EXPLICITATION, IMPLICITATION AND SHIFT OF CONJUNCTIONS IN ENGLISH-CHINESE TRANSLATIONS OF INSTITUTIONAL TEXTS: A CORPUS-ASSISTED STUDY

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Abstract

Unlike other texts, institutional texts are formal which are supposedly translated literally or formally. In spite of this, there exists a hypothesis called the explicitation hypothesis, proposed by Blum-Kulka (1986), which posits that the translation process encourages explicitation of conjunctions, and that the more complex the texts, like institutional texts, the more explicitation (Whittaker, 2004). There is another contending view that, unlike English, Chinese is a systemically implicit language and this implicitness should be manifested in a reduced use of conjunctions in Chinese translated texts as compared to English source texts. This research sets out to investigate these disagreements empirically. This research will be a corpus-assisted study where comparisons are made using parallel corpora (English source texts and their translated Chinese target texts), monolingual comparable corpora (translated Chinese target texts and non-translated Chinese texts) and a combination of both. This study found that the translated texts show a combined influence of the source texts, the interpretation of translators, the influence of the target language and only some influence from the non-translated texts, making the translated texts very different from the non-translated texts. The study also found that explicitation overshadows implicitation in both the monolingual and the parallel analysis. The source texts influence strongly the usage of hypotactic conjunctions while the translators prefer to explicitate paratactic conjunctions. Interestingly, the changes made by the translators seem to show similar sequences of those thoughts as the non-translated texts. Some linguistic reasons of change are identified to inform translators as to which linguistic elements in the source texts may have affected their actions of change, so this study recommends that they rethink their strategies to produce better quality translations. Cumulatively, the differences between the use of conjunctions in the translated texts and the non-translated texts have caused subtle meaning changes.

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Word Count: 91,368

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Abbreviations and Acronyms

AP	*Addition* (paratactic)
AT	*Addition* (textual)
CaPH	*Causal: purpose* (hypotactic)
CaPP	*Causal: purpose* (paratactic)
CaRH	*Causal: reason* (hypotactic)
CaRP	*Causal: reason* (paratactic)
CaRT	*Causal: reason* (textual)
CoCAH	*Conditional: concessive/adversative* (hypotactic)
CoCAP	*Conditional: concessive/adversative*(paratactic)
CoCAT	*Conditional: concessive/adversative* (textual)
CoNH	*Conditional: negative* (hypotactic)
CoNP	*Conditional: negative* (paratactic)
CoNT	*Conditional: negative* (textual)
CoOIH	*Conditional: positive: only if* (hypotactic)
CoPALAH	*Conditional: positive: as long as* (hypotactic)
CoPITH	*Conditional: positive: if...then* (hypotactic)
CoPITP	*Conditional: positive: if...then* (paratactic)
CoPWH	*Conditional: positive: whatever* (hypotactic)
ET	*Elaboration* (textual)
LL	Log-likelihood
MH	*Manner* (hypotactic)
MP	*Manner* (paratactic)
NT	Non-translated texts/non-translated text
S-explicitation	Explicitation in parallel analysis
SFL	Systemic functional linguistics
SHE	*Spatial/situation: extend* (hypotactic)
S-implicitation	Implicitation in parallel analysis
SPH	*Spatial/situation: point* (hypotactic)
S-change	Changes in parallel analysis
S-shift	Shifts in parallel analysis
ST	Source texts/source text
TDP	*Temporal: different time* (paratactic)
TDH	*Temporal: different time* (hypotactic)
TDT	*Temporal: different time* (textual)
T-explicitation	Explicitation in comparable analysis
T-implicitation	Implicitation in comparable analysis
TSH	*Temporal: same time* (hypotactic)
TSP	*Temporal: same time* (paratactic)
TST	*Temporal: same time* (textual)
TT	Translated texts/translated text
TTR	Type-token ratio

To my husband, Chan Chow Juan

and

my son, Nathanael Chan Yu Zhe.

I would like to thank all the friends who have been there to give advice when things were tough, namely, Izatul, Rossila, Nuruliza, Asrul, Julia, Emily and Pauline. Thank you also to my colleagues at SOAS for the sincerity of friendship and support given, in particular, Shelby Chan, Hongbo Zhang and Yang Fan. I also cannot thank Uncle Teen and Aunty Julie enough for graciously providing accommodation and lodging for our first month in London when we had no place to stay. Thank you for the support given by friends from Haven Green Baptist Church, London, for making our stay in London so wonderful. A special thank you goes to Robert Jankowski who was willing to take care of our property for such a long time. Thank you also to Pastor Joshua Yee for his astounding teaching, and to Pastor Elisha, Sister Peggy and Caregroup members from the Renewal Lutheran Church Malaysia for their prayers and support.

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CHAPTER 1
Introduction

1.1 Aims and Research Rationale

This research sets out to investigate conjunctions in the English-Chinese translation of institutional texts. The institutional texts used here consist of understandings, treaties, conventions, protocols and agreements. It is a corpus-assisted translation study[1] where the comparisons are made by using monolingual comparable corpora (translated texts (TT) and non-translated texts (NT)) and parallel corpora (translated texts (TT) and their source texts (ST)). This study aims primarily at the following: (a) to examine the differences and the similarities in the use of conjunctions between the Chinese TT and the Chinese NT, (b) to scrutinise the treatment of conjunctions in the Chinese TT by comparing them with the corresponding conjunctions in the English ST, to inspect the treatment of conjunctions in the English ST by comparing them with the Chinese TT, and to determine the sources of the change, (c) to inspect the influences that might have caused the change in the TT, and (d) to explore the effects of the change.

The focus on institutional texts is borne out of the realisation that this genre is increasingly essential in a globalised world. Globalisation means more global trade, more socio-cultural interactions and more political negotiations between countries. As a result, there arises a need to govern the interactions between them. Predictably, many institutional texts are established; many institutional texts are drawn up; and many institutional texts are translated to increase the accessibility of the texts to the parties involved. In the translation of institutional texts, accuracy is fundamental. Inaccurate translation of these documents may lead to misinterpretations, which in turn may lead to misunderstandings, disputes and disharmony in the relationships of

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[1] In this research, the term "corpus-based", however, will be called "corpus-assisted" as the latter term is felt to give a better representation of the nature of this kind of research which is more towards using corpus as a tool to assist investigation rather than basing the investigation on corpus (Li and Zhang, 2010). There is another term which might create confusion in the study of corpus, namely the "corpus-driven" study. The difference is that the corpus-assisted approach begins with a theory and the corpus is provided to amend, attest or to refute the theory; while the corpus-driven study begins with the corpus where an analysis starts without any theoretical background.

the countries involved. As the institutional texts are considered important legal documents, they are usually translated 'in full' (Wagner, Bech and Martínez, 2002: 75) or translated semantically where they will be more faithful and more literal (Newmark, 1991). Whilst the meaning of the clauses of the institutional texts should be translated accurately, the translation of the logical-semantic relations between these clauses in the institutional texts should not be treated lightly as these logical aspects confine and control the readers' perception and interpretation of the institutional texts. In this regard, conjunctions are the key logical-relation features which bind these clauses, define the relationship between these clauses with their semantic meanings and help organise texts to promote the understanding of them. Hence, it will be fascinating to see if the conjunctional elements in the ST are carried over to the TT; and whether such a carryover (if any) affects the TT to be distant from their NT's corresponding norms.

Another reason why the study of conjunctions in institutional texts is captivating is because it has been attested by Whittaker (2004, cited in Pym, 2005) that the harder the texts the more interpretation is needed by the translators, and the more explicitation of the interpretation by the translators, sometimes through the employment of conjunctions. As the institutional texts are noted for their high difficulty levels, with old-fashioned and tortuous syntax, and dense, long and highly complex sentences (Alcaraz and Hughes, 2002; Cao, 2007), it will be fascinating to determine whether the statements are true that the translation of the institutional texts is usually more literal which entails less influence of the translators, or whether both phenomena, i.e. the formal influence of the ST and the explicitation by the translators will occur in the TT, which may in turn cause the TT to be different from the NT.

Another appealing rationale is that the study of conjunctions in institutional texts will give us some information on the translation strategies as well as the mental process of the translators (Séguinot, 1988). Unlike the case of literary texts where translators are allowed to add in their creativity and be freer in their expression, the institutional texts focus on information which should entail no addition of stylistic creativity on the part of the translators. By studying the conjunctions in the institutional texts, it will first show us the strategies that the translators might have

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employed when they translate; and secondly, it will provide some clues to their cognitive processes and their understanding of the ST through their utilisation of conjunctions, eliminating other aspects of translating such as the stylistic creativity of the translators which may affect the treatment of conjunctions. Study of the exploitation of conjunctions in relation to the mental processes of the translators has also been supported by Halverson (2004: 571) who suggests that conjunctions may play a role in providing a link between the translators' knowledge and the interpretations that they make which may offer a clue to the 'relationship between knowledge, language and cognition'. In this research, the use of conjunctions may showcase the manifestation of the translators' knowledge, language usage and cognition processes which later may give rise to certain effects on the readers.

In addition, the English-Chinese language pair has been selected due to the systemic differences between these two languages. As has been pointed out by Halverson (2004), although Indo-European languages have similar conjunctions, the patterns of application might be different. If that is the case, the dissimilarities might be even greater for languages which are from different language families. As we know, Chinese belongs to the Sino-Tibetan family and is considered a systemically implicit language; whilst English is a member of the Indo-European family and is not a systemically implicit language. Besides being manifested in other forms, many researchers (Zhu, Zheng and Miao, 2001; Pan, 2004) have claimed that the implicitness of the Chinese language is also reflected in the lesser deployment of conjunctions. The different preferences in the usage of the types and frequencies of conjunctions may be due to the divergence of socio-cultural institutionalisation (Baker 1992). Ultimately, a higher quality translation would mean that a translation could mimic the conventional treatment of conjunctions of the NT. As Baker (1992: 111) has clearly opined, 'once the source text is understood, the translator then has to tackle the task of producing a target version which can be accepted as a text in its own right. The phraseology and the collocational and grammatical patterning of the target version must conform to target-language norms'. In this case, the translators have to tackle the task of producing the conjunctive patterning in the TT conforming to the target language norms, to be more exact, the genre of the target language norms. As a consequence, it will be valuable to research conjunctions and to see if the TT are geared towards mimicking conjunctive conventions in the NT. If the

complexity of the English legal syntax which has been attributed in part to the abundance of connectors (Alcaraz and Hughes, 2002) is true; and the implicitness of the Chinese language is also true, one wonders whether the abundant use of conjunctions can be adapted for Chinese readers.

This research also takes advantage of the development of computerisation in the field of linguistics which has made possible a corpus-assisted study. In the past, corpus-assisted studies required manual analysis of a lot of data. However, with the advent of computer technology and present day sophistication in its application, the notion of corpus-assisted studies has evolved to imply the study of vast authentic data 'assembled in a principled way' (Johansson 1995: 19) in electronic form in which the data can be uploaded into certain computer software to be organised, annotated and queried, and the frequencies of certain linguistic phenomena can be calculated with the results used to facilitate analysis. The quantitative results may show a great deal of linguistic events, especially regarding the tendency of recurring patterns. Corpus-assisted studies have also made possible the comparison of the TT and texts written originally in the target language. Such a comparison was impossible in the past. On top of that, the computer and its tools will help churn out data which is more precise and objective. Such data are more accurate, and additionally, they are able to eliminate errors due to human negligence and prejudice. However, using computerisation in research has its limitation in that human effort is required. That is, although the utilisation of electronic data and relevant software will help organise and provide quantitative numbers, the output will still need to be interpreted by human effort. Be that as it may, the interpretation of the data based on quantitative terms will assist a more accurate interpretation, as the numbers are more accurate. Accordingly, this study will benefit from this new technology, which accelerates the research process.

Hitherto, there has been no research done on how conjunctions are treated in the English-Chinese translation of institutional texts. The study of this topic is limited to the central working European languages like English-French by Séguinot (1988). However, the recent impetus of research on the English-Chinese pair is increasing. Some examples of English-Chinese language pair research can be found in Chen (2006), Wang and Qin (2010), Xiao, He and Yue (2010), and Wang (2010). The

detailed differences between these researches will be expounded upon in Chapter 3. The focus of conjunctions in the institutional texts is also limited, for there is no mention of conjunctions in the style guide of the British Standards (2006) of translation services. Perhaps, the use of conjunctions has not been seen as a problem in the translation of institutional texts. However, in alignment with the rationale stated in the previous paragraphs on the study of conjunctions in this genre, it is believed that this theme will shed some light on a lot of issues related to this subject matter. Halverson (2004) has emphasised that serious research on the use of conjunctions in translation is still relatively lacking and that a lot can still be fruitfully studied. In addition, Halverson (2004: 562) has pointed out that 'research on the topic is largely only tangentially translation-related, as cross-linguistic studies have primarily focused on language acquisition questions or more theoretical issues'. Therefore, this research hopes to fill in missing links in the study of conjunctions.

1.2 Research Questions

Drawing on the aims and rationale stated above, the research questions outlined below will serve as a guide to this research.

(1) To what extent does the use of conjunctions in Chinese TT in institutional texts differ from or is similar to that of Chinese NT?

(2a) What are the conjunctions that are made more explicit or have shifted in the Chinese translation of the English institutional texts? What are the linguistic reasons for the change?

(2b) What are the conjunctions that are made more implicit or have shifted in the Chinese translation of the English institutional texts? What are the linguistic reasons for the change?

(3) Can the causes of explicitation, implicitation and shift in the Chinese translation of English institutional texts be attributed to influence of the ST, interpretation of the translators, or influence of genre conventions of the NT or the target language?

(4) What are the possible effects of change on the TT when compared to the NT?

The first research question is intended to examine quantitatively the differences and the similarities of the use of conjunctions in the TT and the NT, the monolingual comparable corpora. The parameters involved are the percentages of the total conjunctions (see Section 5.1), the frequencies of the top-5 conjunctions (see Section 5.2), the type-token ratios (TTR) (see Section 5.3), the frequencies of conjunctions against the 21 most common conjunctions in Chinese (see Section 5.4), the distinctiveness of conjunctions (see Section 5.5), the frequencies and proportions of the taxis and the textual categories (see Section 5.6), the frequencies of the correlative conjunctions (see Section 5.7.1), the frequencies and the proportions of the correlative vs. the stand-alone constructions (see Section 5.7.2) and the frequencies of the double conjunctions (see Section 5.7.3). All these defined parameters are to assist the researcher in identifying all possible differences and similarities between the treatment of conjunctions in both texts from different perspectives and angles.

The second research question concentrates on the comparison between the ST and the TT based on the parallel corpora. The analysis is a mixture of quantitative and qualitative terms. Quantitatively, the frequencies and the percentages of pure explicitation (see Section 6.1.1), of pure explicitation based on semantic categories (see Section 6.1.2), of shift from other conjunctions and other non-conjunctions into conjunctions (see Section 6.1.4), of pure implicitation (see Section 6.2.1), of pure implicitation based on semantic categories (see Section 6.2.2), of shift into other conjunctions and into other non-conjunctions from conjunctions (see Section 6.2.4), are identified. Qualitatively, the linguistics elements that trigger the changes are identified (see Sections 6.1.3, 6.1.5, 6.2.3 and 6.2.5).

The third research question is to establish the quantitative profiles of all the conjunctions in the ST, the TT and the NT, and identify the forces of influence in the TT. Comparisons will first be performed on the total conjunctions in these corpora for the following purposes: (i) to identify which corpus has the highest frequency among the three corpora and to verify if the ST corpus has more conjunctions than the NT; (ii) to find out whether the influence of the ST alone has caused diversion in

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the TT when compared with the NT; (iii) to disclose the percentage of the ST influence and the percentage of pure explicitation in the TT; (iv) to authenticate if the pure explicitation is more than the pure implicitation; and (v) to make known if the pure explicitation alone by the translators has caused explicitation in the TT when compared with the NT. With the same parameter executed on the total conjunctions (see Section 7.1.1), evaluations will later be also performed in the top three semantic categories (see Section 7.1.3, 7.1.4, 7.1.5) and the selected individual conjunctions (see Section 7.1.6) in order to check on the individual entities which make up the total composite of the results of conjunctions. In this section, the conjunctions used in the ST, the TT and the NT based on the semantic categories will also be measured against each other to discover the preferred semantic categories of these corpora in order to identify and contrast the mental processes of the producers of these texts (see Section 7.1.2).

Last but not least, research question four is to discuss the possible effects of the change in the TT when we are comparing the frequencies of the usage of a few distinctive conjunctions in the TT with the NT (see Section 7.2). The establishment of the effects of change on these individual conjunctions is a postulation associated with the semantic meanings that these conjunctions carry which may affect the logical-semantic relations of the discourse.

1.3 Significance of the Study

This research is important, as first, it will establish how distant or close the use of conjunctions in the TT is compared to the NT. This is accomplished through the calculation of the type-token ratio (TTR) and the log-likelihood (LL) as well as the identification of the usage based on the taxis and the textual categories, the calculation of the usage of the correlative conjunctions and many more. In doing so, a more rounded outlook of the treatment of conjunctions in the TT against the usage in the NT is possible. Secondly, it will also measure the use of conjunctions in the TT against the corresponding usage in the ST to establish the similarities or the dissimilarities in the treatment of conjunctions. The TT-ST and the ST-TT comparison will permit the examination of conjunctions identified in the ST and the

TT, allowing the identification of both explicitation and implicitation. As the texts provide the same semantic contexts meticulous comparison can be performed to identify the strategies of translation by the translators i.e. in what linguistic situation the translators will explicitate, implicitate and shift in the use of conjunctions, knowledge of which enlightens the translators on their decision-making. Thirdly, this research is vital as it will be able to ascertain the extent to which the use of conjunctions in the TT has deviated from the ST or the NT. The cognisance of this is important to inform researchers or translators alike on the modus operandi of the translators when translating institutional texts. This modus operandi refers to, e.g. whether a close rendition of the ST conjunctions as the genre of these texts requires formal translation, or the subtle manifestation of the interpretation of the translators as the institutional texts texts are usually more complicated thus the interpretation of the logical-semantic relation is manifested through the use of conjunctions, or the adherence to the original NT's style or target language style in the use of conjunctions as this is the style that the TT should conform to. In addition, the comparison of the semantic categories of conjunctions used in these three corpora may give fresh insight into the mental process of the translators as compared to the mental process of the writers of the ST and the NT. Lastly, the knowledge revealed about the effects of the change in the TT compared to the originals in the NT may trigger the translators to rethink their translation strategies in the translation of the institutional texts.

