<thead>
<tr>
<th>Micro-level explicitation</th>
<th>Stylistic/textual explicitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macro-level explicitation</td>
<td>Text-organizational explicitation</td>
</tr>
<tr>
<td></td>
<td>Pragmatic explicitation</td>
</tr>
<tr>
<td></td>
<td>Communicative</td>
</tr>
<tr>
<td></td>
<td>Cultural</td>
</tr>
</tbody>
</table>

**Table 2.1: Categories of Explicitation**

These explicitation categories will serve as the framework for AOI annotation on the ST. (See further Section 3.2.2.)

### 2.2 Research Questions and Hypotheses

It is hypothesized that explicitation is a conscious operation undertaken by translators to serve certain purposes, such as meeting target reader expectations, enhancing the readability of the TT, or facilitating the comprehension of the TT. Therefore, the amount of translator’s cognitive effort is assumed to be related to the level of explicitness in the TT. In other words, the more explicit certain segments in the TT are, the more cognitive effort has been made by the translator when producing those segments. Cognitive effort has been the focus of numerous studies in psychology and psycholinguistics. It is described as the effort expended by humans necessary to make a satisfactory, rather than optimal, decision (Garbarino and Edell 1997, 47). In the context of the current study, it can be interpreted as the time spent on translation processes including task planning, ST
comprehension, TT production and revision, or as the attention given by the translator to
certain TT segments, appearing as keystroke actions such as longer than normal pauses,
deletions or insertions. It is also used to refer to the effort that TL readers spend on
processing the translated texts—higher readability and processability of the TT leads to
lower cognitive effort by the TL readers.

In turn, the assumption that translators purposefully explicitate the TT prompts
investigation into the causative factors behind that activity. And, in an ideal scenario,
these factors should not only correspond to the data on cognitive effort and the level of
explicitness of the TT but also lead to a positive evaluation of the TTs by the TL readers,
who will have made less cognitive effort in TT comprehension.

That explicitation is a purposeful and conscious activity in the translation process also
indicates that translators’ experience or expertise will affect the degree of explicitness in
the TT. It is therefore shown that professional translators demonstrate a higher degree of
consciousness of task planning, of the communicative situation and of ST and TL
readers’ differences in culture and world knowledge than do novice or student translators.

In this respect, expertise is included as another variable in this study.

To sum up, the questions that I propose to investigate and resolve in the current study are
as follows:

1. How are differences in the amount of cognitive effort on the part of the translator in
processing areas of interest (AOIs)/explicitation “rich points” (PACTE 2009: 213) in the
ST and the production of the target text associated with the level of explicitness in the
TT?
2. What differences emerge between professional and student translators in terms of the levels of explicitation, awareness and consistency in strategic choice?

3. Does the translator/participant’s retrospection of the strategic choices provide data that allow us to determine the motivation for explicitation strategies? In other words, does it enable us to determine whether and, if so, why explicitation strategies are applied in the translation process?

4. How do the target readers respond to the explicitness of the translated text? Does the explicitness of the target text lead to easier cognitive processing than a more literal version? If so, on which level, micro- (stylistic/textual) or macro- (text-organizational and pragmatic)?

Corresponding to these research questions, the hypotheses of this study may be formulated thus:

1. A higher degree of cognitive effort (longer pauses, more keyboard activities and more advanced resourcing strategies) will be apparent when explicitations are carried out than when literal transfers are made.

2. The professional group shows more awareness and articulated recognition of explicitation than the student group. In other words, professional translators carry out explicitation operations purposefully, whereas student translators may lengthen the text accidentally.

3. The data provided by retrospective reports will be related to the Translog-generated data on keystroke actions and the AOI annotation in ST and TTs in such a way as to reveal whether and, if so, why explicitation strategies are applied in the translation
process.

4. The triangulated product- and process-based data demonstrate that explicitation occurs not only on the micro- but also macro-level.

5. The level of explicitation is higher in the professional group than in the student group.

6. A higher level of explicitation during the target text production leads to easier cognitive processing for target readers and to a higher level of readability of the target texts.

2.3 The Theoretical Framework of the Study

2.3.1 Redefining Explicitation

As discussed in the previous sections, a precise and comprehensive definition of explicitation that considers both the translation product and process has not been achieved. Therefore, the first step of this study is to provide a new working definition of explicitation. It should be based on existing definitions, but go beyond the lexicogrammatical and textual levels while having consideration for both the product and process perspectives. With such criteria in mind, I offer the following definition:

Explicitation is a strategic process involving the procedures that translators, in consideration of the purpose and situation of a translation as well as of target reader expectations, consciously use to express overtly in the target text the non-linguistically coded but contextually derivable information in the source text. This is accomplished in
order to resolve unintended ambiguity in the target text, to remove cultural barriers or ideological conflicts, and to improve the processability and readability of the TT.

Explicitation is a process rather than a feature or effect in the translation product because it might take place in any and all the stages of the translation process (including ST processing, drafting and TT revision), and it involves the translator’s cognitive effort and level of expertise. Therefore, looking at the translation product alone is not sufficient for understanding explicitation and its functions in translation. Neubert and Shreve (1992: 10) suggest that “…translation studies should be based on the observation of practice…translation scholars should observe the indigenous performance and natural uses of translation… The hypotheses, models, and theories developed in translation studies should be based on data collected from the body of translation practice.” In this study I use the methods of direct observation and monitoring of the translators’ performance and working processes. These methods will show us a more distinct picture of translators’ strategic planning of their task, their instrumental competence, and their consciousness of communicative functions, translation strategies or target reader expectations. They will also help us to see clearly where explicitations occur and how they take place.

Explicitation is strategic, for it is motivated by specific causes or triggers. Translators, especially professional translators, explicitate the TT with certain purposes in mind. For instance, they make more explanations of some culturally specific items which are not familiar to the target readers thereby resolving ambiguities and bridging cultural and ideological differences. Translators may also make the TT more explicit by expressing
linguistically information that can be derived only from the context in the ST with the aim of increasing the readability of the ST and making it easier for target readers to process. However, the explanations of the causative factors of explicitation that most researchers have proposed so far have been derived from comparative analyses of texts only, and inadequate attention has been devoted to the data that reflect the process perspective. Again, the conceptual validity of research methodologies, models and hypotheses can be tested only by the empirical evidence and observation of translation practice. By conducting the retrospection report and the follow-up interviews, this study will investigate the real reasons why translators make explicitation choices in the translation process.

Success in explicitation yields beneficial and measurable results for target readers. From the functional point of view, the success or failure of a translation product can be evaluated by examining how the translator has responded to the translation situation and how the communicative function of a translation has been fulfilled. In this respect, the TTs produced by our research participants, the translators, will be evaluated by the target readers to see if the more explicitated translated texts are easier for them to read and comprehend.

The validity of the definition will be tested against the data obtained from both the translation process and product, such as, whether translators execute the explicitation procedure consciously or unconsciously, whether and, if so, to what extent target reader expectations are considered by translators, and whether explicitation makes the target text more readable and easier to process. Instead of constraining the investigation of
explicitation to lexicogrammatical or textual levels, I will compare the information and cognitive content in the source and target texts on a global level by examining the propositional content. This will be further discussed in the methodology section.

2.3.2 Triangulating Product and Process Research Methodologies

The empirical research of translation processes emerged in the 1980s, and the development of computer programs and software in the last two decades has allowed for insights into studies on the cognitive processes of translation production. Since it was pioneered in initial exploratory essays by Krings (1986), Gerloff (1988), House (1986), Jääskeläinen (1990) and Lörscher (1991a), process research has moved forward to focus on various translation phenomena or specific stages and aspects of the translation process (e.g. Danks 1997; Shreve and Koby 2001; Dimitrova 2005; Jakobsen 2005; Carl 2010; Shreve and Angelone 2010). Process research methods can be classified in different ways, described by Göpferich (2008, cited in Dam-Jensen 2009: 3) as qualitative vs. quantitative, punctual vs. longitudinal, psycholinguistic vs. neuro-scientific, laboratory vs. field studies, and offline vs. online methods.

The classification of offline and online research methods was developed by Krings (2005) according to the time of data collection: specifically, whether this coincides with the translation process or is conducted after the production activities have taken place (Dam-Jensen 2009: 3). Online methods include behavior observation such as observation protocols, video recording, screen capture, keystroke logging, eye tracking
and brain pattern measurement; and verbal-report data, i.e., think-aloud protocols (TAP) and dialogue protocols.

The recent progress in process studies has drawn upon the interdisciplinary collaboration of linguistics and translation studies with cognitive science, psychology and neuroscience; and the triangulation of product and process research methodologies in data elicitation and analysis. Several large-scale projects have been carried out in the past decade, for instance, the PACTE project (University of Barcelona) on translation competence and its acquisition, the Eye-to-IT project (Copenhagen Business School) on developing research applications for the study of translation process from the psycholinguistic and neurolinguistic perspectives, and the TransComp project (University of Graz) studying longitudinally the development of translation competence, to name just a few. These projects furnish the insight that product analysis itself provides the least reliable data about the process (Krings 2005, 348) and only in combination with the data elicited in the translation process can it give a complete picture of the process-product interface in translation, identify the patterns of translator performance, and track translation competence in the course of translation practice.

The representative projects featuring the triangulation of process and product methodologies include the PROBRAL project carried out by Alves et al. (2010) and the CORPRAT project conducted by Pagano, Magalhães, and Alves (2004). The former investigates the process of (de)metaphorization and integrates methodologies adapted from experimental psycholinguistics as well as from quantitative corpus-based linguistics (Alves 2010); and the latter aims at studying the performance of translators, and
consequently process-product related features through the triangulation of specific data elicitation techniques applied to small corpora (Alves 2010). The combination (triangulation) of two or more different data collection methods and techniques has been utilized as a way to capture data about translation process and product more effectively and comprehensively and to map the internal/process perspectives and the external/product perspectives. For instance, supplementing verbal report or translation product analysis with online-collected data, such as eye tracking, keystroke logging or screen recording yields necessary and beneficial information for the investigation and exploration of the translator’s cognitive process or of what really happens in translator’s mind.

As discussed above, previous studies of explicitation have been mostly product-oriented (often corpus-based) studies (Shlesinger 1995, Olohan/Baker 2000, Olohan 2001, Øverås 1998, Klaudy/Károly 2005). They look at translation products only and compare certain linguistic items or the frequency of explicitation pointers in the ST and TT. Their assumptions about the causative factors behind explicitation or about the process that leads to the production of these phenomena are based solely on the texts and actually show at best only cursory regard for that process. Another shortcoming of an exclusively product-oriented methodology lies in the confusion that it causes concerning the definition of explicitation itself. Without the support of process data no assumptions can be made on the awareness of translators that they are performing explicitation operations, just as the motivation or causation behind explicitation strategies cannot be revealed
without the translators’ retrospection on their text-producing and decision-making processes.

In order to investigate explicitation from a more comprehensive and objective perspective and to explore the motivational and causative factors behind its operation in the translation process, the current study applies the triangulation of product, i.e., the comparative analysis of the propositional content of the ST and TTs, and process perspectives, including online (keystroke logging, observation protocols) and offline methods (translators’ survey, retrospective interviews, questionnaires and readability tests). Research methodologies will be discussed in greater detail in Chapter 3.
CHAPTER 3: Research Methodologies

3.1 Research Design

The methods of this study may be classified under two categories: the one relates to the processing and analysis of the source and translated texts (translation product) and the other to the translation process. The methods in the former category include: 1) the annotation of propositional content in both the Chinese source text and English translated texts; 2) the comparative analysis of propositional content of the individual source and target text sentences; 3) the annotation of areas of interest (AOIs) in the source text; and 4) the association of AOIs with the extra propositional content in the corresponding translated text segments. Methods for studying the translation process include: 1) the use of the computer logging program Translog to trace how the target text was produced; 2) the design of an experimental study and its procedures; 3) methods for collecting data in the translation process which can be further categorized as a form of source text processing; 4) target text production (writing process) and revision; 5) translators’ retrospection over the working process; and 6) the evaluation or rating of the translated texts.
3.2 Methods for Text Processing and Analyzing

3.2.1 The Annotation of Propositional Content in the Source and Target Texts

3.2.1.1 Proposition: Definitions

Propositions are defined by Fletcher (1994: 594) as “the smallest units of meaning to which we can assign a truth value”. In other words, they represent “the basic idea units or thoughts in a text” (Steen 2002: 22) and “the briefest units of language that can be independently found to be true or false” (Sternberg and Mio 2009: 415). Generally, propositions assert either an action or a relationship (Sternberg and Mio 2009: 415) and designate mental representations of projected states of affairs that have been expressed linguistically (Steen 2002: 23).

The concept of a proposition has been widely used in a philosophical context where it refers to the non-linguistic information content (true or false) of the sentences expressed by speakers. Two speakers can express the same idea by uttering different sentences, even in different languages. For example, an English speaker can utter what he/she believes to be the truth that “George Washington was the first president of the U.S.,” whereas a Chinese speaker can express this by saying “乔治.华盛顿是美国的第一位总统。” (Gloss: 乔治.华盛顿 George Washington 是 was 美国的 U.S.’s 第一位 the first 总统 president) The English and Chinese speakers actually believe the same thing and
express the same idea that Washington was the first U.S. President, regardless of the different languages they use. What they believe is the proposition, the truth-value or information content, not the sentence itself that they uttered. Propositions, however, bear not only the true or false information of a sentence, but also the cognitive relations that speakers express in their sentences, in this case, their belief in the identity of the first U.S. president as one George Washington. Such relations necessarily have significant consequences for the translator, who in proceeding toward production of a translation is effectively striving to reproduce in the TT reader’s relation to the target text the ST reader’s cognitive relation to the source text. Propositional analysis as adopted in the current study is therefore a cognitive rather than merely linguistic method for capturing the minimal concept/idea unit of a text segment.

3.2.1.2 Why is Propositional Analysis Used in This Study?

Unlike previous examinations of explicitation which emphasize the comparison of specific lexical items, text length or grammatical structures of ST and TT (Baker 1996, Schirra 2007, Overas 1998, Laviosa 2002), this study adopted the cognitive method of propositional analysis to detect the explicitness cases in the TT. Neubert and Shreve’s remarks on the nature of translation and relations between the ST and TT in their book *Translation as Text* provide the theoretical underpinning for the use of propositional analysis in this study and suggest its advantage over alternative linguistic methods employed by other researchers:
Translation was thought to rely on regular relations or correspondences between the constituent levels of the L1 and the L2... Actually, exact correspondences between discrete lexical or grammatical elements are relatively rare... Authors, translators, and readers process more than words and grammatical structures. They engage in a more encompassing information processing activity that includes the synthesis of meaning structures, the factoring of pragmatic constraints, and the global conditioning of the linguistic surface of the text. Linguistic system, pragmatic constraints, world knowledge, and meaning system all converge in the act of translation... Translation is a synthetic process in which the translator dynamically matches semantic, syntactic, textual, and pragmatic fields to create a unitary whole, the L2 text. (Neubert and Shreve 1992: 44-45)

As discussed in Chapter 2, explicitation is understood in this study as a process involving the procedures implemented by translators rather than as a feature or effect in the translation product or translated text. Explicitation could take place at different stages in the translation process, i.e. ST processing, drafting or TT revision. This corresponds to Neubert and Shreve’s argument (1992: 44-45) that translation is a process involving translators’ cognitive effort and consciousness in producing a “unitary whole” target text rather than the simple replacement of the lexical and grammatical elements or units in the ST.

The other advantage of translating the linguistic content into propositions, as Steen (2002: 23) claims, is that it avoids linguistic noise and, as a result, helps to determine “whether the semantic elements of the content of a text are from the same domain of knowledge or not.” The longer text length of the TT or, for instance, the more frequent addition and
repetition of details for the sake of explicitness in the TT could result from the linguistic noise made by translators, especially novices. In other words although the translator’s intention is to explicitate by providing target readers with more units of meaning or further information, this expansion of the text may not necessarily lead to any greater transparency in the TT or increase its readability; on the contrary, in fact, it may even impede target readers’ comprehension. Comparing text length or lexical elements as a device for studying explicitation is therefore a scientifically suspect procedure. Comparing the number of units of meaning expressed in the equivalent text segments in the ST and TT, on the other hand, facilitates the determination as to whether or not conceptual ideas or meanings have been added to the TT segments or additional information has been provided. If the number of propositions in a TT segment is greater than that in the corresponding ST segment, then additional units of meaning have been expressed in the TT, indicating that explicitation has been implemented as part of the translation process.

3.2.1.3 The Conventions and Procedures of Propositional Annotation in the ST and TT

Propositions, according to Steen (2002: 22), are related to predicate calculus and consist of a predicate and one or more arguments. Kintsch also proposes that the meaning in a sentence can be analyzed as a series of short, abstract statements called propositions and that each proposition is made up of a predicator and word concepts. Predicators are often,
but not always, verbs. In this study, I follow Kintsch’s convention of writing or demonstrating propositions:

First, the word concepts are written in capital letters to avoid confusion with words.

Second, the predicator is always written first, followed by word concepts separated from one another by commas.

Finally, each proposition is enclosed in parentheses, and they are usually numbered, if a long text is under study, to make it easy to refer to them in discussion.

(http://www.jacweb.org/Archived_volumes/Text_articles/V6_Horning.htm)

By way of illustration, Kintsch’s convention may be demonstrated as follows:

John likes apples.

1(LIKE, JOHN, APPLES)

In this sentence, LIKE is the predicator, and JOHN and APPLES are the arguments of the proposition.

More often, a text consists of larger units of discourse than simple sentences. A proposition can be imbedded within another proposition; the former is called a superordinate proposition and the latter a subordinate proposition. Therefore, more complex procedures are necessary for propositional analysis on the macro-level of the text. Steen (2002: 27) proposes the following detailed procedures for carrying out propositional analysis:

1. Break up discourse into units – this creates a list of all semi-independent clauses.
2. Break up units into propositions – this produces a series of linearly and hierarchically ordered nuclear clauses with one predicate and at most three arguments; this also turns all attributive presuppositions into complete propositions.
3. Explicate the concepts involved in ellipsis, substitution and co-reference depending on pronominalization, deictics and alternative but general expressions.

4. Explicate all non-realized but semantically conventional arguments of a predicate by abstract indications of their role.

As discussed above, the annotation of texts with linguistic information practiced by many researchers may reduce the level of transparency or processability of the target text. The case of propositional annotation is different. Through a comparison of each source text and target text sentence segment marked for propositional content it is possible to determine whether the information in the former—and especially the implicit information which could be derived from the context—has been successfully transferred to the latter. For example, in the Chinese sentence “吴家是一个新式的，带着宗教背景的模范家庭。” (Zhang, 1943) three propositions are expressed, whereas in the English translation “The Wu household was a model, modern household, devout and serious” (translated by Kingsbury, 1995), there are four, including an extra one that is not expressed in the source text sentence. A detailed analysis of the propositional content of a ST and a TT sentence may be represented as follows:

The Chinese sentence can be first broken up into three units or semi-independent clauses:

1) 吴家是一个模范家庭。
   (Translation: The Wu household was a model household.)

2) 吴家是一个新式家庭。
   (Translation: The Wu household was a modern household.)
3) 吴家带着宗教背景。

(Translation: *The Wu household was devout.*)

Where P stands for proposition and P1 for proposition 1, the propositional content in this sentence can be analyzed thus:

- P1 (是，吴家，一个模范家庭)
  
  *(be, the Wu household, a model household)*

- P2 (是，吴家，一个新式家庭)
  
  *(be, the Wu household, a modern household)*

- P3 (带着，吴家，宗教背景)
  
  *(have, the Wu household, devout background)*

With the help of the same procedures, the TT sentence can also be broken up into smaller units:

1) The Wu household was a model household.

2) The Wu household was a modern household.

3) The Wu household was devout.

4) The Wu household was serious.

The propositional content in this sentence can be analyzed as follows:

- P1 (BE, THE WU HOUSEHOLD, A MODEL HOUSEHOLD)
- P2 (BE, THE WU HOUSEHOLD, A MODERN HOUSEHOLD)
- P3 (BE, THE WU HOUSEHOLD, DEVOUT)
- P4 (BE, THE WU HOUSEHOLD, SERIOUS)
The fourth proposition obviously contains the extra information that is not linguistically coded in the ST sentence, but implied in the context. Because the Wu household is a model household and devout, it is assumed to be serious as well. For Chinese readers it is not hard to make this assumption with their knowledge of historical and social background, but it could be difficult for English readers to understand. By adding one more proposition to the TT sentence, the translator facilitates TT readers’ access to the text. Hence explicitation occurred in the TT sentence segment where P4 appears to be. Using the same conceptual model, I manually annotated the propositional content of the entire ST that was assigned to the participating translators and that of the TTs that they produced in the experiment. Through a comparison of the number of propositions in the ST and the TTs, I obtained a quantitative result with a view to determining whether the translated text was more explicit than the ST and to what extent. The details of this analysis will be discussed in Chapters 4 and 5.

3.2.2 The Annotation of Areas of Interest in the Source Text

An area of interest, or explicitation “rich point,” is defined as a specific source-text segment which prompts those explicitation operations that occur in the translation process and in turn give rise to the corresponding cases of explicitness that can be found in the TTs. In other words, in certain specific segments of the ST, it is assumed that further explanations are necessary for target readers due to structural differences between
the SL and TL, unfamiliar cultural items, ideological differences, geographical terms or other points of variance.

The term “rich point” was first used in the experimental study carried out by the PACTE group (2009: 213) who pointed out that the term’s methodological advantages include the following: (1) data can be collected on a range of different types of explicitation operations and therefore in a more systematic way; (2) in-depth comparative analyses can be carried out in the same explicitation category with the support of data obtained from different experiments with different participants; (3) data obtained from the translation product and process can be triangulated with the facilitation of the areas of interest; and (4) the experiments can be conducted in a more systematic way and “great economy is guaranteed” in both data collection and analysis.

The PACTE group (2009: 213) classified the translation problems that can be identified by “rich points” in each text as (a) linguistic problems, (b) textual problems, (c) extra-linguistic problems, (d) problems of intentionality, and (e) problems relating to the translation brief and/or the target-text reader. This approach to classification provides the basis for the current study to categorize the areas of interest or “rich points” as indicators of explicitation in the translation process. In place of the five types of “translation problems,” I would categorize the AOIs based on the classification of explicitation that was developed in Chapter 2.

The areas of interest were annotated, according to the categories they belonged to, with the markups as shown in Table 3.1. These linguistically, culturally, functionally and pragmatically challenging segments of the ST require more cognitive effort and
“extensive processing activities” (PACTE, 2009: 215) and therefore are expected to match the process data obtained via Translog where variation in cognitive activity appears in the form of long pauses, deletions, insertions, mouse cursor movements, or copy and paste. The markups of AOIs in the ST are also expected to be related to the extra propositional content in the TT segments compared with the equivalent segments in the ST. The extra propositional content is produced when more information has been provided or explanations have been made by the translators, driven by various constraints during the translation process. This will be discussed further below.

3.2.3 Combining the AOIs and Propositional Data in the ST and TT

After the experiments had been conducted and the TTs produced, the propositional content of the TT submitted by each participant was annotated following the same convention and method that had guided the propositional annotation in the ST. The propositional data obtained from each text segment in the TTs can be tested against the AOIs and the propositional data in the equivalent segment in the ST to examine: (a) whether the number of propositions of the sentence segment in the ST is larger than that of the equivalent segment in the TT; (b) whether explicitation takes place at the corresponding position to the AOIs in the ST and falls into the same explicitation category; and (c) whether cases of explicitation appear in the TTs in positions other than those of the AOIs in the ST indicated and, if so, into which explicitation categories they should be classified.
<table>
<thead>
<tr>
<th>No.</th>
<th>Examples in the ST</th>
<th>AOI Annotation Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>&lt;S1&gt; “南有丽江，中有平遥，北有山海关”。</td>
<td>Stylistic/Textual and pragmatic (cultural and communicative)</td>
</tr>
<tr>
<td>(2)</td>
<td>&lt;S2&gt; 三座古城各有特色：民俗文化，商业文化，古代军事文化。</td>
<td>Stylistic/Textual</td>
</tr>
<tr>
<td>(3)</td>
<td>&lt;S3&gt; 他们都是源远流长的华夏文明遗存的文化奇葩。</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td>(4)</td>
<td>&lt;S5.1&gt; 山海关北依燕山、南襟渤海，长城纵贯其间，扼东北、华北咽喉，始建于明洪武十四年（公元1381年）……</td>
<td>Text-organizational and pragmatic (cultural)</td>
</tr>
<tr>
<td>(5)</td>
<td>&lt;S5.2&gt;……素有“两京琐钥无双地，万里长城第一关”的盛誉。</td>
<td>Pragmatic (cultural) and stylistic/textual</td>
</tr>
<tr>
<td>(6)</td>
<td>&lt;S7&gt; 其境内长城遗存众多且保存良好、结构严谨、规模宏大，山海关长城在万里长城中的地位无可替代。</td>
<td>Stylistic/Textual and text-organizational</td>
</tr>
<tr>
<td>(7)</td>
<td>&lt;S8&gt; 其军事防御功能的完备程度、构思之奇妙堪称中国长城建筑史上的奇迹，其山、海、关、城结为一体的自身特点独一无二，被我国著名长城专家罗哲文誉为最精髓的长城博物馆。</td>
<td>Pragmatic (cultural and communicative) and text-organizational</td>
</tr>
<tr>
<td>(8)</td>
<td>&lt;S9&gt;与长城相关的文化遗存丰富，其中孟姜女故事流传广泛，妇孺皆知。</td>
<td>Pragmatic (cultural)</td>
</tr>
</tbody>
</table>

**Table 3.1: AOI Categories**

10 The anticipation of the particular annotation categories is explained in Chapter 4.
Meanwhile, as is further explained in Section 3.3, the AOIs and the propositional data from both the ST and TT can be triangulated with the process data obtained from Translog to investigate whether the translator’s cognitive effort is related to the AOIs in the ST and explicitation cases in the TT. For example, if the translator spends more cognitive effort (longer pause duration, more deletions and additions, etc.) in processing an AOI in the ST segment, which leads to an instance of explicitation (extra proposition) in the corresponding TT segment, this finding suggests that the explicitation choice has been made intentionally by the translator. In this case, the factors that prompted the translator to explicitate can be revealed through the retrospective interviews. On the other hand, if an AOI in the ST which has been paid some attention by the translator does not result in any extra proposition in the TT segment, it indicates that an explicitation has not been implemented, presumably because the translator assumed there was no further information necessary for the target readers.\footnote{An exception to this inference is highlighted at the end of Chapter 4 where I call attention to the unusual case of text-organizational explicitation in target text 2.} Another variable, professional experience, may play a role here, too. For example, it is possible that translation students expend no cognitive effort on processing certain AOIs, or at least less than professional translators, and therefore achieve no explicit effect on the TT.

### 3.3 Methods for Studying the Translation Process

Neubert and Shreve (1992: 8) claim that “an ideal translation studies should investigate...
describe the ways that translators respond to variability in the translation situation...(and) explain actual translation products (target text) as a function of the translation situation and translation behaviors performed in response to it.” According to them, the investigations of certain translation strategies and techniques, i.e. explicitation, the verification of hypotheses, and the development of translation theories and models, should be based on the translator’s performance as well as the data collected from the observation of actual translation practice (1992: 10). The divorce of theory from empirical observation is for them a recipe for “confusion and ambiguity” (1992: 11).

This plea for a methodology that focuses on process reflects the troubled state of explicitation studies and helps explain some of the difficulties that confront researchers as a consequence of a concentration on the translation product. As was discussed in Chapter 2, explicitation has been studied historically from a product perspective, typically a corpus-based approach that compares the TT with the ST, or the TT with the non-translated text in the same language where the focus rests merely on the description of the phenomena. With specific regard to explicitation studies, this traditional failure to observe and examine the practice and process of translation has led to a variety of problems in defining the strategy. Furthermore, the lack of support from empirical data that might be collected during the actual translating process also renders the controversial hypothesis of explicitation as a “translation universal” unverifiable. By the same token, failure to investigate the translator’s cognitive process will ensure that the reasons or criteria for applying an explicitation strategy remain a mystery, beyond the bounds of
reasonable inquiry. In spite of the Neubert-Shreve plea, the process of how explicitation is produced and the reasons why the procedures leading to its production were adopted have continued to receive only limited critical attention; experimental studies with controlled background and variables have been similarly few and far between; and neither have previous researchers addressed the problem of consciousness vs. unconsciousness in explicitation implementation by translators or the nuances of such implementation.

There have nonetheless been a few notable exceptions to this regrettable state of affairs. In fact, as early as the 1960s Alfred Schutz (1963: 235) called for the research approach of “discovery through processes of controlled inference.” Later, Toury (1982) and Snell-Hornby (1988), among others, also proposed empirical translation studies as a means to ensuring greater rigor in terms of observation and verification. (Neubert and Shreve, 1992: 35). However, according to Neunzig and Tanqueiro (2007), empirical translation studies is still in its early stages, having “only recently adopted the formalism of the social sciences as well as the methodology from other scientific approaches.” They insist the theoretical constructs of translation studies will continue to lack scientific and epistemological status so long as they are not underpinned by the validation that comes with systematic, empirical observation. As Dam-Jensen (2009: 3) concludes, research on translation processes dates back to only the late twentieth century as the advent of increasingly sophisticated electronic equipment and computer programs allowed for the possibility of more advanced insight into the cognitive process.

This technological shift has led promisingly to the development of a new array of process
research methods over the last three decades, classified by Göpferich (2008) as: offline vs. online, psycholinguistic vs. neuro-scientific, qualitative vs. quantitative, punctual vs. longitudinal, and laboratory vs. field studies. In this study, the online and offline methods have been adopted as the primary research methods. Krings (2005) distinguishes the online methods from the offline methods by studying translation processes according to the time of data collection. The online methods coincide with the translation process itself and data are produced simultaneously with the writing process (Dam-Jensen, 2009: 6). The offline methods are used only after the translations have been produced—though they too may have regard for the process (for example, retrospective interviews and questionnaires).

### 3.3.1 Online methods

Online methods, according to Krings (2005), can be further divided into behavior observation and verbal-report data. The methods of behavior observation include video recording, eye tracking, keystroke logging, computer screen capture as well as the traditional method of the researcher’s direct observation of the participants. The methods of verbal report consist of think-aloud protocols and dialogue protocols. In this study, the online methods of direct observation and keystroke logging serve the collection of data from the drafting process. As for the verbal report, retrospective interviews and questionnaires are used instead of think-aloud protocols and dialogue protocols. Since the retrospection takes place after the drafting process, this is considered as an offline method.
and will be discussed in Section 3.3.2.

3.3.1.1 Human observation vs. video recording

The reasons for adopting the traditional method of direct observation instead of video recording are threefold. First, consultation with participants on this issue revealed them to be more uncomfortable with being recorded than with the presence of the researcher. Secondly, the simulated real-life translation production environment and process provide data that could be corrupt or irrelevant to the object of the study, i.e., unnecessary interaction with the observer, checking time, unexpected phone calls or even a short break. These data could result in a protracted, more complicated analysis and evaluation process for the researcher. More time would be required to filter out these irrelevant and unimportant data if video recording were used. By contrast, evaluating the relevance and importance of the instances can be easily achieved by the researcher/observer. Thirdly and finally, the focus of the observation as well as of the experimental study is the writing process itself rather than the external factors that may affect that process, i.e. the social environment of the writer/translator’s workplace (Jakobs, Lehnen and Schindler 2005). Although the method of video recording has the advantage of registering the participant’s facial expressions and writing activities, it runs the risk of omitting or ignoring the actual writing process (Krings et al. 2001, cited in Dam-Jensen 2009: 6).
3.3.1.2 Logging the Writing Process\textsuperscript{12} Using \textit{Translog}

Logging the translator’s writing/translated on the computer by means of a logging program makes it possible for researchers to follow the translator’s working process and to keep a record of all keyboard movements. The data obtained from the writing process, combined with the translation products, allow researchers to draw more inferences and conclusions regarding the underlying cognitive activities. Dimitrova (2005: 75) claims that logging the translator’s writing process on the computer may be considered a method with high ecological validity insofar as it is used under real-life circumstances, given the fact that translators nowadays work mostly on a computer.

Keystroke logging has been used as an observation tool for recording the writing and translation processes since the 1990s (Jakobsen 1999, 2006; Hansen 2002; Alves 2003; Dimitrova 2005; Dam-Jensen 2009). The representative tools include \textit{JEdit}, \textit{ScriptLog}, \textit{InputLog} and \textit{Translog} for logging writing processes. \textit{Translog} was developed for logging the translation process in particular (Miller and Sullivan 2006: 1); it records keystrokes and allows the logging and study of all kinds of writing done at a computer keyboard. With an accuracy of ten milliseconds it registers all keyboard activities and cursor or mouse movements in relation to time (Tirkkonen-Condit 2008: 3). The \textit{Translog} software package has two programs: \textit{Translog User} and \textit{Translog Supervisor}. The participant completes the translation in the \textit{Translog User} working window and the process data are

\textsuperscript{12} The writing process is understood here as referring exclusively to the actual writing down of the translation draft.
collected. When the participant translates in *Translog User* (cf. Figure 3.1), the source text is shown in the top half of the screen and the target text is typed in the bottom half of the screen. Text editing functions, such as copy, paste and cut, are available and font size can be increased or decreased according to the user’s preference.

![Figure 3.1: Translog User Working Window](image1)

After the translation has been completed, the log files generated by *Translog User* can be opened in *Translog Supervisor* (cf. Figure 3.2) where the drafting process can be reviewed and analyzed. The output of *Translog* includes the product and process data generated in any given translation session (Carl 2009: 226), thus providing quantitative, objective information about the translation process.

![Figure 3.2: Translog Supervisor Working Window](image2)
In this study, *Translog* is employed as an online data gathering method to record the participants’ keystroke activities during their translating process, including all changes and corrections, such as deletions, additions, cut-and-paste operations, cursor navigation, the exact time when each keystroke operation is made, as well as the duration of any pauses occurring during the process of typing. By means of the logging of all these keystroke actions, according to Jakobsen (2009: 96), information can be derived regarding the rhythm and speed with which the text is produced. Such findings naturally prompt insight into the cognitive processes that inform the production of the translation. In similar fashion, the record of keystrokes is “immediately interpretable in terms of linguistic units giving the researcher full access to studying the typing process by which a text is produced” (Jakobsen 2009: 104). Furthermore, recording the pauses makes it possible to study the amount of time that the translator devotes to various passages in the source text (Wengelin 2006: 111), thus enabling discovery of those linguistic items that require more cognitive effort on the part of the translator during the translating process. In the case of the current study, data elicited by *Translog* can be tested against the AOIs in the ST and the propositional annotations in both the ST and the TTs. For example, if a long pause or correction shown by the *Translog* data can be associated with the AOI in the ST and with the extra propositional content in the equivalent text segment in the TT, then it is reasonable to conclude that a deliberately strategic explicitation has been implemented given the fact that an apparently greater cognitive effort has been made during this process. This conclusion may in turn be corroborated by the retrospective interviews.
Translog also provides the complete time profile of the writing or translation process. It records the exact point at which a keyboard activity is conducted. Through the Translog time file, it is possible for researchers to investigate the translator’s or writer’s cognitive processing as well as the cognitive effort that he/she makes during the translation or writing activity.

Furthermore, Translog measures time delay, i.e. the duration of pauses, with great precision, thus furnishing the data necessary to study not only the distribution of pauses and their association with the macro-level text, but also with micro-level text elements (Jakobsen 1999). For instance, the patterned duration of pauses, with the exact time display, helps to categorize the cognitive activities, i.e. at which level of text they take place, with greater accuracy: at that of the word, the sentence or the paragraph. These data, associated with the translator’s years of experience, reflect whether the hypothesis is true that expert translators work with emphasis on the macro-structural level of the text, stressing socio-cultural, pragmatic and situational concerns, while novice translators focus more on the micro-, i.e. textual, level. In the case of the current study, Translog’s time file also facilitates the investigation of the metacognition or purposefulness of the

---

13 Time delays are represented by asterisks in Translog Supervisor, where the log files can be displayed. The asterisks can be assigned the desired time value by the user, varying between 0.01 and 99.99 seconds. The default value of a pause unit in Translog is 1.00 second; this tends to represent the information about time delays at macro-levels, such as words, sentences and paragraphs while suppressing information about short delays within words (Jakobsen 1998: 84). In this study, we are interested only in the delays at macro- levels, therefore the default value (1.00 second) of a pause unit was chosen. When a pause is so long that it would take ten or more asterisks to represent, Translog shows one asterisk followed by the time value in seconds, e.g. *15.266 (Jakobsen 1998: 82).
translator’s activity, specifically the implementation of explicitation. This information will be especially useful in examining the hypothesis advanced in Chapter 2 and further discussed in Chapter 5 that professional translators carry out explicitation operations purposefully, whereas novice translators tend to do so accidentally.

A replay function is provided by Translog through which the log files can be played back dynamically and the entire translation process displayed on the screen as in a video recording (cf. Figure 3.2). As Hansen (2003: 34) has pointed out, the method of “recognition” that has been frequently employed in psychology can be used in translation process research with the help of Translog’s replay function. Translators will recognize the pauses, changes and corrections with the replay of their working processes and offer a statement of what went through their mind at given points of time. In showing the whole writing process dynamically on the screen at various speeds, this function helps the translators recall their decision-making process—especially helpful when it comes to the tasks of retrospection and interviews.

### 3.3.1.3 Keystroke Logging vs. Eye-tracking and Think-aloud Protocol

Other popular online methods that have been adopted by many researchers who focus on the translation process include eye-tracking and think-aloud protocol. Eye-tracking, according to Dam-Jensen (2009: 7), is a method for examining subjects’ eye movements, providing a record of their focus of attention during the writing process. This method has been widely used in social science, neuroscience, psychology and psycholinguistics. It
was first introduced to translation studies by a group of translation scholars, among whom Sharon O’Brien is perhaps the most representative. With a view to examining the translator’s employment of translation memory tools, O’Brien has used eye-tracking as a means to studying the relation between cognitive effort and eye movements (O’Brien 2006: 186). However, eye-tracking, as Dam-Jensen (2009: 7) claims, generates a huge amount of data, and processing them requires immense human resources, including time and funding that are disproportionate to the scope of this study.

Think-aloud protocol (TAP) has served since the 1980s as the major online method for eliciting verbal report data and unveiling the content of the “black box,” or translator’s mind. As with eye-tracking, TAP nevertheless has several shortcomings: accessibility, incompleteness and interference, as summarized by Dam-Jensen (2009:10). In terms of accessibility, the verbalization data generated through TAP are wanting to the extent that it is impossible to validate whether the verbalizations are in fact a true reflection of the translator’s cognitive activities. The incompleteness of the data derives from: 1) the possibility that the participant subjectively chose what to verbalize and what to leave out (Hansen 2005: 516); and 2) the fact that only active processes are verbalized, whereas activities that the participant is not conscious of are not verbalized (Hansen 2005: 513; Kovacic 2000: 98). The third shortcoming, and the object of most criticism, is that the act of verbalization interferes with the writing or translating activities and that the working process is interrupted by the participant’s thinking or effort to verbalize.

Keystroke logging, by contrast, does not interfere with the writing and translating processes. Writing or typing a translation in a Translog working window is similar to
working on a regular computer. The participant does not pay any attention to the fact that their writing or translating activities are being logged, with the result that their cognitive processing is not interrupted. Translog simulates the real-life working circumstance and automatically records all the keystroke activities in a non-invasive manner, thereby at once guaranteeing the objectivity and completeness of the data and ensuring the ecological validity of the experimental study.

3.3.2 Offline Methods

The offline methods used in this study consist of an online survey of the translator’s professional background, a retrospective interview and questionnaires. I shall discuss the online survey and questionnaires in greater detail in Section 3.4 (on experimental procedures) and focus on the retrospective interview here.

The retrospective interview is categorized as an offline method for eliciting verbal report data. These are produced by the writer or translator as a reflection or explanation of his/her working process. The participant is asked to verbalize their thoughts, feelings, attitudes and decision-making processes (Krings et al. 2001: 215) regarding specific aspects of the writing or translating task (Dam-Jensen 2009: 4). There have been some claims that offline verbal report data can be insufficient due to the lack of memory of the participant (Hansen 2005: 518-519; Krings 2005: 349). This insufficiency can be compensated for in two ways. First, the retrospection is conducted immediately after the writing or translating task in order to minimize the risk of obtaining distorted data.
(Krings 2005: 349). Secondly, the retrospective interviews are based on the pauses or keystroke activities that were evident when the logged translation was replayed in the Translog reply window. For instance, at each major pause in Translog, the participant is asked to comment in more detail on his/her deliberations or to explain what was going on in his/her mind during that pause. These are recorded by the researcher and then combined with the log of the direct observations from the writing or translating process in order to achieve more comprehensive data. The most important advantage that the retrospective verbal report has is that it does not interfere with the working process. Such interference, as was seen in the preceding section, is often adduced as a problem with other kinds of verbal report, such as TAP (Dam-Jensen 2009:5).

3.4 The Experimental Study

3.4.1 Participants (Online survey)

There are six participants in all in this study, representing the categories of professional translators with no fewer than three years’ experience as well as a firm standing in their profession, and students who have little or no professional translation experience. Their working languages are Chinese and English.\(^{14}\) The rationale for choosing both

\(^{14}\) The six participants include five native Chinese speakers and one native English speaker. The student translators have a high level of English proficiency (English majors
professional translators and translation students as the participants in this experimental study is to examine the variable of expertise as one of the possible motivations that trigger explicitation. There has been some critical discussion, cited above, as to whether explicitation is a “natural translation-inherent procedure and a spontaneous by-product of the translation process” or “a conscious translation technique deliberately employed by professional translators wanting to avoid linguistic and socio-cultural differences between source and target texts” (Mesa-Lao 2011: 44). Some researchers, as already indicated, consider the phenomenon to be a translation universal—an unavoidable by-product of the translation process (Blum-Kulka 1986, Baker 1996), while others claim that it is a deliberate and conscious translation technique or strategy (Krings 1986, Lörscher 1991). Kludy and Karoly (2005: 15, cited in Mesa-Lao 2011: 46) even argue that explicitation as a tool, broadly considered, can be both an unconscious operation and a deliberate strategy. However, as Lao (2011: 46) points out, few of the previous studies address the issue of consciousness vs. unconsciousness since most of them focus on the descriptive study of explicitation as a phenomenon appearing in the translation product rather than from the perspective of translation as a process. This issue arises, on the one hand, from the fact that product-oriented studies are based mainly on the published texts, which are generally translated by professional translators; on the other hand, most translation process studies have often been carried out with student translators who are generally more available than professional translators and can be easily recruited from the

at the graduate level). For more on their backgrounds, see Appendix 1.
institution or department where the researcher is active. Few studies of explicitation systematically compare texts translated by both professional and student/novice translators, especially translations of the same ST, produced under the identical conditions and against a controlled background. As a consequence, the assumptions made in some earlier studies of the professional translator’s work process are actually based on the study of student translators or translation trainees and are correspondingly speculative in nature. Moreover, the assumptions regarding explicitation and its relationship to the translator’s experience seem to be based on fragmentary data. In the current study, the experimental design of including both professional and student translators and assigning them the same ST and reference tools under identical conditions is intended to address more rigorously the research question concerning different levels of awareness of explicitation implementation between professional and student translators as well as levels of explicitness in the TTs produced by both groups. It also aims to test the hypothesis that “the professional group shows more awareness and articulated recognition of explicitation than the student group” (number 2 in the list presented in Chapter 2).

Prior to the experiment the participants were asked to read and sign an Informed Consent Form approved by the IRB (Institutional Research Board) at Kent State University.\(^{15}\) According to the Consent Form, all participants have been assured anonymity and have participated voluntarily: their individual privacy was guaranteed in all published and

\(^{15}\) Approval date: October 7, 2010; FWA Number 00001853
written data obtained from the study and they were free to discontinue or withdraw at any
time their consent to participate. After reading the Informed Consent Form, they all
decided to take part in the experimental study. In order to preserve ecological validity, the
object of the experimental study, i.e. explicitation, was not revealed to the participants.
They were informed in a task description that they were going to participate in an
experimental study of Chinese-English translation and translate a short Chinese text of
about 400 characters into English with no time restriction. The details of the translation
task will be discussed in Section 3.4.3. No further information on the experiment was
given to the participants in order to avoid influencing their behavior in any way.

3.4.2 Source Text and Translation Brief

A clean (that is, not annotated with propositional content or AOIs) Chinese text of about
400 characters was assigned to the participants to translate into English. It consisted of
excerpts drawn from a brochure that gives foreign visitors and tourists an overview of a
coastal city in China (Qinhuangdao). The brochure was published and issued by the
tourist bureau of Qinhuangdao for the purposes of promoting the city’s image, attracting
tourists both domestic and from abroad, and seeking business opportunities. The source
text consisted of three paragraphs selected from within two separate articles in the
brochure that addressed the same topic and in similar writing styles.

Orozco (2001, cited in Lao 2011: 50) claims that one of the key elements in translation
product research from an empirical and experimental point of view is the use of
standardized measuring instruments and a widely recognized scientific research approach. Since the source text is considered one of the determining factors in our experimental study, the criteria that determined its selection are pertinent. The text was selected for a number of reasons. First, it is a text type with which all the participants were assumed to be familiar and with which, as a rule, professional translators have experience in the workplace. Second, given that half of the participants were students with limited or no professional translation experience, as a general introduction and description of a city, the text was not too difficult. It was important that all participants complete the translation and would not be persuaded to withdraw from the experimental task because of an inordinately high degree of difficulty. Third, since Qinhuangdao is a tourist city with a substantial historical and cultural heritage, the text contained a certain number of cultural items, historical background information, fixed expressions and two lines of verse. It therefore offered some excellent possibilities for studying explicitation phenomena coupled with an appropriate number of challenges for the participants, including the professional translators. During the retrospective interviews, some participants did express the sense that the ST was not well composed, a view based on a few longer sentences, one or two complex syntactic structures and some instances of lexical repetition. These problems were detected during the selection of the ST but I decided to leave it as it was on the grounds that the text should be authentic. Besides, in a real-life translation task, the ST is often not perfect. On the contrary, many of the STs with which professional translators have to work are problematic.

Prior to and during the drafting process, the participants were furnished with both a hard
copy and an electronic version of the Chinese text. The ST was also displayed in the *Translog* working window during the drafting process (cf. Figure 3.1).

A translation brief was also provided, stating clearly the purposes and circumstances of the translation task. The considerations that prompt provision of a translation brief are essentially threefold: first, from the functional point of view, textual and linguistic operations will take place under the influence of that brief, describing as it does the intended properties and features of the target text, the aim and the circumstances of the operation and the messages that need to be transmitted (Schäffner 1998: 121); secondly, from the empirical, experimental perspective, it is important to design a representative task as well as define the situation in order to ensure that the experiment is conducted under controlled laboratory conditions (Ericsson and Smith 1991: 18); thirdly, since it has been noted repeatedly in previous sections that ecological validity is crucial to an experimental study, the nature of the exercise and the circumstances surrounding its performance should be as close as possible to a truly authentic task (Dimitrova 2005: 66).

In a real translation task, a translation commission or brief is often provided as a guideline for the translator. For obvious reasons, the translation brief given in this experimental study was only a simulated one, its real purpose having been to provide the researcher with data. The text of the translation brief provided to the participants was the following:

*The text to be translated in this project comprises excerpts from a tourism brochure, an introduction to the district of Shanhaiguan in the city of Qinhuangdao in Hebei Province, China. The brochure was issued and published by the tourist bureau of Qinhuangdao for*
The purposes of promoting the city’s image, attracting tourists both domestic and from abroad and seeking business opportunities. It was originally composed in Chinese and needs to be translated into English for English-speaking tourists who visit the city, and probably China, for the first time. The English version of the brochure should make all the information included in the source text available to the target readers.

3.4.3 The Translation Task

The whole translation process is viewed as comprising not just the actual writing down of the translation (or text production), to which the term “translation process” generally refers, but also the preparation (pre-writing) phase that includes reading and preliminary comprehension of the ST, looking up background information or other kinds of consulting aids, as well as the revision of the translated text after the drafting has been accomplished (post-writing phase). The pre-writing phase started when the participant received the ST and the translation brief and ended when they met with the researcher and commenced the actual writing/drafting process. The post-writing phase began immediately after the writing/drafting had been completed and ended when the participant declared that the translation task had been accomplished (Dimitrova 2005: 86). Data from each of the above-mentioned phases were gathered and registered, as will be discussed in detail in the following sections.
3.4.3.1 Processing the Source Text

The theoretical background for collecting data in the pre-writing phase is that the objects of human translation are texts rather than languages or words. The translator needs to develop a preliminary understanding of the text first in order to translate it or, as Tirkkonen-Condit (2008: 1) has it, “…to resort to his/her encyclopedic, pragmatic and linguistic knowledge to interpret what the author means by what he/she says.” In order to examine the translator’s activities in comprehending and processing the ST and to collect the data of his/her cognitive effort in this pre-writing phase, the source text and the translation brief were sent to the participants via email prior to the experiment. In this way they had the option to read through the ST and the translation brief, take notes, look up the cultural information online or make any other necessary preparations to conduct the actual translation drafting prior to their meeting with the researcher. They were required to keep the notes or marks (highlighting, underlining, etc.) made during the preparation, either on the hardcopy of the ST or in the electronic version, and then submit the file to the researcher. The researcher registered these activities and collected the data accordingly.

The purpose of collecting data from the pre-writing phase is to determine the association between the time spent in the specific segment of the ST and the AOIs in the ST; and, further, to discover whether the activities in the pre-writing phase may be related to explicitation operations in the drafting process or to cases of explicitness in the TTs. One participant, for example, spent quite some time processing the ST and searched online for
information on geographical names, for example, “Shanhaiguan” or the reference to “Liang Jing” (two capitals), background on the lines of verse, and the translation of some unfamiliar vocabulary. This proved to be of paramount importance when it came to analyzing the data on his translation activities and cognitive processes during the later phases of the study.

3.4.3.2 Drafting the Translations

The experiments were conducted at venues mutually agreed upon by the participants and the researcher. In fact, four participants agreed to complete the translation task in the researcher’s office, one at a café that was closer to the participant’s home and one in the library of the school where the participant worked. All participants were comfortable with their chosen venue for the experiment. The translations were done on the researcher’s laptop on which Translog had been installed. The participants carried out the translation task with no time constraints on the Translog working window where both the source and target texts were displayed and the keyboard actions and mouse movements automatically recorded. The brochure from which the ST had been excerpted was provided to the participants and they could read it through at their leisure, particularly the two articles from which the ST paragraphs had been extracted. The participants also had access to whatever online and offline resources they needed, for instance, Internet, dictionaries, or other reference works.

During this phase, the researcher acted as an observer, registering the participants’
activities—looking up words in the dictionary, searching for information online—in order to supplement the *Translog* data. The participants confirmed beforehand that they were comfortable with the presence of the observer, and there were no significant interactions between the participant and the observer during the drafting process.

### 3.4.3.3 Revising the Translation Draft

The participants were given the chance to read and revise their translation either immediately after the experiment or at home before sending the file back to the observer. The observer then registered the changes or corrections in the TTs. In analyzing the data obtained from this revision phase, I looked for associations with explicitation actions during the drafting process as well as with instances of explicitness in the TTs. It was plain that some of the stylistic or pragmatic adjustments made to the texts reflected the translator’s awareness of the target audience and culture that also serve as a factor for explicitation operations. Worthy of note here were the differences between professional and student translators in how they viewed revision as part of the translation process (or not). In contrast to the novices who spent little or no time on revision, two out of the three professional translators took their translation draft home, made changes and adjustments and sent it back to the observer, while the third devoted significant time to revising the draft on site. Through analysis of these data, I expect to determine the associations with explicitation.
3.4.4 Retrospective Interview and Questionnaire

After the translation draft had been completed, the participant, together with the researcher, looked at the drafting process replayed by Translog and was asked to provide retrospections over the significant keystroke activities, including long pauses, deletions and insertions. The replay window, where the entire drafting process was displayed, helped participants to a large degree to recall their cognitive processes, i.e. why they had made the decisions they had made or what had been going on in their minds at the time. After these retrospective interviews, the participants were also asked to complete a questionnaire (see Sections 5.1 and 5.3) in which they had the chance to explain further their activities in the pre-writing, writing and post-writing phases, the problems they encountered during the process, and the distribution of their time during the three phases.

3.4.5 The Translation Product

As mentioned in Section 3.2.1, the translated English texts were also annotated with propositional content. These annotations were checked first against the propositional content in the ST, to see if the instances of explicitness occurred as expected, and then against the log file to determine whether the data from the product are related to those from the process.
3.5 Evaluating the Translation Products

3.5.1 The Readability Test

Readability is defined as “the ease with which written language can be read with understanding” (Crystal 1992: 326). For O’Brien (2010: 144) it is the property of a text “which contributes to or detracts from reading ease.” In this study, a readability test on the TTs was conducted with the help of the Flesch Reading Ease Formula. One of the most widely used, tested and reliable formulas of its kind (Dubay 2004), Flesch’s formula enables the researcher to assess the difficulty of reading the TTs and thereby discover whether explicitation leads to easier processing and understanding of the TTs for target readers. The assessment of readability by the Flesch Formula is displayed in Table 3.2.

<table>
<thead>
<tr>
<th>Scores</th>
<th>Ease of readability</th>
<th>Scores</th>
<th>Ease of readability</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>Very Easy</td>
<td>50-59</td>
<td>Fairly Difficult</td>
</tr>
<tr>
<td>80-89</td>
<td>Easy</td>
<td>30-49</td>
<td>Difficult</td>
</tr>
<tr>
<td>70-79</td>
<td>Fairly Easy</td>
<td>0-29</td>
<td>Very Confusing</td>
</tr>
</tbody>
</table>

The Flesch Reading Ease Formula was developed by Rudolph Flesch in 1948. It has been considered as one of the oldest and most accurate readability formulas without too much scrutiny. The specific mathematical formula is: 

\[ RE = 206.835 - (1.015 \times ASL) - (84.6 \times ASW) \]

where \( RE \) = Readability Ease, \( ASL = \) Average Sentence Length, and \( ASW = \) Average number of syllables per word. The output RE is a number ranging from 0 to 100. The higher the number, the easier the text is to read. (cf. http://www.readabilityformulas.com)
3.5.2 The Readability Rating

As Flesch’s formula for automatic measurement of readability was developed using sentence length, word frequency and number of syllables per word, it does not provide conclusive information about the readers’ ease in reading or understanding the text or about how much cognitive effort they expend in the process. To complement implementation of the formula, a group of native English readers with the reading ability of no lower than high school level were therefore assigned the task of reading the six TTs produced by the translators and of rating their readability. In addition to recording the times spent on reading each of the six translations, every reader responded to three questions: one on ease of reading, another on the extent to which each text met their general expectations as readers, and a third regarding its provision of information on specific cultural items. (See Appendix 2.) The scale for rating ease of reading was based on that proposed by O’Brien (2010: 115):

- **Highly readable:** the segment reads as if it were written by a native writer. It is easy to read and you had no cause to pause during reading.

- **Readable:** the segment is relatively easy to read, but you may have had to pause slightly for processing or to jump backwards once in the sentence to re-read something.
*Somewhat difficult*: the segment does not read as if it were written by a native writer and you may have had to pause once or twice during reading and/or jump backwards to re-read one or two phrases/words.

*Very difficult*: the segment is difficult to read because its structure does not conform to what is normally expected of a grammatical sentence in the TL. You would have to re-read it to make any sense of it.

The recorded times that readers had spent on completing each text, the responses to the three questions and the output of the Flesch Reading Ease Formula were then tested against the number of explicitations in the text. The results of this analysis are presented in Chapter 5 and the association between the translator’s implementation of explicitation and the target text’s readability, as reflected in those results, is discussed in Chapter 6.
CHAPTER 4: Analysis of Product-Based Data: Explicitness Cases in the Target Texts

4.1 Comparing the Propositional Content of the Source and Target Texts

The annotation of the propositional content was conducted first in the ST and then, after the participants had completed their translations, in the TTs as well. Paragraphs and sentences were numbered and each ST and TT sentence was annotated for propositional content. Complex sentences were broken up into smaller units before propositional annotation was conducted. Table 4.1 presents the conventions for propositional annotation and an example of ST and TT annotation. Comprehensive lists of the latter may be found in Appendices 3 and 4.

The total numbers of propositions in the ST and TTs are shown in Table 4.2 below. In order to ensure participants’ anonymity, their names have been replaced by numbers; and, for the sake of consistency, the latter appear in the same sequence as the target texts, which is to say that TT1 is the text produced by Participant 1.

Table 4.2 shows that not all six TTs have a larger number of propositions than the ST. The increase in the number of propositions for each translator in the professional group is significant (twenty-nine, forty-six and forty-five). In the novice group, TT4 and TT5 show less considerable increases of seventeen and nineteen, respectively.
<table>
<thead>
<tr>
<th>&lt;PA&gt;</th>
<th>Paragraph</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;S&gt;</td>
<td>Sentence</td>
</tr>
<tr>
<td>P</td>
<td>Proposition</td>
</tr>
</tbody>
</table>

**Examples:**

The second sentence of the first paragraph in the ST:

<PA1><S2>三座古城各有特色：民俗文化，商业文化，古代军事文化。

P1 (各有，三座古城，特色)
P2 (是，特色，民俗文化)
P3 (文化，民俗)
P4 (是，特色，商业文化)
P5 (文化，商业)
P6 (是，特色，古代军事文化)
P7 (军事，文化)
P8 (古代，军事)

The corresponding sentence in the TT:

<PA1><S2>The three ancient cities each have their own customs, commerce, and military history.

P1 (HAVE, THE THREE CITIES, EACH, THEIR CUSTOMS)
P2 (ANCIENT, CITIES)
P3 (OWN, CUSTOMS)
P4 (HAVE, THE THREE CITIES, COMMERCE)
P5 (HAVE, THE THREE CITIES, HISTORY)
P6 (MILITARY, HISTORY)

---

**Table 4.1: Propositional Annotation Conventions and Examples in ST and TT**
<table>
<thead>
<tr>
<th>Group</th>
<th>Text</th>
<th>No. of Propositions</th>
<th>No. of Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td></td>
<td>98</td>
<td>403 (characters)</td>
</tr>
<tr>
<td><strong>Professional</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT1</td>
<td></td>
<td>127</td>
<td>383</td>
</tr>
<tr>
<td>TT2</td>
<td></td>
<td>144</td>
<td>449</td>
</tr>
<tr>
<td>TT3</td>
<td></td>
<td>143</td>
<td>398</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td></td>
<td><strong>138</strong></td>
<td><strong>410</strong></td>
</tr>
<tr>
<td><strong>Novice</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT4</td>
<td></td>
<td>115</td>
<td>366</td>
</tr>
<tr>
<td>TT5</td>
<td></td>
<td>117</td>
<td>418</td>
</tr>
<tr>
<td>TT6</td>
<td></td>
<td>88</td>
<td>288</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td></td>
<td><strong>107</strong></td>
<td><strong>357</strong></td>
</tr>
</tbody>
</table>

Table 4.2: Total Numbers of Propositions and Word Count per Text

TT6, on the other hand, has ten fewer propositions than the ST and would therefore appear to contradict the notion that explicitation is a universal feature of the translated text, or as Mona Baker (1996: 176) hypothesized, “an overall tendency to spell things out in translation.” Of all the six target texts, TT2 contains the largest and TT6 the smallest number of propositions. As for the association between word count and number of propositions, TT5 has the second largest word count among the six TTs, but its total number of propositions (117) is substantially smaller than in the cases of TT1 and TT3 (127 and 143, respectively). There is no significant difference regarding the number of propositions in TT4 and TT5 (115 vs. 117), but TT5 is 14% longer than TT4 (418 vs. 366 words). From these findings it may be concluded that a longer text does not always lead to a higher level of explicitness; or the more explicit text is not necessarily longer than
the less explicit text. In other words, the number of propositions is not related to the length of the text, thus supporting the argument presented in Chapter 2 that text length or simple word/morpheme count do not necessarily demonstrate the explicitness of a translated text. This argument will be further advanced in Chapter 5.

Table 4.2 also shows that the mean value of propositions in the professional group is 138 and 106 in the novice group. By any measure, this difference may indeed indicate that professional translators demonstrate a higher degree of explicitation than their novice counterparts, but one should guard against comparing only the number of propositions, as these were defined in Chapter 2. Some propositions might be produced unconsciously or unintentionally by translators and they do not always result in higher readability or less cognitive effort on the reader’s part. For this reason, analysis of the process data as well as triangulation of the product and process data become necessary steps in our developing the fullest possible understanding of the information before us.

4.2 Association of AOIs with the Extra Propositional Content in the TTs

As discussed in Chapters 2 and 3, the ST was annotated with areas of interest, likely indicators of explicitation in the translation process, in order to achieve economy in both data collection and analysis. The categorization of these AOIs in accordance with the classification of explicitation developed in Chapter 2 and tabulated in Chapter 3 (see Table 3.1) ensures that data can be collected in a systematic way on a range of different types of explicitation operations. The ST sentence segments in which AOIs are annotated
are aligned with the corresponding sentence segments in the TTs to facilitate examination of whether cases of explicitness (extra propositions) have been produced as a consequence of the translation process. Extra propositions are the ones that are not contained in ST sentences but added by the translators in the course of translating. Each one is counted as a case of explicitness and categorized, as noted, according to the same classification as the AOIs.