1.4 Organisation of Chapters

This thesis comprises of eight chapters. Chapter 1 is the introductory chapter. It lays out the aims, the rationale, the research questions and the significance of this study. Chapter 2 provides the theoretical framework where the concepts of "conjunction" will be delineated. Chapter 3 is a review of the literature on issues related to corpus-assisted studies and also the study of conjunctions. Chapter 4 provides some insights into the size of the corpora and the composition of the corpora as well as the criteria used in the selection of the corpora. The tools used and the process of the preparation of the corpora for comparison will also be elaborated. Following this, the methodology employed to answer the research questions in relation to the

comparable and parallel comparisons will be explicated. Chapter 5 endeavours to answer research questions in relation to the comparable comparison while Chapter 6 answers the research questions in relation to the parallel comparison. Chapter 7 combines the comparable and parallel analyses, and discusses the effects of change in the TT. The last chapter is a synthesis of findings; that is, it will link the research questions with the findings and provide a summary of the overall findings. It will also mention the issues related to this study which include the limitations of this thesis and the implications it might have for future studies in similar areas. This concluding chapter will bring to a close the research on the uniqueness of the use of conjunctions in the TT as compared to the ST and the NT.

CHAPTER 2
Systemic Functional Approach to Conjunction

This chapter presents a crystallisation of the concept of "conjunction". Section 2.1 provides the common notion of "conjunction" in general linguistics. Section 2.2 explains the systemic functional approach to English conjunction drawing essentially on the work of Halliday and Matthiessen (2004); and highlights some issues pertinent to English conjunction raised in the systemic functional approach. The concept of "conjunction" in the Chinese language will be analysed in Section 2.3 based on Li's (2007) systemic functional approach to Chinese conjunction. A general comparison between English and Chinese conjunctions by other scholars who have delved into this area will be made in Section 2.4. Section 2.5 contains the concluding remarks for this chapter.

2.1 The General Notion of "Conjunction"

The contentious term "conjunction" is used loosely or perhaps too critically by scholars to denote the concept that they hold dear. According to Bussmann (1996: 94), the "conjunction" is a 'class of words whose function is to connect words, phrases, or sentences syntactically while characterising semantic relations between those elements'. Syntactically, Bussmann (1996: 94) divides conjunctions into coordinating and subordinating conjunctions where the coordinating conjunctions 'connect elements that are equally ordered with each other', while the subordinating conjunctions 'introduce dependent clauses'. These definitions seem very clear at a cursory glance. However, the division of conjunctions by Bussmann (1996) into solely coordinating and subordinating conjunctions seems to exclude words that join sentences or paragraphs to organise texts, what other scholars call linking adverbials (Biber et al., 1999), conjuncts (Halverson, 2004), or conjunctions or conjunctive adjuncts (Halliday and Matthiessen, 2004). Further probing finds that Bussmann (1996) does place conjunctions as one of the discourse markers in his explanation of discourse markers. Hence, this may imply that Bussmann's definition of "conjunction" and the categorisation of "conjunction" do include the conjunctions which are discourse markers.

Biber et al. (1999), on the other hand, use the term "conjunction" sparingly. More common are terms such as coordinators (or the coordinating conjunctions), subordinators (or the subordinating conjunctions) and linking adverbials (Biber et al., 1999). Halliday and Matthiessen (2004: 81, 538) use the term "conjunction" to denote paratactic conjunctions, hypotactic conjunctions and conjunctive adjuncts. There are also some scholars like Halverson (2004) who use the term "connective" to represent conjuncts (which is the same as conjunctive adjuncts), conjunctions (which is the same as paratactic and hypotactic conjunctions) and certain types of clauses like verbless or non-finite clauses. Richards, Platt and Platt (1992: 77), however, use the term "connective" interchangeably with "conjunction". Crystal (1985) employs the term "connective" to include the copulas "be", "seem", etc. Mauranen (2000), on the other hand, uses the term "connectors" to denote the conjunctive adjuncts that work as "text reflexivity" or "metatext", i.e. as features that are used to organise texts, to remark on the propositions of the texts and to guide the reader.

In this research, the notion of "conjunction" will mainly include words that connect clauses, i.e. the paratactic and the hypotactic conjunctions, and the conjunctions with a cohesive function, i.e. the conjunctive adjunct. It will not include the conjunctions that bind words or phrases[2], and it will also not include copulas. Verbless or non-finite clauses like the infinitive "to" which are considered as a type of hypotactic link in Halliday and Matthiessen's Systemic Functional Linguistics (SFL) will only be discussed if these types of constructions influence the realisation of conjunctions in the TT. This working definition is crucial to delimit the scope of this research.

In the next section, a detailed study of English conjunctions formulated in the SFL will be carried out to explain this system in the treatment of conjunctions.

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[2] The selection of some conjunctions like "and" that bind clauses are done manually.

2.2 Systemic Functional Approach to English Conjunction

According to form and meaning criteria, "conjunction" is traditionally placed as a word class, alongside noun, pronoun, verb, adverb, adjective, preposition and interjection (Bussmann, 1996). However, this classification of words is often criticised for 'the unevenness of the classificatory criteria, which are partially contradictory or overlapping' (Bussmann, 1996: 351) and subsequently a variety of different approaches to the classification of words can also be found. Among them is Systemic Functional Linguistics (SFL).

Systemic Functional Linguistics looks at language as a semiotic system, a system of meaning, which was first proposed by de Saussure (1959). This system of meaning is partly[3] realised through the lexicogrammatical system which consists of lexis and grammar. As a result, SFL looks at both lexis and grammar 'as a resource for making meaning' (Halliday and Matthiessen, 2004: 31). This approach has been chosen because it offers more detailed, intricate and comprehensive categorisations and typologies of conjunctions relying on their functions in language and subsequently on the semantic meanings of each conjunction, apparently giving a more realistic description of grammar compared to the traditional approaches to grammar where weight is given to the form and syntax over function and meaning. It should be noted that it is not my purpose here to argue for the superiority of this approach over others, rather, I merely hope to work within this approach and test the viability of this approach for my research. Additionally, many translation scholars interested in the issue of explicitation, for example Blum-Kulka (1986), Shlesinger (1995), Øverås (1998), Hansen-Schirra, Neumann and Steiner (2006), Abdul-Fattah (2010), and Beleghizadeh and Sharifi (2010), have also successfully based their works on the SFL approach to language. With function and semantic meaning being placed at a more vital status than form and syntax, it is hoped that the comparison between languages will be easier, although it is not my position here to argue for semantic universals for language comparison.

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[3] Others are phonology and graphology.

2.2.1 Conjunctions in Metafunctions

According to Halliday and Matthiessen (2004), there are three basic functions of language, namely, the ideational, the interpersonal and the textual. The ideational metafunction of language 'construe<s> human experience…by representing some process…with its various participants and circumstances' (Halliday and Matthiessen, 2004: 29). The ideational metafunction of language, in turn, can be divided into experiential and logical. The experiential ideational metafunction of language represents human experience and the logical ideational metafunction of language expresses the logical relations derived from experience (Halliday and Matthiessen, 2004). The interpersonal metafunction of language enacts interpersonal relationships by expressing the writer's attitude towards the audience and the topic he is addressing (Halliday and Matthiessen, 2004). The textual metafunction of language exhibits the organisation of the message by 'being able to build up sequences of discourse, organising the discursive flow and creating cohesion and continuity as it moves along' (Halliday and Matthiessen, 2004: 30).

Conjunction is used in different metafunctions. The definitions of "conjunction" by Halliday and Matthiessen (2004) at the different metafunctional levels display the complexity of the concept of "conjunction". Firstly, a conjunction is defined as 'a word or group that either links (paratactic) or binds (hypotactic) the clause in which it occurs structurally to another clause' (Halliday and Matthiessen, 2004: 81). Secondly, a conjunction is defined as 'a way of setting up the logical relations that characterise clause complexes in the absence of the structural relationships by which such complexes are defined' (Halliday and Matthiessen, 2004: 536). The difference between these notions of "conjunction" seems to lie in the word "structural"; the first being the presence of grammatical structure and the second the absence of grammatical structure. A further probe into Halliday and Matthiessen's (2004) work reveals that the former definition of "conjunction" applies to the conjunctions used as the logical ideational metafunction whilst the latter applies to the textual metafunction. A conjunction at the logical ideational metafunction holds within a sentence (intrasentential) with the grammatical structure causing the clauses in a sentence to be 'internally cohesive' (Halliday and Matthiessen, 2004: 538, 589; Halliday and Hasan, 1976: 7) guiding the local organisation of the text. Meanwhile, a

conjunction at the textual metafunction holds between sentences (intersentential) without the grammatical structure causing the sentences or the paragraphs to be cohesive, reinforcing the local relations and controlling the global organisation of the text (Halliday and Matthiessen, 2004). These two types of conjunctions, which function differently, complement each other in creating semantic organisation of the text (Halliday and Matthiessen, 2004).

Section 2.2.1.1 and Section 2.2.1.2 will elaborate more on these two different functions of conjunctions; whereas Section 2.2.1.3 will touch on other possible variations without the conjunctions.

2.2.1.1 Conjunctions at Ideational Metafunction

Firstly, the concentration is on conjunctions at the logical ideational metafunction. At this metafunction, conjunctions are the indicators to mark clauses based on their interdependency between clauses, i.e. either parataxis or hypotaxis. Parataxis is 'the relation between two like elements of equal status, one initiating and the other continuing' (Halliday and Matthiessen, 2004: 374-375). Paratactic clauses are potentially independent of one another and each constitutes a proposition in its own right (Halliday and Matthiessen, 2004). An example of a paratactic construction is as follows:

[2.01] A happened *and then* B happened.   (Halliday and Matthiessen, 2004: 369)

Hypotaxis, on the other hand, is 'the relation between a dependent element and its dominant, the element on which it is dependent' (Halliday and Matthiessen, 2004: 374). An example of a hypotactic construction is where the dependent clause, in this case "after A happened", can be placed either before or after the dominant clause "B happened".

[2.02] *After* A happened, B happened.   (Halliday and Matthiessen, 2004: 369)

The above two examples, [2.01] and [2.02], show syntactical linking and binding of two clauses, i.e. "A happened" and "B happened", into a clause complex. A single linkage within a clause complex is called the clause nexus (Halliday and Matthiessen, 2004). However, often we also find internal bracketing, or nesting in a

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clause complex which involves more than one type of taxis (parataxis and hypotaxis) and with more than one kind of logical-semantic relation (Halliday and Matthiessen, 2004). The sentence below is an example to show nesting:

[2.03] In pain, Kukul pulled out the arrow and headed for the river to wash his wound.   (Halliday and Matthiessen, 2004: 376)

In the above example, the primary clause is "In pain, Kukul pulled out the arrow" and the secondary clause is "and headed for the river". The relationship between these two clauses is paratactic. The phrase "to wash his wound" has a hypotactic relation to "and headed for the river", and it is nested in this clause. At this moment, in this example, it has to be noted that SFL places the non-finite form of the verb, in this case the infinitive "to", as one type of possible hypotactic binding variation alongside conjunctions (see Table 2.2). It is a structural link where the subject experiences ellipsis (Halliday and Matthiessen, 2004).

As for the form of conjunctions, besides the usual conjunctions like "and" and "but", the paratactic conjunctions can be made of conjunctive groups like "and thus" and "and then". Some of the hypotactic *enhancement* conjunctions (see Section 2.2.2) may be formed not only by the simple conjunctions like "because" and "when", or the conjunctive groups like "even if" and "so as", but they may also be formed by verbal conjunctions like "provided that" and "considering that", nominal conjunctions like "in case" and "in order (that)", and adverbial conjunctions like "as long as" and "insofar as" (Halliday and Matthiessen, 2004). Interestingly, Halliday and Matthiessen (2004) also propose that hypotactic *enhancement* conjunctions are not only used to illustrate the hypotactic constructions but also circumstantial relationships. This emphasises a close interrelatedness between this type of construction with the circumstantial elements.

2.2.1.2 Conjunctions at Textual Metafunction

The section below will elaborate on Halliday and Matthiessen's (2004) second definition of "conjunction" which takes us to the textual metafunction level of

conjunctions which is for the continuative of the texts. An example of this construction is as follows:

[2.04] A happened. *Then* B happened.   (Halliday and Matthiessen, 2004: 369)

In example [2.04] above, 'the grammar provides a "clue" as to the nature of the semantic link; but it does not integrate the two clauses into a grammatical construction' (Halliday and Matthiessen, 2004: 369). The conjunctions of this second definition are sometimes called conjunctive adjuncts or discourse adjuncts (Halliday and Matthiessen, 2004). Conjunctive adjuncts consist of not only the conjunctions which also function paratactically like "but" and "and", but they also are made up of the traditional categorised adverbs like "then" and "also"; compound adverbs in -ly like "accordingly"; compound adverbs in there- and where- like "therefore", other compound adverbs like "furthermore" and "nevertheless"; prepositional phrases like "in addition"; and prepositional expressions with "that" like "as a result of that" which is optional and "in spite of that" which is obligatory (Halliday and Hasan, 1976).

As mentioned in the previous paragraph, sometimes the conjunctions used at the textual level are the same as the conjunctions used at the paratactic level (Halliday and Matthiessen, 2004). Sentences [2.05] and [2.06] below feature the usage of "next" with sentence [2.05] showing the conjunctive "next" functions as a paratactic conjunction because it shows a relation between events, while the same conjunction in sentence [2.06] functions as a textual conjunction because there is no event but only linguistic events for the speaker to organise his discourse (Halliday and Hasan, 1976).

[2.05] *Next* he inserted the key into the lock.

[2.06] *Next*, he was incapable of inserting the key into the lock.

(Halliday and Hasan, 1976: 239)

However, sometimes there may be no clear-cut difference between the conjunctions which function as textual indicators and the conjunctions which function as paratactic indicators, like:

[2.07] He heaved the rock aside with all his strength. *And* there in the recesses of a deep hollow lay a glittering heap of treasure.

<div align="right">(Halliday and Hasan, 1976: 235)</div>

Besides using conjunctions at the logical ideational and the textual level, the semantic meanings of conjunctions or the connections made by conjunctions may be represented in other word groups or in other constructions such as grammatical metaphors, which will be discussed in the section below.

2.2.1.3 Grammatical Metaphor

Beside examples [2.01], [2.02] and [2.04] shown in the previous subsections, there are many other ways of presenting ideas and the connection of ideas. Halliday and Matthiessen (2004: 592) call this 'grammatical metaphor' and they are considered as congruent. The difference between them is that examples [2.01] and [2.02] are structurally linked and bound; example [2.04] is not but it is more for the cohesiveness of the texts. These sentences, however, can also 'be realised by a single clause with a phrase (or adverbial group) serving as a circumstantial element within it' (Halliday and Matthiessen, 2004: 369), making it another grammatical metaphor for these three sentences, like:

[2.08] After the time of a, b happened.   (Halliday and Matthiessen, 2004: 369)

Example [2.08] begins with a prepositional phrase which does not have a main verb, thus it is a minor phrase compared to examples [2.01], [2.02] and [2.04]. As Halliday and Matthiessen (2004: 369) have pointed out, 'circumstantial elements are part of the "configurational" organisation of the clause, clauses in clause complexes are part of a chain-like or serial structure'. And that:

'…a circumstantial element in a clause contains only a minor process, not a major one; so unlike a clause it cannot construe a figure, it cannot enact a proposition/proposal and it cannot present a message. In contrast, clause complexing always involves

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assigning clause-hood to an augmentation of expansion or projection; the augmentation as the full potential of a clause…'

(Halliday and Matthiessen, 2004: 368)

Halliday and Matthiessen (2004: 369) also say that 'in the creation of text, we choose between augmenting a clause "internally" by means of a circumstantial element and augmenting it "externally" by means of another clause in a complex'. So, the change from a preposition to a conjunction will be considered as an explicitation because of the changing pattern from a minor phrase into a main clause, while the opposite change will be considered as an implicitation.

Another aspect that is pertinent is that the use of conjunctions is considered as not obligatory (Klaudy, 1998) by some scholars. Sometimes clauses or textual transitions are combined without using any lexicogrammar overtly (Halliday and Matthiessen, 2004). In this case, often, the logical-semantic relations can be deduced by the reader based on the experiential aspects (Halliday and Matthiessen, 2004) or based on the underlying semantic relations of the discourse (Halliday and Hasan, 1976). Consequently, an example given by Halverson (2004: 564) of the juxtaposition of "Thomas ate dinner. He read the paper" can be deduced by the reader, although differently, among which is the interpretation of *additive* "Thomas ate dinner and he read the paper" or *temporal* "Thomas ate dinner; then he read the paper" (Halverson 2004: 564).

Relationships can also be expressed by other certain words, as SFL asserts that the lexicogrammar, i.e. the lexis and the grammar, of a language is used to make meaning. For example, the *temporal* relations may be expressed by means of verbs such as "follow" or "precede" (Baker 1992: 191). The conjunctive "because" can also be changed into the noun "reason", which according to Eggins (2004) has caused texts to sound more formal as it has caused a more complex form at the nominal group level.

A tabular example by Halliday and Matthiessen (2004) shows the manifestation of the *enhancing* relationship of "cause" which may illustrate the interconnectedness between possible constructions and possible employment of other word-groups.

Table 2.1 Manifestations of *enhancing* relationship of "cause"

Domain	System	Metafunction	Example
cohesive sequence:	conjunction	textual	She didn't know the rules, <u>Consequently</u>, she died.
clause, complex:	parataxis	logical	She didn't know the rules; <u>so</u> she died.
	hypotaxis		<u>Because</u> she didn't know the rules, she died.
clause, simplex:	causation	logical + experiential	Her ignorance of the rules <u>caused</u> her <u>to die</u>.
	circumstantiation	experiential	<u>Through</u> ignorance of the rules, she died.
	relational process		Her death <u>was due to</u> ignorance of the rules.
			Her ignorance of the rules <u>caused</u> her death.
			The cause of her death <u>was</u> her ignorance of the rules.
nominal group	qualification		Her death <u>through ignorance of the rules</u>

(Halliday and Matthiessen, 2004: 601, my underline)

From this table, we can see that the *enhancing* relationship of "cause" can be realised using conjunctive adjuncts, paratactic and hypotactic conjunctions, circumstantial elements with prepositional markers, relational processes with verbs and qualification through embedding in the nominal group. Other possible constructions are as listed below:

[2.09] <u>By</u> not knowing the rules, she died.

[2.10] <u>Not knowing</u> the rules, she died.

[2.11] <u>Being</u> ignorant of the rules, she died.

[2.12] She, <u>who</u> was ignorant of the rules, died.

[2.13] Her death, <u>which</u> is due to the ignorance of the rules …

[2.14] She <u>who</u> was ignorant of the rules died.