Once again, it is worth noting that such explicitness cases may or may not be the result of explicitation implementation. The definition advanced in Chapter 2 insists on explicitation as “a strategic process involving the procedures that translators . . . consciously use to express overtly in the target text the non-linguistically coded but contextually derivable information in the source text.” [Emphasis added] For this reason, after each target text has been annotated and analyzed in accordance with the format shown in Table 4.3 below, the product-based data thus obtained will be combined with the process-based data, such as Translog-generated information (keyboard activities and the times that they occur) and with the retrospective comments regarding those Translog data. Only then, after such triangulation of product- and process-based data, can the cases of explicitness that are analyzed below be regarded (or not) as the product of explicitation that was implemented during the translation process.

An example of ST and TT AOI sentence segment alignment and explicit annotation is shown in Table 4.3. Sentence 3 in the ST is aligned with the corresponding sentence(s) in each TT. The numbers of propositions in both the ST and TT sentences are noted as well as the number of explicitness cases in each TT sentence. Extra propositions—those that
are not in the ST but made linguistically explicit in the TT sentence—are also listed in the
table in order to demonstrate precisely what the translator has added and to avoid the
confusion that could arise from a straightforward comparison of proposition numbers:
while some TT sentences contain the same number of, or even fewer, propositions than
the ST sentence, cases of explicitness may still emerge. (See, for example, the instances
of TT2 <S3> and TT6 <S2.2> in Table 4.3.) One explanation for this is that some
information in the ST sentence was not transferred into the TT sentence, yet at the same
time extra information that is not in the ST has been added in the process of translation
production. ST sentence 3 provides a useful illustration of this:

ST <S3>: 他们都是源远流长的华夏文明遗存的文化奇葩。

The sentence may be glossed as follows:

they all be traced back to ancient times Huaxia civilization remain cultural exotic flower.

In TT2, it is translated as:

They are all marvels of early Chinese civilization that have survived the ages.

The translator omitted “cultural” in the ST purposefully, but added early, thus
modulating “ancient times” and providing information about “Huaxia civilization.” Most
Chinese readers are familiar with the term Huaxia, which appears frequently in news
reports, media or literary texts, and it is easy for them to associate this with early Chinese
civilization. However, English readers may not be able to make a similar association if it
is simply transliterated without the provision of any cultural background information. The
translator explained in the retrospective interview why she had omitted the word
“cultural,” and her cognitive activities are shown in the Translog data as follows:
Two long pauses (of 36.045 seconds and one minute and forty-two seconds) and a deletion (of the word “cultural”) were recorded by *Translog* during the translator’s working process. In the retrospective interview, she explained that the long pauses were the results of her looking up the word “奇葩” in the online dictionary (Thesaurus). And the reason she gave for deleting “cultural” was “to avoid repetition and redundancy; English readers won't feel comfortable [reading it]; it reduces the readability.” (See Table 5.5.) This example serves to underline the usefulness of process data. Without them, it is impossible to begin to discover what was going on in the translator’s mind. Investigating the causes or decisions behind explicitation, in other words, requires more than a merely quantitative analysis.

Table 4.4 gives the total numbers of explicitness cases that appear in the TT sentence segments corresponding to the ST sentences in which AOIs are annotated. The explicitness level of the TT sentences in the professional group (mean value approximately twenty-four) is greater than that for the novice group (mean value approximately thirteen), indicating that the professional translators may make more explicitation choices than their novice counterparts and (in response to research question 2 [see Chapter 2]) thereby differentiating between the levels of explicitation among the professional and novice groups.
<table>
<thead>
<tr>
<th>Sentence Sequence</th>
<th>ST/TT Sentences</th>
<th>No. of Propositions in ST/TT sentence</th>
<th>No. of Explicitness Cases</th>
<th>Extra Propositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST &lt;S3&gt;</td>
<td>他□都是源□流□的□夏文明□存的文化奇葩。</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT1 &lt;S3&gt;</td>
<td>They are all remarkable cultural heritages from the long history of the Chinese civilization.</td>
<td>7</td>
<td>2</td>
<td>(REMARKABLE, HERITAGES) (BE, HERITAGES, FROM THE HISTORY)</td>
</tr>
<tr>
<td>TT2 &lt;S3&gt;</td>
<td>They are all marvels of early Chinese civilization that have survived the ages.</td>
<td>5</td>
<td>1</td>
<td>(EARLY, CIVILIZATION)</td>
</tr>
<tr>
<td>TT3 &lt;S3&gt;</td>
<td>These three cities are the fruits of the great Chinese culture.</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>TT4 &lt;S3&gt;</td>
<td>They are the cultural phenomenon of the well-established and long-standing heritage of Hwua Shia civilization.</td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>TT5 &lt;S3&gt;</td>
<td>All of them are the miraculous cultural demonstrations of the long and historical Huaxia civilization.</td>
<td>6</td>
<td>1</td>
<td>(CULTURAL, DEMONSTRATIONS)</td>
</tr>
<tr>
<td>TT6 &lt;S2.2&gt;</td>
<td>...they are widely known as gems in the long-lasting ancient Chinese civilization.</td>
<td>5</td>
<td>1</td>
<td>(ANCIENT, CIVILIZATION)</td>
</tr>
</tbody>
</table>

Table 4.3: An Example: ST and TT AOI Sentence Alignment, Proposition Annotation and Explicitness Cases
In the professional group, TT3 has the largest number of explicitness cases corresponding to the AOIs in the source text (thirty-two). In the novice group, TT6 has a significantly larger number of explicitness cases (twenty) than target texts 4 or 5 (eight and ten, respectively), even though it has the smallest number of propositions among the six TTs.

The factors determining the explicitation decisions by each participant are presented in Chapter 5 with the assistance of data obtained via Translog and from the retrospective interviews and questionnaires.

<table>
<thead>
<tr>
<th>Group</th>
<th>Text No.</th>
<th>No. of AOI-Corresponding Explicitness Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>Text 1</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Text 2</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Text 3</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>24</td>
</tr>
<tr>
<td>Novice</td>
<td>Text 4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Text 5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Text 6</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 4.4: Numbers of AOI-Corresponding Explicitness Cases per Text

4.3 Categorizing Explicitness Cases

Categorizing the AOIs and explicitness cases in TT sentences provides the foundation for systematic, in-depth comparative analyses in each category and area of interest. It also helps to test the hypothesis (number 4 in Chapter 2) that the triangulated product- and process-based data demonstrate explicitation’s occurrence not only on the micro-
(stylistic/textual) but also macro-level (text-organizational and pragmatic). As can be seen from the tables below, the propositional content analysis of sentences in the six target texts corresponding to each of the eight AOIs was carried out to examine 1) whether explicitness cases, in the form of additional propositions that are not in the source text, have occurred in the target texts; 2) to which explicitation category each case of explicitness belongs.

AOI 1 is in the opening sentence of the source text passage. The word-for-word translation of the ST sentence is as follows:

南 South/ 有 have/ 丽江 Lijiang/, 中 middle/ 有 have/ 平遥 Pingyao/, 北 North/ 有 have/ 山海关 Shanhaiguan.

The ST sentence is developed around the linguistic structure of three parallel $S+V+O$ clauses. In Chinese this parallel structure, reminiscent of the form of a popular saying, requires no cohesive links or connectors between the clauses in order to maintain conciseness and economy of expression or to achieve an aphoristic quality. The context of the verb 有 (have) implies familiarity or celebrity since the three proper nouns, 丽江 (Lijiang), 平遥(Pingyao) and 山海关(Shanhaiguan) are actually the names of three culturally and historically well known cities in China and therefore they are of considerable interest to tourists. The directions, 南 (South), 中(the middle) and 北(North) indicate the geographical location of each city. As the introductory sentence of the text, the statement serves to situate Shanhaiguan, the main topic of the text, in the context of two other nationally well-known cities, thus highlighting its historical, cultural and geographical significance. In light of these factors, it was reasonable to expect
stylistic/textual (due to the lack of cohesive links), pragmatic-cultural and pragmatic-communicative explicitations in the English translation.

From the additional propositions in each English translation listed in Table 4.5 it is apparent that pragmatic-cultural explicitness cases arise in TT1, TT3 and TT6, pragmatic-communicative explicitness in TT1 and TT6 and text-organizational explicitness in TT1, TT3 and TT6. (In responding to the issue of absent cohesive links or connectors, Participants 1 and 6 appear to have opted for a restructuring of ST<S1> and Participant 3 for a reorganization of the first two sentences.) No explicitness cases are found in TT2, TT4 and TT5. It is worth noting that Participant 1 made an adjustment to the sequence of the three cities and put Shanhaiguan in the first clause. This effectively gives primary importance to Shanhaiguan and serves the purpose of advertising the city, the principal goal of the ST. By doing so, the translator transferred the communicative function of the ST to TT in the hope of achieving the same effect on TT readers that the ST does on ST readers.

Participants 1, 3 and 6 all added the word “fortress” to “Shanhaiguan” and thereby made the meaning of the Chinese character “关” explicit. In TT3, the participant replaced “middle” with the more specific “mid-west,” suggesting the actual location of the city in China, and presumably giving readers a clearer picture of the geographical whereabouts of the three cities.

17 山 (shan, mountain), 海 (hai, sea), 关 (guan, pass or fortress). 山海关 literally means “the pass between mountain and sea.” This is a reflection of the city’s geographical location as well as of its military strategic importance in ancient China.
Table 4.5: Categories of Explicitness Cases Corresponding to AOI 1

The restructuring of the text here suggests a case of text-organizational explicitness, but it also appears to have resulted in a highlighting of the importance of Shanhaiguan and may thus indicate that a pragmatic-communicative explicitation has been implemented. Although my analysis of the product-based data allows both possibilities for now, the case underlines the importance of consulting the information generated by Translog as well as the retrospective interview in order to achieve a clearer sense of the cognitive, explicitative process that has informed this particular translation. This is especially pertinent to the comparable case of double explicitness that is apparent in TT6 for AOI 1 (see Section 5.4.7). For statistical purposes, each of these instances has been counted and recorded as one case of explicitness. By a similar token, Table 4.13 shares each case between its respective pair of categories.
AOI 2 is identified in the second sentence of the source text. A word-for-word translation is provided below:

三座 three/ 古 ancient/ 城 city/ 各 respectively/ 有 have/ 特色 feature/: 民俗 folk/ 文化 culture/, 商业 commerce/ 文化 culture/, 古代 ancient/ 军事 military/ 文化 culture.

The colon plays a structural role in the sentence by connecting the general concept “feature” with the specific examples that follow it. In addition, although there are no cohesive connectors between sentences 1 and 2, the syntactic relation between them is indicated by the content: sentence 1 introduces the three celebrated cities and sentence 2 explains why they are renowned. Therefore, stylistic/textual explicitations are expected in this sentence.

Table 4.6 shows how TT1 and TT6 demonstrate a higher level of stylistic/textual explicitness with the addition of cohesive connectors. In TT1, “in fact” is used to connect sentences 1 and 2; in TT2, sentences 2 and 3 are translated in such a way as to form one sentence and the preposition “for” is used to indicate the logical connection. There is also a case of text-organizational explicitness in TT1 as a result of the adjusted sequence of the features, which corresponds to the changed order of the three cities in the first sentence. A similar case is also found in TT3 where the participant added an introductory phrase to accompany the reordering of sentences 1 and 2. Four cases of pragmatic-communicative explicitness are apparent in TT3 and TT4 where the adjectives “distinctive” and “special,” as well as additional qualifiers of “feature” (“cultural” and “historical”), provide evidence that the translators adopted the exhortatory style of the
tour operator: not only do “distinctive” and “special” draw attention to the uniqueness of the features, all four epithets imply the superiority of the cities. TT2 and TT5 show no cases of explicitness in regard to AOI 2.

<table>
<thead>
<tr>
<th>AOI 2</th>
<th>Target Text</th>
<th>Explicitness Case (Extra Proposition)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT1</td>
<td>(BE, IT, A FACT)</td>
<td>Sequence of the cultures is altered to match the changed order of the three cities</td>
<td>Text-organizational</td>
</tr>
<tr>
<td>TT2</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT3</td>
<td>(HAVE, CHINESE CIVILIZATION, A LONG HISTORY)</td>
<td></td>
<td>Text-organizational</td>
</tr>
<tr>
<td></td>
<td>(DISTINGUISH, THREE CITIES, THEMSELVES, WITH FEATURES)</td>
<td></td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td>(CULTURAL, FEATURES)</td>
<td></td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td>(HISTORICAL, FEATURES)</td>
<td></td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td>TT4</td>
<td>(SPECIAL, FEATURES)</td>
<td></td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td>TT5</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT6</td>
<td>(BE, THEY, KNOWN, FOR A REASON)</td>
<td></td>
<td>Stylistic/Textual</td>
</tr>
</tbody>
</table>

Table 4.6: Categories of Explicitness Cases Corresponding to AOI 2

Already presented above by way of illustration, ST sentence 3 is the third AOI and its word-for-word English translation follows:

他们 they/ 都 all/ 是 be/ 源远流长的 traced back to ancient times/ 华夏 Huaxia/

文明 civilization/ 遗存 remain/ 的文化 cultural/ 奇葩 exotic flower.

The ST sentence contains a cultural-specific item, *Huaxia civilization*, a term often used in historical Chinese literature to represent Chinese civilization. “Huaxia” originally referred to the confederation of tribes who were the ancestors of the Han ethnic group, the largest such group in China. Although *Huaxia* and *Huaxia civilization* are familiar terms to Chinese readers, they may pose a challenge for those who have no knowledge of
Chinese history or who are unfamiliar with historical Chinese literature. Therefore, a simple transliteration of the name *Huaxia* would not be satisfactory for target readers, may even cause confusion, and would reduce the readability of the TT as a consequence.

It is plain from Table 4.7 that not all participants recognized the necessity of providing more background information on *Huaxia* for target readers. Participants 3, 4 and 5 all used transliteration, and no explicitations were made during the translation process. However, Participants 1, 2 and 6 translated the term as “*heritages from the history*” [sic!], “*early civilization*” or “*ancient civilization,*” respectively, thus apparently implementing the pragmatic-cultural explicitations that had been expected. Participant 1 has added the adjective “*remarkable*” to “*heritages,*” highlighting the advertising function of the text and thus producing a case of pragmatic-communicative explicitness. Another additional case of text-organizational explicitness is recognized in TT6 as a result of combining sentences 2 and 3 into a complex sentence (see Table 4.6).

<table>
<thead>
<tr>
<th>AOI 3</th>
<th>Target Text</th>
<th>Explicitness Case (Extra Proposition)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>多都是</td>
<td><strong>TT1</strong></td>
<td>(REMARKABLE, HERITAGES)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td>源远流长的</td>
<td></td>
<td>(BE, HERITAGES, FROM THE HISTORY)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td>华夏文明的</td>
<td><strong>TT2</strong></td>
<td>(EARLY, CIVILIZATION)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td>遗存的文化奇</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>萌。</td>
<td><strong>TT3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TT4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TT5</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TT6</strong></td>
<td>(BE KNOWN, THEY, WIDELY)</td>
<td>Text-organizational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ANCIENT, CIVILIZATION)</td>
<td>Pragmatic (cultural)</td>
</tr>
</tbody>
</table>

Table 4.7: Categories of Explicitness Cases Corresponding to AOI 3
AOI 4 and AOI 5 are identified in the same ST sentence, sentence 5. Due to its significant length and the fact that it includes two lines of verse, I divided the ST sentence into two AOIs. The gloss for AOI 4, the first part of the ST sentence, is as follows:


Text-organizational explicitness is expected in this sentence for a number of reasons. First of all, the two lines of verse in the second part of the ST sentence (AOI 5) require their own syntactic structure in English translation. Secondly, the absence of conjunctions in Chinese is not acceptable in English. However, by introducing conjunctions to the English translations, translators need to be on their guard against producing run-on sentences. Therefore they may be expected to reorganize the sentence structures in response to this feature of the ST sentence. Pragmatic-cultural explicitness cases are also predicted since the ST sentence contains information on the geographical location of Shanhaiguan, its architectural relation to the Great Wall, the history of the city’s construction and its military importance in the history of China.

Table 4.8 reveals how all six participants seem to have made text-organizational explicitations by translating the long single ST sentence into two or three TT sentences while also introducing additional subjects and participles. Participant 2 made some
major adjustments to the organization of the whole text. In the case of AOIs 4 and 5, the information contained in ST sentence 5 is to be found in TT sentences 9, 7 and 8. That is to say, Participant 2 broke up the ST sentence into three TT sentences and redistributed them within the target text. As a result, the order of sentences in TT2 varies from the ST sentence sequence to a large degree. There will be good reason to revisit this discussion in the triangulation of product and process data that follows below.

Pragmatic-cultural explicitness is realized in each of the six TTs as well, in response to issues pertaining to the geographical and historical background of the city. Presumably with a view to arousing TT readers’ interest in the city, TTs 1, 2, 3 and 4 highlight the strategic importance of Shanhaiguan in the military history of China and thus exhibit cases of pragmatic-communicative explicitness.

As already indicated, the two lines of verse that comprise the second part of ST sentence 5 are distinguished by their parallel structure. These may be glossed as follows:

素 long/ 有 have/ “两 two/ 京 capital/ 锁钥 strategic gateway/ 无 have no/ 双 second/ 地 place/, 万 ten thousand/ 里 19/ 长城 Great Wall/ 第一 first/ 关 pass/” 的 长 great/ 侣 fame.

Stylistic/Textual explicitness is expected in response to the absence of cohesive markers in the ST sentence segments and to the lack of any verb in the second parallel line of verse (万里长城第一关).

---

19 Li: a Chinese unit of length (= 1/2 kilometer). Although this too might call for pragmatic-cultural explicitation, all participants opted for a literal translation.
<table>
<thead>
<tr>
<th>AOI 4</th>
<th>Target Text</th>
<th>Explicitness Case (Extra Proposition)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(BE, IT, SHANHAIGUAN)</td>
<td>Text-organizational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(STRATEGIC, POINT)</td>
<td>Pragmatic (communicative)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(SITUATE, SHANHAIGUAN, AT THE FOOT OF YANSAN MOUNTAINS)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, HONGWU, THE EMPEROR)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(HAVE, SHANHAIGUAN, A PASS)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(REIGN, HONGWU)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, MING, DYNASTY)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td>TT1</td>
<td>(RUN, THE GREAT WALL, FROM NORTH TO SOUTH OF SHANHAIGUAN)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, SHANHAIGUAN, A CITY)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, MING, A DYNASTY)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, HONGWU, A PERIOD)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(STRATEGIC, BOTTLENECK)</td>
<td>Pragmatic (communicative)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ST &lt;S5&gt;—TT &lt;S9&gt;, &lt;S7&gt;</td>
<td>Text-organizational</td>
<td></td>
</tr>
<tr>
<td>TT2</td>
<td>(BE, MING A DYNASTY)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, MING DYNASTY, FROM 1368-1644)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(ENJOY, SHANHAIGUAN, A LOCATION)</td>
<td>Text-organizational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(STRATEGIC, LOCATION)</td>
<td>Pragmatic (communicative)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MILITARY, LOCATION)</td>
<td>Pragmatic (communicative)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(UNIQUE, LOCATION)</td>
<td>Pragmatic (communicative)</td>
<td></td>
</tr>
<tr>
<td>TT3</td>
<td>(BE, SHANHAIGUAN, NEAR YIAN MOUNTAIN, BO SEA)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(VITAL, PASSAGE)</td>
<td>Pragmatic (communicative)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, MING, A DYNASTY)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(OF SHANHAIGUAN, THE CONSTRUCTION)</td>
<td>Text-organizational</td>
<td></td>
</tr>
<tr>
<td>TT4</td>
<td>(SIT, SHANHAIGUAN, GEOGRAPHICALLY)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(GEOGRAPHICAL, ENTRANCE POINT)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, MING, DYNASTY)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, IT, SHANHAIGUAN)</td>
<td>Text-organizational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE BUILT, SHANHAIGUAN)</td>
<td>Text-organizational</td>
<td></td>
</tr>
<tr>
<td>TT5</td>
<td>(BE, HONGWU EMPEROR)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, HONGWU, DURING MING DYNASTY)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(PASS THROUGH, THE GREAT WALL)</td>
<td>Pragmatic (cultural)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(BE, THE FORTRESS, SHANHAIGUAN)</td>
<td>Text-organizational</td>
<td></td>
</tr>
<tr>
<td>TT6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.8: Categories of Explicitness Cases Corresponding to AOI 4
Pragmatic-cultural explicitness is similarly anticipated since the “two capital[s]” (Shenyang and Beijing) in the verse couplet are not specified in the ST.

In spite of expectations to the contrary, four of the six target texts (1, 2, 4 and 5) show no evidence of stylistic/textual explicitness since the participants chose to use two noun phrases to translate the lines of verse. In TT3, on the other hand, “This unique strategic location [of Shanhaiguan]” is presented as the subject introducing the new sentence as well as the connector linking it with the previous one. In TT6, stylistic/textual explicitness is achieved in similar fashion, by means of the verb “regard.” Two pragmatic-cultural explicitness cases explaining “two capitals” are found in TT3 and TT5, while the other four TTs show no signs of such implementation. TTs 2, 3, 4, 5 and 6 contain a number of cases of pragmatic-communicative explicitness, emphasizing once again the military importance of the location of Shanhaiguan.

AOI 6 is drawn from ST sentence 7 which may be rendered by the following word-for-word translation:

其境内 within its border/ 长城 Great Wall/ 遗存 remain/ 众多 numerous/ 且 in addition/ 保存 preserve/ 良好 well/ 、结构 construction/ 严谨 rigorous/ 、规模 scale/ 宏大 grand/， 山海关 Shanhaiguan/ 长城 Great Wall/ 在 at/ 万里 ten thousand li/ 长城 Great Wall/ 中 among/ 的地位 status/ 无可替代 irreplaceable.

Since the sentence is distinguished by several four-character expressions that are used in a parallel form and by the fact that there is no connector between the two clauses, stylistic/textual as well as text-organizational explicitations are expected in participants’ translations here.
<table>
<thead>
<tr>
<th>AOI 5</th>
<th>Target Text</th>
<th>Explicitness Case (Extra Proposition)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT1</td>
<td>None</td>
<td>ST &lt;S5&gt;—TT &lt;S8&gt;</td>
<td>Text-organizational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(HAVE, PLACE, IMPORTANCE)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(MILITARY, IMPORTANCE)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(GREAT, MILITARY)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td>TT2</td>
<td></td>
<td>(BE, SHANHAIGUAN CITY, A STRATEGIC LOCATION)</td>
<td>Stylistic/Textual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BE, THE LOCATION, UNIQUE, IN GEOGRAPHY)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BE, SHENYANG AND BEIJING, THE TWO CITIES)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BE, TWO CITIES, IN NORTHERN CHINA)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BE, THE TWO CITIES, STRATEGICALLY IMPORTANT)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td>TT3</td>
<td></td>
<td>(MAJOR, TWO CAPITALS)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(THE MOST, CRITICAL)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BE LIKE, NONE, IT, GEOGRAPHICALLY)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(HAVE, CHINA, TWO CAPITALS)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td>TT4</td>
<td></td>
<td>(BE, THERE, NO WONDER)</td>
<td>Stylistic/Textual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BE REGARDED, IT, AS THE KEY)</td>
<td>Stylistic/Textual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(THE MOST IMPORTANT, FORTRESS)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td>TT5</td>
<td></td>
<td>(BE, SHANHAIGUAN, A FORTRESS)</td>
<td>Pragmatic (cultural)</td>
</tr>
</tbody>
</table>

Table 4.9: Categories of Explicitness Cases Corresponding to AOI 5
Surprisingly, Table 4.10 reveals only two cases of text-organizational explicitness, in TT2 and TT3, and one case of pragmatic-communicative explicitness, in TT3. The other four participants made no explicitation choices.

AOI 7 is from ST <S8>, another sentence of significant length with a complex syntactic structure. It may be glossed in the following manner:

<table>
<thead>
<tr>
<th>AOI 6</th>
<th>Target Text</th>
<th>Explicitness Case (Extra Proposition)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(CAN, BE OBSERVED, CONSTRUCTION)</td>
<td>Text-organizational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(MAKE, THE CONSTRUCTION, SHANHAIGUAN CITY A GATEWAY)</td>
<td>Text-organizational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BE, GATEWAY, STRATEGIC)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.10: Categories of Explicitness Cases Corresponding to AOI 6
This passage can be broken up into two sentences, one parallel to the other, but conjunctions are needed in the English translation. Long subjects containing adjective and participial phrases make the translation more challenging. As in the case of AOI 4, the introduction of conjunctions for the purposes of cohesion runs the same risk of producing run-on sentences in the target language. Therefore, it seems reasonable to expect cases of text-organizational explicitness in the target texts. Similarly, word choices such as 奇妙(fantastic), 奇迹(miracle), 独一无二(unique) and 最精髓的(most quintessential) reflect the advertising purpose of the source text and lead one to expect further pragmatic-communicative explicitation. Moreover, since the name Shanhaiguan reflects the city’s physical geographical features by combining the mountain (shan), the sea (hai) and the pass (guan), this may require pragmatic-cultural explicitation.

Table 4.11 shows text-organizational explicitness in TTs 1, 2 and 4. Participant 1 combined the second part of ST sentence 7 with sentence 8 and used the conjunction “because” to connect the two. Participant 4 adopted a similar strategy by connecting ST sentences 7 and 8 with the same conjunction. TT2 shows the rearrangement of sentences from ST sentence 8 to TT sentences 10 and 6 and exhibits two instances of stylistic/textual explicitness with the addition of the two phrases, “between them” and “in a marriage of elements.” The expected pragmatic-cultural explicitness concerning the name of the city of Shanhaiguan is apparent in TT1 and TT2, and another case of cultural explicitness is found in TT4 where the translator added an extra word, “purpose,” in translating “军事防御” (military defense). I have categorized this as cultural explicitness.
for now but suspect it is in fact a redundant word choice, a result of the participant’s lack of translation experience. It will be tested against the process data to find out the actual cause. Participant 5 explicitated “the well-known expert” as “one of the most famous experts.” A possible explanation is that she is endeavoring to persuade target readers of the importance of Shanhaiguan as it has been recognized and highly praised by various cultural authorities. TTs 3 and 6, finally, have no explicitness cases.

The gloss for the last area of interest (AOI 8) is as follows:

与 about/ 长城 Great Wall/ 相关的 relevant/ 文化 cultural/ 遗存 heritage/ 丰富 abundant/，其中 among/ 孟姜女 Lady Mengjiang/ 故事 story/ 留传 spread/ 广泛 widely/，妇孺皆知 universally well-known.

From ST sentence 9, AOI 8 is expected to prompt mainly pragmatic-cultural explicitation. “Lady Mengjiang,” a folk tale about the Great Wall, is a household name in China. However, target readers who are not familiar with Chinese folk culture would consider it strange and difficult to understand.

The three professional translators (Participants 1, 2 and 3) all appear to have made pragmatic-cultural explicitation choices by providing the cultural background of the folk tale at some length. However, such implementation could not be found in TTs 4, 5 and 6, the novice group. TT6 does register five cases of explicitness, but they all focus on the communicative function of the text. No further information about the folk tale is provided.
### Table 4.11: Categories of Explicitness Cases Corresponding to AOI 7

20 The three cases of pragmatic-cultural explicitness accomplished by both participants 1 and 2 are each counted as the result of one explicitation performed in a single operation.
<table>
<thead>
<tr>
<th>AOI 8</th>
<th>Target Text</th>
<th>Explicitness Case (Extra Proposition)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT1</td>
<td></td>
<td>(TAKE PLACE, LEGEND, 550 B.C.)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(COLLAPSE, TEARS, THE GREAT WALL)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(LADY MENGJIANG’S, TEARS, OVER THE DEATH)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(DIE, MENGJIANG’S HUSBAND)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td>TT2</td>
<td></td>
<td>(BE, LADY MENGJIANG, THE LEGEND)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(CONSCRIPT, MENGJIANG’S HUSBAND)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(HELP BUILD, HUSBAND, THE GREAT WALL)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(DIE, HUSBAND, WORKING)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BE BURIED, HUSBAND, UNDER THE WALL)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td>TT3</td>
<td></td>
<td>(AMAZE, YOU, BY THE RELICS AND STORIES)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(HISTORICAL, RELICS)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(MOVING, STORIES)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BEAUTIFUL, STORIES)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(TRAVEL, YOU, IN SHANHAIGUAN CITY)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BE, MENGJIANGNU, NEWLY WEDDED)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CRY, MENGJIANGNU, FOR HER HUSBAND)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(MOURN, MENGJIANGNU, FOR HER HUSBAND)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HUSBAND, IN THE CONSTRUCTION OF GREAT WALL)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(COLLAPSE, THE WALLS, IN HER CRYING AND MOURNING)</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td>TT4</td>
<td></td>
<td>None</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td>TT5</td>
<td></td>
<td>None</td>
<td>Pragmatic (cultural)</td>
</tr>
<tr>
<td>TT6</td>
<td></td>
<td>(BE, SHANHAIGUAN, SITE)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WORLD CULTURAL HERITAGE, SITE)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(HISTORICAL, TOWN)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(CULTURAL, TOWN)</td>
<td>Pragmatic (communicative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BE, THE LEGEND, ONE OF THE STORIES)</td>
<td>Pragmatic (communicative)</td>
</tr>
</tbody>
</table>

Table 4.12: Categories of Explicitness Cases Corresponding to AOI 8
4.4 Analyzing the AOI Corresponding Explicitness Cases

It was hypothesized in Chapter 2 that explicitation occurs not only on the micro- (linguistic and stylistic/textual) but also macro-level (text-organizational and pragmatic). In order to begin to verify this hypothesis, a comparative analysis of the explicitness cases for each category was carried out between the professional and novice groups. Shown in Table 4.13 below, the numbers of explicitness cases for every category in each TT were registered and the total numbers at the macro- and micro-levels in each group were calculated. The data displayed in the table lead to the general conclusion that explicitation may occur on both the micro- and macro-levels, thereby verifying the cited hypothesis. Furthermore, the target texts show a higher degree of explicitness on the macro-level than they do on the micro-level. As shown in Table 4.13, both the professional and novice group reveal a significant difference between the micro- and macro-level. The professional group has sixty-nine explicitness cases on the macro-level, but only four on the micro-level (a ratio of about seventeen to one). The novice group, by comparison, shows thirty-five explicitness cases on the macro-level, whereas only three cases are identified on the micro-level (a ratio of approximately twelve to one). This leads to the conclusion that on the macro-level professional translators tend to make more explicitation choices than do novice translators. Further confirmation of this tendency will be found in the summary statistical analyses in Chapter 5 (see Section 5.4.8, Figure 5.5).
<table>
<thead>
<tr>
<th>Group</th>
<th>Text</th>
<th>Explicitness Cases at Micro-level</th>
<th>Explicitness Cases at Macro-level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Stylistic/Textual</td>
<td>Text-organizational</td>
</tr>
<tr>
<td></td>
<td>TT1</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>TT2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>TT3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Sub-total</td>
<td>4</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>TT4</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TT5</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TT6</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Sub-total</td>
<td>3</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3</td>
<td>35</td>
</tr>
</tbody>
</table>

**Table 4.13: Numbers of Explicitness Cases on Micro- and Macro-Levels**

21 Regarding the totals that include “.5,” see footnote 1 above.
While all three participants in the professional group appear to emphasize pragmatic-cultural explicitation, TT3 shows a significantly higher number of pragmatic-communicative explicitness cases when compared with TT1 and TT2. This finding indicates that Participant 3 paid more attention to the situation and purpose of the translation. However, whether or not this was a successful strategy that increased the readability of the target text needs to be tested against the target readers’ ratings of the TTs. Although no further significant differences are apparent with regard to other categories of explicitation within the professional group, I would draw attention to the case of TT2, which represents a most unusual instance of extensive text reorganization. On the one hand, the translator has apparently expended considerable cognitive effort in the total rearrangement of the middle sentences of the source text. On the other, since this has been achieved with the minimal production of additional propositions in the sentences or sentence segments corresponding to the AOIs, the given total of four text-organizational explicitness cases should be read with circumspection. This outcome demonstrates once again the limitations of pursuing a merely quantitative, product-based analysis as well as the concomitant need to analyze data gathered during the process of translation. Chapter 5 endeavors to respond to this need.