[2.15] She <u>not knowing</u> the rules died.

[2.16] Her death <u>which</u> is due to the ignorance of the rules…

[2.17] The <u>reason</u> <u>why she died</u> was her ignorance of the rules.

[2.18] The <u>reason</u> <u>of her death</u> was her ignorance of the rules.

Example [2.09] is a hypotactic construction with a prepositional phrase while examples [2.10] and [2.11] are also hypotactic constructions of non-finite verbs without any markers. Examples [2.12] and [2.13] are more of *elaboration* through a non-defining relative clause than *enhancement*. Examples [2.14], [2.15] and [2.16] are defining relative clauses which are embedded in the nominal group post-modifying the nouns. They are also elaborating in nature. The difference between the non-defining and the defining clause is that the defining clause 'do<es> not form a separate tone group, because there is only one piece of information here' (Halliday and Matthiessen, 2004: 429). Examples [2.17] and [2.18] use the noun "reason" which explicitly gives the meaning of "cause" while embedded with the clause "why she died" or joined with the qualifying phrase "of her death" post-modifying the noun. Besides these examples, there may be many more constructions and ways of presenting an idea. A table, the *Synoptic Summary of Expansion*, presented by Halliday and Matthiessen (2004) may give us a brief understanding of how these sentences with different linguistic elements may be interrelated with the same meaning of expansion.

In the whole section of 2.2.1, conjunctions are viewed on the basis of their functions in language where SFL is able to place them logically at each metafunctional level. This type of categorisation is not seen in other typologies like in Biber et al (1999) where there is no in-depth connection. The absence of this typology is especially noted in terms of functions in language, among the categorisation of coordinators, subordinators and linking adverbials where each is like an entity by itself except that there is a slight mention of the syntactical differences between the coordinators and the subordinators like the linkage of syntactic role (Biber et al., 1999); and a slight mention of the differences between coordinators and linking adverbials especially on the syntactic aspects like differences in the position in a clause, the exclusiveness of the coordinators but not the linking adverbials which may be preceded by a coordinator, and the usage of commas for the linking adverbials but not the coordinators. This kind of syntactical connection does not go deeper than the surface structure while ignoring the core of language which is to produce meaning. However, by placing conjunctions based on their functions in language, the functional and meaningful interrelatedness between the conjunctions used at the taxis level and the conjunctive adjunct used at the textual level is made known. By the

introduction of the notion of the grammatical metaphor, the interrelatedness between the conjunctions with other constructions and word-groups is also made known, therefore, giving a more realistic account and interrelatedness of language when changes happen in the translations.

2.2.2 Semantic Functions

In this section, the semantic functions of conjunctions will be expounded. According to SFL, conjunctions at both the logical ideational metafunction and the textual metafunction expand a text and are made up of the relationships of *elaboration*, *extension* or *enhancement* (Halliday and Matthiessen, 2004). In the logical ideational metafunction, *elaboration* means that the secondary clause restates in other words, specifies in greater detail, comments or exemplifies the primary clause or some portion of the primary clause (Halliday and Matthiessen, 2004). *Extension*, on the other hand, means that the secondary clause adds some new elements, gives an exception to it, or offers an alternative (Halliday and Matthiessen, 2004). *Enhancement* happens when the secondary clause expands the primary clause 'with some circumstantial feature of time, place, cause or condition' (Halliday and Matthiessen, 2004: 378). The semantic functions of the textual metafunction are similar to the definitions of *elaboration*, *extension* and *enhancement* above. The only difference is that there is no involvement of the secondary or primary clauses but more of involvement of the cohesiveness of the sentences.

2.2.2.1 Semantic Functions at Logical Ideational Metafunctional Level

This section focuses on the semantic functions at the logical ideational metafunctional level where Table 2.2 gives an overview of parataxis and hypotaxis of *elaboration*, *extension* and *enhancement* and their markers.

Table 2.2 English paratactic and hypotactic expansion and their principal markers

Type of expansion	Sub-type	Category	Meaning	Paratactic	Hypotactic		
					Finite	Non-finite: conjunction	Non-finite: preposition
Elaboration	*exposition*		P i.e. Q	or (rather), in other words, that is to say, I mean, i.e. (often textual)	-	-	-
	exemplification		P e.g. Q	for example, for instance, in particular, e.g. (often textual)	-	-	-
	clarification		P viz. Q	in fact, actually, indeed, at least, i.e., viz. (often textual)	-	-	-
	description			-	non-defining relative clause introduced by *wh*-element	non-finite relative clause introduced by -ing, -ed, to -	-
Extension	*addition*	*"and", additive: positive*	X and Y	(both…) and; not only…but also	while, whereas	-	besides, apart from, as well as, with
		"nor", additive: negative	not X and not Y	(neither…) nor	-	-	-
		"but", adversative	X and conversely Y	but	while, whereas	-	without
	variation	*"instead", replacive*	not X but Y	but not; not…but; but instead	-	-	instead of, rather than
		"except", subtractive	X but not all X	only, but, except	except that, but that	-	except for, other than
	alternation	*"or"*	X or Y	(either…) or (else)	If…not (…then)	-	-
Enhancement	*temporal*	*same time*	A meanwhile B	(and) meanwhile; now; and…(then)	[extent] as, while	while	in (the course/ process of)
					[point] when, as soon as, the moment, by the time, once	when	on
					[spread] whenever, every time	-	-
		different time: later	A subsequently B	(and) then; and + afterwards	after, since, ever since	since	after
		different time: earlier	A previously B	and/ but + before that/ first	before, until/ till	until	before
	spatial	*same place*	C there D	and there	[extend] as far as		-
					[point] where	-	-
					[spread] wherever, everywhere	-	-
	manner	*means*	N is via/ by means of M	and + in that way; (and) thus	whereby	-	by (means of)
		comparison	N is like M	and + similarly; (and) so, thus	as, as if, like, the way	like	
		quality			as		
	causal-conditional	*cause: reason*	because P so result Q	[cause^effect] (and) so; and + therefore			
				[effect^cause] for; (because)	because, as, since, in case, seeing that, considering		with, by, through, at, as a result, because of, in case of
		cause: purpose	because intention Q so action P	-	In order that, so that	-	(in order/ so as) to; for (the sake of), with the aim of, for fear of
		cause: result			so that	-	to
		condition: positive	if P then Q	(and) then; and + in that case	if, provided that, as long as	if	in the event of

		condition: negative	if not P then Q	or else; (or) otherwise	unless	unless	but for, without
		condition: concessive	if P then contrary to expecting Q	[concessionˆconsequence] but; (and) yet, still; but + nevertheless	even if, even though, although, as, though	even if, even though, although	despite, in spite of, without
				[consequenceˆconcession] (though)			

From this table, besides the conjunctions being placed according to their tactic relations, they are also placed according to their semantic categories. For paratactic *elaboration*, the conjunctions found in the table above are often also used for textual cohesiveness (Halliday and Matthiessen, 2004). More often, sentences are juxtaposed like in example [2.19] below to form paratactic *elaboration* without any conjunction. In this example, the secondary clause exemplifies the primary clause.

[2.19] We used to have races – we used to have relays.

(Halliday and Matthiessen, 2004: 398)

For hypotactic *elaboration*, the relations are marked by *wh-* elements (e.g. "which", "who", "where", "whose", "when", "as", "in which", "of whom", "of which") to form a non-defining relative clause having a finite verb (see example [2.20]); and the relationship can also be marked by "-ing", "-ed", infinitive "to" to form a non-finite clause, see example [2.21].

[2.20] Now consider the opposite situation, <u>where</u> the velocity decreases.

(Halliday and Matthiessen, 2004: 401)

[2.21] It's my own invention – <u>to keep</u> clothes and sandwiches in.

(Halliday and Matthiessen, 2004: 403)

It should be noted that "where" in example [2.20] above functions as a non-defining relative clause marker and there is also other usage of "where" as a defining relative clause marker, and as a spatial conjunction which will be the "real" conjunction. Other similar cases are the usage of "when" and "as" where special attention is made when post-editing these words.

Next, below are examples of paratactic *extension* [2.22] and hypotactic *extension* with their conjunctive markers.

[2.22] Moominpappa himself was a foundling, <u>and</u> we know nothing about his parents.   (Halliday and Matthiessen, 2004: 406)

[2.23] And yet Frank grows up, <u>while</u> Huch never grew up.
(Halliday and Matthiessen, 2004: 408)

Besides the usual conjunctive markers with finite verbs making finite clauses, hypotactic *extension* may also be marked by prepositions or preposition groups functioning conjunctively which are followed by non-finite verbs making non-finite clauses. An example can be seen in [2.24] below where the preposition is "with", and the non-finite verb is "constituting" which may be preceded by a subject "women".

[2.24] Most families are dependent on two salaries coming into the home, <u>with</u> women now <u>constituting</u> almost half the country's workforce.
(Halliday and Matthiessen, 2004: 409)

Hypotactic *extension* also may be constructed by no conjunctive markers (Halliday and Matthiessen, 2004). An example can be found in [2.25] where "talking to herself" may be changed to "and talked to herself" with conjunctive markers.

[2.25] So she wandered on, <u>talking</u> to herself as she went.
(Halliday and Matthiessen, 2004: 410)

Like paratactic and hypotactic *extension*, paratactic *enhancement* and hypotactic *enhancement* may be marked by conjunctions. One point to notice is that, hypotactic *enhancement* of place also includes abstract "place" like:

[2.26] As a result, disagreement is carried out in the absence of an audience, <u>where</u> ideological and performance changes may be made without the threat of damage to the goals of the team, as well as the character of the individual.
(Halliday and Matthiessen, 2004: 417)

Unlike hypotactic *extension*, hypotactic *enhancement* has an added group of conjunctions which are used with non-finite verbs. An example is given in [2.27] where the conjunction "while" is followed by the non-finite verb "making".

> [2.27] The issue was raised by elderly presidential adviser Sun Yun-suan, whom Chen visited <u>while</u> making traditional courtesy calls to influential figures in the current government. (Halliday and Matthiessen, 2004: 420)

Like hypotactic *extension*, hypotactic *enhancement* may also be marked by no conjunctive marker. Example [2.28] illustrates the hypotactic relations of *causal: reason* with no conjunctive marker but with the non-finite verb of "having", while example [2.29] has the infinitive "to".

> [2.28] This view was not empirically based, <u>having</u> arisen from an a priori philosophy. (Halliday and Matthiessen, 2004: 420)

> [2.29] In practice, these are blended <u>to</u> produce a practical classification as follows.
> (Halliday and Matthiessen, 2004: 421)

In this research, where conjunction is the focus, non-defining relative clauses, non-finite clauses and non-finite clauses with preposition will not be the focus of study, but they will only be brought up for discussion when it is necessary. For example, prepositions which function as hypotactic structural connectors will not be studied in detail but if a conjunction is translated from this type of preposition, I will be able to identify this track and make a connection thereof.

The next section concentrates on semantic functions at the textual metafunctional level.

2.2.2.2 Semantic Functions at Textual Metafunctional Level

Halliday and Hasan (1976) categorise conjunctive relations into four categories: *additive*, *adversative*, *causal*, and *temporal* and their subcategories. However,

Halliday and Matthiessen (2004) extend the categories to eight major categories with many other sub-categories, under the three main categories of *elaboration*, *extension* and *enhancement*, just like conjunctions at the ideational metafunctional level. Below is Halliday and Matthiessen's (2004) latest typology of English conjunctive adjuncts of the textual metafunction summarised in tabular form.

Table 2.3 English conjunctive adjuncts

Type of expansion	Sub-types			Items
Elaboration	*apposition*	*expository*		in other words, that is (to say), I mean (to say), to put it another way
		exemplifying		for example, for instance, thus, to illustrate
	clarification	*corrective*		or rather, at least, to be more precise
		distractive		by the way, incidentally
		dismissive		in any case, anyway, leaving that aside
		particularizing		in particular, more especially
		resumptive		as I was saying, to resume, to get back to the point
		summative		in short, to sum up, in conclusion, briefly
		verifactive		actually, as a matter of fact, in fact
extension	*addition*	*positive*		and, also, moreover, in addition
		negative		nor
		adversative		but, yet, on the other hand, however
	variation	*replacive*		on the contrary, instead
		subtractive		apart from that, except for that
		alternative		alternatively
enhancement	*Spatio-temporal: temporal*	*Simple*	*following*	then, next, afterwards [including correlatives first…then]
			simultaneous	just then, at the same time
			preceding	before that, hitherto, previously
			conclusive	in the end, finally
		complex	*immediate*	at once, thereupon, straightaway
			interrupted	soon, after a while
			repetitive	next time, on another occasion
			specific	next day, an hour later, that morning
			durative	meanwhile, all that time
			terminal	until then, up to that point
			punctiliar	at this moment
		simple internal	*following*	next, secondly ("my next point is") [including correlatives first…next]
			simultaneous	at this point, here, now
			preceding	hitherto, up to now
			conclusive	lastly, last of all, finally
	manner	*comparison*	*positive*	likewise, similarly
			negative	in a different way
		means		thus, thereby, by such means
	Causal-condition	*Causal: general*		so, then, therefore, consequently, hence, because of that; for
		Causal: specific	*result*	in consequence, as a result
			reason	on account of this, for that reason
			purpose	for that purpose, with this in view
		Conditional	*positive*	then, in that case, in that event, under the circumstances

		negative		otherwise, if not
		concessive		yet, still, though, despite this, however, even so, all the same, nevertheless
	matter	*positive*		here, there, as to that, in that respect
		negative		in other respects, elsewhere

<div align="right">(Halliday and Matthiessen, 2004: 542-543)</div>

In this whole section, conjunctions are viewed in line with their semantic functions in language, i.e. *elaboration*, *extension* or *enhancement*, at both the ideological and textual level. This type of categorisation is not seen in other typologies like in Biber et al. (1999) where there is no semantic connection among the semantic categories of coordinators, subordinators and linking adverbials. Biber et al. (1999) place coordinators into three semantic categories, specifically *addition*, *contrast* and *alternative*; while subordinators have ten semantic categories, namely, *time adverbial*, *place adverbial*, *manner adverbial*, *contingency adverbial of reason*, *contingency adverbial of condition*: *open condition*, *contingency adverbial of condition*: *hypothetical condition*, *contingency adverbial of condition*: *rhetorical condition, preference, proportion* and *supplementive clauses*. Linking adverbials have six general semantic categories like *enumeration and addition*, *summation*, *apposition*, *result/inference*, *contrast/concession* and *transition*. This kind of semantic categorisation does not show the interconnectedness of the semantic functions between the conjunctions used as coordinators, subordinators and linking adverbials. Therefore, the strength of this theoretical framework is that, conjunctions at both the ideological and textual level are placed in more or less synchronised semantic categories, making known the interrelatedness between conjunctions used based on their semantic functions, methodically facilitating the study of explicitation, implicitation and shift in meaning.

In the whole of 2.2, some aspects related to conjunctions generally and English conjunctions specifically have been covered. This will provide a foundation for the understanding of some issues related to conjunction. In the next section, the systemic functional approach to Chinese conjunctions will be delineated. It will draw on the work of Li (2007), *A Systemic Functional Grammar of Chinese: A Text Based Analysis*.

2.3 Systemic Functional Approach to Chinese Conjunction

Since Li's (2007) work is also drawn from the SFL approach of Halliday and Matthiessen (2004), the semantic categories of conjunctions given by Li (2007) are similar to those of Halliday and Matthiessen's. Hence, below is the table on parataxis and hypotaxis of *elaboration*, *extension* and *enhancement* and their markers in Chinese:

Table 2.4 Chinese paratactic and hypotactic expansion and their principal markers

Type of expansion	Sub-type		Meaning	Paratactic	Hypotactic
Elaboration	*expository*	*positive*	P i.e. Q	换言之 huanyanzhi; 换句话 说 huanjuhuashuo	nil
		negative	P in contrast to Q	反过来说 fanguolaishuo	nil
	exemplifying	*phenomenal*	P e.g. Q	比方 bifang; 好比 haobi; 像 xiang; 比如 biru; 例如 liru; 譬如 piru	nil
	clarifying	*specifying*	P viz. Q	也就是说 yejiushishuo; 就是 jiushi; 即是 jishi; 和 he	nil
		summative	Q summarizes P	总之 zongzhi; 总言之 zongyanzhi	nil
Extension	*additive*	*positive*	P and Q	并(且)bing (qie); 而(且)er (qie); qie 且; 以及 yiji; 再说 zaishuo; 既…也/ 又 ji…ye/ you; 此外…再有/ 还有 ciwai…zaiyou/ haiyou	除了…(之 外) …(另外) 还有 chule …(zhiwai) …(lingwai) haiyou
			P to the extent of Q	乃至 naizhi	
			P even Q	就是 jiushi; 就连 jiulian; 甚 而 shener; 甚至 (于)shenzhi (yu)	
			not only P but also Q	岂但/ 不但…也/ 并且 qidan/ budan…ye/ bingqie;；不单/ 不仅…而且/ 并且/ 也/ 就是 budan/ bujin …erqie/ bingqie/ ye/ jiushi; 不管…还 是 buguan…haishi; 不只/ 非 但…并且/ 就是 buzhi/ feidan…bingqie/ jiushi	
			not only P but even Q		慢说/ 别说…就 是/ 就连 manshuo/ bieshuo…jiushi/ jiulian
			even P then Q		也都…(更)何况 ye/ dou…(geng) hekuang; 尚且… 何况 shangqie… hekuang
		negative	not P and not Q	既非…又非 jifei…youfei	
		adversative	P but Q	但是 danshi; 而 er; 只是 zhishi; 可是 keshi; 不过 buguo	
	varying	*replacive*	not P but Q	相反 xiangfan; 反之 fanzhi; 反而 faner; fandao 反倒	
			not even P but Q	非但不…反而/ 反倒 feidanbu…faner/ fandao	
			even P but not Q		宁可…而不 ningke…erbu;宁