In the novice group, TT6 shows a higher degree of pragmatic-communicative explicitness than TT4 and TT5, due possibly to the same strategy adopted in TT3. Finally, the category of stylistic/textual explicitation reveals another notable difference. Whereas three cases of stylistic/textual explicitness are to be found in TT6, there are none in TT4 or TT5. Again, the effect on target readers of these varying degrees of explicitness at the
micro- and macro-levels as well as in each explicitation category should be examined through the readability test that was conducted on the TTs. This analysis, too, will be undertaken in the next chapter.
CHAPTER 5: Triangulating Product- and Process-Based Data

The data of the translation process were solicited at all three stages of the translation task: the data of source text processing in the pre-writing stage, the Translog data and direct observations made during the writing process and the data of retrospective interviews, questionnaires and editing activities completed during the post-writing stage. Some sources of the data (the questionnaires, for example) were used at different stages of the process. Data from each stage of the translation task are presented in detail in the following sections. This chapter also includes the association of the readability ratings with the level of explicitness of TTs that was analyzed in Chapter 4.

5.1 Data of Source Text Processing

The data of source text processing were collected from: 1) the notes and markups that participants had made in the source text, either electronically or in a hard copy (the participants had been asked to submit their copy of the ST when they met with me for the experiment); 2) questions 1 to 3 in the questionnaires that the participants filled out after they had finished drafting the translation.

In the table below, the numbers of occurrences that describe each participant’s ST
processing activities corresponding to the AOIs are listed. These include the underlining or highlighting of words or sentences, notes, numbers and punctuation marks.

<table>
<thead>
<tr>
<th>AOI</th>
<th>Participant 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>1</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td></td>
<td>1</td>
<td>3</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Total occurrences</td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>17</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

*Table 5.1: Occurrences of ST AOI Processing Activities per Participant*

The occurrences of each participant’s ST processing activities corresponding to the AOIs were tested against the data from the questionnaires (questions 1 to 3). The three questions in relation to the ST processing are, respectively, about: 1) the amount of time the participant spent on this in comparison to the other stages in the process; 2) whether they made notes when processing the ST; and 3) the degree to which the notes helped in the production of the TT (see Figure 5.2: Questionnaire on the Translation Process). The results of the questionnaires (questions 1 to 3) are listed in the following table in combination with the number of ST processing occurrences.
<table>
<thead>
<tr>
<th></th>
<th>Participant 1</th>
<th>Participant 2</th>
<th>Participant 3</th>
<th>Participant 4</th>
<th>Participant 5</th>
<th>Participant 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of Occurrences</strong></td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>17</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Question 1</td>
<td>The least</td>
<td>Moderate</td>
<td>The most</td>
<td>The most</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Question 2</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Question 3</td>
<td>Somewhat</td>
<td>Somewhat</td>
<td>A lot</td>
<td>Somewhat</td>
<td>Somewhat</td>
<td>Moderately</td>
</tr>
</tbody>
</table>

**Table 5.2: ST Processing Data: Occurrence of Activities and Questionnaire Results**

As the above table indicates, all six participants made notes and marks in the source text to various degrees. It is worth noting that Participant 3 from the professional group expended much effort on ST processing, although the number of his ST processing activity occurrences is relatively small. His copy of the source text (electronic version) provides details of ST processing including the highlighting of specific words and expressions (三座古城 three ancient cities, 奇葩 exotic flower, 孟姜女 Lady Mengjiang and 非物质文化遗产 Intangible Cultural Heritage) and lengthy notes on the background of the construction history of Shanhaiguan, the “two capitals,” and the legend of Lady Mengjiang as well. He also paraphrased the two lines of verse in vernacular Chinese, presumably in order to make the task of translation easier. The note on the “Intangible Cultural Heritage” suggests that he did some research and formulated some thoughts about the translation of the term. This activity is in keeping with his response to the questionnaire where he indicates that the preparation he made in processing the ST greatly helped with drafting the translation. Participant 4 also rated ST processing as the one taking most of her time toward the completion of the translation task and found the
notes she made “somewhat” helpful in the drafting process. Her responses to the
questionnaire correspond to the number of occurrences of ST processing activities which
is higher than in the case of the other participants. Participants 2, 5 and 6 spent a
moderate amount of time in processing the ST and considered the notes “somewhat” or
“moderately” helpful during the drafting. Participant 1 is the only one who reported
spending “the least” amount of time on ST processing, and he made very few notes on
the source text.

In order to determine whether explicitation has been implemented, the data from ST
processing will be used below as a supplement to the triangulation of product-based,
which is to say the AOI-corresponding explicitness cases in the TT, and process-based
data, which include the Translog file, retrospective interviews and questionnaires (see
Section 5.4). If the participant spent extra effort in processing some specific areas in the
ST, it is fair to assume a greater likelihood that corresponding extra cognitive activities
occurred in these during the drafting process; if, in turn, this assumption is verified by
both the Translog data and retrospections or by the Translog data alone, and if the cases
of explicitness were produced in the same areas, then the association would indicate that
these were indeed the result of explicitations or conscious decisions made by the
translator. On the other hand, one should also admit the alternative possibility that
Translog verification is not forthcoming and that there is no evidence in the process data
of extra cognitive effort having been made in the said areas during the drafting process.

In such instances the data from ST processing and their triangulation with the
corresponding cases of explicitness become especially crucial since the pre-writing
activities on the ST may (or may not) be of sufficient quality as to render further extensive cognitive activity during the drafting process redundant: that is to say, the participant’s preparations may have been so extensive that writing the translation itself requires little or nothing in the way of extra cognitive effort. Participant 3, for example, who, as Table 5.2 shows, spent more of her time on ST processing than on actual writing or revision and considered the notes that she kept to be “a lot” of help in production of the target text, may be an interesting case in point here.

5.2 Gathering and Selecting Data via Translog and Retrospective Interviews in the Writing and Post-Writing Processes

Data in the translation drafting process were gathered from Translog and supplemented with the researcher’s own direct observations of the participants’ drafting activities. Translog was used to record the keyboard activities and the precise times at which these occurred during the writing and revision process. All the keyboard activities and mouse movements are stored in the log files generated by Translog separately. I also acted as an observer to register the participant’s other activities, such as looking up words or consulting resources online. Both the Translog and direct observation data are presented in detail below.

Each participant’s drafting activities were registered and recorded by Translog and presented in the log file generated by Translog Supervisor in the form of linear sequences. The symbols used in Translog to represent the translator’s keyboard activities are shown
As noted in Chapter 3, *Translog* registers the time delays (pauses) in the text production process and allows the user to select any time value between 0.01 and 99.99 seconds for the display of time delays. Since the current study focuses on time delays at the macro-level, such as in words, sentences or paragraphs, rather than the short delays within words, the time value was set at 1.00 second for the linear presentation of the data. This means that delays shorter than 1.00 second are not recorded in the data. Each pause unit is represented by a red asterisk, as seen in Figure 5.1. When the delay is ten seconds or longer and requires more than ten asterisks, it is shown instead as one asterisk followed by the numerical presentation of the time in square parentheses (e.g. \[\ast 45.372\])

For the purposes of this study I focused on delays of longer than ten seconds and interviewed the participants accordingly, rather than asking about every delay that had been registered during the drafting process. In keeping with the same pattern, deletions of letters with a view to correcting spelling were not considered in the interviews and data analysis. I examined only those deletions made at word, clause or sentence level and
interviewed the participants who exhibited these data with a particular view to investigating their cognitive processes. Other activities, such as “copy”, “cut”, “paste,” as well as mouse movement represented by the arrow keys, were examined and served similarly as indicators for the retrospective interviews.

After the participant had announced his/her completion of the translation draft in the Translog Writer working window, I saved the project file and reopened it in the Translog Supervisor window, where both the linear presentation of the process data and the dynamic replay of the entire working process can be conducted. (cf. Figure 3.1). The participant and I looked together at the Translog Supervisor window where the log file was shown on the right and the dynamic replay could be followed on the left. A retrospective interview was conducted with each participant as we reviewed Translog’s linear representation of the entire text production process from the beginning to the end.

An example of the log file review and retrospective interview may be helpful at this point:

```
[Start] * [0] * * * * * * * [1] * * * * * [0] * * * * * * Li * 
[1] * * * [0] * jing * chang * * * in * the * South, * Pingyao * * * 
** in the *** middle, ** Shanhaiqian * in * the * North **.[45.372] [13] P
* ass * * * * * * in [17] * * * * * * * [14] * [43] *[Paste: Shanhaiqian Pass in the 
North] * * * [59.353] [31] The * * * [15] * * * [14] * * * [1] * is * ofte
n * mentioned * in * on * par * with * * * [22] * and * * [24] * * * 
* * * * * * * * * * * between.
```

This is the representation of Translog data on Participant 1’s process of translating the first sentence of the source text. It shows two long pauses (one of about forty-five
seconds and the other of about fifty-nine seconds), one deletion at word level and one copy and paste accompanied by mouse movements. After identifying those keyboard activities that entailed a significant amount of cognitive effort, I interviewed the participant by asking him questions, such as: “Why did you pause at this point for forty-five seconds?” “What was going on in your mind?” or “What made you delete this word?” In order to assist his recollection of his cognitive activities, in the Translog Supervisor window I replayed his working process for the time that my interview questions concerned. Then, in an Excel file and in the format shown below, I recorded his retrospective comments in response to questions on each of the keyboard activities that suggested substantial cognitive effort:

<table>
<thead>
<tr>
<th>Mouse clicks, cut &amp; paste (02:34)</th>
<th>“Move Shanhai Pass before Lijiang and Pingyao so as to be consistent with the English linguistic habit (i.e., North and South as opposed to South and North in Chinese)”</th>
</tr>
</thead>
</table>

“02:34” is two minutes and thirty-four seconds, the time since the participant clicked “Start” in the Translog Writer working window and began the logging. At this point, he cut the text “Shanhaiguan Pass in the North” and pasted it before the word “Lijiang.” There was one mouse click (\[8-43\]) before the paste and one after the paste (\[831\]).22 The participant explained that he first translated the three cities and their locations (Lijiang in the South, Pingyao in the middle and Shanhaiguan in the North) in the sequence given in the ST. Recognizing, however, that the Chinese linguistic habit of expressing directions in the order of South then North differs from the customary English

---

22 The numbers that follow the mouse-click symbol indicate how many keystroke spaces the cursor has either advanced (here, “31”) or moved back (here, “-43”).
order of North then South, he decided to move “Shanhaiguan” before “Lijiang” in order to adapt to the English linguistic norm.

In this manner, the results from the retrospective interviews with the participant are combined with the Translog data in the log files. Due to the large amount of data produced during the writing and post-writing processes and in order to achieve economy in the data analysis, I chose to focus only on those data that appeared in the text segments corresponding to the AOIs in the ST. (See Tables 5.4 to 5.9.) By doing so, I hoped to organize the process data in a more systematic way for the purposes of their triangulation, in Section 5.4, with the product-based data.

5.3 Results from the Questionnaires

Insofar as they complement the Translog-generated data and the retrospection reports, the questionnaires (see Figure 5.2) that participants completed after the retrospective interviews constitute another important component in the triangulation analysis. The results of questionnaires are given in Table 5.3. The results of questions 1-3 are omitted here since they are exclusively related to ST processing and have already been presented in Section 5.1.

As far as the translation brief is concerned, Participants 1, 2 and 6 reported that it helped them “a lot” and guided them through the translation production process. The other participants, 3, 4 and 5, responded that the brief was “somewhat” useful. This indicates that Participants 1, 2 and 6 considered the purpose and situation of the translation task, as
described in the translation brief to a higher degree than Participants 3, 4 and 5. Hence
the brief may play a role in the overall text planning and translation strategy as well as
the explicitation decision-making itself. In fact, during the retrospective interviews,
Participant 2 made it plain that she refrained from adding too much historical background
information because the text, as outlined in the brief, was intended for tourists and not
history students. Participant 4 made a similar observation, noting that too much
historical information might distract readers from the text’s main purpose: namely, to
serve the promotional agenda of the tourist bureau in Qinhuangdao (see Section 3.4.2).
The responses to Questions 5 and 6 reveal that for four participants (2, 3, 5 and 6) TT
readability is of greater importance than ST fidelity as a general orientation to target text
production. Participants 1 and 4 consider ST fidelity and TT readability equally important,
but give the latter 90% and 50%, respectively. All participants reported having given
significant consideration (Participants 1 to 5: “a lot;” Participant 6: “moderately”) to the
acceptability of the target texts among the target readers. This indicates that their overall
translation strategy tended to be more target-reader-oriented than source-text-oriented.
Question 11, a sort of corollary to questions 5 and 6, was specifically intended to
investigate the translators’ cognitive process during the implementation of explicitation.
The participants were required not only to confirm whether or not they spent extra time
on providing supplementary information where they thought this was necessary, but also
explain the reasons and strategies or procedures associated with these additions.
Participants 1, 2, 3 and 6 furnished such confirmation together with rationales for their
efforts, which have been integrated into the analysis of the triangulated data in Section
5.4 below. Participants 4 and 5, on the other hand, reported that they had not made any additional cognitive effort. The responses to Questions 5, 6 and 11, when combined with the cases of explicitness in the TTs, with the Translog data and the retrospection reports, provide a further potential resource for uncovering the causes of explicitation operations during the translation process.

Question 7 regards the participants’ reckoning of the usefulness of seeking out resources online or offline during the translation process. 84% of the participants found that these helped “a lot.” Only Participant 6 reported that such research was of “little” use in his translation. This question was intended to complement the Translog data, and especially to provide an explanation for some of the long pauses registered there.

Questions 8, 9 and 10 are specifically about the revision stage, another important part of the translation process. All six participants reported having made revisions to the translated text and, while doing so, five of them had regard for all three of the factors listed: semantic relations, textual consistency and acceptability to the target audience. Participant 2 offered “thematic consistency” as an additional factor that she had considered during her revision. This begins to account for some of the major adjustments that she made to the sentence sequence in the TT, reorganizing sentences around a given theme, and for the considerable amount of time that she devoted to the translation revision. Only Participant 4 appears not to have considered the target readers’ acceptance of the TT in her revision; and she is alone as well in finding no more than minimal satisfaction in what changes she did make to her text during the translation process, the other participants being “moderately” pleased or well satisfied with their revisions. These
data could be associated with the lower level of explicitness of her translated text as shown in Chapter 4 (Table 4.4). The legitimacy of this and other similar projections above will be tested in the triangulation analysis that follows directly.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rank the amount of time you spent on the following processes:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1. the most,  2. moderately,  3. the least)</td>
</tr>
<tr>
<td></td>
<td>source text processing</td>
</tr>
<tr>
<td></td>
<td>translating/writing</td>
</tr>
<tr>
<td></td>
<td>target text revising</td>
</tr>
<tr>
<td>2. Did you take some notes (electronically or on paper) while reading the source text?</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>If yes, go to Question 3.</td>
</tr>
<tr>
<td></td>
<td>If no, go directly to Question 4.</td>
</tr>
<tr>
<td>3. How much did the notes help you with producing the target text?</td>
<td>Not at all</td>
</tr>
<tr>
<td>4. How much did the “translation brief” guide your translation production?</td>
<td>Not at all</td>
</tr>
<tr>
<td>5. What was your orientation in the translation production? Please indicate the percentage of each (total may be more than 100%):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>source text fidelity ___%</td>
</tr>
<tr>
<td></td>
<td>target text readability ___%</td>
</tr>
<tr>
<td>6. To what extent did you consider the acceptability of the translated text among the target readers in the process of your translation production?</td>
<td>Not at all</td>
</tr>
<tr>
<td>7. How much did the online or offline resources help you with your translation production?</td>
<td>Not at all</td>
</tr>
<tr>
<td>8. Did you make any revisions to your translated text?</td>
<td>Yes</td>
</tr>
<tr>
<td>9. If yes, what were your considerations when you made changes?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>semantic relations</td>
</tr>
<tr>
<td></td>
<td>all of the above</td>
</tr>
<tr>
<td>10. How satisfied are you with the appropriateness of the changes you made during your translation production or revision?</td>
<td>Not at all</td>
</tr>
<tr>
<td>11. Did you spend extra time explaining what you think is not plainly stated in the source text?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

23 These may refer to both the adjustments that were accomplished as part of the on-site writing process and, in the case of Participants 1 and 3, the revision that was made as part of the post-writing phase (see Section 3.4.3.3).
Figure 5.2: Questionnaire on the Translation Process
<table>
<thead>
<tr>
<th>Participan t Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>A lot</td>
<td>A lot</td>
<td>Somewhat</td>
<td>Somewhat</td>
<td>Somewhat</td>
<td>A lot</td>
</tr>
<tr>
<td>5</td>
<td>ST fidelity</td>
<td>TT</td>
<td>TT</td>
<td>ST fidelity</td>
<td>TT</td>
<td>TT</td>
</tr>
<tr>
<td></td>
<td>90%</td>
<td>readability</td>
<td>readability</td>
<td>90%</td>
<td>readability</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>TT</td>
<td>readability</td>
<td>TT</td>
<td>50%</td>
<td>TT</td>
<td>50%</td>
</tr>
<tr>
<td>6</td>
<td>A lot</td>
<td>A lot</td>
<td>A lot</td>
<td>A lot</td>
<td>A lot</td>
<td>Moderately</td>
</tr>
<tr>
<td>7</td>
<td>A lot</td>
<td>A lot</td>
<td>A lot</td>
<td>A lot</td>
<td>A lot</td>
<td>A little</td>
</tr>
<tr>
<td>8</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>9</td>
<td>All</td>
<td>All and thematic consistency</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>10</td>
<td>Moderately</td>
<td>A lot</td>
<td>A lot</td>
<td>A little</td>
<td>Moderately</td>
<td>A lot</td>
</tr>
<tr>
<td>11</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 5.3: Results of Questionnaire
5.4 Triangulating Process- and Product-Based Data

5.4.1 Procedures

In this section, I triangulate data gathered from the translation process, including ST processing, Translog files, my own observation of the participants during the drafting process, retrospective interviews and questionnaires, with product data, or the explicitness cases corresponding to AOIs that were identified in Chapter 4. Using as my starting-point the tables below, which display the Translog data combined with retrospections corresponding to the eight AOIs for each participant, I approach the data triangulation in accordance with the following general procedural guideline:

1) Offer a brief preliminary description of each participant’s approach to the process of translation, including considerations such as: the quality of preparation; general tendencies of the participant’s cognitive activities; whether any major adjustments or revisions were made; the use and frequency of use of on- and offline resources during the drafting process; whether the participant was source-text- or target-reader-oriented; and to what degree the source text processing and preparation helped the translator with the translation.

2) Analyze quantitatively and qualitatively whether the explicitness cases corresponding to the AOIs in each TT may be associated with the participant’s cognitive activities recorded via Translog and his/her retrospective reports. That is
to say: determine a) whether a translator’s cognitive activity, for example a longer pause, resulted in an extra proposition that constitutes an explicitness case in the target text; and b) whether the retrospective comments that the translator made about his/her mental process at that point match the explicitness case in the TT.

Given the variety of available data sources, this second step is likely to prompt several different types of outcome. Four in particular emerge from the individual participant analyses below:

a) Explicitness cases that are found to be supported by both the Translog data and the retrospective report will of course lend themselves most easily to the claim that explicitation has indeed taken place.

b) There will be cases as well where the Translog data are not corroborated by reports from the retrospective interviews. The conclusion in such instances will be essentially the same as that for the first category: the association of an explicitness case with the Translog-generated evidence that cognitive effort has been expended indicates that an explicitation has been implemented. However, there will also be good reason here to consider the possibility that the translator (especially if a novice), having made the necessary cognitive effort to achieve explicitness, is incapable of articulating the explicitation process that preceded it. (Cf. hypothesis number 6, presented in Chapter 2.) In the absence of corroborative evidence from the retrospective reports, appeal will also be made, where possible, to other sources of process data in order further to justify the assertion that an explicitation has been implemented.
c) These supplementary sources of data will of course be all the more indispensable if any claim whatsoever of explicitation is to be made for those cases of explicitness that are not verified in the Translog data or, by extension, in the retrospective reports.

d) More common than this third category are instances of a fourth that also emerges from the triangulation of process- and product-based data. I have reference to those Translog-generated data which indicate that significant cognitive activities has taken place but has neither led to the implementation of an explicitation nor resulted in a case of explicitness.

These four categories will serve as a basis for the general statistical summary that follows the individual participant analyses.

5.4.2 Triangulation Analysis of Process- and Product-Based Data for Participant 1

Participant 1 emphasizes both fidelity to the ST and the readability and acceptability of the TT by the target audience. He also gives consideration to the situation and goal of the translation with the help of the translation brief and tries to maintain the promotional purpose of the text. As shown in Table 5.4, Participant 1’s drafting process entails twenty considerable pauses, seven deletions and one cut and paste accompanied by mouse movements at the beginning of the drafting process. With reference to the AOI-corresponding explicitness cases (see Table 4.5-4.11), twelve out of the twenty explicitness cases are associated with both the Translog data and retrospective reports.
<table>
<thead>
<tr>
<th>AOI</th>
<th>Translog Data and Retrospections</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="https://example.com/image1" alt="Image" /></td>
</tr>
</tbody>
</table>

“Move Shanhaiguan Pass before Lijiang and Pingyao so as to be consistent with the English linguistic habit (i.e., North and South as opposed to South and North in Chinese).”

“Thinking about rewriting the sentence by removing the quotation marks and changing it into an indirect quote.”

“Put Shanhaiguan in the beginning of the article to highlight the subject.”

| 2   | ![Image](https://example.com/image2) |

“Make sure the listed characteristics of each place match the changed order. (See cut and paste for AOI 1).”

“Change the word "folklore" to "folk" to correct the mistake of narrowing民俗 to folk literature (i.e., folk culture).”

| 3   | ![Image](https://example.com/image3) |

They are all cultural heritages of Chinese civilization. From the long history...
No retrospection

<table>
<thead>
<tr>
<th>long pause (13:45.8)</th>
<th>“Look up ‘依山傍水’ in dictionary.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pause (17:14.4)</td>
<td>“Look up ‘渤海’ to see if the dictionary's translation is Bo Sea or Bohai Sea.”</td>
</tr>
<tr>
<td>long pause (18:17.7)</td>
<td>“Look up ‘燕山’ in the dictionary.”</td>
</tr>
</tbody>
</table>
| deletion (23:04)    | “Consider adding the word ‘Emperor’ after the reign title ‘Hongwu’ for English readers’ interest (since the Ming dynasty the emperor’s title had
been the same as his reign’s title; so, I can simply add ‘Emperor’ to the reign title to attract the foreign readers.”

“syntactic reconstruction of ‘素有... 盛誉.’”

“Look up ‘无双’ in dictionary and thinking about the best English word choice among ‘only,’ ‘sole,’ ‘unparalleled’ and ‘unmatched’ to translate ‘无双地;’ the final decision is to use a simple and natural modifier (‘only’) for the word ‘key’ (‘锁钥’) for English readers and change the original Chinese simile (‘锁钥-地’) to the direct metaphor of ‘key’ but maintain the Chinese poetic parallelism in my English translation in terms of number of words.”

“Consider translating ‘两京’ as ‘two’ or ‘twin capitals’ and decide to use ‘twin’ to remind English readers of ‘The Tale of Twin Cities.’”

“Syntactic planning of the sentence ‘其境内... 保存良好.’”

“Syntactic planning how to incorporate ‘结构严谨、规模宏大’ into the
<table>
<thead>
<tr>
<th>Time (sec)</th>
<th>Action</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(37:45.3)</td>
<td></td>
<td>complex sentence.”</td>
</tr>
<tr>
<td>(38:47.8)</td>
<td>long pause</td>
<td>“Look up ‘严谨’ in the dictionary.”</td>
</tr>
<tr>
<td>(40:20.5)</td>
<td>deletion</td>
<td>“Delete ‘grand’ and insert it in front of ‘structure,’ so as to combine two four-character phrases into one English expression with two adjectives for the purpose of readability.”</td>
</tr>
<tr>
<td>(40:45)</td>
<td>long pause</td>
<td>“Thinking how to translate ‘无可替代.’”</td>
</tr>
<tr>
<td>Action/Correction</td>
<td>Text</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>deletion (47:12.4)</td>
<td>“Change ‘， which’ to ‘that’ in order to maintain the original Chinese sentence structure without a pause or comma.”</td>
<td></td>
</tr>
<tr>
<td>long pause (47:16.7)</td>
<td>“Thinking how to translate ‘堪称…奇迹’.”</td>
<td></td>
</tr>
<tr>
<td>long pause (48:54.8)</td>
<td>“Syntactic planning of the sentence ‘其山…独一无二.’.”</td>
<td></td>
</tr>
<tr>
<td>long pause (49:46.8)</td>
<td>“Thinking how to translate ‘结为一体.’”</td>
<td></td>
</tr>
<tr>
<td>multiple deletions and long pause (52:03.4)</td>
<td>“Syntactic planning of ‘被我国…博物馆.’”</td>
<td></td>
</tr>
<tr>
<td>long pause (55:48.5)</td>
<td>“Look up ‘精髓’ in dictionary and consider the best adjective to modify ‘museum’ as a metaphor.”</td>
<td></td>
</tr>
<tr>
<td>long pause and deletion (58:37.7)</td>
<td>“Reconsider the best translation for ‘精髓’: the expression ‘pith and marrow’ sounds more materialistic than the adjective ‘quintessential’ in rendering the material quality of ‘relics’ for stylistic consistence.”</td>
<td></td>
</tr>
</tbody>
</table>

8

<table>
<thead>
<tr>
<th>Action/Correction</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pause (1:01:23.95 3)</td>
<td>“Syntactic planning of the sentence ‘与长城……皆知.’”</td>
</tr>
<tr>
<td>long pause (1:02:23.5)</td>
<td>“Consider adding the date of Lady Meng Jiang legend for target readers.”</td>
</tr>
</tbody>
</table>

Table 5.4: Translog Data and Retrospection Corresponding to Sentences with AOIs:

Participant 1
The participant’s text production of AOI 1 is a complicated cognitive process that is reflected in his retrospection and can be observed with the assistance of the Translog replay function. He first translated the three cities and their locations while following the sequence given in the ST sentence. Then, by means of a cut and paste, he moved “Shanhaiguan in the North” to the beginning of the sentence, making it the subject of the phrase. In the retrospective interview, he explained this as a gesture to English linguistic habit, which would express the directions “north and south” in the opposite order to Chinese. However, the participant was not yet satisfied with the translation since “Shanhaiguan,” as the main topic of the entire text, appeared after the two other cities. As a result, he went on to make text-organizational adjustments, changing the direct quotation into a statement and adding “is often mentioned on a par with,” thus rendering a complex ST sentence with three parallel clauses into a simple sentence with “Shanhaiguan” as the subject. By attracting target readers’ attention to the city right at the beginning of the text, he effectively highlighted its importance and paid due deference to the translation brief’s focus on the brochure’s primary purpose: namely, to promote the image of Shanhaiguan. The final outcome, therefore, of this complex cognitive process is a pragmatic-communicative explicitation.

As a consequence of this, the participant was obliged to reorder the three “features” in AOI 2 to be structurally consistent. Hence a text-organizational explicitation was conducted here. The other two text-organizational explicitations were made in AOI 7 where the translator combined the second part of ST sentence 7 with sentence 8 with the help of the connector “because.” The retrospective comments demonstrate that these are
intentional activities carried out by the participant.

As the evidence of the Translog data and retrospections shown in the table above suggests, eight explicitness cases in AOIs 4 and 8 are all outcomes of pragmatic-cultural explicitation. In AOI 4, the participant was aware of the fact that target readers may not be familiar with the historical background of ancient dynasties. He therefore explicitated “Hongwu period” as “the reign of Hongwu emperor”. Similarly, in AOI 8, the participant made four explicitations to provide the cultural background to “Lady Mengjiang”. However, these were not all accomplished during the drafting process as there was only one retrospective comment concerning the date of Mengjiang. Other additions were made later during the post-writing revision phase: the participant made notes after the experiment and sent the file back to me.

In AOIs 1 to 4 and 7 seven explicitness cases are supported with Translog data but prompted no retrospections by the participant. In spite of this, there appear to be convincing process-based data to justify the claim that stylistic/textual (AOI 2), text-organizational (AOI 4), pragmatic-communicative and pragmatic-cultural (AOIs 1, 3 and 7) explicitations have been implemented.

The only explicitness case that finds no support in the Translog data is a result of re-production of the pragmatic-cultural explicitation that was made in AOI 1 where “Shanhaiguan” was translated as “Shanhaiguan Pass.” While it is fair to assume that such re-production, in AOI 4, would require no additional cognitive effort, and hence the lack of support from Translog, it has nevertheless, for statistical purposes, been counted as a separate explicitation. Moreover, since the cultural explicitness that it re-produces is
verified by both *Translog* data and the retrospective report, it is, once again for statistical purposes, therefore regarded as a thirteenth instance of double verification to be added to the twelve discussed earlier.

In conclusion, for participant 1, 65% of the explicitness cases in his TT are associated with both the *Translog* data and retrospections. 35% of explicitness cases are associated with *Translog* data, but find no matching support in the retrospections. 100% of the explicitness cases corresponding to the AOIs in the TT are the result of explicitation.