					肯/ 宁可/ 宁愿…(也不) ningke/ ningyuan…(yebu)
		subtractive	except P, Q		除了…(之外)…也/ 都 chule…(zhiwai)…ye/ dou
	alterative		P or Q	还是 haishi; 或者 huozhe; 或则 huoze	
			either P or Q	不是…就是 bushi..jiushi	
			P or even Q	(再)不然 (zai) buran	
Enhancement	*spatial*	*simultaneous -extent*	P as far as Q	(从)…一直到/ 以致到 (cong)…yizhidao/ yizhidao	
		-point	P there Q	进而 jiner	当…在那里/ 地方 dang…zai na li/ difang
		-spread	Where P, Q		不论…那里…(都) bulun…nali…(dou)
	temporal	*Succession -later*	P then Q	跟着 genzhe, 此后 cihou	(在)…以后 (zai)…yihou
			P immediately follow by Q	接着 jiezhe	
			since P, then Q	从此 congci	自从…(以后) zicong …(yihou)
			until p, then Q		等到…以后 dengdao…yihou
		-earlier	P precedes Q		在…(之)前 zai…(zhi) qian
		-combine	first P then Q	先…再 xian…zai; 最初…接着…最后/ 终 zuichu…jiezhe…zuihou/ zhong	
		simultaneous -point/extent	when P then Q		当…的时候 dang…de shihou; 如果…的时候 ruguo…de shihou; …shi 时
		-spread	whenever P then Q		每逢…(的时候)meifeng…(de shihou); (但)凡…(的时候)(dan) fan…(de shihou)
	manner: means		P is via/ by means of Q		从 cong; 透过 touguo; 由 you ; 以经…就是/ 便 yijing…jiushi/ bian
	manner: comparison	*positive*	P likewise Q	同样(的)tongyang (de)	好像 hoaxiang
		negative	P unlike Q		不像 bu xiang
	causal	*reason*	P so Q	所以 suoyi; 因此 yinci; 因而 yiner; 以致 yizhi; 故 gu; 结果 jieguo	因(为)…(所以/ 就/ 才)yin (wei) …(suoyi/ jiu/ cai)
			just because of P so Q		为其…才 weiqi…cai
			P so imply Q	可见 kejian	
		purpose	for the purpose of Q so P		为了…(甚至(于))weile…(shen zhi(yu))
			action P for the purpose of Q		以(便) yi (bian)
			action P not for the purpose of Q		免得 miande; 省得 shende ; 以免 yimian
	conditional	*positive*	if P then Q	则 ze; (那)就(na) jiu	假如/ 假使/ 如

				(果)/ 要是/ 若(是)/ 设若/ 倘(若/或)…(的话)…就/ 还/ 则/ 便 jiaru/ jiashi / ru (guo)/ yaoshi/ ruo (shi)/ sheruo / tang (ruo/huo)…(dehua)…jiu/ hai/ ze/ bian
		as long as P then Q		只要 zhiyao, 但凡…(就) danfan…(jiu)
		whatever/ no matter P then Q		无论/ 不论/ 不管/ 别管…(还是) wulun/ bulun/ buguan / bieguan…(haishi); 任 ren; (任)凭 (ren) ping
		even P then Q		万一 wanyi
		if and only if P then Q		惟有/ 只有…才 weiyou/ zhiyou…cai
	negative	not Q unless P		除非 chufei
		Q unless P		要…除非 Yao…chufei
		P otherwise Q	(要)不然(yao) buran; 不然的话 burande hua; 要不 yaobu; 否则 fuoze	
		if not P then Q		若非…便是/ 则为 ruofei…bianshi/ zewei
		if not P then not Q		若非/ 要不是 ruofei / yaobushi
	concession	although P, then Q	但是 danshi; 可是 keshi; 却 que	虽然/ 虽说(是)/ 虽则…(但是/ 却/ 仍然/ 可是/ (然)而/ 还 suiran/ suishuo (shi)/ suize …(danshi/ que / rengran/ keshi/ (ran) er / hai; 尽管…(可是/ 却/ 然而) jinguan… (keshi/ que / raner); 既(或/ 令)/ 就是…(也/ 还) ji (huo/ bian / ling)/ jiushi …(ye/ hai); 纵(然/ 令/ 使)…也 zong (ran/ ling/ shi)…ye; 按说…但是/ 不过/ 可是 anshuo…danshi/ buguo/ keshi; 别看…(但是/ 可是) biekan…(danshi/ keshi); 果然…但是 guoran…danshi

(Adapted from Li, 2007: 84, 87-89, 91-92)

Although the work by Li (2007), in the above table, only illustrates paratactic and hypotactic conjunctions without conjunctive adjuncts, closely surveyed, it is found that the paratactic conjunction and the conjunctive adjunct are combined. A personal contact with the author found that the author's position on this matter is that it has not been a thorough enough study on the differences between paratactic conjunctions and conjunctive adjuncts in Chinese, thus the need for the combination (2008, personal communication).

There is also no indication of the non-defining relative clause as this structure is not found in the Chinese language. The aspect of conjunctions used in non-finite and finite constructions is also not an issue in the Chinese language as Chinese does not differentiate non-finite and finite clauses. In the list of conjunctions in the table above, there is 因 yin [because (of)] which may function as a conjunction or a preposition to form circumstantial elements, depending on the structure. Accordingly, careful post-editing is executed to ensure that only conjunctions are selected.

It has to be stressed here that Tables 2.2, 2.3 and 2.4 are used as a guide to identify the semantic functions of conjunctions found by the POS taggers used in this research. Some words which are newly identified as conjunctions in the SFL framework will not be included in the calculation. Words like 就 jiu [then] which are traditionally tagged as an adverb; 在…（之）前 zai…(zhi) qian [in….before] and 当…的时候 dang…de shihou [when…the time] which are traditionally tagged as prepositions and nouns will only be brought up for discussion if conjunctions in English are translated into these words and constructions. Words like "for example" in English will also not be studied as they are also not traditionally-recognised conjunctions. Further detailed explanation of this track will be found in Section 4.3.1, 4.4.2, 4.4.3 and 4.4.4, on tagging tools and post-editing.

2.4. Differences and Similarities between English and Chinese Conjunctive Systems

Although a look at the tables of SFL conjunctions in English and Chinese (Tables 2.2, 2.3 and 2.4) highlights that the differences of the use of conjunctions are not that

great as conjunctions are used in the same parataxis, hypotaxis and textual level with almost similar semantic categories, some of the practices in the use of conjunctions have been found to be different in these two languages.

The first divergence has been pointed out by Halliday (2006) in that the dependent clause in hypotaxis of English must be marked by a conjunction, whilst the dominant clause may or may not need to be marked, as in example [2.30a]. However, the situation is reversed in Chinese. The dominant clause in hypotaxis of Chinese must be marked by a conjunction, whilst the dependent clause may or may not be similarly marked.

> [2.30a: Source text] If you're feeling cold, (then) put your coat on.
>
> (Halliday, 2006: 356)
>
> [2.30b: Chinese translation] (Ruguo) ni juede leng jiu chuanshang dayi.
>
> [2.30c: Chinese translation] （如果）你觉得冷就穿上大衣。
>
> [2.30d: Back translation] (If) you are feeling cold <u>then</u> put on coat.

In sentence [2.30a], the dependent clause is "if you're feeling cold" and the dominant clause is "(then) put your coat on". In this case, the conjunctive "if" is necessary and its correlative conjunction, "then", is optional. In the above example [2.30b/c], the dependent clause is "(如果）你觉得冷 (ruguo) ni juede leng [(If) you are feeling cold]" and the dominant clause is "<u>就穿上大衣</u> jiu chuanshang dayi [then put on coat]". In this case, the dominant clause in Chinese with its conjunctive 就 jiu [then] is indispensable, whilst the conjunctive 如果 ruguo [if] is optional in the Chinese. These findings by Halliday indirectly show the reason why paratactic conjunctions may be a more preferred choice compared to hypotactic conjunctions because paratactic conjunctions are used in the dominant clause while hypotactic conjunctions are utilised in the dependent clause.

The second dissimilarity is that paratactic conjunctions and hypotactic conjunctions are mutually exclusive in the English language, but not so in the Chinese language. We do not use "although….but" in English because it is a mixture of paratactic conjunctions and hypotactic conjunctions, but this correlative conjunction is

perfectly accepted in Chinese, despite that we do use "although…yet" and "if…then" (Halliday and Matthiessen, 2004) in English.

In terms of the differences in the frequencies or the distribution of usage, Chinese has been said to use fewer conjunctions than English does (Gao, 2000). In this regard, Tsai (1995: 243) is of the opinion that Chinese is a 'disconnected language'. Even though there might be a corresponding match of conjunctions between English and Chinese, the Chinese conjunctions are not as necessary as the English conjunctions and often the Chinese language will drop such links in English like "which", "of", "that", "for", "and", "in", "where", etc. (Tsai, 1995). Below are two examples of Chinese sentences and their corresponding English translation taken from Gao (2000: 176-177):

> [2.31a: Source text] wo shi heiren ni shi bairen.
>
> [2.31b: Source text] 我是黑人你是白人。
>
> [2.31c: Back translation] I am black person you are white person.
>
> [2.31d: English translation] I am a black person *and* you are a white person.
>
> <div align="right">(Gao, 2000: 176)</div>

> [2.32a: Source text] ni kan wo, wo kan ni, shei dou bu renshi shei.
>
> [2.32b: Source text] 你看我，我看你，谁都不认识谁。
>
> [2.32c: Back translation] You look at me, I look at you, who even not recognise who (semantic meaning: no one knows each other (added by me)).
>
> [2.32d: English translation1] We look at each other, *but neither* recognises the other.
>
> [2.32e: English translation 2] We look at each other *and* nobody recognises anyone.
>
> <div align="right">(Gao, 2000: 176)</div>

Example [2.31] above shows that the English language prefers to add conjunctive "and" but not so in Chinese. Example [2.32] shows two possible English translations with added conjunctions "but neither" in example [2.32d] or with conjunction "and" in example [2.32e] but not so in the Chinese. From these two examples, it can be inferred that the Chinese language does not use many conjunctions. The logical-semantic relations in the context of a Chinese text provide conjunctive relations.

Relatively then, the English language tends to use more conjunctions than the Chinese language does.

The words "paratactic" and "hypotactic" have been used to discuss the typological differences between the English language and the Chinese language. It is said that English is a hypotactic language while Chinese is a paratactic language. This, however, should not be confused with similar notions used in this thesis as these words both discuss conjunctions, but in different ways. According to Yu (1993), who subscribes fully to the notion of literary theory, "paratactic" means languages where the utilisation of conjunctions and conjunctive adverbs (and other elements, like prepositions) are optional and not necessary, while "hypotactic" means the opposite. It does not mean that English prefers to use hypotactic conjunctions while Chinese paratactic conjunctions. *Ipso facto*, picking up from the previous paragraph, this statement also demonstrates that conjunctions in the Chinese language are less preferred while conjunctions in the English language are more preferred.

Although most scholars believe that Chinese relies on fewer conjunctions, other scholars believe otherwise, like Baker (1992: 192), who says that Chinese prefers 'to use simpler and shorter structures and to mark the relations between these structures explicitly where necessary'. The phrase "to mark the relations between these structures explicitly" may indicate more employment of conjunctions. These contrastive claims about differences of the stylistic preference in both English and Chinese can only be confirmed using empirical investigation assisted by a corpus through corpus linguistics. The different preferences may also be dissimilar in different genres. This research hopes to be able to validate some claims or to reveal new findings especially on the treatment of conjunctions in institutional texts.

2.5 Concluding Remarks

This chapter gives an overview of what conjunctions are in this research, subsumed under the SFL framework and how they are categorised according to their metafunctional levels, taxis and semantic differences. It is hoped that this compartmentalisation has defined conjunctions into workable categories to facilitate

the research proper. The chapter also introduces the concept of grammatical metaphor which shows how other lexicogrammars may replace the conjunctions. It also presents the Chinese language conjunctions under the same framework and shows some differences and similarities between the conjunctive system of English and Chinese.

According to Lamiroy (1994), the function of conjunctions is at the crossroad of syntax, semantics and pragmatics. Thus, primarily, the study of conjunctions will involve 'considerable theoretical magnitude' (Halverson, 2004: 562). In this study, only two of these aspects will be touched on, namely syntax and semantics. In terms of syntax, comparison will be on parataxis, hypotaxis and textual cohesiveness, correlative conjunctions, stand-alone conjunctions and double conjunctions and the shift from and into other word groups. In terms of semantics, the comparison will be on the types of semantic categories which are distinctive and semantic shifts.

CHAPTER 3
Corpus-assisted Study of Conjunctions

Chapter 2 unveils the overarching concept of conjunction which is the pivotal concept in this research. Chapter 3 focuses on various issues related to corpus-assisted study and the study of conjunctions. Section 3.1 will attempt to highlight the change of focus from prescriptive to descriptive studies, narrowing down to how corpus-assisted studies have benefited descriptive studies. In Section 3.2, I will expound on the use of corpora in the study of translation, while Section 3.3 will demonstrate in detail the study of conjunctions in translation, be it corpus-assisted or not. This will be connected closely with corpus design, which will be elucidated in Section 3.4. The notion of change, including explicitation, implicitation and shift in the use of conjunctions will be delineated in Section 3.5, culminating with an integrated model of change eclectically adapted from Catford (1965) and Séguinot (1988). Study of the use of conjunctions will only be complete with the identification of the causes and effects of change, which will be discussed in Section 3.6 and Section 3.7 respectively. The connection of conjunctions to cognitive processes will be brought to light in Section 3.8. Corpus-related arguments on norms, laws, universals and tendencies will be delineated in Section 3.9. Last but not least, the literature review is closed by looking at the criticism leveled at the corpus-assisted methodology which will be laid out in Section 3.10. Section 3.11 contains the concluding remarks.

3.1 From Prescriptive to Descriptive Approach and the Use of Corpus-Assisted Study

Before the 1970s, a majority of translation studies were oriented towards prescriptive approaches. Prescriptive approaches to translation studies are normative and focus on the stipulation of rules for practical application. These approaches to translation studies have been heavily criticised for theorising through limited examples (Toury, 1995). Predominantly oriented towards pedagogy, these approaches also have given rise to criticism on TT through contrastive linguistic approaches. Criticisms leveled against TT are often the inadequacy of these texts compared with the ST. The TT are often labeled as second rate reading material accused of being unfaithful to the

originals, on one hand, and on the other, if the translations are faithful, they are often accused of being translationese or being unnatural in the target language; and therefore the legitimacy of TT is usually downplayed. To counter prescriptive studies, Toury (1995: 1) has asserted that 'what constitutes the subject matter of a proper discipline of translation studies is (observable or reconstructable) facts of real life rather than merely speculative entities resulting from pre-conceived hypotheses and theoretical models'.

Thus, after the 1970s, translation studies became geared towards descriptive approaches; a development which was proposed by Gideon Toury, but may be traced back to Itamar Even-Zohar's Polysystem Theory (1978) placing a body of TT into the target literary system which in turn is within the broader social, cultural and historical system. Descriptive approaches aim 'to describe the phenomena of translating and translation(s) as they manifest themselves in the world of our experience' (Holmes, 1988: 71). Now, the focus has shifted from the ST-TT comparison to the acknowledgement of the legitimacy of translation as a system of its own, thus making TT 'the objects of study' (Hermans, 1985: 14). Stemming also from the placement of TT in the target system, now the target system is brought into the limelight to be compared to the TT in order to explore what makes a TT. The importance of descriptive approaches is summed up in the following sentence by Toury (1995: 1): 'No empirical science can make a claim for completeness and (relative) autonomy unless it has a proper descriptive branch'.

The empirical investigation of TT originating from descriptive approaches is brought to greater heights with corpus-assisted translation studies, first proposed by Baker in her seminal article in 1993, entitled *Corpus Linguistics and Translation Studies: Implications and Applications*. By applying corpus linguistic techniques and methodologies, research in translation is able to 'make a leap from prescriptive to descriptive statements, from methodologising to proper theorising, and from individual and fragmented pieces of research to powerful generalisations' (Baker 1993: 248). This is a very strong statement where corpus-assisted study is viewed as a utility that will take translation study to a more promising level away from making weak premises and conjectures to formulating powerful theories of translation. It has been more than three decades since corpus linguistics has been developed for

linguistics research and two decades now since corpus-assisted study was first proposed in translation studies. Since then, we can note burgeoning interest in embarking on this methodology in translation research. The development in this area has also witnessed diverse research directions on the objects of studies.

3.2 Multifarious Research of Corpus-Assisted Studies

Research using corpora is indeed multifarious, ranging from identifying features of translation, to spotting intrusion of the translators or changes in ideology in the TT, to differentiating idiosyncrasies of the individual translators, to using corpora for teaching purposes, and so on. Studies on features of translation are the most prominent research in corpus-assisted studies where many features are said to be specific in the TT and significantly have set the TT apart from the ST and the NT. These features are manifested through lexical, syntactic, semantic, pragmatic and stylistic evidence. Amongst the features of translation is simplification where the language used in the TT is said to be simpler. This may be reflected, amongst other things, in a decrease of lexical words but an increase of grammatical words, a decrease of low frequency words but an increase of high frequency words, a lowering of information load and a lowering of average sentence length (Laviosa, 1996). Another salient trait found in the TT is leveling out, which is the tendency of the TT to hover around the centre of any continuum rather than move towards the fringes. For example, translated English texts tend to be more like each other in terms of lexical density, type-token ratio (TTR), and mean sentence length than individual texts in NT English corpora (Baker, 1996). Another pervasive feature of the TT is their distinctive distribution where certain lexical words are more distinctive in the TT. This is evident in the research completed by Shama'a (1978, cited in Baker, 1993: 245) who finds that the words *say* and *day* occur twice as often in English texts translated from Arabic as compared to the original English texts, and a lower frequency as compared to the Arabic originals. Some other unique characteristics of TT are that "untranslatable" items of the target language get underrepresented in the translation (Tirkkonen-Condit, 2000); increase in the level of formality in translation, for example, by the increased use of optional "that" or the lower use of contractions (Olohan and Baker, 2000; Olohan, 2003); increase in the

level of explicitness in translation (Baker, 1993); increase in sanitisation where vocabulary in the translation is toned down (Baker, 2004); lesser diversity of lexical patterning in translation (Dayrell, 2005); a tendency towards disambiguation (Baker 1993); a tendency to avoid repetitions (Baker, 1993; Toury, 1991); and a preference for fluency (Baker, 2004). Some of these so-called intrinsic features of translation are interrelated. For example, explicitation of optional "that" causes formality in the translation; and sentence splitting is an indication of normalisation, simplification and explicitation (Shlesinger, 2005).

Despite a preoccupation with locating the innate features of translation, corpus-assisted studies have been broadened to include other research purposes. Corpus-assisted methodology has sometimes been used to locate the translators' voice or presence in the TT, like the research done by Bosseaux (2001) who conducts her study using parallel corpora of English-French novels by focusing on linguistic features like deixis, modality, transitivity and free indirect discourse, and finds translators' discursive presence in the translation. Corpus-assisted methodology has also been used by some scholars to identify changes in point of view, like the research carried out by Skrandies (2007) who delves into the interaction between writers and readers in German history writing and its English translation, and discovers that the translators frequently shift the authorial point of view in the ST to the TT reader's point of view. With the help of this methodology, scholars have also been able to research the dissimilarity of ideology between TT and NT in the same language. Laviosa (2002), for example, analyses collocation of the words "Europe", "European", "European Union", "EU" and "Union" in translated English and NT English newspaper articles, and reveals that the NT English texts demonstrate a greater emphasis on the impact of the policies on Britain's economy. Kemppanen's (2004) survey also exemplifies a similar trend in research on the word *ystävyys* "friendship" in Russian-Finnish translations and NT Finnish political history texts where the result highlights that the NT Finnish texts express no policy of friendship between the Soviet Union and Finland whilst the TT express otherwise. Suggesting that corpora can be used as a methodology to identify the distinctive individual styles of literary translators, Baker (2000) carried out a small scale and exploratory study on translated work of Peter Bush and Peter Clark, and concluded that differences in the standardised TTR, average sentence length and the reporting structure between

work of these two British literary translators may suggest distinctive differences of their own linguistic styles.

To improve production skills, Jin (2008) researched how the NT of the city introduction of English texts can aid Chinese language translators who are translating out of their mother tongue to make their translated English texts more natural, mimicking the style of English native speakers. In her report, Jin points out that sentences in the TT are generally shorter, use simple and compound sentences, and use more nouns; whilst sentences originally written in English show more tendency towards subordinate clause links to form complex sentences and use more verbs. By comparing both corpora, Jin also spots awkward collocations and more subtle errors in the TT like the usage of articles. Using the English-Arabic parallel corpus of United Nations texts, Salhi (2010) uses the corpus in the translation classroom to deal with words which are polysemous, which makes it difficult to identify possible translations. Xia and Li (2010) use specialised comparable corpora which consist of English translations of Chinese language advertisements and the original English to assess the translation of law firm advertisements using statistics. They find that the phrase "law service" which is found rampantly in the TT is never found in NT. Instead, the NT prefer the phrase "legal services". In their findings, there is also the distinct usage of the word "university" in the TT compared with the NT. According to Xia and Li (2010), Chinese culture increases the credibility of a firm by linking or collaboration with universities and this will make no sense to the English TT readers. There are also other types of research using corpora like the study of individual syntactic features to investigate the anaphoric demonstrative "this" which form textual semantics in the English ST as compared to the corresponding constituent in the Portuguese of four different text genres by Rocha (2010). Corpus-assisted study has also been extended to the study of metaphor by Ding, Noël and Wolf (2010) who find that the TT will opt for target language metaphors that have been firmly established, i.e. have a higher degree of entrenchment, than the metaphors which are available as the ST correspondence.

In addition, corpus-assisted study has not been confined to written texts; in fact, the scope has been extended to research on interpretating where interpreted texts are transcribed and research carried out. An example is the research by Gao (2010) on

simultaneous interpreting checking on how the interpreter manages coherence with a limited time span. Corpora are also built to create a terminology bank, as in the on-going endeavor of Tengku Mahadi, Vaezian and Akbari (2010).

The examples of research given above give an indication that corpus-assisted studies are not limited to identifying specificity of the TT but have diversified into other areas of research and usage. Pertinent to my research, corpus-assisted study is also used to identify the explicitation of conjunctions in the TT. The section below will expound on research based on work done on the translation of conjunctions.

3.3 The Study of Conjunctions in Translation Studies

During the era of prescriptive approaches to translation, explicitation, implicitation and some forms of shift were considered techniques that translators should employ in order to translate. Some of the scholars that have advocated these are Vinay and Darbelnet (1958/1995) and Nida (1964). In descriptive orientations, however, explicitation, especially the explicitation of conjunctions, has been viewed as a observable linguistic fact found in the TT, so much so that it has been hypothesised as a translation universal.[4] Although prescriptive orientations may form a basis of changes in the TT, and although there are reports on implicitation and shift in the use of conjunctions, the results on the explicitation of conjunctions are more significant. It is also observed that the phenomena of changes inclusive of explicitation, implicitation and shift that have been found in other research are based on the relation between the TT-ST, or the TT-NT. A clearer delineation can be found in Section 3.5 on the notion of change. In this section, I would like to draw attention to some of the research on the use of conjunctions in translation studies, their findings and some of the weaknesses of the research. I will begin this exploration with some non-Chinese language findings and end with some findings which have been based on the English and Chinese language pair.

To begin with, Vanderauwera (1985) who studied fifty Dutch-English novels using a large data set but did not have the privilege of being assisted by computers, noticed

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[4] For the notion of "translation universals", please refer to Section 3.9.

explicitation of conjunctions in the TT compared to the ST. Following that, explicitation has been identified in many studies including Blum-Kulka (1986) who used example-based techniques. The study discovered cases of explicitation of cohesive devices including conjunctions in a few language pairs like English-French and English-Hebrew. Blum-Kulka opines that it is due to the interpretation process by the translators. An empirical study by Séguinot (1988) revealed that there is greater explicitness in translations with improvement of topic-comment links and improvement of focus, addition of linking words and changing of information in subordinate structures to co-ordinate or principal structures. Much of this early research was based on parallel comparison. However, Vehmas-Lehto (1989), before the suggestion by Baker (1993), studied native Finnish texts compared to TT in Finnish and detected high usage of connectives in the TT compared to the NT which may be due to influence from the ST, as Russian ST use 10.4 instances of coordination markers per 100 words, while Finnish native texts use only 2.5, causing clumsiness and obscurity in the TT. The trend of using ST, TT and NT in research was picked up by Pápai (2004) who focused solely on explicitation of various types, not on conjunctions alone. Since her sole focus on explicitation which caused her to summarise that 'explicitation seems to be a strong tendency in the English–Hungarian translation direction' (Pápai, 2004: 159), the research is lopsided, as no endeavour has been made to identify S-implicitation, i.e. implicitation in the TT when comparing to the ST (see Section 3.5). She also did not account for cases where *amely*, a type of conjunction in the Hungarian language, is used more in non-literary native texts, causing T-implicitation, i.e. implicitation in the TT when comparing with the NT (see Section 3.5). Her conclusion that explicitation in the TT is because 'the translators tended to adjust to target text standards and satisfy the target readers' expectation' (Pápai, 2004: 160) is mismatched, as earlier she has said that 'the explicitness of the translation is higher than that of non-translated texts' (Pápai, 2004: 159). Although her work seems to have utilised three corpora, there is no connection to the extent of the ST's influence, the translators' inherent explicitation or the influence of the NT on the TT.

Abdul-Fattah (2010), who looked at explicitation of conjunctions by the same translators/authors, found that the TT used more *concessive* conjunctions than their NT. By searching for *concessive/adversative* conjunctions in the ST, the TT and the

NT, in the translation of Durant's work by Z. N. Mahmoud, Abdul-Fattah (2010) stated that less usage of *concessive* conjunctions in the ST has caused the TT to have fewer conjunctions than NT. However, in the case of the translation by Abu Hadid where the ST have more conjunctions than the TT, Abdul-Fattah (2010) attributed it to other types of conjunctions in the TT which are not included in the count. This problem is due to the methodology in the selection of conjunctions where conjunctions are selected based on, in total, only two types of semantic categories, and thus, shift into conjunctions of other categories cannot be accounted for. Based on Abdul-Fattah's statistics of *concessive* conjunctions appearing more in the ST (1,432) than in the TT (1,157) or the NT (814), we may also infer that the translators have performed implicitation in the TT.

In addition to the more rampant identification of explicitation, interestingly, other researchers also have found implicitation of conjunctions. For instance, Lamiroy (1994) finds French connectives dropped in Dutch translations. A presentation of Altenberg (1995, cited in Halverson, 2005) discovers 19% of implicitation of conjunctions from Swedish-English and 13% from English-Swedish. More balanced research is by Øverås (1998) who observes both explicitation and implicitation phenomena in the TT. Øverås (1998) investigated both grammatical and lexical ties of English-Norwegian and Norwegian-English literary texts, and her grammatical ties include conjunctions and references. Thus her report on grammatical ties may not purely reflect the phenomena of conjunctions but the combination of both. In her overall findings on grammatical ties, Øverås (1998) revealed that the TT in both Norwegian and English show instances of explicitation and implicitation; however overall instances of explicitation are more than instances of implicitation. Furthermore, she has also gone into some detail for the study on individual texts. In analysing individual translations which include both grammatical ties and lexical ties, she noted that three texts have more implicitation than explicitation; four out of forty texts show equal amounts of explicitation and implicitation, while a great number show more explicitation.

Klaudy and Károly (2005: 13), looking at explicitation and implicitation differently from Øverås's (1998) point of view, proposed an 'asymmetry hypothesis'. Their hypothesis is based on the findings of their bi-directional parallel analysis of English

(ST)-Hungarian (TT) and Hungarian (ST)-English (TT), where explicitation found in the Hungarian TT does not imply implicitation when translating from Hungarian (ST) into English (TT). Thus, their hypothesis states that regardless of the language pair and in spite of the translation direction, there is more explicitation than implicitation.

Other researchers who detect both implicitation and explicitation in the TT are Mauranen (2000) and Puurtinen (2004). Mauranen (2000), using Finnish comparable corpora of academic prose and popular non-fiction, observes six types of connectors. There is only slight explicitation of conjunctions for three types and slight implicitation of conjunctions for two types, but implicitation of *toisaalta* (roughly meaning "on the one hand" and "on the other hand") in the TT is half of those in the NT. The division into different connectors without generalisation gives a more realistic picture of how each conjunction may be treated differently. This excessive implicitation of *toisaalta* has prompted her to research further using parallel comparison. In her parallel analysis of Finnish-English, she found that one third of *toisaalta* are dropped, defying the explicitation hypothesis of Blum-Kulka (1986). In her parallel comparison of English-Finish, 90% of *toisaalta* are retained from the English equivalent while 8% have been added by the translators. In this case, the ST and the explicitation by the translators may not be sufficient to cause explicitation of *toisaalta* when compared to the NT. Like Mauranen, Puurtinen (2004) who studied Finnish TT in children's literature using comparable corpora also researched individual connectives, which include conjunctions, specific adverbs and relative pronouns. She found that there are three connectives which experience explicitation, two connectives experience implicitation, and the rest are almost equal. These two researchers seem to indicate that when compared to a monolingual reference corpus, individual conjunctions do not necessarily experience significant explicitation in the TT, but there may be obvious cases of implicitation, depending on the languages that are being compared. Besides the identification of explicitation and implicitation both in parallel and comparable analysis, in global statistics or individual conjunctions, there is also the identification of shift. Altenberg's (1995) study also observes shifts of structure in the translation of conjunctions of 9% from Swedish-English and 13% from English-Swedish.

It has been noticed in the research mentioned above that some is lopsided or only presents one side of the coin. For instance, research such as that by Vanderauwera (1985), Blum-Kulka (1986), Séguinot (1988), Vehmas-Lehto (1989), Pápai (2004), Abdul-Fattah (2010), Lamiroy (1994) and Altenberg (1995) only inspects either the aspect of explicitation or the aspect of implicitation but not both. It is not so in the research that has been carried out by Øverås (1998), Klaudy and Károly (2005), Puurtinen (2004) and Mauranen (2000) in which they give a more balanced view of the actual correlative differences between explicitation and implicitation in translation.

Having described the study of conjunctions in non-Chinese corpora, now we move on to the study of conjunctions in the English-Chinese language pair. The study of conjunctions in the English and Chinese language pair is gaining impetus. Chen (2006) uses two sets of translation in the Chinese language version comprising translation for Taiwanese and Chinese audiences and one set of original Chinese from the Sinica corpus of modern Chinese language of popular science texts. The study finds explicitation of connectives which consist of conjunctions and sentential adverbs in both sets of comparisons. Like some of the one-sided research mentioned earlier, Chen's research parochially focuses on explicitation, and as a consequence, little attention has been focused on implicitation. Some examples can be viewed in his 21 most common conjunctions in the Chinese language, 12 of which show signs of explicitation but the remaining 9 show signs of implicitation as the frequencies in the TT are lower. Another example can be found in his log-likelihood table where Chen observes that of all the 172 types of connectives, 58 conjunctions with a total frequency of 15,219 stand out as distinctive for the TT. Other than these, there are also 43 types of conjunctions with a total of 4,625 which are distinctive in the NT and which involve implicitation, although the types and frequencies may be fewer than the types and frequencies of explicitation. Having identified the five most distinctive conjunctions, Chen further probes into how the TT are different from the NT in terms of syntactic shift and into the influence of the ST on the TT. He finds that about 75% of these five most distinctive conjunctions are due to the influence of the ST. A significant weakness that has been noticed by Becher (2011) is that because Chen does not investigate the S-implicitation of conjunctions, there might be cases where many conjunctions in the ST are implicitated but perhaps the

implicitation might not be sufficient to cause equalisation when the cases in the TT are compared to those in the NT.

Wang and Qin (2010) studied conjunctions alongside other word classes, without attention being placed on individual conjunctions. Consequently the result is a very crude representation of conjunctions in the TT. According to Wang and Qin (2010), who identify conjunctions using taggers in the English ST, the Chinese TT and the Chinese NT, the TT have more conjunctions than the NT, but the ST have more than the other two corpora. They conclude that 'explicitation in TCT [TT] runs in parallel with implicitation' in the sense that 'TCT [TT] is more explicit than OCT [NT], but more implicit than EST [ST]', and suggest that 'explicitation and implicitation co-exist in any translation pair' (Wang and Qin, 2010: 179). Their line of inference is problematic as explicitation in the TT may not run parallel with implicitation, as there may be cases where the ST have less conjunctions than the TT, and the NT have less conjunctions than the TT, and thus the TT may be more explicit than the ST and also the NT. As Wang and Qin (2010) compare all words based on the categories stipulated by the taggers, words like "that" which has no Chinese correspondent are included in the calculation of conjunctions; thus it is no wonder that there are more English conjunctions than there are conjunctions in the TT. This type of comparison may be used as contrastive comparison between two languages to check for systemic differences between the two languages, but it is not suitable to compare the ST to the TT unless some adjustments are made like the obvious differences because of the system of the two languages being weeded out. If not, with this crude data, one may infer something that is quite contrary to the explicitation hypothesis that the TT is less explicit than the ST and that there is no explicit interpretation by the translators in the TT at all.

The work of Xiao, He and Yue (2010) is different from Chen (2006), and Wang and Qin (2010). Xiao, He and Yue (2010), who center their research on the use of conjunctions in different genres in their comparable corpora, observe that most of their 15 different types of genres show explicitation of conjunctions except popular lore and academic prose. In addition, using frequency bands, they are able to identify that there are more types of conjunctions with higher frequency in the TT. Furthermore, they also detect that generally the TT prefer to use more informal,

colloquial and simple conjunctions while the NT use formal and archaic conjunctions, albeit with some subtleties of the differences between genres. In addition, the identification of higher function words (inclusive of conjunctions) and the higher proportion of high-frequency words (also inclusive of conjunctions) point towards the simplification hypothesis.

In contrast, Wang's (2010) focus is different from the three studies that I mentioned earlier. By using a bi-directional corpus of Chinese-English and English-Chinese literary texts, Wang (2010) focuses on just one word, i.e. "however", in the two sets of English texts, i.e. English TT and English ST. He looks at the counterpart sentences in the Chinese ST to identify the source. Later "however" is researched in the English ST to see how it is translated into Chinese. He noticed that in his Chinese-English study, "however" is usually explicitated in the TT; in his English-Chinese research, he observed that "however" in the English texts is usually translated with a wide range of conjunctions and there is only 3.96% of implicitation in the Chinese TT. His work supports the explicitation hypothesis where the translation process has caused the English TT to be more explicitated and has caused the Chinese TT to be more explicitated than the Chinese NT. He also researched the position of these conjunctions.

These literature reviews of studies on the English and Chinese language pair show that the phenomenon of explicitation exists in all of the researchers' work. For example, Chen (2006) used comparable analysis of popular science texts; Wang and Qin (2010) compared the TT to the NT of the Chinese language; Xiao, He and Yue's work (2010) gave a comparable analysis of different genres; and Wang (2010) provided a comparison based on bi-directional texts. Here the TT show signs of explicitation compared to the ST, and the TT show more signs of explicitation compared to the NT. Implicitation is not observed in Chen's work. Wang and Qin (2010) notice the existence of implicitation when comparing the TT with the ST in which, as mentioned earlier, comparison does not take into consideration the systemic differences between the two languages under study. Xiao, He and Yue's work (2010) finds fewer conjunctions in the TT for two types of genres. Wang (2010) discovered a small percentage of "however" have not been translated in the Chinese TT.

My work is similar to Chen (2006) and Wang (2010) in the sense that it is based on one genre only, whereas Wang and Qin (2010) lump all Chinese texts together, and Xiao, He and Yue (2010) give a big picture of differences of conjunctions used in several different genres. As has been indicated by the findings of Xiao, He and Yue (2010) each genre is different in the treatment of conjunctions, hence, my choice in this study is to concentrate on one genre only, namely institutional texts, the rationale for whose choice has been expounded on in Chapter 1. Since it is based on one genre, a more exhaustive study can be performed. Somewhat distinct from all the work mentioned above, my work is more encompassing by incorporating explicitation, implicitation and shift of the TT-ST and the TT-NT with comparison of all conjunctions, inclusive of global statistics and also individual conjunctions. This is performed with the aim that the use of conjunctions in the TT may be accounted for.

3.4 Corpus Design of Other Researchers

Other matters related to the study of conjunctions are the design or combination of corpora for comparison. In this section, work related to the study of conjunctions, which may not be corpus-assisted, may also be cited for the discussion of the aspect of design in order to bring this subject of "texts" design more closely to the object of discussion, i.e. "conjunctions".

In terms of corpus design, there is the basic parallel of corpus design which consists of the usual ST-TT comparison. Some examples of parallel corpus research are Vauderauwera (1985), Blum-Kulka (1986), Séguinot (1988) and Lamiroy (1994). The main advantage of using parallel corpora is that they allow measurement of equivalence. Such measurement facilitates the identification of the influence of the ST and the S-change[5] in the TT as both texts have the same 'semantic content' (Granger 2003: 19), which is a type of product-oriented investigation. There is a

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[5] I have employed the "S-change" to denote differences in the TT from the ST. The utilisation of this terminology is an extension and derivative from Chesterman's (2004: 39) terms of "S-universe" for ST-TT comparison and "T-universe" for TT-NT comparison. As the usage of this terminology "universe" has a more confined meaning implying that the universal features do exist, I prefer to use more neutral terms to account for changes that happen in the TT. Other related tems are S-explicitation, S-implicitation and S-shift.

drawback, however. Entirely using this kind of unidirectional parallel corpus design hinders assessment of the possible engagement of the target language, the native texts or the target culture in the TT, which is itself a different product-oriented investigation. When this happens, it may indirectly hamper further discovery of the translators' mind, which is a process-oriented investigation, as changes in the TT may derive from the indirect linkage of target norms besides the innate translation process of the translators.