It is worth mentioning as an important addendum that four specific cognitive activities rationalized by the participant’s retrospections for AOIs 5, 6 and 7 did not result in any explicitness in the TT. In AOI 5, the participant expended a considerable amount of cognitive effort in the process of translating the two lines of verse. However, he finally opted for two noun phrases out of consideration for the readability of the TT. Two comparable cases may be identified in AOIs 6 and 7 where, in another attempt to clarify, the participant actually simplifies the message of the source text. This demonstrates that the measure of the translator’s cognitive effort is not always proportionate to the level of explicitness that he produces. Once again in AOI 5, the participant expended great cognitive effort on the translation of “两京”, specifically in deciding between “two cities” and “twin cities.” According to his own report, he chose to use the latter “to remind English readers of ‘The Tale of Twin Cities.’” Ironically, however, his effort was ultimately misplaced: the Dickens novel that he presumably had in mind bears the title *A Tale of Two Cities*; the best laid schemes of mice and men…

The remaining 55% of the long pauses registered in the *Translog* data are due to lexical
resourcing and dictionary look-ups, and no explicitness cases are produced as a result of this cognitive effort. This finding is verified by both the ST processing data, which show no evidence of ST preparation in the pre-writing phase, and by the questionnaire in which the participant claims to have devoted “the least” amount of time to ST processing.

5.4.3 Triangulation Analysis of Process- and Product-Based Data for Participant 2

As was mentioned at the end of Chapter 4, the target text produced by Participant 2 represents an unusual measure of text reorganization yet only minimal production of explicitness in the form of extra propositions. By triangulating the process and product data, I hope to uncover the causes behind this. Participant 2 spent three hours and eighteen minutes on the drafting process, a considerably longer time than the other participants. The overriding reason for this is that she devoted about an hour and a half to revising the translation before announcing her completion of the task; this was both recorded by Translog and reported in the questionnaire. Her overall strategy is oriented toward the target reader: readability of the target text is her primary consideration in the translation process. In the retrospective interview, she expressed the view that the ST was not well structured. It contained too many repetitions; the sentence structures were too long and complicated; and the themes of neighbouring paragraphs were inconsistent. She therefore anticipated much in the way of confusion and difficulty of comprehension for the target reader. This explains why she so radically reorganized the middle of the text during the revision process (see below). Participant 2 made substantial use of online
resources in order to seek out cultural and historical background information as well as to look up words. The primary online dictionary she used was *Thesaurus* and *Nciku* (a Chinese-English online dictionary). Although the participant reported that she made notes during ST processing and that these helped “moderately” with her translation, there was no record from my direct observation that she referred to the ST notes during the drafting process.

*Translog* registers, altogether, thirty-two activities for Participant 2 that correspond to AOIs and that have been provided with retrospective reports. As a result of these cognitive activities, twenty-one explicitness cases were produced and have been identified in the target text. Among these, fifteen are associated with both the *Translog* data and retrospective reports, including nine pragmatic-cultural cases in AOIs 4, 7 and 8, one pragmatic-communicative in AOI 4, four text-organizational in AOIs 4 to 7 and one case of stylistic/textual explicitness in AOI 7.

One of the pragmatic-cultural explicitness cases in AOI 4 was produced in the translation of the geographical relationship between the Great Wall and Shanhaiguan. The participant first used the phrase “runs through,” then after a long pause decided to delete this and used “runs from north to south” instead. Regarding these pause and deletion activities, she explained in the retrospective interviews that adding the orientations to the verb provided a visual effect for target readers who might not be familiar with the geographical location of the Great Wall—though, in doing this, she had to sacrifice the conciseness of the text due to the linguistic differences between Chinese and English.

Two other cases of pragmatic-cultural explicitness in this AOI appear where the
participant explicitated “Ming” as “Ming dynasty” and “Hongwu” as “Hongwu period.”
<table>
<thead>
<tr>
<th>AOI</th>
<th>Translog Data and Retrospections</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="image" alt="translog_data" /></td>
</tr>
<tr>
<td></td>
<td>No retrospection</td>
</tr>
<tr>
<td>2</td>
<td><img src="image" alt="translog_data" /></td>
</tr>
<tr>
<td></td>
<td>“Searching online; deleted ‘culture’ because it’s a filler and does not make sense in English; copied the text into Word file.”</td>
</tr>
<tr>
<td>3</td>
<td><img src="image" alt="translog_data" /></td>
</tr>
<tr>
<td></td>
<td>“Searching online for ‘奇葩’ and looked in Thesaurus.”</td>
</tr>
<tr>
<td></td>
<td>“Deleted ‘cultural’ to avoid repetition and redundancy; English readers won’t feel comfortable; it reduces the readability.”</td>
</tr>
<tr>
<td>4</td>
<td><img src="image" alt="translog_data" /></td>
</tr>
</tbody>
</table>

Notes:
- The table shows a representation of the Translog Data and Retrospections with some text highlighted and annotations indicating long pauses and deletions.
- The text includes an example of searching online for a specific term and looking up its meaning in a Thesaurus.
- The annotations provide insights into the editing process, such as deleting fillers and adjusting for cultural differences.
- The text also highlights the importance of considering the audience and readability in the translation process.
<table>
<thead>
<tr>
<th>Time</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:01.4</td>
<td>“Looking for the English term for ‘燕山.’”</td>
</tr>
<tr>
<td>13:21.618</td>
<td>“Looking for the English term for ‘渤海.’ Had doubts about the translation of these two terms, whether ‘Yanshan Mountains’ or ‘Yan Mountains,’ but decided to stay with the standard English terms (online).”</td>
</tr>
<tr>
<td>15:03</td>
<td>“Thinking about how to translate ‘纵贯’ properly.”</td>
</tr>
<tr>
<td>16:46.6</td>
<td>“Deleted ‘through,’ used ‘runs…from north to south;’ thought it’s more visual, considering the characteristics of such text type in English; despite the added meaning due to linguistic differences between Chinese and English.”</td>
</tr>
<tr>
<td>18:21.9</td>
<td>“Looking back to the text; thinking about how to translate ‘紧扼……咽喉.’”</td>
</tr>
<tr>
<td>19:57</td>
<td>“Considering ‘throat,’ ‘strategic place,’ but prefer ‘bottleneck;’ looked for the usage of ‘bottleneck’ in various contexts.”</td>
</tr>
<tr>
<td>25:55.6</td>
<td>“Thinking about how to translate ‘明洪武’ properly; further explanation is not necessary for Hongwu period since general English readers should understand it’s a period of time in Ming dynasty.”</td>
</tr>
</tbody>
</table>
Paste: A place of great military importance, Shanhaiguan was praised as "the key between two capitals, the first pass of the Great Wall."

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>very long pause</td>
<td>“I was searching online for the translation of the poem line, but didn’t find anything good; from my past experience, I would ask native speakers for help. So I left the poem lines untranslated for the time being.”</td>
</tr>
<tr>
<td>deletion</td>
<td>“Deleted ‘lock’ because it’s not used in English in such context.”</td>
</tr>
<tr>
<td>cut and paste</td>
<td>“In the revision phase, I reordered the sentences to make the target text thematically more consistent.”</td>
</tr>
</tbody>
</table>

- The portion of the Great Wall within its borders has been preserved well.
The section of the Great Wall that falls within the borders of Shanhaiguan is unmatched among the rest of the Wall. It has been well-preserved, and the precision of its construction can be observed here on a large scale. Great Wall expert Luo Zhewen believes that Shanhaiguan is where the essence of the Great Wall can best be realized.

Paste: The Great Wall at Shanhaiguan has been well-preserved, and is unmatched by other sections of the Wall: the precision of its construction can be observed here on a large scale. Great Wall expert Luo Zhewen believes that Shanhaiguan is where the essence of the Great Wall can best be realized.

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pauses</td>
<td>51:37.859</td>
<td>“Searching online for ‘严谨’ and ‘宏大.’ Thinking how to translate the four four-character words.”</td>
</tr>
<tr>
<td>long pause</td>
<td>1:04:45.384</td>
<td>“Thinking how to adjust the sentence structure. Later decided to move the ‘unmatched’ clause to the beginning of the sentence. It sounds more natural to target readers.”</td>
</tr>
<tr>
<td>deletions</td>
<td>1:04:53.252</td>
<td>“Combined ‘结构严谨、规模宏大’ into one expression so it sounds natural. ‘规模宏大’ is too abstract in English and doesn't express much meaning.”</td>
</tr>
<tr>
<td>cut and paste</td>
<td>3:09:13.040</td>
<td>“Reordered the sentences.”</td>
</tr>
</tbody>
</table>
As a defensive structure, the Great Wall at Shanhaiguan is brilliantly conceptualized, a high point in the architectural history of the Great Wall. Shanhaiguan is where the essence of the Great Wall can best be realized. The mountains ("shan"), the sea ("hai"), the pass between them ("guan"), and the city itself become one entity in a marriage of elements unlike any other.

<table>
<thead>
<tr>
<th>Degree of completeness</th>
<th>The Great Wall's defensive function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.034</td>
<td>0.034</td>
</tr>
</tbody>
</table>

"Searching in online dictionary for '构思.'"
<table>
<thead>
<tr>
<th>Time Code</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:15:51</td>
<td>“Searching online for the collocation of ‘the Great Wall as a defensive …””</td>
<td></td>
</tr>
<tr>
<td>1:16:32.471</td>
<td>long pause</td>
<td></td>
</tr>
<tr>
<td>1:18:16.538</td>
<td>“Did not like ‘miracle’…looking for an alternative word.”</td>
<td></td>
</tr>
<tr>
<td>2:01:48</td>
<td>“Searching online for information on ‘Luo Zhewen.'”</td>
<td></td>
</tr>
<tr>
<td>2:07:24</td>
<td>“Changed ‘essential’ to a clause because the meaning of the adjective form of essence is now unrelated to the noun.”</td>
<td></td>
</tr>
<tr>
<td>1:20:40</td>
<td>“Added Pinyin ‘shan, hai and guan’ to indicate the connection between the name (‘Shanhaiguan’) and the geographical characteristics.”</td>
<td></td>
</tr>
<tr>
<td>1:22:14</td>
<td>“Thinking about how to translate ‘结为一体.'”</td>
<td></td>
</tr>
<tr>
<td>1:23:14</td>
<td>mouse movement and pause</td>
<td></td>
</tr>
</tbody>
</table>

**Paste:** Shanhaiguan is also an important piece of world history, and has left a rich legacy.

*The wife of Meng Men Hia Jiang left a rich legacy.*
Hearing of the death of her husband, Lady Meng Jiang's tears when she heard of his death caused a collapse in the Wall, under which she found the bones of her husband and was able to give him a proper burial.

Table 5.5: Translog Data and Retrospection Corresponding to Sentences with AOIs:

<table>
<thead>
<tr>
<th>Participant 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 5.5: Translog Data and Retrospection Corresponding to Sentences with AOIs:</strong></td>
</tr>
<tr>
<td><strong>carriage return (1:25:45.766)</strong></td>
</tr>
<tr>
<td><strong>mouse movement and pause (2:17:33.993)</strong></td>
</tr>
<tr>
<td><strong>carriage return</strong></td>
</tr>
<tr>
<td><strong>mouse movements and pauses (2:43:26)</strong></td>
</tr>
<tr>
<td><strong>mouse movement and cut and paste (03:48:221)</strong></td>
</tr>
</tbody>
</table>
Whereas no effort is required of Chinese readers to understand the meanings of “Ming” and “Hongwu” in this context, the terms may sound strange to target readers. However, having recognized the possibility of providing more information on the relation between the Hongwu period and Ming dynasty, the participant refrained from doing so and, according to her retrospection record, target readers should not expect further cultural details here. The pragmatic-cultural explicitness in AOI 7 was produced as a result of her annotation of the mountain, sea and pass in Pinyin (shan, hai, guan). This was done, as the participant elaborated in her retrospection, in order to indicate the connection between the name of “Shanhaiguan” and the city’s geographical characteristics. The other five instances of pragmatic-cultural explicitness all appear in AOI 8 where the participant endeavored to provide the cultural background for the story of Lady Mengjiang. This was also rationalized in the retrospective report.

An instance of pragmatic-communicative explicitness, supported by both the Translog data and Participant 2’s retrospection report, also appears in AOI 4 and concerns the translation of “紧扼 ……咽喉 (tightly/hold/…throat).” The Translog data indicate that the translator made considerable cognitive effort in processing this expression. She read the context of the sentence in the ST carefully, considered various options, such as “throat” and “strategic place,” and finally decided to use “bottleneck” after researching online possible collocations for “bottleneck.” The word “strategic” was added; although the participant did not explain why, it is obvious from the context that the qualifier serves to emphasize the military importance of Shanhaiguan.

There is one case of text-organizational explicitness in each of AOIs 4, 5, 6 and 7, all a
result of the reorganization of the textual structure during the revision of the TT. Due to
the distinctive nature of these activities and the fact that they all derive from the same
type of activity, I questioned the participant about them as a general overall strategy
rather than inquiring about each activity of “cut and paste” recorded in the Translog file.
The retrospections are also complemented with the notes she made during the revision
process, helping toward the discovery of the cognitive process that must have informed
the TT revision.
In the interview, the participant explained that the reason for the text reorganization was
to increase the readability and acceptability of the TT, given the poor structure of the ST.
The procedures for her revision included: 1) determining the gist and marking the main
topic of each ST sentence; 2) deleting the repeated sentences; 3) grouping sentences with
the same topic; and 4) inserting transition sentences between paragraphs for greater
textual fluency. The resulting correspondence between the ST and TT sentences is:
ST <S5> to TT <S9> and TT <S7>; ST <S6> to TT <S8>; ST <S7> to TT <S14>; ST
<S8> to TT <S5>; ST <S9> to TT <S10>, <S15> and <S6>. The order of the sentences
in the middle part of the ST has been completely changed and the topics in each
paragraph are generally more consistent. The fact that repeated sentences have been
deleted accounts for the minimal production of extra propositions in the
AOI-corresponding sentence segments. Hence the number of explicitness cases in these
areas is significantly lower than one might have been led to expect by such a radical
transformation of the ST. Nevertheless, the cognitive effort made by the participant
during this revision is markedly higher when compared with the earlier stages of the
writing phase: in fact, of the total amount time spent in text production, she devoted 45% to revision. This indicates that a greater expense of cognitive effort does not always result in a higher degree of explicitness in the target text. Sometimes the decisions made against explicitation follow a complicated cognitive process where multiple factors, such as text function, translation purpose and text readability, can all play an important role.

One of the two cases of stylistic/textual explicitness in AOI 7 is related to both the Translog data and the retrospective report. It concerns the participant’s insertion of the phrase “in a marriage of elements” to the sentence “The mountains (shan), the sea (hai), the pass between them (guan), and the city itself become one entity unlike any other.” According to the retrospective interview, this was accomplished, once again no doubt with the target reader in mind, for the sake of the naturalness and rhythm of the TT sentence.

Two cases of pragmatic-cultural (one each in AOIs 3 and 4) and three of pragmatic communicative explicitness (all in AOI 5) are supported by the Translog data but lack any further verification in the retrospective report. During the revision phase the participant added “early” to “civilization” in AOI 3 and “City” to “Shanhaiguan” in AOI 4. She also emphasized the military importance of Shanhaiguan in AOI 7 by adding three extra propositions. One case of stylistic/textual explicitness, similarly matched by the Translog file but lacking corroborative evidence in the retrospective report, sees “the pass” elucidated as “the pass between them [mountain and sea].” Not only does the extra proposition serve to define the pass more precisely, the additional two words successfully maintain the rhythm of the sentence and guard against its abrupt conclusion. Furthermore,
the latter consideration is much in keeping with the participant’s concern to “sound more natural to the target readers” expressed in her retrospection on the almost adjacent stylistic/textual case of “in a marriage of elements.” This, like the other cognitive activities described here, could also derive from the instinct of the experienced professional translator and her recognition of and due regard for the purpose of the translation. In spite of the absent retrospective reports it therefore seems fair to count each of these cases of explicitness as the result of careful explicitation.

In sum, the triangulation for Participant 2 reveals that 71% of the explicitness cases in her TT are associated with both the Translog data and retrospections, while 29% are associated with the Translog file, but lacking support from retrospective reports. 100% of the explicitness cases corresponding to the AOIs in the TT are the result of the translator’s implementation of explicitation.

As with Participant 1, who registered four such activities, in the case of Participant 2 five cognitive activities are rationalized in the retrospective reports but did not produce any explicitness case. In AOI 2, the repeated word “culture” was deleted because, according to the participant’s report, “it's a filler and does not make sense in English.” In the translation of the lines of verse in AOI 5, “lock” was deleted from the expression “lock and key.” In the ST sentence, “锁钥(lock/key)” is used to express crucial importance, whereas, in English, as the participant explained, “lock” is not used in such a context. The lines of verse in AOI 5 clearly required significant extra time and effort of the participant to translate. This can be verified by the long pauses and considerable number of deletions in the Translog data. She first searched online for the translation of the verse
lines, but found no satisfactory solutions. Therefore she decided first to leave them untranslated and return to them later. She noted in the interview that, following her past experience, she would normally turn to native Chinese speakers or experts for help. She also reported in the interview that readability of the target text was her priority as a professional translator working for a translation agency. When she returned to the lines of verse later, no doubt with that priority in mind, she decided to translate them into two noun phrases. In accordance, finally, with the same principle, she translated the two four-character expressions “结构严谨、规模宏大” in AOI 6 into one expression “the precision of its construction.” In the opinion of Participant 2, the translator’s cognitive effort should be directed toward the goal of clarity for the target reader rather than toward explicitation for its own sake.

5.4.4 Triangulation Analysis of Process- and Product-Based Data for Participant 3

In terms of overall translation strategy, Participant 3 favors an emphasis on the readability of the target text and its acceptability by the target audience. He worked more carefully than any of the other participants on processing the source text. Indeed, as he reports in his responses to the questionnaire he devoted more time to ST processing than to drafting. As mentioned in Section 5.1, his preparations for the drafting of the TT were considerable, including extensive research on the geographical, historical and cultural background of Shanhaiguan and the Great Wall, on the translation of the proper names, such as the “Intangible Cultural Heritage,” and on the meaning of the lines of verse. The
notes he made during his ST processing helped him to a sufficiently large degree that he actually copied some of the text from his notes on the ST and pasted it into the TT. Furthermore, he constantly referred back to his ST notes during the drafting process, as I registered in my direct observation. The participant also spent ten minutes revising the TT before he announced the completion of the drafting. He checked the spellings, word choices and grammar. After the experiment, he took the TT back, made further revisions and changes and sent the final version back to me the next day. Most of the revisions he made in the post-writing phase concerned issues of grammar and corrections to spellings of words. For this reason, the TT revision during the post-writing phase will not be included in the following analysis.

Eighteen Translog activities corresponding to the AOIs were provided with comments by Participant 3 during the retrospective interview. Among the thirty-two explicitness cases identified in his target text, nineteen are associated with both Translog data and the retrospective reports, including: nine cases of pragmatic-cultural explicitness in AOIs 4, 5 and 8; five of pragmatic-communicative in AOIs 1/2 and 5; four text-organizational cases in AOIs 1/2, 4 and 6; and one case of stylistic/textual explicitness in AOI 5. Because the participant had made careful preparations during the pre-writing phase, when it came to the cultural and historical items in the TT he went back to the ST and looked for useful information in the notes he had made. This is how the pragmatic-cultural explicitness cases were produced in AOI 4 where the years of the Ming dynasty are given for the target readers’ interest. In the same manner, five cases of pragmatic-cultural explicitness were produced in AOI 8 to help describe the story of Lady Mengjiang.
## AOI Translog Data and Retrospections

<table>
<thead>
<tr>
<th>AOI</th>
<th>Translog Data and Retrospections</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/24</td>
<td><img src="image" alt="Image of AOI data and transcription" /></td>
</tr>
</tbody>
</table>

- **Data for AOIs 1 and 2** are presented in this fashion because the participant chose to combine the two sentences in his target text. A similar case arises below with Participant 6’s processing of AOIs 2 and 3.

---

24 The Translog data for AOIs 1 and 2 are presented in this fashion because the participant chose to combine the two sentences in his target text. A similar case arises below with Participant 6’s processing of AOIs 2 and 3.
<table>
<thead>
<tr>
<th>Time (05:05-06:36.6)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pause (07:47.5)</td>
<td>“Considering inserting ‘distinctive cultural and historical’ before ‘features’ to make the meaning of ‘features’ more explicit.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (09:18.257)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pause</td>
<td>“Thinking of adding ‘importance’ to make the sentence meaning more complete and correspond to the syntactic structure.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (10:45.9)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>deletion, pause and cursor movement (12:34.5)</td>
<td>“Considering whether the translation of this ST sentence is still needed since the previous sentence has expressed the meaning.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (13:40.2)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pauses</td>
<td>“Word choice for the same sentence.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (01:37.712)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pause (12:47.5)</td>
<td>“Word choice between ‘culture’ and ‘civilization.’”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (16.292)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pause and pastes (15:50-18:15)</td>
<td>Observation: Referred back to the notes in ST, copied and pasted them into the working window.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (01:43.72)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pause and pastes (15:50-18:15)</td>
<td>“Considering adding ‘importance’ to make the sentence meaning more complete and correspond to the syntactic structure.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (16.227)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pause</td>
<td>“Word choice for the same sentence.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (16.369)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pause and pastes (15:50-18:15)</td>
<td>“Word choice between ‘culture’ and ‘civilization.’”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (16.38)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>long pause and pastes (15:50-18:15)</td>
<td>“Word choice for the same sentence.”</td>
</tr>
<tr>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td></td>
</tr>
<tr>
<td>![Image]</td>
<td></td>
</tr>
</tbody>
</table>

### Observation:
- Referred back to the notes in ST, copied and pasted them into the working window.
- “Considering rearranging the syntactic structure on the basis of the semantic meaning of the source text.”
- “Searching online for ‘两京’.”

### Searching online:
- The city wall of Shanhaiqu is still well-preserved.
- The Great Wall...

### Considering not translating:
- Referred back to the notes in ST, copied and pasted them into the working window.
- “Considering rearranging the syntactic structure on the basis of the semantic meaning of the source text.”
- “Searching online for ‘两京’.”

### Example:
- Searching online for “两京”.

---

6

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>01:55.345</td>
<td>Paste: The city wall of Shanhaiqu is still well-preserved.</td>
</tr>
<tr>
<td>35:57.410</td>
<td>Observation: Referred back to the notes in ST, copied and pasted them into the working window.</td>
</tr>
<tr>
<td>42:14.068</td>
<td>Observation: Referred back to the notes in ST, copied and pasted them into the working window.</td>
</tr>
<tr>
<td>43:07.7</td>
<td>“Considering rearranging the syntactic structure on the basis of the semantic meaning of the source text.”</td>
</tr>
</tbody>
</table>

---

7

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>01:46.383</td>
<td>![Image]</td>
</tr>
<tr>
<td>30:14.044</td>
<td>Observation: Referred back to the notes in ST, copied and pasted them into the working window.</td>
</tr>
<tr>
<td>32:14.745</td>
<td>Observation: Referred back to the notes in ST, copied and pasted them into the working window.</td>
</tr>
<tr>
<td>43:07.7</td>
<td>“Considering rearranging the syntactic structure on the basis of the semantic meaning of the source text.”</td>
</tr>
</tbody>
</table>
Table 5.6: Translog Data and Retrospection Corresponding to Sentences with AOIs:

<table>
<thead>
<tr>
<th>Participant 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation: Referred back to the ST notes about Lady Mengjiang.</td>
</tr>
<tr>
<td>“Trying to make cultural annotations for target readers.”</td>
</tr>
</tbody>
</table>
The other two such cases were produced when the participant found some background information online about “兩京 (two capitals)” and translated them with the actual names of these two cities: “Shenyang” and “Beijing.” Due to the fact that most of the cultural background information was prepared in the ST processing phase and that the participant simply copied the texts into his translation draft, not many cognitive activities are recorded in Translog, and correspondingly few retrospective comments emerge as a consequence. Nevertheless, this does not mean that the participant did not make a significant cognitive effort in the translation process. On the contrary, that he spent a considerable amount of time in preparation testifies to the quality of the cognitive effort that he made.

Four cases of pragmatic-cultural in AOIs 1/2 and nine of pragmatic-communicative explicitness in AOIs 4, 6 and 8 could be associated with the Translog data but not with the retrospective reports. Those in AOI 1/2 are about the locations of Lijiang, Pingyao and Shankaiguan as well as the fact that they are three cities. The keyboard activities corresponding to the four explicitness cases are traceable in Translog, but not in great numbers and therefore lack the support of retrospections. This can be explained by the fact that, as a professional translator who works primarily in China, the participant is so familiar with the geographical details of the three cities that he did not need to make an extra effort when transferring this information into the TT. His explicitating the three names as those of cities can be regarded as a gesture to his target readers’ lack of cultural knowledge of China, a view that finds some verification in his questionnaire responses which reveal his general orientation as a translator to be toward the target reader.
The participant offered no retrospective reports on the cognitive activities that produced pragmatic-communicative explicitness cases emphasizing the military importance of Shanhaiguan and the cultural prestige enjoyed by the folk story of Lady Mengjiang. Once again, the production of these explicitness cases is best read as the result of the participant’s meticulous preparation for the translation task, including his careful reading of the brochure and translation brief before he actually began the drafting.

In the interview, the participant reported that he felt the source text was somewhat ill-structured and that there were too many repetitions of verbs and sentences. This concern was reflected in his cognitive process during the drafting phase when, for example, he endeavored to avoid redundancy in AOIs 1/2 and 3 and reorganized and restructured AOI 7, a long and complex sentence in the ST. Although these cognitive activities did not result in any explicitness cases in the TT, they required considerable cognitive effort on the part of the translator.

In conclusion, 59% of the explicitness cases are associated with Translog data and retrospective reports. 41% are associated with Translog data with no retrospective comments but verified by the ST notes and by direct observation. Therefore, 100% of the explicitness cases corresponding to the AOIs in TT3 are the result of the translator’s implementation of explicitation.

5.4.5 Triangulation Analysis of Process- and Product-Based Data for Participant 4

Participant 4 read the ST carefully before beginning the experiment: she marked the
words and sentences that needed more attention in the drafting, glossed a few phrases and parsed the longer sentences—seventeen occurrences in all of ST processing activities. But there is no evidence in the ST research having been done on the cultural and historical background. In the questionnaire, the participant reported that the notes from her ST processing helped her “moderately” with the translation. She considered fidelity to the ST and TT readability to be equally important (50% each) and indicated that acceptability of the TT among the target readers was her primary principle of translation. She used online resourcing tools, such as Yahoo Chinese-English dictionary, and found them most helpful. The participant spent approximately five minutes revising the whole draft before she announced her completion of the translation task. Although in the questionnaire she reported the changes she had made during the revision were less than satisfactory, she did not, when offered the opportunity, make further changes after the experiment.

Although fourteen Translog activities are supported by the retrospective reports in the interview, these activities produced only eight explicitness cases in the TT, the smallest number among the six participants, and a statistic reflected in the fact that the drafting process lasted only fifty-six minutes.

Five of the explicitness cases are associated with Translog data and retrospective reports, including two cases of pragmatic-communicative explicitness in AOIs 4 and 5, one of pragmatic-cultural in AOI 4 and two text-organizational cases in AOIs 4 and 7. In the cases of pragmatic-communicative explicitness where the military importance of Shanhaiguan and the status of two capitals in the history of China were emphasized, the
cognitive effort is well verified by both Translog data and direct observation, but the participant could not provide rationalized accounts for these implementations, beyond simple comments such as “I was thinking about how to translate it.” Much the same is true of the two cases of text-organizational explicitness in AOIs 4 and 7, and the pragmatic-cultural explicitness made in AOI 4 concerning the historical background of Ming dynasty reveals a similar limitation: the extra information she provided hardly meets the intended goal reported in her interview: “[I was] considering the fact that TT readers may lack historical background information on the Hongwu period;” she offered no further information regarding Hongwu.

One case of pragmatic-cultural explicitness in AOI 7 can be associated with the Translog data, but finds no support in the retrospective reports. The word “purpose” was added when she was revising the translation, but no retrospection was articulated, and neither was any supporting evidence found in her ST processing activities. By contrast, one case of pragmatic-communicative explicitness in AOI 2 (“special” added to “features”) and one of pragmatic-cultural in AOI 4 (Shanhaiguan’s geographical location is made more precise) are verified by neither Translog data nor the retrospection, yet evidence for the latter is found in the corresponding area in the ST notes where the participant wrote the word “near” that was later used in her translation.

On three occasions explicitation was avoided on purpose, out of consideration for other factors. In AOI 1, there is a significantly large number of cognitive activities are registered by Translog, but no explicitness cases were produced. According to the retrospection, this owed to the participant’s wish to maintain the structure of the ST
sentence and the form of direct quotation.
<table>
<thead>
<tr>
<th>AOI</th>
<th>Translog Data and Retrospections</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="image" alt="Translog Data and Retrospections" /></td>
</tr>
<tr>
<td>2</td>
<td><img src="image" alt="Translog Data and Retrospections" /></td>
</tr>
<tr>
<td>3</td>
<td><img src="image" alt="Translog Data and Retrospections" /></td>
</tr>
<tr>
<td>4</td>
<td><img src="image" alt="Translog Data and Retrospections" /></td>
</tr>
<tr>
<td>Time</td>
<td>Text</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>8:00.4</td>
<td>“Thinking about the translation of the word ‘縱貫.’”</td>
</tr>
<tr>
<td>11:03.16</td>
<td>“Thinking about the translation of the expressions ‘緊扼……咽喉’ and sentence parsing: whether the next clause should be a separate sentence.”</td>
</tr>
<tr>
<td>11:56.5</td>
<td>“Considering the fact that TT readers may lack historical background information on the Hongwu period.”</td>
</tr>
<tr>
<td>14:45.574</td>
<td>“ST lacks clause connectors...how to translate ‘盛誉’ and ‘兩京’? Decided not to explain further the two capitals considering the style of the text—a tourism brochure; too much info will distract the readers... The interpretation of the lines of verse. I intend to keep the poetic style...”</td>
</tr>
<tr>
<td>16:33.6</td>
<td>“Thinking about how to translate ‘境内’ and ‘遗存众多.’”</td>
</tr>
<tr>
<td>17:48.8</td>
<td>“Considering whether it is necessary to parse the clauses between ‘遗存众多’ and ‘保存…宏大’ and how to translate ‘结构严谨’ and ‘众多.’”</td>
</tr>
<tr>
<td>Participant 4</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td><strong>Table 5.7: Translog Data and Retrospection Corresponding to Sentences with AOIs:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>because</strong></td>
<td><strong>the</strong></td>
</tr>
<tr>
<td>long pause (22:38.9)</td>
<td>“Thinking about how to translate ‘军事防御功能’ and ‘完备程度’. ST sounds wordy; but for the sake of the completeness of ST info, decided to translate all the info in the ST.”</td>
</tr>
<tr>
<td>long pause (23:40.5)</td>
<td>“Thinking about how to translate ‘堪称’ and ‘建筑史.’”</td>
</tr>
<tr>
<td>long pause (26:39.0)</td>
<td>“Thinking about how to translate ‘自身特点’ and ‘独一无二.’”</td>
</tr>
<tr>
<td>long pauses (27:28.5)</td>
<td>“Thinking about how to translate ‘精髓’… Need to be careful with the syntactic structure.”</td>
</tr>
<tr>
<td>long pauses (31:14.0)</td>
<td>“Thinking about how to translate ‘孔姜女’ and whether extra background info is necessary for TT readers; but decided not to explain further, rather to keep the style of the ST… Did not consider too much whether TT readers would understand this cultural item.”</td>
</tr>
</tbody>
</table>
In AOI 5, the participant thought about the option of providing further information on the two capitals, but decided against it because she felt too much background information could distract target readers from the main purpose of the text. In AOI 8, again, she did not add extra information about the story of Lady Mengjiang in order to “maintain the style of the ST,” without considering whether the TT readers would have difficulty in understanding the cultural item here. This contradicts her response to the questionnaire that the acceptability of the TT was her priority as well as her comments on the explicitation of the Ming dynasty. We may draw the conclusion here that Participant 4’s strategies are not consistent throughout the translation process.

Statistically, 63% of the explicitness cases are associated with both the Translog data and retrospective reports; 12% are associated with the Translog data only; and 25% are associated with neither. Since there is evidence of cognitive effort in the ST notes for the case of pragmatic-cultural explicitness in AOI 4, it is still counted as explicitation. Therefore, 75% explicitness cases corresponding to AOIs are the outcome of explicitation implementation by the participant.

5.4.6 Triangulation Analysis of Process- and Product-Based Data for Participant 5

The drafting process for Participant 5 lasted even shorter than that for Participant 4: a mere forty-three minutes. According to the completed questionnaire, she spent a moderate amount of time on ST processing, but most of the notes and marks she made were at the level of individual words. There is no evidence that she made any significant
preparation for the presentation of cultural or historical background. She indicated in the questionnaire that she spent a lot of time on revision, but the Translog data suggest nothing regarding such activities. She considered target text readability and acceptability to define her overall translation strategy, as reported in the questionnaire, but did not provide further explanation on items that were implicit in the TT. She did not read the brochure at all before beginning her translation draft.

The tables in Chapter 4 revealed only ten explicitness cases in TT 5, of which two are associated with both Translog and the retrospective reports, six are associated with Translog data only and two are unsupported altogether by the process data. In AOI 4, two cases of pragmatic-cultural expliciteness are corroborated by the evidence of the Translog data and retrospections. In this sentence, the participant explicitated the geographical location of Shanhaiguan as well as the Ming dynasty, although, in the case of the latter, she chose without any explanation to omit Hongwu at the same time.

In AOIs 4, 5 and 7, some explicitness cases are associated with the Translog data, but not the retrospective reports. In AOI 4, the participant explicitated Shanhaiguan as a geographical entrance point, but made no comments on this in the interview, perhaps as it functions as a kind of extension of the other pragmatic-cultural explicitation mentioned above. In AOI 5, she produced two cases pragmatic-communicative explicitness while highlighting the military importance of Shanhaiguan and one case of pragmatic-cultural explicitness case by providing background information on the two capitals. Another two cases of pragmatic-communicative explicitness cases were produced in AOI 7 where the participant emphasized the reputation enjoyed by the Great Wall authority, Luo Zhewen,
enjoyed. She failed to provide any rationale for these cognitive activities in the retrospective interviews.

Two cases of text-organizational explicitness identified in AOI 4 are not associated with either Translog data or the retrospective reports. Participant 5 broke up the long complex sentence in the ST into two shorter sentences in the TT. However, there is no obvious Translog evidence related to this activity, and therefore no retrospective comments were made.

In AOI 8, the participant did endeavor to provide cultural background information on Lady Mengjiang. By simply identifying Mengjiang as a woman and replacing the word “children” with “youngsters,” she failed, however, to achieve any effect of explicitness in the TT.

In conclusion: 20% of explicitness cases in TT 5 are associated with both Translog data and retrospective reports; 60% are associated with Translog data only; and 20% are associated with neither. 80% of the explicitness cases are counted as the products of explicitation implementation. The level of articulation regarding her cognitive processes is significantly lower than that of other participants, and most of the retrospective comments that she did make concerned lexical and syntactic choices rather than the cultural and historical background, the function of the text, or the purpose of the translation.
<table>
<thead>
<tr>
<th>AOI</th>
<th>Translog Data and Retrospections</th>
</tr>
</thead>
</table>
| 1   | The three cities have its own unique culture. Each of them is its cultural centre. Business culture and ancient military culture. **[Start]**
|     | deletion and insertion (00:01)   |
|     | “Delete ‘the three cities’ and insert ‘each of the three cities’ to highlight the features of each city respectively.” |
| 2   | They are the cultural centre of China. **[Start]**
|     | long pause and deletion (01:24.4) |
|     | “Considering the translation and word choice of ‘folk culture’ in the TL.” |
|     | deletion and insertion (00:01)   |
|     | “Delete ‘the three cities’ and insert ‘each of the three cities’ to highlight the features of each city respectively.” |
| 3   | Shanhaiwan sits *north* of the south of Yan Mountain. **[Start]**
|     | long pause and deletion (01:24.4) |
|     | “Considering the translation and word choice of ‘folk culture’ in the TL.” |
|     | deletion and insertion (00:01)   |
|     | “Delete ‘the three cities’ and insert ‘each of the three cities’ to highlight the features of each city respectively.” |
| 4   | Shanhaiwan sits geographically *north* of the south of Yan Mountain. **[Start]**
<p>|     | long pause and deletion (01:24.4) |
|     | “Considering the translation and word choice of ‘folk culture’ in the TL.” |
|     | deletion and insertion (00:01)   |
|     | “Delete ‘the three cities’ and insert ‘each of the three cities’ to highlight the features of each city respectively.” |</p>
<table>
<thead>
<tr>
<th><strong>5</strong></th>
<th>Its reputation has always been known for the most critical point of entrance to the Great Wall. Geographically, there has been like it in the 15th century. Between two capitals of China, it has been geographically.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6</strong></td>
<td>Its military defense ability is among the highest in the 28th century. The completeness level of the defense system is among the highest. In the 37th century, the amazing formation and their own design are unique.</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>“Keep sentence structure synthetic.”</td>
</tr>
<tr>
<td>Event Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Pause and deletions</strong></td>
<td>(26:35.564) &quot;Syntactic planning and word choice.&quot;</td>
</tr>
<tr>
<td><strong>Long pauses</strong></td>
<td>(27:58.7) &quot;Planning the sentence structure and thinking about how to translate ‘独一无二’ and ‘精髓.’&quot;</td>
</tr>
<tr>
<td><strong>Pause and cursor movement</strong></td>
<td>(30:27.8) &quot;Move ‘Luo Zhewen’ to the beginning of the sentence so that it’s more suitable for TL readers.”</td>
</tr>
<tr>
<td><strong>Pause, deletions and cursor movement</strong></td>
<td>(31:39.1) &quot;A woman named Mengjiang’ manifests a better understanding of this cultural item for target readers.”</td>
</tr>
<tr>
<td><strong>Deletion</strong></td>
<td>(32:56.0) &quot;‘Children’ changed to ‘youngsters’ for a broader range of audience.”</td>
</tr>
</tbody>
</table>

Table 5.8: Translog Data and Retrospection Corresponding to Sentences with AOIs:

Participant 5
5.4.7 Triangulation Analysis of Process- and Product-Based Data for Participant 6

Participant 6 is another unusual case in that his target text is the shortest among the six (288 words, eighty-eight propositions); and the drafting process as well was the shortest in duration, taking him only about thirty-six minutes. Yet the TT contains twenty explicitness cases, the highest number in the novice group. It is perhaps no accident that, of the three novices, Participant 6 is the one who can boast some limited previous experience as a freelance translator (see Appendix 1). His overall translation strategy is target-reader-oriented (100%); he gave “moderate” consideration to the TT’s acceptability during its production, but fidelity to the ST was also of some importance to him (50%). He read the ST carefully and made some marks on it before meeting with me for the experiment. He also highlighted a couple of lines in the translation brief, indicating that this, too, played a role in the production of his TT. This was later supported by the questionnaire in which he noted that the translation brief had guided his translation “a lot.” In terms of the time distribution, he reported that he spent most of the time in writing, a moderate amount of time in ST processing and the least time in TT revising. This finding corresponds to the Translog data, which display no obvious evidence of effort in TT revision.
<table>
<thead>
<tr>
<th>AOI</th>
<th>Translog Data and Retrospections</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="https://example.com/translog_data.png" alt="Translog Data" /></td>
</tr>
<tr>
<td>2/3</td>
<td><img src="https://example.com/translog_data.png" alt="Translog Data" /></td>
</tr>
<tr>
<td>4</td>
<td><img src="https://example.com/translog_data.png" alt="Translog Data" /></td>
</tr>
</tbody>
</table>

**Deletion (00:01)**

“Delete ‘paramount to’ and change it to ‘one of the three’: the former means that the fortress is close to the other two in importance, while the latter refers to the fortress as equally important—close to the original text.”

**Pause (00:02.02)**

“Thinking about the syntax of the sentence.”

**Deletion (02:13.3)**

“Delete ‘all the three are important …;’ change to the ‘known for’ structure.”

**Deletion (03:44.7)**

“Delete ‘the importance in’ and other nouns; change to adjectives to fit the sentence structure.”

**Long pause (05:49)**

“Thinking about placing ‘known’ in the main clause.”
<table>
<thead>
<tr>
<th>Position</th>
<th>Text</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>The numerical value referenced is [164]. As there is no corresponding text in the image, it is not clear what the number represents.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The number of relics is specified as 92. This requires clarification, as it is not clear what the relics are or how they relate to the text.</td>
<td></td>
</tr>
</tbody>
</table>
“the sentence to give the site more agency and importance.”

“Consider using ‘close in’ or a noun to translate the architectural feature of the site.”

“Change ‘close in…’ to ‘organic integration’: nouns might be more formal and ornate…fitting the style of the original text.”

“Shanhaiguan was acclaimed by Chinese expert and scholar. The most precious Great Wall, as the most precious Great Wall Museum, referring to the Great Wall and Cultural Heritage and Cultural Town.

“Shanhaiguan is also a ***cultural site ***and ***historical site ***and ***most ***of ***the ***most ***known ***stories ***about ***the ***Great ***Wall ***fortress ***.

“Change ‘the Great Wall’ to ‘fortress,’ making the word more concrete and avoid repeating the Great Wall in the sentence(s).”

“Change ‘Mengjiangnu stories’ as the subject of the sentence to the object of the sentence, highlighting the cultural richness of the site.”

Table 5.9: Translog Data and Retrospection Corresponding to Sentences with AOs:

Participant 6
Twenty text production activities corresponding to AOIs were both registered by Translog and provided with retrospective comments by the participant. Out of the twenty explicitness cases corresponding to AOIs, fourteen are associated with both Translog data and retrospective reports. This demonstrates a high level of articulation on the part of Participant 6, especially in light of his limited experience as a translator. Of those fourteen cases two are instances of pragmatic-cultural explicitness in AOI 1, seven are pragmatic-communicative in AOIs 1 and 8, two are text-organizational in AOIs 2/3 and 4 and three are stylistic/textual in AOIs 2/3 and 5. In the case of pragmatic-cultural explicitness in AOI 1, two extra propositions indicate that China has three ancient fortresses and that Shanhaiguan is one of them. The qualifier, “famous,” added to “fortress,” highlights the reputation that Shanhaiguan enjoys and thus bears pragmatic-communicative explicitness. One explicitness case in particular in AOI 1, “Shanhaiguan is one of the three fortresses,” is identified in Chapter 4 with dual categories and calls for further investigation of the process data. According to the retrospective comments that the participant made on this, it was intended more to emphasize the importance of Shanhaiguan. Therefore, I count it as pragmatic-communicative explicitness rather than text-organizational. The other five instances of pragmatic-communicative explicitness appear in AOI 8 where an extra sentence, “Shanhaiguan is also a World Cultural Heritage site and a Historical and Cultural town” was added by the translator in order to realize the advertising purpose. That the story of Lady Mengjiang is praised as legend produces another case of pragmatic-communicative explicitness. Nevertheless, the participant did not provide any
extra background information about Mengjiang or the story. Even the name was literally translated as “Mengjiang Nu,” which may cause confusion since “Nu” (woman in Chinese) can bear little or no meaning for target readers. In the cases of text-organizational explicitness, the participant combined sentences 2 and 3 in the ST to create one TT sentence as displayed in AOIs 2/3 in the table above. In AOI 4, the participant restructured the sentence by moving the participle about the time of construction to the beginning of the sentence, thus achieving a greater degree of thematic consistency. These activities are all confirmed as intentional by the retrospective reports.

The three stylistic/textual explicitness cases are in AOIs 2/3, where the preposition “for” was added, and AOI 5 where “No wonder it has been regarded” is used to introduce the translation of the lines of verse. Evidence of the conscious planning of these activities can be found in the retrospections as well.

Four explicitness cases can be associated with the Translog data, but are not corroborated by the retrospective reports. These are three instances of pragmatic-cultural explicitness: one in AOIs 2/3 and three in AOI 4. In AOIs 2/3, “ancient civilization” is given as the translation of “华夏文明” (Huaxia civilization), the implication of which has been explicitated. In AOI 4, there was a long pause (12.107 seconds) registered by Translog before the cultural explicitness cases of the Hongwu emperor and the Ming dynasty. Another long pause (12.277 seconds) was made when the participant was trying to explain the location of the Great Wall and its geographical relation to the Bo Sea and Yan Mountain. These are not supported by the retrospective verbalization, even though a great amount of cognitive effort was clearly made by the participant.
Two explicitness cases—one pragmatic-communicative and one pragmatic-cultural—in AOI 5 are not associated with either the Translog data or the retrospective reports. No corroborative evidence can be found in the ST notes either. Therefore, it is reasonable to say that these two explicitness cases were not intended by the participant in the text production process.

To conclude: 70% of explicitness cases are associated with both the Translog data and the retrospective reports; 20% are associated with Translog data only and 10% are not supported by any process data at all. 90% of the explicitness cases in TT6 are, therefore, the result of explicitation by the translator.

5.4.8 Statistical Summary of Triangulation Analysis

The following statistical summary charts are presented here by way of conclusion to the triangulation of product- and process-based data. There will be good reason to return to these in the course of the discussion that follows in Chapter 6.
Figure 5.3: Triangulation of Process- and Product-Based Data In Each Category per Participant

Figure 5.3 presents the numbers of occurrences of association in each category per participant. E-T-R corresponds to the earlier category a) (see Section 5.4.1), in which explicitness cases are associated with both the Translog data and retrospective reports. E-T is equivalent to category b) where explicitness cases are associated with only Translog data. E-0-0 corresponds to category c) in which explicitness cases are associated with neither Translog data nor retrospective reports.

Once again as displayed in the chart, the sum of E-T-R and E-T reveals the total number of explicitations in any given case. 0-T-R represents category d) where no explicitness cases were produced but a significant amount of cognitive activity was registered by Translog and accompanied by retrospections.

![Figure 5.3: Triangulation of Process- and Product-Based Data In Each Category per Participant](image)

Figure 5.4: Percentage of Association of Explicitness Cases to Translog Data and Retrospections per Participant

Based on the statistics in Figure 5.3, Figure 5.4 displays the percentages of associations
of explicitness cases with *Translog* data and retrospective reports.

To facilitate examination and discussion of whether explicitation takes place at macro-level or micro-level, Figure 5.5 is used to show the numbers of explicitations implemented by each participant during the translation process in each of the categories: stylistic/textual, text-organizational, pragmatic-communicative and pragmatic-cultural.

![Figure 5.5: Numbers of Explicitations in Each Category per Participant](image)

**Figure 5.5: Numbers of Explicitations in Each Category per Participant**

### 5.5 Readability of the Target Texts

An online text readability consensus calculator was used to test the ease of reading for each target text. The results were calculated based on the Flesch Reading Ease Formula (See Chapter 3, Footnote 7) whose output is a number from 0 to 100. A higher score indicates that the text is easier to read. The reading ease scores are related to school grade reading abilities: scores of 90 to 100, for example, can be comprehended by an average
fifth-grader; eighth- and ninth-grade students can understand documents with a score of 60 to 70; and college graduates can understand documents with a score of 0 to 30. The readability of each of the target texts produced by the participants is displayed in Table 5.10. The reading ease scores for all six texts range from 34.1 (“difficult”) to 57.1 (“fairly difficult”) [See Table 3.3 for the readability assessment scale]. TT2 and TT4 enjoy a higher degree of reading ease than the other four texts. TT3 has the lowest readability score of all of the six texts. The mean score of reading ease in the professional group is lower than that in the novice group.

<table>
<thead>
<tr>
<th>Group</th>
<th>TT</th>
<th>Flesch Reading Ease Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>1</td>
<td>46.8</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>53.4</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>34.1</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>44.77</td>
</tr>
<tr>
<td>Novice</td>
<td>4</td>
<td>57.1</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>43.4</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>48.4</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>49.63</td>
</tr>
</tbody>
</table>

Table 5.10: Flesch Reading Ease Scores of TTs

The scores demonstrate that the readability of the six target texts is at a level between eighth or ninth grade and college graduate. This is in keeping with the purpose of the source text, a tourist brochure intended to promote the city of Shanhaguan and therefore not particularly aimed at readers below seventh-grade reading level. However, as
discussed in Chapter 3, Flesch’s formula for automatic measurement of readability was
developed using sentence length, word frequency and number of syllables per word. It
does not provide any data regarding readers’ ease or cognitive effort in comprehending
the text or in retrieving information from the text. Another limitation of Flesch’s
readability formula is that it was designed for texts originally composed in English, not
for translated documents. That is to say, it has no regard for the constraints or influence
necessarily exercised by the source text.

For these reasons, data from a readability rating survey were used to complement the
results from the Flesch test and proved to be significantly more illuminating. Eighteen of
the twenty raters that I contacted provided valid responses regarding ease of reading the
six texts, reader’s general expectations and information on specific cultural items. The
ranking results of each of these perspectives are shown in Tables 5.11 to 5.13. In addition,
SPSS was used to compute a Kendall's coefficient of concordance (Kendall’s $W$) in order
to assess the level of agreement among raters in their responses to each of the three
survey questions and to provide statistical verification of the test results. Kendall’s $W$ is a
value between 0 and 1, where 1 represents perfect unanimity, 0 indicates no agreement
whatsoever, and all values in between suggest a higher or lower level of concordance.  

Table 5.11 represents the ranking results of ease of reading for the six target texts: TT2
has the highest ranking of 3.83, close to Highly Readable; the ranking for TT6 is exactly
3, Readable; TT1 is ranked as the third most readable text with a result of 2.89; TT3 and

25 See Legendre 2010 for further details.
TT4 lie between Readable and Somewhat Difficult; and TT 5 is ranked as Somewhat Difficult, the least readable text among the six.
<table>
<thead>
<tr>
<th>Rater</th>
<th>TT1</th>
<th>TT 2</th>
<th>TT 3</th>
<th>TT 4</th>
<th>TT 5</th>
<th>TT 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Mean</td>
<td>2.89</td>
<td>3.83</td>
<td>2.39</td>
<td>2.50</td>
<td>2.00</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Table 5.11: Ranking of Reading Ease per TT

(4=Highly Readable, 3=Readable, 2=Somewhat Difficult, 1=Very Difficult)
The SPSS output on Kendall’s coefficient of concordance is shown in Figure 5.6 below:

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>18</td>
</tr>
<tr>
<td>Kendall's W&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.528</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>47.490</td>
</tr>
<tr>
<td>df</td>
<td>5</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Figure 5.6: Kendall's Coefficient of Concordance I**

Kendall’s coefficient of concordance, a value of 0.528, demonstrates a significant level of agreement among raters.

The second question in the survey asked readers how well each target text met their general expectations as they considered information on issues pertaining to the history, geography and culture of Shanhaiguan.

Table 5.12 displays the ranking results in response to this question. From the mean value of the eighteen rankings for each TT, we can see that TT2 enjoys the highest ranking of 3.78, close to *Very Well*; the results for TT1 and TT3 (2.83 and 2.72, respectively) rank closer to *Well*; TTs 4 to 6 lie between *Well* and *Not So Well*, with TT6 midway between the two and TTs 4 and 5 both tending to *Not So Well*. 
Table 5.12: Ranking of Meeting Readers’ Expectations per TT

<table>
<thead>
<tr>
<th>Rater</th>
<th>TT 1</th>
<th>TT 2</th>
<th>TT 3</th>
<th>TT 4</th>
<th>TT 5</th>
<th>TT 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Mean</td>
<td>2.83</td>
<td>3.78</td>
<td>2.72</td>
<td>2.44</td>
<td>2.28</td>
<td>2.50</td>
</tr>
</tbody>
</table>

(4=Very Well, 3=Well, 2=Not So Well, 1=Not Well At All)
The SPSS output on Kendall’s coefficient of concordance on the extent to which target readers’ general expectations were met is displayed in Figure 5.7 below.

| Test Statistics |
|-----------------|-----------------|
| N               | 18              |
| Kendall's W^a   | .425            |
| Chi-Square      | 38.235          |
| df              | 5               |
| Asymp. Sig.     | .000            |

**Figure 5.7: Kendall's Coefficient of Concordance II**

Kendall’s coefficient of concordance, a value of 0.425, indicates a fair degree of agreement among rankers.

Table 5.13 represents the ranking results in response to the survey question how well each text succeeded in furnishing information on specific cultural items. TT2, with a ranking value of 3.72, close to Very Well is rated, once again, as the most successful of the six texts in this respect; TTs 1 and 3 have similar ranking results, between Well and Not So Well; the scores for TTs 4 to 6 are all below 2.00, that is between Not So Well and Not Well At All; TT6 is ranked lowest in serving this purpose.
<table>
<thead>
<tr>
<th>Rater</th>
<th>TT 1</th>
<th>TT 2</th>
<th>TT 3</th>
<th>TT 4</th>
<th>TT 5</th>
<th>TT 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mean</td>
<td>2.72</td>
<td>3.72</td>
<td>2.83</td>
<td>1.83</td>
<td>1.78</td>
<td>1.61</td>
</tr>
</tbody>
</table>

Table 5.13: Ranking on Cultural Specific Items per TT

*(4=Very Well, 3=Well, 2=Not So Well, 1=Not Well At All)*
The SPSS output on Kendall’s coefficient of concordance on ranking information regarding cultural specific items is displayed in Figure 5.8 below.

**Test Statistics**

<table>
<thead>
<tr>
<th>N</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kendall's W&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.658</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>59.255</td>
</tr>
<tr>
<td>df</td>
<td>5</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Figure 5.8: Kendall's Coefficient of Concordance III**

In Figure 5.9, the numbers of explicitations that each participant made in the process of text production are combined with the readability ranking of each target text in order to facilitate the analysis of the association between the level of explicitation implementation and the readability of the target text. As shown in the chart, Participant 3 made the largest number of explicitations in the TT production. However, the readability of TT3 is ranked only fifth among the six texts, lower than TT4 or TT6, both texts produced by novice translators; TT6 is ranked second regarding readability, higher than TTs 1 and 3 in the professional group, yet the number of explicitations Participant 6 made in order to produce the TT is apparently smaller than in TT1 or TT3. TT2 enjoys the highest ranking
in all three aspects: readability, meeting target readers’ general expectations and providing information on specific cultural items. On the other hand, the number of explicitations that were implemented in the production of TT2 is smaller than that for TT3 and only one more than for TT1. A comparison between TT4 and TT5 demonstrates a similar tendency: TT4 contains a smaller number of explicitations, but exhibits a higher level of readability than TT5. Although Participant 6 produced a more readable text than either of his fellow novice translators, unlike his professional counterparts he failed, according to readers’ ratings, to provide sufficient background information on specific cultural and historical items. There is no significant difference between TT1 and TT3 or between TT4 and TT5 in this regard.

**Figure 5.9: Triangulation of Explicitation Data and Readability Rankings**

*(Ranking 1: TT Readability; Ranking 2: TT Reader’s Expectations; Ranking 3: Culture Specific Ranking)*
The nature of the association between the implementation of explicitation within a given text and that text’s readability level will be an issue of some moment once again in Chapter 6 as I turn to a discussion of the hypotheses that were advanced in Chapter 2 in light of the analyses conducted over the last two chapters.
CHAPTER 6: Discussion, Conclusions, Implications and Future Directions

6.1 Discussion

Explicitation, as defined in Chapter 2, is a strategic and purposeful process that translators undertake in order to resolve unintended ambiguity in the target text, to remove cultural barriers, and to improve the readability of the TT. When making explicitation decisions, translators consider the purpose and situation of a translation as well as target reader expectations. Therefore, explicitation involves conscious decision-making and cognitive effort on the part of the translators.

With the help of this framework for understanding explicitation and in response to the first research question, it was hypothesized that a higher degree of cognitive effort is apparent when explicitations are carried out than when literal transfers are made. This has been verified by the process data presented in Chapter 5, which include information on ST processing activities, the researcher’s direct observations made during the writing process, questionnaires, Translog data and retrospective interviews. The ST processing activities over specific text segments, combined with the results of the questionnaires (see Section 5.1), verify the cognitive effort that the translators made in the pre-writing phase. For the writing phase, Translog data such as pauses longer than ten seconds, deletions
beyond the lexical level and concurrent cursor mouse movements serve as further evidence of greater cognitive effort having been expended in the TT production. All participants, according to the questionnaires, reported having made revisions during either the writing or a separate post-writing phase. The explicitness cases identified in the TTs, when associated with the process data analyzed in Chapter 5, are by definition considered the result of explicitation implementation. Therefore, the process data support hypothesis 1 that a higher degree of cognitive effort is apparent when explicitation is carried out and verify the notion that explicitation is the result of a metacognitive process. In other words, the participants applied their metacognitive knowledge and regulatory skills throughout the cognitive process and task performance. They actively and consciously controlled the process, from task planning to text production and evaluation, deliberately modulating their cognitive resources and regulating the selection, adoption and evaluation of the explicitation strategy.

A notable exception arises where explicitation decisions regarding certain text units that were made earlier in the translation production process may facilitate processing similar or repeated units later. As a result, the explicitness cases in these units are not supported by evidence of cognitive effort in the process of text production. This is called the “facilitation effect” (Strömqvist 1996, cited in Dimitrova 2005: 30; see also 140-41), which is apparent in monolingual texts and has also been adopted in translation process research (Schelletter 2002, Dimitrova 2005). The facilitation effect may be found in the translation process, according to Dimitrova (2005: 30), under “at least” the following circumstances: 1) decisions, especially the global decisions regarding the TT and the task
of translation made during the earlier stage of the writing phase may influence later decisions and hence facilitate processing; 2) certain linguistic material, i.e. words or phrases may be repeated several times in the ST and will thus potentially facilitate retrieval of TL material; 3) as the text representation progresses both mentally and in the form of the TL version, increasingly more context will be provided, once again facilitating ST processing and TT production (Dimitrova 2005: 30). As was seen in Chapter 5, the triangulated product- and process-based data in the case of Participant 1 show that certain instances of explicitness (“Shanhaiguan Pass”) are unsupported by any obvious evidence of cognitive activities. But once again, as was suggested there, these explicitness cases are actually the re-production of the pragmatic-cultural explicitation that was made earlier in the text production process, where “Shanhaiguan” was translated as “Shanhaiguan Pass.” The explicitation decision made at an earlier stage of text production facilitated processing the repeated word and thereby accelerated, or eased, the process of translation. One might also argue here that the facilitation effect is a product of the participant’s higher level of metacognition. As expertise increases and the task performer possesses more cognitive regulatory skills as well as task-specific strategies, less cognitive effort is needed and the automaticity of the task performance is naturally increased.

In response to the first research question concerning the association between the amount of cognitive effort on the part of the translator in ST processing and TT production and the level of explicitness in the TT, the product- and process-based data actually show that 1) a higher level of cognitive effort does not necessarily result in explicitation
implementation or in a higher degree of explicitness in the TT; and 2) explicitness cases are not always the products of cognitive effort expended by the translator.

In the first instance, data from five out of the six participants display various numbers of Translog activities and retrospective reports that did not produce any explicitness cases (see Figure 5.3). According to those participants’ retrospective reports, they actually avoided providing “too much” cultural background intentionally when it came to processing the geographical term, “two capitals” and the historical term, “Hongwu period.” Their avoidance was explained in terms of consideration for the translation brief or for the acceptability and readability of the target text: too much information would distract readers from the main purpose of the text. As a consequence, no explicitation was carried out in the TT production process corresponding to these text segments, although a significant amount of cognitive effort was made by the translators during the same process. This finding supports Neubert and Shreve’s (1995: 51) argument that no simple one-to-one relationships exist between textual results and cognitive procedures: the target text sentence may be the result of several procedures applied in a specific sequence. In the experiment in this study, some participants went through this complicated mental process: recognizing SL and TL textual/linguistic differences; considering the possibility of providing extra information; having regard for the translation brief or for the purpose of the translation; and, finally, determining not to explicitate.

A related case concerns Participant 2 who, once again intentionally, deleted the “filler” word “culture,” which appears repeatedly in the ST. The result of this decision was a reduced number of propositions in the TT segment in comparison to the corresponding
ST sentence segment. As Neubert and Shreve (1992: 73) explain, the translator cannot transfer the typical grammatical and lexical usages between SL and TL uncritically before gaining an understanding of the standards of acceptability in the target language community. A primary characteristic of texts according to Holz-Mänttäri (1984) and Vermeer (1986), acceptability is an overriding consideration in the case of Participant 2, who explains in her retrospective report that those “fillers” are not acceptable in English: the repetition of the same words would create redundancy and potential puzzlement for readers, thus reducing the readability of the target text.

In both of these instances the translators’ understanding of text acceptability and readability dissuaded them from implementing explicitation and, in the case of Participant 2, even prompted the simplification of the TT segments. This approach to translation is of course oriented primarily toward the target reader or recipient (Holz-Mänttäri 1984; Vermeer 1986) in that it calls for modifications to the nature of the text in the interests of target readers. In TT2 in particular, it serves as a global translation strategy and accounts for the radical reorganization of the text undertaken by Participant 2. The exceptional quality of this reorganization has been mentioned above and marks most distinctively the metacognitive knowledge and regulatory skills of this translator. Her “utilization of textual structures as process cues” (Shreve 2009: 258), or more specifically her restructuring of the target text around a series of themes, distinguishes her most immediately from student translators. It is surely no accident that TT2 is ranked as the most readable of the six translations.

The other occasion where the amount of cognitive effort does not correspond to the level
of explicitness in the target text is illustrated by those cases of explicitness (all in TTs produced by the novice group) that are not supported by any process data. Figure 5.3 shows that in each target text in the novice group there are two instances of explicitness cases with no support from Translog data, ST processing activities, TT revisions or retrospective reports. This serves as evidence that novice translators may have expanded the text or repeated details without awareness or out of ignorance. These explicitness cases were produced with no cognitive effort on the part of the translators and, by definition, were not counted as the result of explicitation due to the unconscious and unintentional nature of their production. This outcome demonstrates that professional translators possess a higher level of metacognitive knowledge and regulatory skill than novice translators and as a consequence exercise more conscious control over the translation process. The discussion of hypothesis 2 will naturally give cause to return to this issue.