To counter the weakness of the inaccessibility to the translation process, there is another variation of parallel corpus design, namely bi-directional parallel corpora, which has been undertaken by Øverås (1998) using English-Norwegian Norwegian-English corpora. Øverås (1998) is able to confirm that explicitation is a distinctive feature of translation, resulting from the translation or mediation process, when both the translated Norwegian and translated English exhibit explicitation matched up against their ST. However, again, the target norms which may be present in the TT are sidelined in this design. Admittedly, Øverås (1998) is aware of the lack of the bi-directional parallel analysis and believes that it is with the comparison with the native texts that the third code on product of the TT may be more clearly defined. Additionally, Øverås (1998), Altenberg (1995) and Wang (2010) also use bi-directional parallel. Beside these parallel designs, there may still be another variation of parallel comparison where one ST is evaluated against translations by different translators, allowing researchers to identify the individual styles or the translators' idiosyncrasies, like part of Chen's (2006) work where translation into Taiwanese Chinese and mainland Chinese is compared.

There is also monolingual comparable corpus design, or in short comparable corpus design, which examines the contrast between the TT in language A and the texts originally written in the same language A. Like the unidirectional parallel corpus, this is also a product-oriented investigation which facilitates the detection of T-change[6]. Since it is first put forward by Baker in 1993 and has been stressed again in 1995, this model of research has proliferated. Some examples include research by Xiao, He and Yue (2010). This stand-alone use of a monolingual comparable corpus

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[6] "T-change" denotes differences in the TT from the NT. Other related terms are T-explicitation and T-implicitation.

has attracted a lot of criticism where the main premise of the argument is that the method of engaging comparable corpus is limited in indicating some linguistic features which might be due to the influence of the ST. Pym (2005: 39) commented on the work by Olohan and Baker (2000) on the explicitation of the connective "that": 'such bravura, without attention to possible alternative explanations, raises the spectre of a generation of translation scholars busy observing corpora without thinking about the process'. Hansen-Schirra, Neumann and Steiner (2006: 1) have also remarked that the investigation of monolingual comparable corpora 'without looking into the account of ST is restricted and problematic'. Other issues pertaining to this model can be summed up in the title *How Comparable Can "Comparable Corpora" Be* (Laviosa, 1997) as criteria suggested by Baker (1995: 234) that 'both corpora should cover a similar domain, variety of language and time span, and be of comparable length' may not be so easily achieved. Such comparability is said to be achievable, e.g. in the case of ZJU Corpus of Translational Chinese (ZCTC), which represent the TT, and Lancaster Corpus of Mandarin Chinese (LCMC), which represent the NT, for Chinese (Xiao, He and Yue, 2010).

After much criticism of comparable corpus design, eventually, Baker (2004: 181) declares that 'ultimately we will want to go back to the source text in some cases to seek further and complementary explanations'. This point is also made by Chesterman (2004a: 44) who maintains that 'the translator is constrained by "what was said" in the source text and "what they understand was said in the source text"'. Accordingly, this brings us to another type of corpus design which unites both the parallel and monolingual comparable corpora. Few scholars have attempted to apply this corpus design. First, there is Vehmas-Lehto (1989) who generally uses comparable corpora of Finnish newspaper articles and texts of the same genre for Russian ST. Then, there is Puurtinen (2004) whose work is mainly on comparable corpora but who refers back to the ST to identify the forces of the ST in the TT. Like Puurtinen, Chen (2006) uses English-Chinese scientific texts and the original Chinese language to study connectives and also refers back to the ST for influences in the TT. Wang and Qin (2010) also compare equally translated Chinese texts, NT Chinese texts and English ST, although the title of their article is *A Parallel Corpus-Based Study of Translational Chinese*. These researchers put emphasis on comparable analysis. Parallel analysis is put forward only to account for certain

cases, except in the research by Wang and Qin (2010). The combination of parallel and comparable corpora will facilitate study in both the process and product of translation. In terms of the process, the research can elicit the translation features due to the translation process through the total TT-ST and TT-NT assessment, seeking if the translators have added their interpretation or omitted some elements not related to the ST or the NT influence. This result is similar to the bi-directional parallel corpus design but using different means to authenticate the translation-inherent features. In terms of the product, the research can unravel how different the TT is from the ST and the NT, bringing translation research to another dimension. Despite the efficacy of this combination, the research performed by these researchers still fall short of what the capability of this combination can offer. Vehmas-Lehto (1989) does not use it to account for the interpretation process. Puurtinen (2004) and Chen (2006), however, are able to identify the translation process of a limited number of conjunctions. In terms of the product, Vehmas-Lehto (1989), Puurtinen (2004) and Chen (2006) are able to identify how different the usage is between conjunctions in the TT and the NT, and later justify the usage of certain conjunctions in the TT as due to the influence of the ST (Vehmas-Lehto, 1989; Puurtinen, 2004; Chen, 2006), the interpretation by the translators (Puurtinen, 2004; Chen, 2006), or perhaps the norms of the NT[7] (Puurtinen, 2004). The conjunctions studied are also limited. Wang and Qin's (2010) research will not be able to account for the differences between the ST and the TT, even though they have the same "semantic content".

Another variant is the use of bi-directional parallel corpora and comparable corpora design of both languages like the work undertaken by Hansen-Schirra, Neumann and Steiner (2006) who use a bi-directional parallel corpus of English-German and German-English, the English original and the German original. The result of this comparison will only offer a more watertight argument on the proposition proposed, as the process and the product of translation are scrutinised from all directions. For example, if a feature is found to be so explicitated in the TT when compared to the ST in both directions, and if explicitation is not due to the influence of conventions of the NT, arguments for the feature being the result of the translators' interpretation process and thus a specificity in the TT will be stronger. Also if much research using

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[7] Incidentally, Puurtinen (2004) does not claim it to be so, but the more usage of *jossa/joissa* (in which/where) in the NT, according to Puurtinen (2004: 173) is "with no apparent reason".

this design is performed on different language pairs and on different genres and it is found that the feature is so explicitated, then, the claim of explicitation as a translation universal will be confirmed.

Despite formerly being exclusively the domain of corpus linguistics, multilingual comparable corpus design where two or more language systems are incorporated for contrastive studies is gaining recognition in translation studies. Prior to corpus linguistics studies, Séguinot (1988) laments that it is a challenge to establish the initial structural, stylistic and rhetorical differences, and as a consequence research is limited and constrained. Nevertheless, this type of study is no longer a challenge due to the help of corpus linguistics tools. Furthermore, this type of study is also advocated and recognised by many scholars of translation, amongst them Blum-Kulka (1986), Øverås (1998) and Mason (2001), as the advantage is the comparability of languages produced by native users (Granger 2003: 19), giving the researchers a better perspective on the contrast between the language systems in order to have a more informed argument for their observation of the phenomena in the TT.

There may also be other variations of corpus design like contrasts between the translated work of one translator with others to identify the idiosyncrasy of the translators; assessment of the work of one translator or the TT through time to identify diachronic development of the translators' translations or the TT themselves; and evaluation of translations in different languages from the same source etc. From the above synopsis of corpus design, it is evident that the translation research environment has now departed from mere recursive one-way ST-TT studies to move towards more complex designs that include a network of related texts, of different combinations, of multiple directions and of different sets.

3.5 Notion of Change in the Use of Conjunctions

In Section 3.4, it is has been established that parallel corpus design facilitates the detection of S-change, whereas monolingual comparable corpus design assists with uncovering T-change. In this survey, S-change takes into account S-explicitation, S-

shift from other conjunctions and S-shift from other non-conjunctions where the starting point of research is the TT (Chinese TT-English ST); S-implicitation, S-shift into other conjunctions and S-shift into other non-conjunctions where the point of commencement is moved to the ST (English ST-Chinese TT). The necessity of commencing the research from the TT and then the ST is because by first identifying the conjunctions in the TT and later comparing them with the ST only then will explicitation be identified. However, that does not enable the identification of implicitation. Thus the reverse process is indispensable. On the other hand, T-change contains T-explicitation and T-implicitation. This dichotomy between the results of parallel comparison and comparable comparison is essential for clearer isolation of the specificity of change. Besides these working terms, it should be further explicated that S-explicitation is a generic term to account for any form of explicitation in parallel analysis, be it the explicitation of forms of conjunction from non-tangible elements in the ST to the appearance of conjunctions in the TT which is more specifically labeled as "pure S-explicitation", the explicitation of structure or the explicitation of meaning. Meanwhile, S-implicitation is also a generic term for any form of implicitation in the parallel analysis ranging from the implicitation of forms from conjunctions in the ST to non-tangible elements in the TT labeled as "pure S-implicitation", to the implicitation of structure or the implicitation of meaning. In this research the terms "explicitation", "explicitness", "overt" and "addition" are used interchangeably; so are the terms "implicitation", "implicitness", "covert" and "omission". The types of change explained here are tabulated below.

Table 3.1 Types of change

Analyses	Points of commencement of search for conjunctions	Types of change		Explanations
Parallel analysis	TT	S-change	S-explicitation/ pure S-explicitation	non-tangible[8] elements in the ST to conjunctions in the TT
			S-shift from other conjunctions	other conjunctions to conjunctions
			S-shift from other non-conjunctions[9]	non-conjunctions to conjunctions
	ST		S-implicitation/ pure S-implicitation	conjunctions in the ST to non-tangible elements in the TT
			S-shift into other conjunctions	conjunctions to other conjunctions
			S-shift into other non-conjunctions	conjunctions to non-conjunctions
Comparable analysis	TT	T-change	T-explicitation	conjunctions in TT more than conjunctions in the NT
	TT		T-implicitation	conjunctions in the TT fewer than conjunctions in the NT

Based on parallel comparison, the term "explicitation" was first introduced by Vinay and Darbelnet (1958/1995: 342) who define it in the glossary as 'a stylistic translation technique which consists of making explicit in the target language what remains implicit in the source language because it is apparent from either the context or the situation'. The term "implicitation", on the other hand, has been defined as 'a stylistic translation technique which consists of making something explicit in the SL implicit in the TL' (Vinay and Darbelnet, 1958/1995: 344). Vinay and Darbelnet's (1958/1995) definitions of explicitation and implicitation entails that there should be

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[8] 'Non-tangible' here means there is no one-to-one correspondence. For example, if a sentence like 'It may not, in any case, change their personal status…' were to be translated with the addition "but" like 'But it may not, in any case, change their personal status…", this will be considered as explicitation. This is so because there is no tangible one-to-one correspondence of "but" in the ST, even though the usage of "but" may be triggered by the negation "not".

[9] The difference between "S-shift from other non-conjunctions" and "S-explicitation" is that there is a tangible one-to-one correspondence for "S-shift from other non-conjunctions" but not for "S-explicitation". An example of "S-shift from other non-conjunctions" is that 'In the event of a complaint by a supplier…' which is a preposition is translated as 'If the supplier filed a complaint…'. In this case, there is a tangible one-to-one correspondence for the usage of the conjunction "if" in the TT which is the preposition "in the event".

no added information in cases of explicitation because the information would be implied in the ST; and there should be no subtraction of information in cases of implicitation because the information would be implied in the TT. Acceding to Vinay and Darbelnet's (1958/1995) statements, the 'explicitation hypothesis' by Blum-Kulka (1986: 19) also states that explicitation by the translators causes the TT to be more redundant than the ST, i.e. what is found implicit in the ST is redundantly explicitated in the TT. However, Séguinot (1988: 108) contends that even though explicitation can be due to implicitness in the ST, it can also be the result of addition of information in the TT not found in the ST, and it can be the consequence of elements in the ST that are given greater emphasis. In addition, in line with Nida's explanation (1964), Séguinot (1988) also mentions that when information in subordinate structure is translated into coordinate structure, it is an indication of explicitation. This example shows that change of forms may also change the explicitness of texts.

According to Séguinot (1988), the term "explicitation" should be reserved for addition in translation that is due to the nature of the translation process and not due to systemic differences, stylistic preferences or rhetorical differences between languages. As has been mentioned earlier, the identification of systemic differences, stylistic preferences or rhetorical differences between languages may be feasible through multilingual comparable corpora. However, placing the TT with these established preferences is not an easy job. As Øverås (1998) has mentioned, this kind of research is impossible to be implemented as it may rely upon personal preferences of the informants and there might not be clear cut differences between obligatory systemic shifts and stylistic preference shifts; and between stylistic shifts and shifts caused by the translation process or the shifts due to cultural conventions. Thus, this research does not attempt to do so. In this research, all conjunctions identified by the taggers are included and there is no attempt to differentiate whether it is an obligatory, stylistic or rhetoric, conjunction except for some obvious cases and also some usages of conjunctions in the TT which are due to the translation inherent process.

Next, there is the notion of "shift" which is also parallel comparison-oriented. Catford (1965: 73) defines "shift" as 'departures from formal correspondence in the

process of going from the source language (SL) to the target language (TL)'. From this statement, it seems that to understand the concept of "shift", first it is necessary to comprehend the notion of "formal correspondence". "Formal correspondence" is 'any TL category (unit, class, structure, element of structure, etc.) which can be said to occupy, as nearly as possible, the "same" place in the "economy" of the TL as the given SL category occupies in the SL' (Catford, 1965: 27). Nida (1964) terms it "formal equivalence" but later changes it to "formal correspondence" (Nida and Taber, 1969). Catford (1965) then divides shifts into level shifts and category shifts. A level shift happens when a source language item at one linguistic level is shifted to another linguistic level in the TT. For example, a conjunction which is at the grammatical level is shifted into a noun which is at the lexical level. Category shifts are divided into four categories, namely structure shift, class shift, unit shift and intra-system shift. A structure shift occurs when there is a change in structure, like from a hypotactic construction into a paratactic construction. A class shift comes about when one word class is replaced by another word class in the translation. For instance, a conjunction is translated into a preposition. A unit shift, on the other hand, transpires due to a change of rank, as a word may be translated by a clause. Lastly, an intra-system shift arises when the target language system has the same formal constitution as the source language system, but the translation chooses to use a non-corresponding term in the translation. As most of the conjunctions have formal correspondences, this type of shift can be linked to the "dynamic equivalence" proposed by Nida (1964: 166) where translators strive for 'the closest natural equivalent to the source-language message'. According to Nida (1964), in the term "closest natural equivalent", "equivalent" means equivalent to the response of the source language message. "Natural" means that the rendering must fit the target language, the target culture, the target audience, and also the context of the message. "Closest" binds the source language message and target aspects together 'on the basis of the highest degree of approximation' (Nida 1964: 166). In this text, I will use the term "natural equivalent", dropping the term "closest" as it is not my concern here to check for the degree of approximation. The term "natural equivalent" is used here to denote words that are being rendered in the TT which may have formal correspondence with the ST but that formal correspondence is not used. Rather, the translators opt for some other words where the usage does not seem to have caused extreme differences of response when compared with the ST. In addition, the usage

has not caused "obvious" problems in the TT when compared to the target aspects. The word "obvious" is in inverted commas, this is because problems can only arise if the frequency of usage of the conjunction in the TT is different from the frequency of usage of conjunction in the NT. In a normal comparison of ST and TT, and even comparing with the target aspects, without the assistance of corpus, this problem would not be obvious.

My preference for Catford's theoretical framework which concentrates on forms to account for the changes is because the use of conjunctions in the three texts is enumerated based on form through tagging. This study will first concentrate on the shift in form then on the shift in meaning, a double layer of research. As for shift in form, anything that has been shifted into/from conjunctions based on Catford's shifts will be considered as a shift. This linguistic shift, even though it may not cause changes in meaning, as subtle as it may be, may cause some changes in orientation. For example, a change from a subordinate structure to a coordinate structure is considered as a form of explicitation (Séguinot, 1988). A change from a function word to a lexical word is also a form of explicitation (Xiao, He and Yue, 2010). It is only later, after the changes of form are identified, that the meaning factor is examined. The meaning factor will be based on SFL. If any of the changes do not cause changes in meaning based on the semantic categories of SFL, then they will be considered as dynamic translations, or grammatical metaphors. If the changes cause changes in semantic categories, they will be considered changes in meaning depending on whether they are into more meaning or less. Catford's model is very closely connected to the 'Firthian and Hallidayan linguistic model' (Munday, 2012: 60), the theoretical framework used for the notion of conjunctions in this study, where a language is viewed as a communicative instrument functioning in a context through different levels (e.g. semantics, lexis, grammar, phonology, phonetics) and ranks (clause, phrase/group, word, morpheme) (Munday, 2012).

Due to the direction of the study, this research has to be linguistically oriented. Other frameworks, like van Leuven-Zwart (1989) and Vinay and Darbelnet (1958/1995), are not suitable for this research. In van Leuven-Zwart's (1989) study of shift, she opines that conjunctions do not appear in the "architranseme", a common denominator, between the ST and the TT. Strangely, however, shifts in the use of

conjunctions are placed as a type of syntactic-semantic modification where it is said that there is disjunction of "transemes", a comprehensible textual unit, between the ST transemes with the architranseme and the TT transemes with the architranseme at the level of syntax and semantics. The discrepancies in the two statements, where the first states that there is no architranseme for conjunction and the second states that the syntactic-semantic modification happens where the ST or the TT conjunctions are disjunct with the architranseme, are confusing. Another issue I find somewhat dense is how the ST transemes can be disjunct with the architranseme as the architranseme should be determined by the elements in the ST. According to van Leuven-Zwart (1989), the syntactic-semantic modification of conjunctions is said to happen when there is addition, deletion or changes of meaning. In the framework of this study, this shall be handled in Table 3.2. Van Leuven-Zwart (1990) acknowledges that shift in the use of conjunctions may affect the textual function on the discourse level, changing the degree of explicitness of cohesion. The addition of conjunctions is found to be rampant in her study and she places it as a type of tendency towards explanation, where 'implicit connections are made explicit by *causal*, final and other conjunctions, and vague, indirect or "illogical" links between events and actions are explained or rationalised' (van Leuven-Zwart, 1990: 89, my italics). Although her framework seems very detailed and encompassing with aspects of syntactic, semantic, stylistic and pragmatic shift, as well as other aspects like generalisation and specification, the link between the microstructure to the macrostructure, and the differentiation of the story level and the discourse level, her model is not used because of the discrepancies stated above, and because her framework places importance on narrative texts and not enough emphasis is placed on the use of conjunctions. Furthermore, her model is known for being complex (Munday, 2012). Nor is Vinay and Darbelnet's model of direct translation and oblique translation suitable, except for their literal translation which is equivalent to Catford's (1965) formal correspondence. Their "transposition" where a form is changed without changing the meaning and their "modulation" where meaning is changed, is very closely related to the model set forth in this research, except that more emphasis is on obligatory and optional shifts in Vinay and Darbelnet's model.

Therefore, by integrating and adapting the three forms of explicitation by Séguinot (1988) and the notion of shift by Catford (1965), I have created a model of S-change and formal correspondence on the use of conjunctions as below.

Table 3.2 Integrated model of S-change and formal correspondence on the use of conjunctions

Categories	Conjunctions or expressions in source texts	Conjunctions or expressions in translated texts
(i)	formal correspondence	conjunction (neutral)
(ii)	conjunction of different meaning	conjunction (explicitation/implicitation/change of meaning)
(iii)	zero conjunction with other expression indicating the meaning	conjunction (explicitation/implicitation/change of meaning or structure)
(iv)	zero conjunction with no other expression indicating the meaning	conjunction (pure explicitation)
(v)	conjunction	formal correspondence (neutral)
(vi)	conjunction	conjunction of different meaning (explicitation/ implicitation/change of meaning)
(vii)	conjunction	zero conjunctions with other expression indicating the meaning (explicitation/implicitation/change of meaning or structure)
(viii)	conjunction	zero conjunctions with no other expression indicating the meaning (pure implicitation)

Categories (i) through (iv) are some probable combinations of occurrence in Chinese TT-English ST comparison. Category (i) happens when the conjunctions in the TT are translated from their closest corresponding conjunctions in the ST, what Catford (1965) terms as formal correspondence. This will be a neutral phenomenon and the determination of compatibility is based on the taxonomy in SFL. Category (ii) takes place when conjunctions in the TT are translated from other conjunctions which do not give the formal meaning. This is if conjunctions are shifted from lesser-semantic-content conjunctions, in line with Séguinot's (1988: 108) statement that greater emphasis is placed on the conjunctions in the TT, which is considered as explicitation, and to be more exact, explicitation of meaning. Contrarily, cases where conjunctions are shifted from more semantic content to lesser are considered as implicitation of meaning. There are also cases where the conjunctions used are simply different. Again, decisions about the shift of meaning will rely completely on

the taxonomy in SFL. Sometimes, it may be a change of structure where a hypotactic conjunction is translated into a paratactic conjunction, creating explicitation (Séguinot, 1988). For category (iii), conjunctions in the TT are shifted from other non-conjunctions. This may be a case of level shift or category shift proposed by Catford (1965). We can also discuss this shift as explicitation using Séguinot's (1988) argument where elements (non-conjunctions) which are implicit in the ST may be explicitated, or elements (non-conjunctions) in the ST may be given greater emphasis through this shift. Sometimes, such a shift changes meaning, but not always. This category resembles SFL's grammatical metaphor. Categories (ii) and (iii) may be cases of intra-system shift into textual equivalents as advocated by Catford (1965), where the translators choose other forms of translation even though there may be exact formal correspondences. These categories are by no means wrong translations, but sometimes, they can be natural equivalents, with some subtle differences. Category (iv) comes about according to the description of Séguinot (1988), where co-textually unrecoverable material in the ST is rendered explicit by the translators in the TT. This is a sign of pure explicitation which can most probably be inferred as the translators' interpretation.

Having discussed the potential changes or non-changes in Chinese TT-English ST comparison, the discussion moves on to categories (v) through (viii), typifying the potential changes in English ST-Chinese TT analysis. Categories (v) and (vi) are symmetrical and reciprocal with categories (i) and (ii) respectively, as conjunctions which are translated formally into the TT are also translated formally from the ST, and conjunctions which are shifted into the TT are also shifted from the ST. Category (vii) shows conjunctions in the ST which have been translated without using any conjunction, but there are other overt expressions signaling the semantic content of the ST's conjunction. This is a total contrast to category (iii). Category (viii) illustrates conjunctions in the ST which are not translated and there is no other expression signaling the meaning. These observable facts can be inferred as pure implicitation.

As the monolingual comparable corpus does not have the same semantic content unlike parallel corpus design, T-change can only identify T-explicitation and T-implicitation. T-shift, if we place the notion of shift according to Catford's (1965)

definition of shift, should perhaps involve how the NT bind clauses with or without the use of conjunctions, and how different or similar the TT bind clauses as compared to the NT. In order for that to be feasible, the system of the Chinese language, or, more specifically, the language system of the Chinese institutional genre, should be identified to understand the systemic usage of the Chinese language. The term "shift", however, is used in Chen's (2006) research to account for syntactic differences between the usage of connectives in comparable analysis like the shift based on pair or stand-alone constructions, inter-sentential or intrasentiatial connections, collocates, fixed expressions, usage of commas, new pair constructions and new L2 connectives. In a way, these conjunctions are used syntactically differently, but I would rather call this mere differences in the usage, rather than "shift". Until and unless we have established the system of the Chinese language, which will not be attempted in this research, we will adhere to the more obvious comparison of the presence or the absence of forms of conjunctions in the TT-NT comparison. The term T-explicitation means the TT have more conjunctions while T-implicitation means the TT have fewer conjunctions.

The complication and 'double point of view' of identifying both parallel and comparable analyses has been voiced by Bakker, Koster and van Leuven-Zwart (1998: 228) who observe that, for example, a formal correspondence in the ST-TT comparison may be construed as an explicitation or implicitation in the TT-NT comparison 'violating the expectations of the target system'. In this research, this complication is resolved in research question 3.

Having established the taxonomy of change, through the S-change and the T-change, and the non-change which is formal correspondence, to assist in the analysis of the types of change in this research, we now proceed to embark upon an explanation of the causes of change to explicate the reasons.

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3.6 Causes of Change in the Use of Conjunctions in Translation

We will proceed to look at the causes of change, not necessarily specifically change in the use of conjunctions, but change in general and more so the causes of explicitation, as the study of translation is very much related to explicitation. A change can be attributable to an obligatory change which is due to systemic differences between the two languages (Klaudy, 1998). Many researchers, however, do not consider the use of conjunctions as obligatory. Even though there may be English structures that are not found in the Chinese language, like non-defining relative clauses, which may produce changes of structures in the Chinese language and in turn prompt the use of conjunctions, the presence of conjunctions here may not be obligatory, as the translators may opt for other constructions without the use of conjunctions. However, it is hoped that this empirical survey will help to disclose whether the use of conjunctions is obligatory or not.

A change can also be optional. Optional means when the translators have more than one choice in translating. Choices are made based on text-building strategies and stylistic preferences between languages (Klaudy, 1998), and also for ideological and cultural reasons (Bakker, Koster and van Leuven-Zwart, 1998: 228). In any linguistic study, especially in the study of the translation of conjunctions, a change which is optional or not can be determined, as has been mentioned earlier, through a large scale multilingual comparable corpus study which is genre specific to identify the style of each language system (Blum-Kulka, 1986). If the translators change according to text-building strategies and stylistic preferences of the target language/the target culture, it will be deemed a case of initial norms making the TT more acceptable to the target norms. But if the translators adhere to the ST/the source language/the source culture, it will be a case of initial norms making the TT more adequate to the source norms. If these areas are determined, only then can the next cause of change, which is translation-inherent change, be unveiled. Many studies on the use of conjunctions in TT have pointed back to the influence of the ST, e.g. Puurtinen (2004) believes that the explicitation of *että* ["that" or "in order to"] compared to the NT may be attributed to the influence of the ST. Chen (2006) gives evidence that when an explicitation does occur, it is often motivated by

postmodification[10] and juxtaposition[11] in the ST. Based on the works of Vehmas-Lehto (1989) and Doherty (1987), Klaudy (1998) places the use of conjunctions as optional. Optional means the usage or the non-usage may not cause any errors in grammar but may cause the texts to be unnatural.

Beyond the linguistic level, many researchers have put forward their observations on causes of optional change. One of the reasons for change is the translators' own preference (Baker, 2004). As Baker (2004: 181) puts it, 'translators are writers' and they are expected to demonstrate their own set of preferred linguistic choices. This reason is also attested by Chen (2006) who studied variation in *conditional* connectives used by four individual translators and found that there is a distinct preference among the four translators for certain *conditional* connectives, even though the *conditional* connectives investigated are more or less interchangeable. The different expertise of the translators may also cause changes in the TT, as shown by Englund Dimitrova (2005) who found that professional translators explicitate conjunctions more consistently. However, Blum-Kulka (1986) mentions that explicitation occurs in the work of language learners, nonprofessional translators and professional translators alike, because of inherent translation. On the other hand, Séguinot (1988: 109) feels that 'where the translation is less explicit…, the writing is improved'. In other words, this statement can suggest that better writing (by professionals) is writing which is implicit, or where professional translators use fewer conjunctions. The different findings of these researchers should be set against the background of the NT in order to decide whether an explicitation act by a translator is welcome.

Related to the translators' background, Chen (2006) offers a pedagogical factor as a reason where translators are taught to add connectives for clarity and flow of information. This account of the cause of change is also supported by Chesterman (2004a) who proposes that training to write clearly is a definite factor. Related to the perception of the translators, Englund Dimitrova agrees that selection by translators is based on 'the translator's view of the appropriate relationship between the ST and

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[10] Some examples of postmodifications are the usage of relative clauses and phrases starting with "by", "with" and "-ing".
[11] Juxtaposition is a combination of two sentences into one.

the TT, the permissible degree of freedom in translation, and/or by his/her notions of what is a good text in the target language' (Englund Dimitrova 2003: 22). In addition, Pym (2005) also contributes to this discussion with a rationalist and sociological explanation that translators explicitate for risk aversion purposes, i.e. to prevent the risk of not getting paid, or losing a client, or to prevent not being recognised by selecting low-risk interpretation in their translations. Another related economic aspect is that translators who are paid according to word count might endeavour to explicitate as much as they can to increase the words count (Egeberg 1996, cited in Øverås, 1998: 17).

Another reason which is place bound may be due to setting and readership variation, as observed by Chen (2006), who finds that there is a higher inclination for the use of connectives in Taiwanese translations as compared to mainland Chinese translations. This might be connected to the overall tendency of readers in Taiwan to expect a fluent reading, as opposed to the long standing tradition of pedagogical or social norms in China which accept foreignisation, keeping the interference of the translators to a minimum. Yet another reason which is time-bound could be the trend of a particular time, as has been noticed by Egeberg (1996, cited in Øverås, 1998: 17), who gives an example pertaining to a language trend in Norway in the 1950s which favoured short and simple sentences because of the Norwegian 1938 language reform catalysed by Dostoyevsky. However, Øverås (1989) notices that the trend changed in the latter half of the 20th century. There is also a situational cause witnessed by Séguinot (1988: 107-108) who finds that causes of change may be due to differences in the editing strategies of text revisers or the attitude of institutions. Based on type-bound criteria, Shih (2008) opines that the causes of change may be due to the different "skopos" of the texts, such that the difference between the target readers and a particular translation purpose may have caused some differences in the variation of explicitation.

A change can be translation-inherent. Unlike optional change which is language dependent or cultural norms dependent, a translation-inherent change is language-independent (Klaudy, 1998), and is very much linked to the mediation process performed by translators which causes the TT to be distinctive from the ST and the NT. It is said to be due to subconscious cognitive processes of the translators

(Olohan and Baker, 2000). As has been noticed by Pym (2005) translators are readers and writers; and they realise the difficulty in construing meaning; once they have solved the problem of construing the meaning of the ST, they want to make the meaning explicit. Pym's (2005) idea is confirmed by Whittaker (2004, cited in Pym, 2005) who finds that the harder the texts, the harder the translator works and the more explicitation occurs. Along a similar vein, Øverås (1998: 17) expresses that 'the conscious or sub-conscious desire to improve on the original is as likely to lead to explicitation as implicitation'. This is so because translators have social roles as mediators (Klaudy, 1996). As translation-inherent change is due to the process of translating, explicitation found in translation has caused Blum-Kulka (1986: 19) to propose the famous 'explicitation hypothesis' which postulates that regardless of the language pair, there is a higher level of explicitness of cohesive devices in TT due to the translation interpretation process. It is also noticed by Klaudy and Károly (2005) that change entails an asymmetrical shift where explicitation in the L1→L2 direction is not counterbalanced by implicitation in the L2→L1 direction. The discussion of translation-inherent effects is directly linked to the discussion of translation universals in Section 3.9, as features found exclusively in the TT may be features found universally across languages and cultures of the TT. In this research, I consider conjunctions which have no tangible counterparts as translation-inherent and term them as "pure explicitation" or "pure implicitation".

Another more linguistically motivated explanation of what triggers explicitation or implicitation of conjunctions has been given by Becher (2011a). Since he uses bi-directional texts of a total of only about 88,000 words, Becher (2011a) is able to detail his study, but he may lose out in terms of the representativeness of his work. He finds that there are 139 cases of explicitation and 44 cases of implicitation from the direction of English-German, while there are 79 cases of explicitation and 64 cases of implicitation from German-English. His five reasons for explicitation and implicitation are geared towards the translators' endeavours to adhere to target language norms to ensure the naturalness of the TT, like 1) complying with the communicative norms of the target language community, 2) exploiting specific features of the target language system, 3) dealing with specific restrictions of the target language system, 4) avoiding stylistically marked ways of expression, and 5) optimising the cohesion of the target text. Thus, his argument that explicitation in

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English-German is disproportionally high is due to the translators desire to conform to German language norms where the use of conjunctions is more explicit; and thus this may also counterbalance implicitation from the German-English direction. However, some of his arguments can be said to be not very sound. For example, in German-English translation, the German *dabei* [here] is said to be implicitated in the English because it is more 'in line with the communicative norms of English' (Becher, 2011a: 172). However, I find the sentences given by him where "here" is added, such as "our goal here is to provide…" are reasonably fine in English. Another example is where "also", which functions as an adverb, but has been considered as a connective in his study, is found to be explicitated in the English translation because the translators are said to want to compensate for a construction found in German but not English. However, there he does not consider whether "also" is used more in English native texts, as his work has found more conjunctions in the German native texts but not as many in the English native texts. Becher (2011b: 27) argues vehemently that the "explicitation hypothesis" is unmotivated because 'it does not give a reason why translations should be "inherently" more explicit than non-translated texts'. His last category of optimising the cohesion of target texts (Becher, 2011a) is taxomised because some of his examples cannot be placed in any of his four categories; and he argues that 'that does not need to worry us, since we should expect translators to add a connective once in a while' (Becher, 2011: 183). I think this may very well be part of translation-inherent change because the translators need 'to ensure understanding between the source text author and her target text readers' (Becher, 2011: 183).

In this study, the causes of change are based on linguistic evidence which focuses on the reasons for change, especially on what triggers the change and what has changed, rather than the purpose of change, like the perspective from Becher (2011) mentioned in the previous paragraph. S-change is first viewed from a more micro-operational aspect based on linguistic changes found in the ST and the TT which will be carried out in Chapter 6. In Chapter 7, the study will attempt to identify whether the TT adhere to the ST norms or are acceptable to the TT norms, or due to the translation-inherent process. This attempt is devoid of researcher conjecture but based on hard linguistic evidence found in the corpora. Be it linguistically motivated

or meta-situationally motivated, all these different systems have influenced the use of conjunctions in the TT.

3.7 Effects of Change in the Use of Conjunctions in Translation

Just like the causes of change in the use of conjunctions, the effects of change are also mostly based on explicitation of conjunctions in the TT, as this line of research is more popular. There are many explanations for how the explicitation of conjunctions will affect a text. Shuttleworth and Cowie (2007) believe that the explicitation of conjunctions can help the logical flow of texts and increase readability. Vanderauwara (1985) contends that explicitation of conjunctions may increase the clarity of information that is implicit in the ST. Chen (2006) proposes that explicitation of connectives can avoid ambiguity, explicitate *causal* relations and enhance inter-sentential cohesion; and Pápai (2004) proposes that, in the translation of technical writing, conjunctions are added to produce a clearer text. Whilst explicitation of conjunctions is believed to facilitate the flow of information thus "helping" the reader to have a better and clearer understanding of the content of the text, it is also believed that the explicitation of conjunctions can shift the meaning of the ST (Blum-Kulka, 1986), can control the interpretation of the content of the text (Baker, 1992) and can manipulate the ideology of the content (Hatim and Mason, 1997: 158). Blum-Kulka (1986) has demonstrated in her examples that a slight addition of "so" changed a dialogue between a couple from a supportive (wife) and a challenge role (husband) to a counter-challenge (wife) and a challenge role (husband). Mauranen (1993) also finds that indeed the use of conjunctions has rhetorical effects like convincingness, authoritativeness and logicality. Shih (2008) further explains that added connectives help children to grasp the message quickly but added connectives are of little help to adults and may 'destroy the literary sense and feeling of the original work'. On a more social effect, Millis, Golding and Barker (1995) find that *causal* connectives will increase the generation of inference.

On another note, as has been mentioned earlier, Séguinot (1988: 109) seems to contend that 'where the translation is less explicit, the writing is improved', even though she states that the TT have improved topic comment links, have improved focus, and have improved cohesion and coherence. This may suggest that while the

explicitation of conjunctions might be able to facilitate the flow of the message and thus facilitate reading, the quality of the resulting written work would be lower. This statement may be especially significant in the study of the translated Chinese language texts. If it is found to be true that implicit logical-semantic relations are much preferred in the Chinese language, i.e. if Chinese can be "perfect" without much use of conjunctions, a point worth pondering is whether change in the use of conjunctions in the TT is to be viewed as a positive phenomenon or a negative one.

Chesterman (2004a) recognised that the study of the effects of potential universals in translation is still at its infancy stage and stressed the importance of the study of effects on the reader. It is hoped that this present research will be able to fill in this gap, and hopefully its findings will be useful to teachers of translation and translators. Based on the linguistic evidence (i.e. the semantic meaning carried by conjunctions) in the TT compared to those the NT, as the effects should be based on readers who read both the TT and the NT, this study will attempt to discover the effects of change in the TT.

3.8 Cognitive Process and the Use of Conjunctions in Translation

As has been mentioned earlier, the corpus design of this study is able to identify the translation process; one of the causes of change is due to the translation process, which is closely linked to the cognitive processed of the translators. Lederer (1994/2003) identifies three overlapping "interpretive models" of translation, i.e. understanding the ST sense, deverbalising the ST and re-expressing the sense. The cognitive process is located in the stage of deverbalising.