Hypothesis 2 assumed that the professional group would show more awareness and articulated recognition of explicitation than the student group. The triangulated data reveal that five of the participants (1, 2, 3, 4 and 6) demonstrate a higher than 50% association between explicitness cases and Translog data as well as retrospective reports (see Figure 5.4). Participant 5 in the novice group also displays a tendency to such association, but with a lower percentage. From Tables 5.4 to 5.9 we can conclude that all participants were able to comment on their text production and decision-making processes, but the degree or quality of these comments regarding explicitation implementation varies between the professional and novice groups. Within the
professional group, participants provided evidence of a more heightened awareness concerning the global translation approach, translation strategies, the translation brief and regard for issues pertaining to TT acceptability. Comments such as “consistency with English linguistic habits,” “for/to remind target readers,” “English text readability,” “the characteristics of such text type in English” and “more natural to English readers” frequently appear in the retrospective reports in the professional group. Furthermore, they described in considerable detail most, if not all, of the mental operations on which they were interviewed. The novice group, by contrast, displayed less ability to generalize or rationalize their text production process and cognitive activities. Neither could they recount their mental processes in as much detail as the professional translators, usually offering such simple and vague comments as: “thinking about how to translate…,” “looking up words in dictionary” or “planning the sentence structure.”

The ability to give verbal expression to their working procedures and cognitive processes indicates the translators’ metacognitive awareness. For example, the numerous text reorganization activities that Participant 2 undertook during the TT revision and the text planning and the extensive translation preparations made by Participant 3 in the pre-writing phase, as well as the optional strategies of leaving out filler words and altering textual structures, are all the reflections of translators’ higher level of metacognition. They complete tasks, as Shreve describes them, not only at lower-level, such as transferring the linguistic package from SL to TL, but also display “higher-order cognitive skills” and “actively and consciously controlled higher-order aspects of the translation task” (2009: 255). Professional translators tend to demonstrate greater
metacognitive knowledge, not only knowing which strategies to use and when in order to solve problems, but also displaying a more heightened awareness of those strategies once adopted and being able to elaborate the reasons for their application.

Translators with a higher level of metacognition have a better sense of planning and of controlling the requirements of the translation task, consciously using this to guide their overall translation approach. The fact that almost all the pragmatic-communicative explicitness cases in the six TTs (see Table 4.13) are supported by process data (see Figure 5.5) and thereby identified as pragmatic-communicative explicitations is an example of translators’ metacognition, or “task awareness” as proposed by Shreve (2009: 257). He states that task awareness helps translators to “reflect on the task, recognize its processes and sequences, and incorporate changes into the task where necessary” in order “to proceed successfully to goal completion” (2009: 257). The level of task awareness is apparently higher in the professional group (cf. Figure 5.5) who conducted a larger number of conscious explicitation operations than the novice group.

Furthermore, all three professional translators reported their awareness during the experiment of habitual working procedures that they had developed based on their prior experience. They either made revisions along with the drafting process, reorganizing the TT sentence sequences according to themes or making thorough preparations during the pre-writing phase. Participant 2 is an interesting case in point. When she encountered difficulties in translating the lines of verse, she decided to leave them temporarily and come back to them later, thereby exemplifying a non-linear or, in Nord’s terminology (1991: 34), “recursive” approach to the task of translation. She also reported in the
retrospective interview that normally she would consult colleagues who were native Chinese speakers or experts in the field, applying the cognitive regulatory skill of planning. The professional translators also generally demonstrated a much higher degree of consistency than their novice counterparts when adopting translation procedures and strategies. As noted (cf. Section 5.4.5), novice translators’ retrospections even revealed some contradictory comments in terms of their translation strategies.

To conclude, professional translators display a higher level of metacognitive knowledge and regulation, consciously applying their habitual working habits to the translation task, employing strategies consistently and externalizing their cognitive processes through verbalization. Student translators, by contrast, are less aware of their cognitive processes; on account of their lack of professional experience, they do not apply habitual working patterns to their task performance; and they are generally less able to give verbal expression to their cognitive processes. In short, their level of metacognition needs to be increased through training and practice.

Hypothesis 3 proposed that participants’ retrospective reports could be associated with Translog data corresponding to the AOIs in ST and TTs in such a way as to reveal the motivations or causative factors for the application of explicitation. Neubert and Shreve (1995: 54) argue that in acting as a communicator or bridge between two different language and culture communities, the translator is responsible for transferring not just the linguistic knowledge or content of the text, but also the cultural and social values, world knowledge and communicative functions from the source language community to the target language community. This kind of transfer requires that the translator make an
accurate evaluation of the knowledge gap between two communities in order to be able to
compensate appropriately for what the TL community lacks. The recognition of his/her
role as “communicator” between cultures becomes part of the motivational process for
adopting an explicitation strategy, which can only be uncovered with the help of the
translator’s own retrospection, the researcher’s sole path to determining the causative
factors behind any given explicitation.

These factors comprise primarily the following four perspectives: a) SL and TL linguistic,
textual and stylistic differences; b) SL and TL knowledge difference; c) TT readership
and acceptability in TL readers; and d) the requirements of the translation task or
translation brief. They correspond to the categories of explicitness cases that were
analyzed in Chapter 4: textual/stylistic, text-organizational, pragmatic-cultural and
pragmatic-communicative. It is especially worth adding that this method of retrospective
interviews helped not only to reveal the motivation for explicitation operations, but also
to determine the category of certain explicitness cases that appeared to admit double
identities (see Footnote 1 in Chapter 4 and Section 5.4.7).

Abundant evidence has been found in both the product-based data (explicitness cases) [cf.
Table 4.13] and the triangulated product- and process-based data (explicitation operations)
[cf. Figures 5.3 to 5.5] to support hypotheses 4 and 5 that assume, respectively: 1)
explicitation occurs not only on the micro- but also macro-level; and 2) the level of
explicitation is higher in the professional group than in the student group. On the one
hand, the number of explicitation occurrences in the professional group is significantly
larger than that in the student group (24 vs. 11), verifying hypothesis 5. On the other hand,
textual/stylistic explicitation at micro-level and text-organizational, pragmatic-cultural and pragmatic-communicative explicitation at macro-level occurred in both groups. Moreover, they both show a higher level of explicitation at macro-level than at micro-level. The numbers of text-organizational, pragmatic-communicative and pragmatic-cultural explicitations for all six participants are considerably larger than textual-stylistic totals, indicating once again that explicitation is a complex, purpose-driven and target-reader-oriented cognitive process. It requires the employment of more macro-level strategies than micro-level strategies as well as the metacognitive knowledge to develop these strategies.

The data for each explicitation category in both groups demonstrate that Participant 3 employed considerably higher numbers of pragmatic-communicative and pragmatic-cultural explicitations than did the rest of the participants. This result may indicate Participant 3’s more heightened awareness of the translation purpose as described in the translation brief and that he expended more effort in transferring the promotional function of the ST to the TT. Nevertheless, how the target text is received by the target readers does not depend solely on how well the translator transfers the communicative function of the text. The appropriate metacognitive skill of evaluating target readers’ expectations, the cultural and knowledge gap between SL and TL, and the metacognitive knowledge used to decide how and when to implement an explicitation strategy all play a crucial role in the translator’s text production process. This argument is supported by the readability ranking results: TT 3, the most explicit text, was ranked only the fourth most readable text by target readers, suggesting that the highest level of
explicitation does not necessarily lead to the highest degree of overall readability of the TT.

Further to this argument, Figure 5.9 shows that hypothesis 6, which concerns the association between the level of explicitation during the target text production and the readability of the target text, is not verified by our analysis of the data. Whereas TT 2 has the highest ranking of readability, its level of explicitation is lower than in TT3. In similar fashion, TT 6 enjoys higher a ranking of readability than either TT1 or TT3, but exhibits a lower level of explicitation than both. Yet TT6 fails to meet target readers’ expectations regarding the general purpose of the text, and neither does it succeed in providing sufficient explanation of certain culture-specific items. Translators’ predictions of the target text readership and cultural distance between the ST writer and TT readers as well as assumptions regarding the communicative effect of the TT determine the level of explicitation and, as a result, affect the readability and acceptability of the TT. This is well illustrated by the evaluative comments made by some readers. One, for example, observed that most participants had failed to give a clear enough picture of the relation between the characteristics of the three cities and their geographical locations:

“I found the geographic descriptions and the listings of which cities are known for their ethnic, commercial, and military significance to be very confusing without a map. I think this confusion made me read each passage more slowly than I otherwise would have.” –Reader M.

This target reader’s response demonstrates the cultural distance between the ST producer
and TT readers and the barrier it creates for TT readers in their effort to understand the text.

In response to its syntactic structure, another reader remarked of TT 1 that “the sentences are too long and hard to read.” Yet another reacted to some of the culture-specific items with comments such as “Do you need to say this?” or “the miracle of what? Who regards it as a miracle?” Such observations reflect readers’ dissatisfaction with certain aspects of the TTs and how important it is for translators to evaluate the degree of explicitation during text production. On the one hand, too much extra information may actually reduce the readability of the text; on the other hand, insufficient information causes target readers confusion and difficulties in understanding the text.

Explicitation, then: a target-reader- or recipient-oriented translation strategy that entails the metacognitive processes and the employment of metacognitive knowledge and regulation. A successful application of explicitation will satisfy the target reader’s expectations and needs; it will take into account the conventions of the target language and culture; and it will satisfactorily accommodate the purpose, function and various criteria of the translation task as presented in the translation brief. If they are to produce highly readable, recipient-oriented texts, translators will be required to possess appropriate metacognitive knowledge as well as the metacognitive regulatory skills of planning, monitoring and evaluation. As we shall see in the final chapter, meeting this goal has important implications for translation studies pedagogy and for the training of translators.
6.2 Conclusions

Facilitated by empirical research methods, this study has investigated explicitation from both the translation product and process perspectives. The most immediate significant outcome of this triangulation has been the proposal and confirmation of a new, refined definition of explicitation. However, in combining process- and product-oriented research methods, the study has also implemented an original integration of research methodologies for investigation of explicitation. These have included:

1) The application of propositional analysis as a tool for comparing levels of explicitness in ST and TTs. The non-linguistic nature of propositions and the fact that they designate mental representations and cognitive relations facilitated the investigation of explicitation at macro-levels. Moreover, their avoidance of the constraints of language pairs and text types incidentally suggests the potential universality of propositional analysis as a methodology.

2) The use of keystroke-logging software and retrospective interviews to measure cognitive effort and its association with instances of explicitation. Translog also enables the exploration of the causative factors or rationales behind the translator’s implementation of explicitation.

3) The incorporation of a readability test as well as, more importantly, a readability rating survey in order to assess explicitation from the target reader’s perspective. The readability test and rating survey helped us to examine the extent to which explicitation does or does not facilitate the target readership’s comprehension of
the TTs. Evaluation of TTs by actual target readers rather than from the researcher’s own perspective naturally furnishes a more objective view of whether—and, if so, how well—explicitation facilitates target text processability.

On the basis of the data analyses in Chapters 4 and 5 as well as of the discussion of research questions and hypotheses in Chapter 6, the following conclusions may be drawn. First, explicitation is not always a preferred procedure or strategy employed in the process of translation. During that complex, decision-making, cognitive process of translation, translators do not always choose explicitation as the solution to bridging the linguistic, cultural or world knowledge gap. On the contrary, out of consideration for other factors, including the translation brief, target reader expectations and TT readability, they sometimes opt against adopting explicitation altogether. This finding stands in marked contradiction to Mona Baker’s (1996: 176) claim for explicitation as a universal feature of translation.

Second, a higher level of explicitation does not necessarily lead to a higher degree of readability in the target text. As discussed in Chapter 6, some target texts with higher ratings of readability actually exhibit relatively low levels of explicitness. This result confirms once again that explicitation is a cognitive, decision-making process that requires on the part of the translator appropriate anticipation and evaluation of: 1) the target readership; 2) the communicative effect that the translation product achieves; and 3) the cultural distance between the ST writer and TT readers. In order to satisfy these requirements or meet these goals, the translator needs to control consciously the translation process, using his/her metacognitive knowledge and regulatory skills. Such
knowledge and skills are developmental and can be obtained and improved through training and practice.

Nevertheless, an important addendum needs to be made to this second conclusion. While our analysis of the data does not verify the general hypothesis that a higher level of explicitation leads to a greater degree of text readability, there may be evidence to justify the more specific assumption that certain types of explicitation do ensure the production of a more readable TT. Compare, for instance, text-organizational and pragmatic-cultural explicitation. On the one hand, the target text produced by the principal practitioner of the former type (Participant 2) was rated by our group of eighteen target readers as the most readable of the six TTs. On the other, the evidence in the retrospective reports that would undermine hypothesis 6 is concerned more or less exclusively with pragmatic-cultural explicitation. The assumption, then, that specific types of explicitation may indeed be related to text readability invites further investigation.

This assumption may not be unrelated to our third conclusion: namely, that certain types of explicitation require more cognitive effort than others. The Translog data, retrospective interview and questionnaire all confirmed that Participant 2—once again, the principal exponent of text-organizational explicitation—had expended the greatest amount of cognitive effort among all the participants on this type of explicitation. The fact that she devoted a considerably larger amount of time to text reorganization during the translation revision phase than other participants indicates her deliberate control of the translation process as a whole and reflects her application of global strategies that benefit translation production and enhance target text readability.
This third conclusion, however, raises the possibility of an interesting fourth. For, if certain types of explicitation are cognitively more demanding than others, might it not be worth inquiring whether there are similar significant variations within a particular type of explicitation and, if so, on what these variations might be based? In responding to this inquiry, I would call attention to the micro- and macro-strategies proposed by Hönig (1991: 79) in his model of an ideal translation process. According to Hönig (1995: 56), macro-strategy includes not only “the characteristics that are decisive for the target text, such as its function, its audience, and the medium in which it will appear,” but also “the options that translators have for searching information and verifying their subjective associations, as well as for improving their subject domain knowledge.” This last phrase in particular suggests an overriding concern with the development of a more meaningful general understanding of the target text. Micro-strategy, by contrast, refers to the employment of specific rules or strategies within a translation situation. In order to determine whether a micro-strategy is applicable, translators need macro-strategies to control the implementation of those rules; or, as Göpferich (2009: 17) argues, “without a macro-strategy, translators run the risk of getting lost in the maze of micro-strategies.”

Recall then, for example, the case of Participant 4 who refrained from pragmatic-cultural explicitation of the “two capitals” in AOI 5 on the basis that too much background information might distract the target reader from the main purpose of the text. Such a micro-based concern with the accretion of raw information—characteristic of the novice translator—contrasts starkly with the more sophisticated macro-strategies that distinguish the professional. Once again, Participant 2 is an excellent case in point. In accounting for
her explicitation of Shanhaiguan’s geographical relationship with the Great Wall, she describes the additional orientations of “north” and “south” as part of an effort to achieve a more “visual” effect for the target reader. This indicates a more globally-minded approach to the production of the target text: pragmatic-cultural explicitation, in other words, is not just a matter of providing cultural tidbits, or snippets of information to explain specific, unfamiliar cultural items; it is also about furnishing the target reader with the wherewithal to process the general cultural content of the text as a whole. By extension, in the particular case of Participant 2, it is fair to suggest that a similar metacognitively advanced mindset informed the radical textual reorganization that is the hallmark of TT2, the result of a strategic schema-building process. The consistent employment of this type of macro-strategy, as Göpferich (2009: 17) points out, leads to real translation competence and thus yields important pedagogical insights.

6.3 Implications

The general pedagogical implications of this study are essentially two-fold: on the one hand, the investigation of the translator’s cognitive process and its triangulation with the translation products as well as the close observation of the pre-writing, writing, and post-writing phases of the translation process provide the necessary empirical evidence and practical foundation on which to base translator training and teaching objectives as well as prospective learning outcomes. The theoretical foundation for this practice, on the other hand, comprises the different levels of metacognitive knowledge and regulatory
skills in addition to the (in)ability to employ global strategies that were identified in the novice and professional groups.

More specifically, however: if, as the results of this study suggest, it is indeed the consistent application of global macro-strategies, themselves a reflection of a metacognitively advanced mindset, that produces genuine translation competence, how might we draw on those results to project new training activities for the student translator’s classroom? Having witnessed the process whereby the likes of Participant 2 produce a highly readable target text, what sort of tasks might trainee translators be usefully asked to accomplish in the classroom in order to develop their professional competence and to progress toward that metacognitively advanced mindset?

One of the goals noted in the introduction to this study was to pursue a deeper understanding of how translators comprehend the source text. It is from this so-called pre-writing phase that more specific, potentially useful pedagogical messages begin to emerge. For example, as was demonstrated in Chapter 5, this is precisely the stage at which Participant 2 was inspired to reorganize the central part of the target text: namely, where she adopted a critical stance regarding the ST. Source texts, as we observed in Chapter 3, are often imperfect. Participant 2’s sense, expressed in the retrospective interview, that the ST was not well structured and unduly repetitive, her allusion to the inordinate length and complexity of the sentence structures, and her focus on the thematic inconsistency between neighboring paragraphs were all factors leading to her conclusion that without thorough reorganization, confusion and difficulty of comprehension would be the likely consequence for target readers. That is to say, the global macro-strategy that
Participant 2 went on to implement was rooted in a readiness to adopt a thoughtful critical stance toward the ST before giving any immediate consideration to target text production. The specific implication of this kind of readiness for the classroom is immediately plain: students should be presented with learning activities that encourage the patient development of global critical reading skills and foster a regard for the unique qualities of the source text. It is perhaps no accident that the only other participant who indicated significant critical reservations regarding the source text was another of the professionals.

It may be argued that there is little new in a pedagogical appeal to students of translation to follow professional or expert example. Nevertheless, I would respond that the grounds on which that appeal is made are radically different from those of a more traditional learning environment. This is not a matter of inviting students to accept passively whichever set of rules or strategies their teachers see fit to impose upon them. Thanks to the implementation of empirical methods in the translation studies classroom, students will have the chance to develop translation competencies based on their own active experience throughout the learning process. Observing and discussing the professional or expert translator’s working process should be a foundational part of that experience, providing students as it would with the opportunity to acquire a deeper understanding of how a translation task is completed in a specific situation, a heightened awareness of what types of translation problems they may encounter and a deeper sense of the potential solutions to these professional challenges.

Another anticipated effect of this approach to expert or process modeling was a shift in
the student translator’s attention from contrastive linguistic features to cultural pragmatic factors. Yet, as the contrast described above between Participant 4 and Participant 2 shows, the strategic accommodation of these factors, once that shift has been accomplished, is far from straightforward. Again and again, students should be encouraged to conceive of translation as a purpose-driven and situation-conditioned, complex cognitive process rather than as a mere transfer of linguistic or raw information. There is certainly some advantage to be drawn at the micro-level from a learning activity that would have them focusing on those passages in the text that might be in need of pragmatic cultural explicitation. However, this same activity will be greatly enriched, in pedagogical terms, if it is followed by a discussion that at once highlights the cultural integrity of the source text and pays due heed to the translation brief. Students might then finally be invited, on the basis of their observation of the process data, to identify those macro-based means or strategies that the professionals employ in order to convey that integrity. Such a metacognitive training process will not only enhance students’ ability to build their own schemas while employing their own global macro-strategies; it will also foster in them a more meaningful, controlled and intentional use of micro-strategies.

6.4 Future Directions

The results of this study suggest several fruitful directions for future studies of explicitation, and potentially of other hypothesized universal features of translation as well.
First, propositional analysis as a tool for source text processing and the comparative analysis of the explicitness of ST and TT is based on the annotation of propositions. While it was possible to perform this annotation manually in the case of a small-scale project like the current study, the demands of time and the other costs in human resources render propositional annotation on a larger scale, at best, difficult to manage. For the purposes, then, of conducting larger-scale investigations, the creation of automatic propositional annotation tools and programs would surely constitute a useful enrichment of the translation researcher’s technological resources.

Second, as was concluded in Section 6.2, further studies of target text readability and its association with particular types of explicitation need to be conducted. To this end, I would propose the development of a readability scale specifically for translated texts. Current existing automatic measurements of readability are, as we noted above concerning Flesch’s formula, intended primarily for texts composed in English and are based on linguistic and textual features alone. No consideration is given to such demonstrably crucial factors as cultural difference, situational specifics or the gap in world knowledge. These are precisely the factors that would have to inform the design of a readability scale for target texts.

Finally, it has become increasingly apparent that the investigation of such a highly complex cognitive process as that of translation requires a multiplicity of mutually complementary methodologies; the growing interdisciplinarity of the field of translation studies has effectively rendered all methodological approaches to research individually insufficient. Several translation process researchers have indicated that the combination
of multiple tools of research represents the most likely means to conducting deeper investigations into the translation process. In future studies of explicitation in particular, methodologies like eye-tracking, screen capturing or even fMRI brain imaging should be used to explore and shed light on the development of translation competence and metacognition. In its own endeavor to contribute to this exploration, the current study has benefitted substantially from the information generated by the Translog program. Nevertheless, the overriding message of the study has been the following: translation studies will, in future, have no choice but to admit into its embrace an ever-increasing diversity of process-based methodologies; by triangulating these with methods associated with a more traditional product-based mode of inquiry, scholars will continue to obtain ever greater, ever more direct access to the “black box” of the translator’s mind.
### APPENDIX A: The participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age interval</th>
<th>Sex</th>
<th>Status</th>
<th>First language</th>
<th>Years of experience</th>
<th>Subject fields</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Zhu)</td>
<td>31-40</td>
<td>M</td>
<td>Professional translator</td>
<td>Chinese</td>
<td>3</td>
<td>Business, education, government, tourism</td>
<td></td>
</tr>
<tr>
<td>2 (Sasha)</td>
<td>21-30</td>
<td>F</td>
<td>Professional translator</td>
<td>English</td>
<td>6</td>
<td>Education, tourism, technology, literature</td>
<td></td>
</tr>
<tr>
<td>3 (Choy)</td>
<td>41-50</td>
<td>M</td>
<td>Professional translator</td>
<td>Chinese</td>
<td>4</td>
<td>Literature</td>
<td>Studied translation at university level</td>
</tr>
<tr>
<td>4 (Lin)</td>
<td>31-40</td>
<td></td>
<td>Student</td>
<td>Chinese</td>
<td>0</td>
<td></td>
<td>Studies English at post-graduate level</td>
</tr>
<tr>
<td>5 (Liu)</td>
<td>21-30</td>
<td></td>
<td>Student</td>
<td>Chinese</td>
<td>0</td>
<td></td>
<td>Studies English at university level</td>
</tr>
<tr>
<td>6 (Zheng)</td>
<td>31-40</td>
<td>M</td>
<td>Student</td>
<td>Chinese</td>
<td>2-3 (freelance)</td>
<td>Technology, science, literature</td>
<td>Studies English at post-graduate level</td>
</tr>
</tbody>
</table>
APPENDIX B: Instruction sheet

You are invited to read six translations of a passage from a Chinese tourist brochure on the city of Shanhaiguan and, on the basis of your reading, complete the table below in accordance with the following instructions:

a. Please record the time you spend in reading each translated text.

b. After reading each translation, please indicate your rating of the ease (or not!) with which you read the text according to the following categories:

**Highly readable:** the segment reads as if it were written by a native writer. It is easy to read and you had no cause to pause during reading.

**Readable:** the segment is relatively easy to read, but you may have had to pause slightly for processing or to jump backwards once in the sentence to re-read something.

**Somewhat difficult:** the segment does not read as if it were written by a native writer and you may have had to pause once or twice during reading and/or jump backwards to re-read one or two phrases/words.

**Very difficult:** the segment is difficult to read because its structure does not conform to what is normally expected of a grammatical sentence in the TL. You would have to re-read it to make any sense of it.
c. After reading all six translations, and considering information on issues such as the history, geography, culture of the city of Shanhaiguan, please rate how well each text meets your general expectations as a reader. [Very well, well, not so well, not well at all]

d. Insofar as they are important to your understanding of the text, please rate how well each text succeeds in serving the purpose of providing information on the following specific items (Lady Mengjiang/Mengjiang Nü, “two capitals” and Hongwu). [Very well, well, not so well, not well at all]

Please use the following table to indicate your responses to the above instructions:

<table>
<thead>
<tr>
<th>Text No.</th>
<th>Instruction a.</th>
<th>Instruction b.</th>
<th>Instruction c.</th>
<th>Instruction d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C: Total number of propositions

Total number of propositions: 98

<S1>“南有丽江，中有平遥，北有山海关”。3 Propositions

P1 (有，南，丽江)
P2 (有，中，平遥)
P3 (有，北，山海关)

<S2>三座古城各有特色：民俗文化，商业文化，古代军事文化。7 Propositions

分析：三座古城各有特色。特色是民俗文化，商业文化，古代军事文化。

P1 (各有，三座城，特色)
P2 (是，特色，文化)
P3 (文化，民俗)
P4 (文化，商业)
P5 (军事，文化)
P6 (古代，军事)
P7 (古，城)

<S3>他们都是源远流长的华夏文明遗存的文化奇葩。5 Propositions
分析：(1) 他们都是文化奇葩。

(2) 华夏文明遗存文化奇葩。

(3) 华夏文明源远流长。

5 Propositions

分析：(1) 万里长城是世界七大奇迹之一。

(2) 万里长城是人类文明史上最伟大的建筑工程。

<5>山海关北依燕山，南襟渤海，长城纵贯其间，紧扼东北、华北咽喉，始建于明洪武十四年（公元 1381 年）
城第一关”<A12>的盛誉。13 Propositions

分析：(1) 山海关北依燕山，南襟渤海。

P1 （北依，山海关，燕山）

P2 （南襟，山海关，渤海）

(2) 长城纵贯其（山海关）间，紧扼东北、华北咽喉。

P3 （纵贯，长城，山海关间）

P4 （紧扼，长城，东北、华北咽喉）

(3) （山海关）始建于明洪武十四年（公元 1381 年）。

P5 （始建，山海关，于明洪武十四年）

P6 （公元 1381 年，明洪武十四年）

P7 （明，洪武）

(4) （山海关）素有……盛誉。

P8 （素有，山海关，盛誉）

(5) a.“两京琐钥无双地”，

P9 （锁钥，两京）

P10 （无双，地）

b.“万里长城第一关”。

P11 （是，长城，关）
山海关是世界文化遗产地，是历史文化名城，是长城军事重镇。

其境内长城遗存众多且保存良好，结构严谨、规模宏大，山海关长城在万里长城中的地位无可替代。

分析：（1）其（山海关）境内长城遗存众多且保存良好。
（2）长城结构严谨，规模宏大。

P5（结构严谨，长城）
P6（规模宏大，长城）

3）山海关长城（长城山海关部分）在万里长城中的地位无可替代。

P7（无可替代，地位）
P8（是，山海关长城，长城的一部分）
P9（长，长城，万里）

<S8> 其军事防御功能的完备程度、构思之奇妙堪称中国长城建筑史上的奇迹，其山、海、关、城结为一体的自身特点独一无二，被我国著名长城专家罗哲文誉为最精髓的长城博物馆。17 Propositions

分析：（1）其（山海关）军事防御功能的完备程度、构思之奇妙堪称中国长城建筑史上的奇迹。

P1（堪称，完备程度，奇迹）
P2（堪称，构思之奇妙，奇迹）
P3（<具有>，山海关，功能）
P4（功能，军事防御）
P5（<是>，奇迹，建筑史上的）
P6（建筑史，长城）
<S9>与长城相关的文化遗存丰富，其中孟姜女故事留传广泛，妇孺皆知。7

Propositions

分析：(1) 与长城相关的文化遗存丰富。

P1 （丰富，遗存）

P2 （遗存，文化）

P3 （与长城相关，遗存）
(2) 其中孟姜女故事流传广泛，妇孺皆知。

P4 （流传，故事，广泛）

P5 （知，故事，妇孺，皆）

P6 （<是>，关于孟姜女，故事）

P7 （在，故事，遗存中）

<S10> 为了挖掘这座历史文化古城的非物质文化遗产，更好地弘扬长城文化、孟姜女文化的深厚底蕴，推介古城的文化内涵，多年来，山海关区对境内长城的保护、管理、维修、研究、利用及长城文化、孟姜女文化的发掘、发展等方面十分重视，并做了大量卓有成效的工作，得到了业内专家的高度认可。24 Propositions

分析：(1) （工作目的是）为了挖掘这座历史文化古城的非物质文化遗产，更好地弘扬长城文化、孟姜女文化的深厚底蕴，推介古城的文化内涵。

P1 （挖掘，<山海关区>，非物质文化遗产）

P2 （更好地弘扬，<山海关区>，底蕴）

P3 （深厚，底蕴）

P4 （<有>，长城文化，底蕴）

P5 （<有>，孟姜女文化，底蕴）

P6 （<山海关区>，推介，文化内涵）

P7 （<有>，古城，文化内涵）
（2）多年来，山海关区对境内长城的保护、管理、维修、研究、利用及长城文化、孟姜女文化的发掘、发展等方面十分重视。

P8 重视，山海关区，保护
P9 重视，山海关区，管理
P10 重视，山海关区，维修
P11 重视，山海关区，研究
P12 重视，山海关区，利用
P13 在，长城，山海关区境内
P14 重视，山海关区，多年来
P15 发展，山海关区，长城文化
P16 发展，山海关区，孟姜女文化
P17 发掘，山海关区，长城文化
P18 发掘，山海关区，孟姜女文化
P19 重视，山海关区，十分

（3）山海关区并做了大量卓有成效的工作，得到了业内专家的高度认可。

P20 做，山海关区，工作
P21 大量，工作
P22 卓有成效，工作
P23 （得到，山海关区，认可）

P24 （认可，业内专家，高度）
APPENDIX D: Propositional Annotation

Propositional Annotation: TT1 (Total propositions: 127)

<P1><S1>The Shanhaiguan Pass in north China is often mentioned on a par with Lijiang in the south and Pingyao in between. 5

P1 (MENTION, PASS, WITH LIJIANG AND PINGYAO, OFTEN)
P2 (IN NORTH CHINA, PASS)
P3 (IN THE SOUTH, LIJIANG)
P4 (IN BETWEEN, PINGYAO)
P5 (BE, SHANHAIGUAN, A PASS)

<S2>In fact, each of the three ancient towns has its own characteristics: ancient military, folk, and commercial cultures, respectively. 6

P1 (HAVE, THE THREE TOWNS, CHARACTERISTICS, EACH)
P2 (OWN, CHARACTERISTICS)
P3 (INCLUDE, CHARACTERISTICS, CULTURE, RESPECTIVELY)
P4 (MILITARY, CULTURE)
P5 (ANCIENT, MILITARY)
P5 (FOLK, CULTURE)
P6 (COMMERCIAL, CULTURE)
They are all remarkable cultural heritages from the long history of the Chinese civilization.

The Great Wall is known as one of the seven world wonders, the greatest architectural project in human civilizations.

Situated at the foot of Yanshan Mountains to the north and embracing Bohai Sea to the south, with the Great Wall running through its pass, Shanhaiguan is the strategic point in northeast and north China.
It was first built in the fourteenth year of the Hongwu Emperor's reign (1381) during the Ming Dynasty and has since then enjoyed a great renown for being "the only key to the twin capitals, the first pass to the Great Wall."
A world cultural heritage, a famous historical and cultural town, and a place of strategic importance along the Great Wall, Shanhaiguan carries numerous well preserved relics of the Great Wall with their meticulous structures and grand scales. 19
Shanhaiguan's position on the Great Walls is irreplaceable because of its perfect defensibility and marvelous scheme that have earned its reputation as a magic in the architectural history of China's Great Wall. 13

P1 (BE, POSITION, IRREPLACEABLE)
P2 (HAVE, SHANHAIGUAN, POSITION, ON THE GREAT WALL)
P3 (BE, THE REASON, DEFENSIBILITY)
P4 (PERFECT, DEFENSIBILITY)
P5 (BE, REASON, SCHEME)
P6 (MARVELOUS, SCHEME)
P7 (EARN, DEFENSIBILITY, REPUTATION)
P8 (BE, SHANHAIGUAN, A MAGIC)
P9 (ARCHITECTURAL, HISTORY)
P10 (HAVE, THE GREAT WALL, HISTORY)
P11 (CHINA’S HISTORY)
P12 (EARN, SCHEME, REPUTATION)
P13 (IN THE HISTORY, MAGIC)
It is praised by the celebrated Chinese Great Wall expert Luo Zhewen as the pith and marrow of the Great Wall for its unique feature that combines the mountains (shan), the sea (hai), the pass (guan) and the town. 10

There are abundant cultural heritages related to the Great Wall, including the very popular legend of Lady Meng Jiang (ca. 550 B.C.), whose tears over her husband’s death collapsed the Great Wall. 9
For many years, in order to discover the non-material cultural heritages of this historical town, to further promote the significances of the cultures of the Great Wall and of Lady Meng Jiang’s loyalty, and to popularize the cultural meanings of the ancient town, the Shanhuaiguan District administration has been paying special attentions to the protection, management, maintenance, study, and utilization of the Great Wall within the area, as well as to explore and develop the Great Wall and Meng Jiang cultures. 27
Its fruitful efforts have been highly recognized by experts in the fields.
P3 (IN THE FIELDS, EXPERTS)
Propositional Annotation: TT2 (Total propositions: 144)

<P1><S1>"In the south, there is Lijiang, the center has Pingyao, and the north has Shanhaiguan."

P1 (BE, LIJIANG, IN THE SOUTH)
P2 (HAVE, THE CENTER, PINGYAO)
P3 (HAVE, THE NORTH, SHANHAIGUAN)

<S2>The three ancient cities each have their own customs, commerce, and military history.

P1 (HAVE, THE THREE CITIES, EACH, CUSTOMS)
P2 (ANCIENT, CITIES)
P3 (OWN, CUSTOMS)
P4 (HAVE, THE THREE CITIES, COMMERCE)
P5 (HAVE, THE THREE CITIES, HISTORY)
P6 (MILITARY, HISTORY)
P7 (THEIR, CUSTOMS)

<S3>They are all marvels of early Chinese civilization that have survived the ages.

P1 (BE, THEY, MARVELS, ALL)
P2 (HAVE, CIVILIZATION, MARVELS)
P3 (EARLY, CIVILIZATION)
P4 (SURVIVE, THEY, THE AGES)
P5 (CHINESE, CIVILIZATION)
Another marvel of early Chinese civilization and one of the Seven Wonders of the World, the Great Wall of China has been called the greatest feat of architectural engineering in the history of human civilization, and part of the Great Wall lies not far from the city of Shanhaiguan. 15

P1 (CALL, THE GREAT WALL, FEAT, IN THE HISTORY)
P2 (HAVE, CHINA, THE GREAT WALL)
P3 (THE GREATEST, FEAT)
P4 (HAVE, ENGINEERING, THE FEAT)
P5 (HAVE, CIVILIZATION, HISTORY)
P6 (BE, THE GREAT WALL, MARVEL)
P7 (HAVE, CIVILIZATION, MARVELS)
P8 (EARLY, CIVILIZATION)
P9 (BE, THE GREAT WALL, ONE OF THE SEVEN WONDERS)
P10 (HAVE, THE WORLD, SEVEN WONDERS)
P11 (LIE, PART OF THE GREAT WALL, NOT FAR FROM SHANHAIGUAN)
P12 (BE, SHANHAIGUAN, A CITY)
P13 (ARCHITECHTURAL, ENGINEERING)
P14 (HUMAN, CIVILIZATION)
P15 (ANOTHER, MARVEL)

The Great Wall at Shanhaiguan has been well-preserved, and is unmatched by other
sections of the Wall: the precision of its construction can be observed here on a large scale. 6

P1 (PRESERVE, THE GREAT WALL, WELL)
P2 (UNMATCH, THE GREAT WALL, BY OTHER SECTIONS)
P3 (OBSERVE, THE PRECISION, ON A LARGE SCALE)
P4 (HAVE, CONSTRUCTION, PRECISION)
P5 (AT SHANHAIGUAN, THE GREAT WALL)
P6 (HAVE, THE WALL, OTHER SECTIONS)

<S6>Great Wall expert Luo Zhewen believes that Shanhaiguan is where the essence of the Great Wall can best be realized. 5

P1 (BELIEVE, LUO ZHEWEN)
P2 (BE, SHANHAIGUAN, THE LOCATION)
P3 (REALIZE, THE ESSENCE, BEST)
P4 (HAVE, THE GREAT WALL, ESSENCE)
P5 (BE, LUO ZHEWEN, GREAT WALL EXPERT)

<P3><S7>The city of Shanhaiguan was built in the fourteenth year of the Hongwu period (AD 1381) during the Ming Dynasty. 6

P1 (BUILD, SHANHAIGUAN, IN THE FOURTEENTH YEAR)
P2 (BE, THE FOURTEENTH YEAR OF HONGWU PERIOD, AD 1381)
P3 (BE, AD 1381, DURING MING)
P4 (BE, SHANHAIGUAN, A CITY)
P5 (BE, MING, A DYNASTY)

P6 (OF HONGWU PERIOD, THE FOURTEENTH YEAR)

<S8> A place of great military importance, it was praised as "the key between two capitals, the first pass of the Great Wall." 8

P1 (PRAISE, IT, THE KEY)

P2 (PRAISE, IT, THE PASS)

P3 (HAVE, IT, IMPORTANCE)

P4 (BE, THE KEY, BETWEEN TWO CAPITALS)

P5 (HAVE, THE GREAT WALL, PASS)

P6 (FIRST, PASS)

P7 (MILITARY, IMPORTANCE)

P8 (GREAT, IMPORTANCE)

<S9> To the north of Shanhaiguan are the Yanshan Mountains, to the south is the Bohai Sea, and the Great Wall runs between them from north to south, closely guarding the strategic bottleneck of northern China. 9

P1 (BE, YANSHAN MOUNTAINS, TO THE NORTH)

P2 (BE, BOHAI SEA, TO THE SOUTH)

P3 (RUN, THE GREAT WALL, BETWEEN THEM)

P4 (RUN, THE GREAT WALL, FROM NORTH TO SOUTH)

P5 (GEARD, THE GREAT WALL, THE BOTTLENECK)

P6 (HAVE, NOTHERN CHINA, BOTTLENECK)
As a defensive structure, the Great Wall at Shanhaiguan is brilliantly conceptualized, a high point in the architectural history of the Great Wall.

There is also a rich cultural heritage surrounding the Great Wall.

One well-known story is the legend of Lady Meng Jiang, whose husband was conscripted to help build the Great Wall, died working there, and was buried under the Wall.
Lady Meng Jiang's tears when she heard of his death caused a collapse in the Wall, under which she found the bones of her husband and was able to give him a proper burial.

Shanhaiguan is an important piece of world history, and has left a rich legacy.
The mountains ("shan"), the sea ("hai"), the pass between them ("guan"), and the city itself become one entity in a marriage of elements unlike any other.  

In order to uphold this historical city's legacy, to raise awareness of the Great Wall and of the touching story of Lady Meng Jiang, and to share the ancient city's cultural significance, the Shanhaiqian District has for many years paid considerable attention to the protection, management, maintenance, and research of the Great Wall at
Shanhaiguan, and to the advancement of the culture surrounding the Great Wall and the story of Lady Meng Jiang. 30

(1) The Shanhaiguan District has for many years paid considerable attention to the protection, management, maintenance, and research of the Great Wall at Shanhaiguan.

P1 (PAY, DISTRICT, ATTENTION, FOR MANY YEARS)
P2 (PAY, ATTENTION, TO THE PROTECTION)
P3 (PAY, ATTENTION, TO THE MANAGEMENT)
P4 (PAY, ATTENTION, TO THE MAINTENANCE)
P5 (PAY, ATTENTION, TO THE RESEARCH)
P6 (SHANHAIGUAN, DISTRICT)
P7 (PROTECT, DISTRICT, THE GREAT WALL)
P8 (MANAGE, DISTRICT, THE GREAT WALL)
P9 (MAINTAIN, DISTRICT, THE GREAT WALL)
P10 (RESEARCH, DISTRICT, THE GREAT WALL)
P11 (AT SHANHAIGUAN, THE GREAT WALL)

(2) The attention has also been paid to the advancement of the culture surrounding the Great Wall and the story of Lady Meng Jiang.

P1 (PAY, ATTENTION, TO THE ADVANCEMENT)
P2 (SURROUND, THE CULTURE, THE GREAT WALL)
P3 (SURROUND, THE CULTURE, THE STORY)
The Shanhaiguan District has done a great deal of highly effective work and has earned the respect of experts in the field.
P1 (DO, DISTRICT, WROK)
P2 (EFFECTIVE, WORK)
P3 (HIGHLY, EFFECTIVE)
P4 (A GREAT DEAL, WORK)
P5 (EARN, DISTRICT, THE RESPECT)
P6 (HAVE, EXPERTS, RESPECT)
P7 (IN THE FIELD, EXPERTS)
P8 (SHANHAIGUAN, DISTRICT)
Propositional Annotation TT3 (Total Propositions: 114)

<P1> <S1>"Li River at the south, Ping Yau in the middle, and Shanhaiguan at north." 3

P1 (AT THE SOUTH, LI RIVER)
P2 (IN THE MIDDLE, PINGYAU)
P3 (AT NORTH, SHANHAIGUAN)

<S2> Each three ancient cities has its own special features: folk culture, business culture, and ancient military culture. 9

P1 (HAVE, EACH CITY, ITS FEATURES)
P2 (ANCIENT, THREE CITIES)
P3 (SPECIAL, FEATURES)
P4 (INCLUDE, FEATURES, CULTURE)
P5 (FOLK, CULTURE)
P6 (BUSINESS, CULTURE)
P7 (MILITARY CULTURE)
P8 (ANCIENT, MILITARY)
P9 (OWN, FEATURES)

<S3> They are the cultural phenomenon of the well-established and long-standing heritage of Hwua Shia civilization. 5

P1 (BE, THEY, PHENOMENON)
P2 (WELL-ESTABLISHED, CIVILIZATION)
P3 (LONG-STANDING, CIVILIZATION)
The Great Wall is one of Seven Wonders of the World, and it is the greatest building construction in the history of human civilization.

Shanhaiguan is near Yian Mountain at north and Bo Sea at south.

The Great Wall lies between these two locations, and controls the vital passage of northeastern and northern China.
The construction of Shanhaiguan started in the 14th year of Hong Wu period in Ming Dynasty (1381 AD). 4

It has since been given the great fame of "the only key to the two major capitals of China, and the first Pass of the Great Wall." 9

Shanhaiguan is the world's cultural heritage, a famous historical city, and a significant military site of the Great Wall. 9
There is a great amount of the remaining wall in the surrounding area, and is well preserved, prudently constructed, and in grandiose scale.  

Shanhaiguan's role in the Great Wall is irreplaceable, because the thorough and intensive level of military defense purpose and its sophisticated design can be regarded as a milestone in the architectural history of the Great Wall.
The unique feature of its incorporating mountain, sea, and chateau as one unity is what the Chinese Great Wall expert Zhewen Ro called "the essence of the Great Wall museum." 9

Analysis:

(4) The Chinese Great Wall has a unique feature.
(5) The Great Wall incorporates mountain, sea, and chateau as one unity.

(6) The feature has been called “the essence of the Great Wall museum” by Zhewen Ro.

(7) Zhewen Ro is a Chinese Great Wall expert.

There is abundant cultural heritage relating to the Great Wall. 3

Among them, the story of Mon Jian Nieu is one of the most circulated and well known by the Chinese. 5
To excavate the spiritual aspect of the cultural heritage of this historical site, and to proclaim the Great Wall culture and Mon Jian Nieu culture, and to spread the cultivation of Shanhaiguan, the administration has protected, maintained, and researched the Great Wall in this area for decades. 13
Also, there is a great emphasis on the continuing effort to keep developing both the Great Wall culture and Mon Jian Nieu culture. 5

The large amount of outstanding work has been highly recognized by the professions. 3
Propositional Annotation: TT4 (Total propositions: 117)

<String 1><P1>"Lijiang in the South, Pingyuan in the Middle and Shanhaiguan in the North."

3

P1 (IN THE SOUTH, LIJIANG)
P2 (IN THE MIDDLE, PINGYUAN)
P3 (IN THE NORTH, SHANHAIGUAN )

<String 2>Each of the three cities has its own uniqueness - its folk culture, business culture and ancient military culture. 7

P1 (HAVE, THREE CITIES, EACH, UNIQUENESS)
P2 (OWN, UNIQUENESS)
P3 (INCLUDE, UNIQUENESS, CULTURE)
P4 (BUSINESS, CULTURE)
P5 (MILITARY, CULTURE)
P6 (ANCIENT, MILITARY)
P7 (FOLK, CULTURE)

<String 3>All of them are the miraculous cultural demonstrations of the long and historical Huaxia civilization. 7

P1 (BE, THREE CITIES, ALL, DEMONSTRATIONS)
P2 (MIRACULOUS, DEMONSTRATIONS)
P3 (DEMONSTRATE, THREE CITIES, CIVILIZATION)
P4 (LONG, CIVILIZATION)
The Great Wall of China is known for being one of the seven wonders of the world, and is the greatest architectural project of the man kind in history. 8

Shanhaiguan sits geographically south of the Yan Mountain and north of the Bohai Sea, with the Great Wall lying longitudinally across. 3
<S6>It is the most critical geographical entrance point through the Northeastern and Northern China. 4

P1 (BE, SHANHAIGUAN, ENTRANCE POINT)
P2 (MOST CRITICAL, ENTRANCE POINT)
P3 (GEOGRAPHICAL, ENTRANCE POINT)
P4 (BE, ENTRANCE POINT, THROUGH THE NORTHEASTERN CHINA, NORTHERN CHINA)

<S7>Shanhaiguan was built in the 14th year of the Ming dynasty (A.D. 1381), and has always been known for the reputation of being the most critical geographical entrance point to the Great Wall; there has none been like it geographically between the two capitals of China. 10

P1 (BUILD, SHANHAIGUAN, IN THE 14TH YEAR OF MING DYNASTY)
P2 (BE, MING DYNASTY, A.D. 1381)
P3 (KNOW, SHANHAIGUAN, FOR THE REPUTATION)
P4 (BE, REPUTATION, ENTRANCE POINT)
P5 (THE MOST CRITICAL, ENTRANCE POINT)
P6 (GEOGRAPHICAL, ENTRANCE POINT)
P7 (BE LIKE, NONE, SHANHAIGUAN, GEOGRAPHICALLY)
P8 (BE, SHANHAIGUAN, BETWEEN THE TWO CAPITALS)
P9 (HAVE, CHINA, TWO CAPITALS)
P10 (TO THE GREAT WALL, ENTRANCE POINT)
Shanhaiguan is one of the cultural heritage remained in the world, a city known for its famous historical culture and its military significance near the Great Wall.

Within Shanhaiguan's surroundings, there are many remains of the Great Wall that are left in well condition, rigorously structured and in magnificent scale.
The Great Wall at Shanhaiguan has irreplaceable significance in the history of the Great Wall.

P1 (HAVE, THE GREAT WALL, SIGNIFICANCE, IN THE HISTORY)
P2 (AT SHANHAIGUAN, THE GREAT WALL)
P3 (IRREPLACEABLE, SIGNIFICANCE)
P4 (OF THE GREAT WALL, THE HISTORY)

The level of completeness and the amazing design of its military defense ability are known as the miracle of the architectural history of the Great Wall in China.

P1 (KNOW, LEVEL OF COMPLETENESS, AS MIRACLE)
P2 (KNOW, DESIGN OF DEFENSE ABILITY, AS MIRACLE)
P3 (AMAZING, DESIGN)
P4 (MILITARY, DEFENSE ABILITY)
P5 (OF HISTORY, MIRACLE)
P6 (ARCHITECTURAL, HISTORY)
P7 (OF THE GREAT WALL, HISTORY)
P8 (IN CHINA, THE GREAT WALL)

The uniqueness of the mountain, the sea, location and city combined in one is so rare that it is called the essence of the museum of the Great Wall by Zhewen Luo, one of the most famous Great Wall experts in China.

P1 (BE, THE COMBINATION, UNIQUE)
P2 (BE, THE UNIQUENESS, RARE, SO)
There are also many rich historical heritage surrounding the Great Wall. 4

One of which, the story of a woman named Mengjiang, is especially well known by everyone ranging from youngsters to adults. 5

In order to further uncover the non-material cultural heritage associated with this historical city to better promote the rich and abundant history and culture about the
Great Wall and the history of the woman named Mengjia, Shanhaiguan district has spent a significant amount of efforts in protecting, maintaining, research and utilization of the Great Wall remaining, as well as the discovery and development of the culture of the woman named Mengjia in the area in recent years. 25
In addition, significant amount of achievements have been received and recognized by the experts in the field. 4

P1 (RECEIVE, AMOUNT OF ACHIEVEMENTS, BY THE EXPERTS)
P2 (RECOGNIZE, AMOUNT OF ACHIEVEMENTS, BY THE EXPERTS)
P3 (SIGNIFICANT, AMOUNT)
P4 (IN THE FIELD, EXPERTS)
Propositional Annotation: TT5 (Total propositions: 82)

<P1><S1>Shanhaiguan is one of the three famous ancient fortresses in China, with Lijiang in the South and Pingyao in the Middle. 6

P1 (BE, SHANHAIGUAN, ONE OF THE FORTRESSES)
P2 (HAVE, CHINA, THREE FORTRESSES)
P3 (ANCIENT, FORTRESSES)
P4 (FAMOUS, FORTRESSES)
P5 (IN THE SOUTH, LIJIANG)
P6 (IN THE MIDDLE, PINGYAO)

NOTE: “Shanhaiguan in the North” is missing.

<S2>For their ethnic, commercial, and military importance respectively. 4

P1 (BE, REASON, THEIR IMPORTANCE)
P2 (ETHNIC, IMPORTANCE)
P3 (COMMERCIAL, IMPORTANCE)
P4 (MILITARY, IMPORTANCE)

<S3>they are widely known as gems in the long-lasting ancient Chinese civilization. 5

P1 (KNOW, THEY, WIDELY, AS GEMS)
P2 (HAVE, CIVILIZATION, GEMS)
P3 (ANCIENT, CIVILIZATION)
P4 (LONG-LASTING, CIVILIZATION)
P5 (CHINESE, CIVILIZATION)
As part of the Great Wall, one of the world's seven relics, Shanhaiguan is one of the greatest architectures in human history.

Started to be built in the fourteenth year of the Hongwu Emperor in the Ming Dynasty (1381 AD), the fortress has Yanshan to its north and Bohai to its south, with the Great Wall passing through in the middle, thus holding a strategic position in between the Northeast and North China.
P8 (IN THE MIDDLE, THE GREAT WALL)

P9 (HOLD, THE FORSTRESS, A POSITION, BETWEEN THE
    NORTHEAST AND NORTH CHINA)

P10 (STRATEGIC, POSITION)

<S5>No wonder it has been regarded as the key to both capitals and the most important fortress on the Great Wall. 4

P1 (REGARD, SHANHAIGUAN, THE KEY, TO BOTH CAPITALS)

P2 (BE, SHANHAIGUAN, FORTRESS)

P3 (ON THE GREAT WALL, FORTRESS)

P4 (THE MOST IMPORTANT, FORTRESS)

<S6>As a crucial military site, Shanhaiquian is well structured for defense. 4

P1 (STRUCTURE, SHANHAIGUAN, WELL, FOR DEFENSE)

P2 (BE, SHANHAIGUAN, A SITE)

P3 (MILITARY, SITE)

P4 (CRUCIAL, SITE)

<S7>The many relics of the Great Wall in the fortress were well preserved, demonstrating original structure, grand size, and organic integration of the mountain, the sea, th fortress, and the town. 11

P1 (PREERVE, RELICS, WELL)

P2 (OF THE GREAT WALL, RELICS)

P3 (MANY, RELICS)
Shanhaiguan is also a World Cultural Heritage site and a Historical and Cultural Town.

For its irreplacable position in the Great Wall, Shanhaiguan was acclaimed Zhewen Luo, a famous Chinese expert on the Great Wall, as the best Great Wall museum.

Shanhaiguan is also a World Cultural Heritage site and a Historical and Cultural Town.
The legend of Mengjiannu has been one of the most known stories about the fortress. 4

To promote the culture of the Great Wall, the tradition of Mengjiangnu, and the richness of the ancient town, the Shanhaiguan District Administration has been dedicated to preserving and maintaining the Great Wall and researching, discovering, and developing the non-material heritage of the fortress. 13
Those successful efforts have been widely recognized by experts and scholars.
Propositional Annotation: TT6 (Total propositions: 145)

<P1><S1>In the long history of Chinese civilization, three cities distinguishes themselves with their own distinctive cultural and historical features: that of local customs and traditions, of commerce and of strategic military importance respectively. 14

Analysis:

(1) Chinese civilization has a long history.

P1 (HAVE, CIVILIZATION, A HISTORY)

P2 (LONG HISTORY)

P3 (CHINESE, CIVILIZATION)

(2) Three cities distinguish themselves with their own distinctive cultural and historical features.

P1 (DISTINGUISH, THREE CITIES, THEMSELVES)

P2 (CULTURAL, FEATURES)

P3 (HISTORICAL, FEATURES)

P4 (HAVE, THREE CITIES, FEATURES)

Note: “distinctive” is the repetition of “distinguish”. No extra information is added.

(3) The features include local customs and traditions, commerce and strategic military importance, respectively.

P1 (INLCUDE, THE FEATURES, CUSTOMS)

P2 (INCLUDE, THE FEATURES, TRADITIONS)
These cities have long been known as Lijiang city in the south, Pingyao city in the mid-west and Shanhaiguan city in the Northeast of China for their geographical locations.

These three cities are the fruits of the great Chinese culture.
As one of the new seven wonders of the world, Great Wall represents the greatest architecture in the world. 5

First built in 1381 in the Ming Dynasty (1368-1644), Shanhaiguan city enjoys a unique military strategic location: it adjoins the Bohai Sea to the south and the Yanshan Mountain to the north. 12

Analysis:

(1) Shanhaiguan was built in 1381 in the Ming Dynasty (1368-1644).

Note: 1381 is used instead of 洪武十四年; the range of Ming Dynasty is added.
(2) Shanhaiguan city enjoys a unique military strategic location.

- P1 (ENJOY, SHANHAIGUAN CITY, A LOCATION)
- P2 (BE, THE LOCATION, UNIQUE)
- P3 (STRATEGIC, LOCATION)
- P4 (MILITARY, LOCATION)

(3) It adjoins the Bohai Sea to the south and the Yanshan Mountain to the north.

- P1 (ADJOIN, IT, SEA, MOUNTAIN)
- P2 (TO THE SOUTH, BOHAI)
- P3 (TO THE NORTH, YANSHAN)
- P4 (BOHAI, SEA)
- P5 (YANSHAN, MOUNTAIN)

<S6>This unique strategic location in geography made Shanghaiguan city the critically unique gateway between Shenyang and Beijing, the two strategically important cities in northern China. 13

Analysis:

(1) Shanhaiguan city has a unique strategic location in geography.

- P1 (HAVE, CITY, A LOCATION)
- P2 (STRATEGIC, LOCATION)
- P3 (BE, THE LOCATION, UNIQUE IN GEOGRAPHY)
- P4 (UNIQUE, LOCATION)
- P5 (BE, SHANHAIGUAN, A CITY)
(2) Shanhaiguan city is the critically unique gateway between Shenyang and Beijing.

P1 (BE, SHANHAIGUAN, THE GATEWAY)
P2 (BE, THE GATEWAY, UNIQUE)
P3 (BE, THE GATEWAY, BETWEEN SHENYANG AND BEIJING)
P4 (CRITICALLY, UNIQUE)

(3) Shenyang and Beijing are the two strategically important cities in Northern China.

P1 (BE, SHENYANG AND BEIJING, THE TWO CITIES)
P2 (BE, THE TWO CITIES, IMPORTANT)
P3 (BE, SHENYANG AND BEIJING, IN CHINA)
P4 (NORTHERN, CHINA)
P5 (STRATEGICALLY, IMPORTANT)

<S7>It is known as 'the most important military gateway in China. 5

P1 (KNOW, IT, GATEWAY)
P2 (BE, IT, IN CHINA)
P3 (MILITARY, GATEWAY)
P4 (BE, IT, IMPORTANT)
P5 (THE MOST, IMPORTANT)

Note: The poem lines have been paraphrased and translated in non-poetic form.

“Two cities” is specified as Beijing and Shenyang.
For its long history and military significance, Shanhaiguan city is now the Intangible Cultural Heritage of the World. In Shanhaiguan municipal area, still well-preserved is the walls of Great Wall. 13

Analysis:

(1) Shanhaiguan city is now the Intangible Cultural Heritage of the World.

   P1 (BE, CITY, HERITAGE)
   P2 (BE, SHANHAIGUAN, A CITY)
   P3 (CULTURE, HERITAGE)
   P4 (INTANGIBLE, CULTURE)
   P5 (HERITAGE, OF THE WORLD)

(2) Shanhaiguan city has long history and military significance.

   P1 (HAVE, CITY, HISTORY)
   P2 (HAVE, CITY, SIGNIFICANCE)
   P3 (LONG, HISTORY)
   P4 (MILITARY, SIGNIFICANCE)

(3) The walls of Great Wall in Shanhaiguan municipal area are well preserved.

   P1 (PRESERVE, THE WALLS, WELL)
   P2 (BE, THE WALLS, OF GREAT WALL)
   P3 (BE, THE WALLS, IN SHANHAIGUAN AREA)
   P4 (MUNICIPAL, AREA)
The complicated and spectacular construction in this part of Great Wall has made Shanhaiguan city an irreplaceable strategic gateway in Chinese history.

P1 (MAKE, THE CONSTRUCTION, CITY, A GATEWAY)
P2 (BE, THE CONSTRUCTION, COMPLICATED)
P3 (BE, THE CONSTRUCTION, SPECTACULAR)
P4 (BE, GATEWAY, STRATEGIC)
P5 (BE, GATEWAY, IRREPLACEABLE)
P6 (IRREPLACEABLE, IN CHINESE HISTORY)
P7 (BE, SHANHAIGUAN, CITY)

The sections of Great Wall in this area is unique in that it took into consideration of mountains, sea and gateway in its planning and construction.

P1 (BE, THE PLANNING, UNIQUE)
P2 (BE, THE CONSTRUCTION, UNIQUE)
P3 (CONSIDER, IT, MOUNTAINS)
P4 (CONSIDER, IT, SEA)
P5 (CONSIDER, IT, GATEWAY)
P6 (IN THIS AREA, GREAT WALL)
P7 (OF GREAT WALL, THE PLANNING)
P8 (OF GREAT WALL, THE CONSTRUCTION)

There is no parallel in the world in its design and is praised as the 'museum of Great Wall' by Lou Zhewen, a Great Wall specialist.
Analysis:

(1) There is no parallel in the world in its design.

P1 (HAVE, DESIGN, NO PARALLEL, IN THE WORLD)
P2 (HAVE, SHANHAIGUAN, DESIGN)

(2) It is praised as the ‘museum of Great Wall’ by Luo Zhewen, a Great Wall specialist.

P1 (PRAISE, IT, THE MUSEUM)
P2 (MAKE, THE PRAISE, BY LUO ZHEWEN)
P3 (BE, LUO ZHEWEN, A SPECIALIST)
P4 (OF GREAT WALL, THE MUSEUM)
P5 (GREAT WALL, SPECIALIST)

<S12> Travelling in Shanghaiguan city, you will be amazed by the historical relics and beautiful moving stories, particularly the famous story of Mengjiangnu, a newly wedded lady whose crying and mourning for her husband died in the construction of Great Wall had made the walls collapse. 18

Analysis:

(1) Travelling in Shanghaiguan city, you will be amazed by the historical relics and beautiful moving stories, particularly the famous story of Mengjiangnu.

P1 (AMAZE, YOU, BY THE RELICS)
P2 (AMAZE, YOU, BY STORIES)
P3 (BE, STORIES, MOVING)
In order to publicize Great Wall culture and Mengjiangnuyu culture, the Shanhaiguan city government has taken great measures to preserve and make better use of its historical and cultural heritage and to make the city better known to the outside world. 15
The city has efficiently and systemically preserved Great Wall and carried out a series of activities in research and development of the local historical culture, which has been highly praised by experts and specialists.

Analysis:

(1) The city has efficiently and systemically preserved Great Wall.

   P1 (PRESERVE, THE CITY, GREAT WALL)
P2 (BE, PRESERVATION, EFFICIENT)
P3 (BE, PRESERVATION, SYSTEMATICALLY)

(2) The city has carried out a series of activities in research and development of the local historical culture.
P1 (CARRY OUT, THE CITY, ACTIVITIES)
P2 (BE, THE ACTIVITIES, IN RESEARCH)
P3 (BE, THE ACTIVITIES, IN DEVELOPMENT)
P4 (BE, RESEARCH AND DEVELOPMENT, ABOUT CULTURE)
P5 (A SERIES OF, ACTIVITIES)
P6 (LOCAL, CULTURE)
P7 (HISTORICAL, CULTURE)

(3) The activities have been highly praised by experts and specialists.
P1 (PRAISE, THE ACTIVITIES, BY EXPERTS)
P2 (PRAISE, THE ACTIVITIES, BY SPECIALISTS)
REFERENCES