The link of use of conjunctions in TT to the cognitive process has been highlighted by Halverson (2004). A study on such a link has also been taken up by Englund Dimitrova (2005) using different methodologies to research the differences of the cognitive processes between nine different participants (four professional translators, two translator students, three language students) of different expertise to check on the explicitation of the usage of connectives in a Russian-Swedish translation. She uses think-aloud-protocols in which the translators are required to verbalise their

thoughts; as well as recording the key-stokes[12] like cut-and paste and typing speed of the translators. She analyses a few conjunctions based on semantic categories i.e. *additive*, *adversative* (*contrastive*), and *temporal/causal* added by the translators in the TT. She finds explicitation of conjunctions more consistent in the professionals than the non-professionals. The drawback is the non-involvement of NT in the research; thus it would not be able to ascertain if explicitation is influenced by the NT or the target language. Another technique is use of eye-trackers (O'Brien, 2006) to track movements of the eyes in order to identify the focus of the eyes, which may link to the identification of the focus of the brain.

From another angle, Espunya (2007) studied whether explicitation of conjunctions in translation is cognitively related to the linguistic informativeness of conjunctions. Based on Kortmann's (1991) scale of informativeness for interclausal relationships, where *addition* is less informative, but *concession* is the most informative, followed by *contrast* and *condition*, Espunya (2007) studied the translation of V-ing free adjuncts into connectives from English into Catalan. She found that the conjunctions with higher informative scales are more highly explicitated in terms of rate (percentage of individual category), but less explicitated in terms of frequency. Irrespective of the methodology and results, it can be inferred that the study of the link between conjunctions and the cognitive process is current and can be viewed from different perspectives.

Based also on her semantic categories, Halverson (2004) finds that the *additive* and the *causal* categories of connectives are more likely to be changed (explicitated, implicitated and shifted), compared to *contrastive* or *temporal* connectives. According to Halverson (2004), Altenberg (1995) also places conjunctions into semantic categories and has found quite similar trends to Halverson's observations, where *additive* and *causal* categories are versatile. The volatility of the *additive* category, according to Schiffrin (1987, cited in Halverson, 2004: 73) is due to the low semantic meaning of "and", which relies on the contextual interpretation. As for the volatility of *causal* connectives, it is due to the generation of causal-based inferences where the insertion or taking away of *causal* connectives may affect the

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[12] Software used is *Translog* created by Jakobsen (1999).

understanding of texts (Halverson, 2004), depending on the readership. All these have links to the cognitive process of the translators. Just like the example given by Halverson, Lamiroy (1994) has observed the usage of French connectives in native speakers' of other languages and finds that differences in usage could be due to the complexity in transferring connectives across languages. These are differences in the cognitive abilities of native speakers and differences in the languages in using logical conjunctions.

The study that is carried out in this thesis is similar to Halverson's (2004) work in terms of the methodology where conjunctions are placed in semantic categories for comparison between the ST, the TT and the NT. Contrary to her work, however, the identification of the inference process is based on similarities or differences in the usage of these conjunctions in the semantic categories in these texts to understand the minds of the translators and how they have performed in relation to one another. I believe that through this method of using conjunction, we are able to disclose the mental representation of the translators.

The next two sections will touch on more macro issues related to this study, i.e. discussions on norms, laws, universals and tendencies, and also some criticism in employing corpus methology.

3.9 Corpus-Assisted Study: Norms, Laws, Universals and Tendencies

The study of changes in the use of conjunctions will help us to identify norms, laws, universals and tendencies in translation. Discussion of norms may very much be interrelated to the discussion of optional causes of change, while discussion of universals is interrelated to translation-inherent change. While norms and universals are more abstract concepts, optional and translation-inherent causes are more concrete to account for the causes of the changes. Laws, on the other hand, are the more significant aspects of norms while tendencies are less profound than norms and universals.

The most famous advocate of norms is Gideon Toury (1995: 51) who describes "norms" as 'the general values or ideas shared by a certain community as to what is right and wrong, adequate and inadequate – into specific performance instructions appropriate for and applicable to specific situations providing they are not (yet) formulated as laws'. Norms are divided into three levels, i.e. preliminary, initial and operational. Preliminary norms look at effects beyond textual levels on translation policy, like the choice of texts that are selected to be translated and the directness of such translation (the question of whether the translation mediated by another language is permitted). Initial norms are bifurcated into adequacy, which is adherence to the ST, and acceptability, which is loyalty to the target culture. Van Leuven-Zwart (1989) believes that by studying shift, we are able to identify the initial norms. Operational norms are decisions made when translating, like what remains and what changes. It is bifurcated into matricial norms which deal with omissions, additions, substitutions and transpositions of textual segments like sentences, paragraphs or chapters; and textual-linguistic norms, which include decisions made on the language and stylistic features in the TT. Some may be general and apply to all translations; some others may be particular and apply to a certain text/type and/or mode; and still some others may be based on NT norms. Some norms have greater influence than others. The notion of norms entails that certain features in the TT may be due to strategies of translation normally employed in the culture of translating of a specific socio-cultural group. 'Concepts of translation itself are culture-bound, for a start; even prototype concepts may be, too. We can perhaps never totally escape the limits of our own culture-boundness, even if this might be extended e.g. to a general "Western culture" (Chesterman, 2004b: 10). In this study, concentration is placed on the initial norms and the textual-linguistic norms. Initial norms are so prevalent that they have been labeled as "laws"[13] of translation behavior by Toury (1995), specifically the law of source language interference which stresses adequacy with the ST, and the law of growing standardisation which sustains the acceptability of the NT. A more detailed explanation is found in the following paragraph.

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[13] Toury (1995: 259) defines "laws" as 'theoretical formulations purporting to state the relations between all variables which have been found relevant to a particular domain'.

The law of source language interference states that 'phenomena pertaining to the make-up of the source text tend to be transferred to the target text' (Toury, 1995: 275). This linguistic pattern is also discovered in the research of Gellerstam (1986) who uses the word "translationese" to account for the "fingerprint" of the ST left in the TT. Others call this observation "shining through" (Teich, 2003). The law of growing standardisation, on the other hand, happens when 'in translation, source-text textemes tend to be converted into target-language (or target-culture) repertoremes' (Toury, 1995: 267-268) or in other words 'textual relations obtaining in the original are often modified, sometimes to the point of being totally ignored, in favour of habitual options offered by a target repertoire' (Toury, 1995: 268). This law is similar to the concept of "normalisation", which entails some overuse or exaggeration of the target language's lexicogrammatical properties or patterns (Baker, 1996; Teich, 2003). From these two laws, it seems that the TT experience two concomitant forces from both the ST and the NT at the same time, although the degree and elements of influence may vary.

Besides the two forces, there are also elements purportedly universal in TT devoid of pressure from the ST or the NT, and independent of language pairs, genre, socio-cultural contexts or individualities or idiosyncrasies of the translators. This assumed or hypothesised concept of translation universals was first proposed by Baker (1993) who stated that translation universals are 'features which typically occur in translated text rather than original utterances and which are not the result of interference from specific linguistic systems' (Baker, 1993: 243) and 'can be seen as a product of constraints which are inherent in the translation process itself' (Baker, 1993: 246). The claim of translation universals is borne out of the observation that the TT have been long considered inferior, as translation is known to 'inevitably fall short of reproducing all the glory of the original' (Baker, 1993: 234). Thus, rather than looking at what translation is not, translation universals enquire primarily into what translation is. The notion of translation universals is related to "the third code" put forward by Frawley (1984: 168) which refers to 'the unique language at the meeting point of the source and translated texts, languages and cultures'. It is also related to the explicitation hypothesis (Blum-Kulka, 1986). Although, according to Baker (1993), the notion of translation universals is only an assumed concept that is pending further research, other researchers like Vanderauwera (1985), Blum-Kulka

(1986), Laviosa-Braithwaite (1998), Pápai (2004) and Mason (2001) affirm that some features of translation are indeed universal. Some researchers, like Olohan (2001) however, take a safer, liberal and diplomatic stance by referring to some features of translation as tendencies instead of translation universals. Nevertheless, Mauranen (2000) views translation universals from a more lenient view: a view which is not as absolute but with a higher level of generalisation.

These epistemic exchanges on norms, laws, universals and tendencies will be revisited in Section 8.2.5, drawing on evidence from the data. In the next section, the focus is shifted to a not-so-positive report on corpus-assisted methodology. Again, the discussion will be revisited in Section 8.2.3, placing this study in relation to the criticism.

3.10 Criticism of the Corpus-Assisted Methodology

The methodology of using corpora in research which gives rise to the claim of translation universals has lately been criticised. Gerzymish-Arbogast (2007) argues strongly that the assertion of translation universals through quantitative description is a fallacy, putting forward her argument on the groundwork of the universal thought principle, namely: theoretical stance as participant-observer, individual vs. collective, and system levels of description. Firstly, she alleges that translation universals look solely at the perspective of the TT as a detached observer; *ipso facto* it has not taken into consideration the participants' view: 'in translation theory, the lack of differentiating between the participant's and observer's stance or point of view has led to the seemingly irreconcilable gap between theory and practice' (Gerzymish-Arbogast, 2007: 4). Later, she advocates that research should be oriented towards its usefulness to translators to help solve problems during translation.

Secondly, she also criticises the corpus methodology for looking at collective levels of description as corpora utilise vast data to give rise to translation universals, losing information of individual parameters, as individual levels of description of texts might yield different findings. This is also the criticism leveled by Chesterman

(2004a). The same weakness, however, is viewed as strength by Baker (1993: 248) who contends that the corpus-assisted methodology will create 'powerful generalisation'.

Another concern for corpus-assisted studies related to the system levels of description and voiced by Gerzymish-Arbogast (2007) and shared by Tymoczko (1998) and Mason (2001: 77-78) is the over-emphasis on quantitative data churned out by corpus software neglecting qualitative analysis, like semantics, pragmatics, contexts, co-texts, socio-culture, translators, skopos, theory and practices etc. Another concern voiced by Chesterman (2004a) is that the texts selected can never be all encompassing representative as there are sure to be grey areas of many kinds, like the definition of adaptation and translation, the definition of professional translations and the definition of "bad" translations.

It is important to note that the emphasis on quantitative analysis never implies the exclusion of qualitative analysis in corpus linguistics. Although some of the earlier corpus-assisted studies are polemical and the claim of Gerzymish-Arbogast (2007) is not without its truth, many corpus-assisted researchers are now improving their research methodologies to heighten the credibility and validity of their research. For example, Olohan (2003) explores contractions at a collective level and also differentiates the use of contraction by some individual translators; Mauranen (2000) also concentrates on individual conjunctions and found one to be different, i.e. "toisaalta" (roughly meaning "on the one hand" and "on the other hand"). She further identifies the reasons. Finally, Chen (2006) focuses on the different syntactic usages between five individual distinctive conjunctions.

This study, although it is generally inspected through the observers' stance, does not hinder the application of findings for the participants. On individual and collective issues, this study will be a combination of research on collective conjunctions and conjunctions used individually, which will give a clearer picture of how individual conjunctions behave differently and how they have collectively affected the general results. In terms of quantitative vs. qualitative, this research will combine both descriptions where statistics will be taken into consideration, as well as causes and effects which make up the qualitative aspect of the study.

3.11 Concluding Remarks

This chapter has set out the background understanding for this research. This is a descriptive study where conjunctions are taken from authentic texts, and the phenomena of the use of conjunctions in the TT compared to the ST and the NT will be reported. The section on the multifarious research of corpus-assisted studies has informed this study by looking at the other research assisted by corpora, placing this research on the map of other studies assisted by corpora. Literature review of other researchers who have worked on conjunctions is essential, as it has been found that there is no research which thoroughly includes T-change (T-explicitation, T-implicitation) and S-change (S-explicitation, S-implicitation, S-shift) of collective conjunctions and individual conjunctions. This study required a very heavy workload but it is contended here that the result will be worth the effort. The notion of change based on form set out in the study, be it T-change of S-change, is vital to assist in the categorisation of change. The causes and effects of change based on linguistic evidence proposed by this study will also add to other findings by other researchers who based their work on other social, rational, psychological, etc. grounds. Many researchers have also attempted to understand the process of translation using different methodologies. It is hoped that, based on observations of the use of conjunctions, some patterns of the inferential processes of translators can surface. The study of conjunctions in TT cannot be detached from the notions of norms, laws, universals and tendencies. Based on the evidence found in this work, it is hoped that some discussions to attest or refute some of these notions can be evoked. The criticism of some researchers of the corpus-assisted methodology which has given rise to the notion of translation universals has helped shape this study and hopefully some of these criticisms can be avoided in this work.

CHAPTER 4
Data and Methodology

This research is an empirical descriptive study of conjunctions in translation where authentic texts are collected to identify the phenomena of the use of conjunctions in the TT as compared to the use of conjunctions in the ST and in the NT. It will also mainly be a corpus-assisted study where a large number of texts are collected in electronic form. This will be both a product-oriented and process-oriented investigation. In terms of product orientation, the investigation will reveal difference between conjunctions in the TT to that of the ST and to that of the NT, and whether the changes have brought forth any effect on the TT. In terms of process orientation, the aim is to reveal as much as possible of the translators' mind by means of unraveling the reasons the translators make changes in the use of conjunctions. This is also a quantitative investigation and a qualitative analysis. As part of linguistic studies observing the differences between the ST, the TT and the NT, the survey will first utilise corpus linguistics tools to calculate statistics like frequencies of the use of conjunctions, the total running words, the total types, the log-likelihood (LL) values etc. for further interpretation. To fulfill the qualitative aspect of the investigation, more in-depth investigation is executed to identify the reasons for change in the use of conjunctions and a discussion of the effects of change. This is a synchronic study of the use of conjunctions from the 1940s until now where the main object is to identify modern Chinese translation of the institutional texts.

Section 4.1 is allocated to describing the corpora used in this study; Section 4.2 deals with the acquisition of data; Section 4.3 is on the linguistic tools involved; Section 4.4 presents the preparation of the electronic texts; and Sections 4.5 through 4.8 are on the employment of the methodology in the investigation of conjunctions.

4.1 Corpora in this Study

Corpus-assisted translated studies put the corpus size, the corpus design and the selection of corpus at a very vital status as all these factors may influence the representativeness of the findings. However, before these factors are delineated, it is

appropriate to understand the register of the institutional texts. The field of the institutional texts consists of international bilateral or multilateral understandings, treaties, conventions, protocols or agreements like the World Trade Organization's agreements, the World Intellectual Property Organization's agreements, the Antarctic Treaty, Universal Copyright Conventions, etc., aiming to bind two or more parties to the agreement. The mode of the institutional texts is written in formal language. Heavy vocabularies, frozen expressions and complex structures are some of the unique features of the texts (Alcaraz and Hughes, 2002). The clauses they use are usually declarative, giving statements and descriptions of regulations on how the agreement should be. There are no imperative sentences as they do not command, but more so, the language is polite and diplomatic aiming to foster closer ties and understanding. The tenor of the texts includes people at the ministerial level, lawyers, companies and organisations involved in international relations.

4.1.1 Corpus Size

The corpus comprises about one million words in total, subdivided amongst the English institutional texts, their corresponding Chinese TT and the institutional texts written originally in Chinese. Table 4.1 gives an illustration of the division of the corpus:

Table 4.1 Corpus size of source texts, translated texts and non-translated texts

Description	Source texts	Translated texts	Non-translated texts
Tokens	394,694	339,895	342,043
Total tokens	1,076,632		
Content	63 full institutional texts in English and their translation into Chinese		193 full texts of original writings in Chinese

This tripartite corpus would be considered a fairly small-scale study as compared to Chen's (2006) work which consists of a total of about 2.5 million words, Wang and Qin's (2010) research which uses samples from about 3.5 million English words and Chinese characters, and Xiao, He and Yue's (2010) study which utilises a total of 2 million words. The use of lesser data compared to the data of the other researchers, firstly, is to ensure that instances of conjunctions selected are accurate; thus much time is spent in post-editing the tagged texts (see Section 4.4.4). By merely basing

the research on the results from the taggers, many errata will be included in the study which may jeopardise the credibility of the results. Secondly, with the lesser usage of data, detailed identification of cases of explicitation, implicitation and shift can be performed manually. According to Hansen-Schirra, Neumann and Steiner (2006) Machine Translation is able to fit each word class to another, thus it will be able to identify explicitation, implicitation and shift, however, judging from experience with the taggers, this again may not yield credible and accurate results. Therefore, to do justice to the data, I have resorted to a smaller-scale study of one million words.

4.1.2 Corpus Design

The eclectic design model employed in this thesis is a broad amalgamation of monolingual comparable corpus design (Chinese TT and Chinese NT), parallel corpus design (English ST-Chinese TT and Chinese TT-English ST), and a minor section on multilingual comparable corpus design (English ST and Chinese NT). Equal weight is put on the comparable and parallel analyses. Monolingual comparable and parallel analyses are highly recommended by McEnery and Xiao (2002), and they are also in accordance with Toury's (1995) methodology to account for the adequacy of the TT with respect to the ST and the acceptability of the TT in the target culture, or in Herman's (1999: 37) terms, 'ST-oriented' and 'TT-oriented'. The added small section on ST-NT comparison is the result of a proposal by some scholars who state the significance of understanding the structural, stylistic and rhetorical differences between languages in order to give a more realistic account of translation phenomena. Although my work will not be able to delve deeply into the details proposed, the mere comparison based on the calculation of the frequencies of some semantic categories may provide some insights into whether the use of conjunctions in the ST alone has caused explicitation compared to the use of conjunctions in the NT. The composition of the comparison can be seen in Figure 4.1.

Figure 4.1 Monolingual comparable, parallel and multilingual comparable analyses in this research
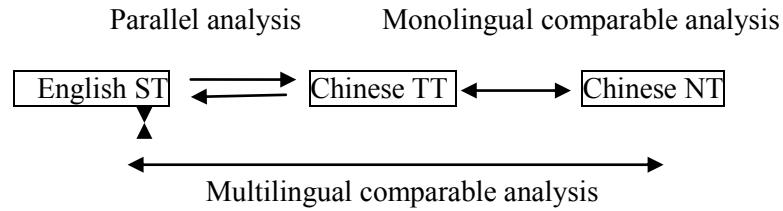
The monolingual comparable analysis will be used to analyse the T-changes/similarities between the Chinese TT and the Chinese NT to determine to what extent the Chinese TT differ from or are similar to the Chinese NT. This is a product-based analysis since part of this study is to identify products based on TT-ST comparison, i.e. S-explicitation, S-implicitation and S-shift, a more unique approach is implemented. I will only use one set of English ST and the Chinese TT; and I will begin to look for explicitation and shift from other conjunctions or other non-conjunctions into conjunctions by identifying conjunctions in the Chinese TT and later comparing them to the English ST. However, in order to identify S-implicitation and S-shift from conjunctions into other conjunctions or into other non-conjunctions, I need to begin the search in the English ST and refer to the Chinese TT to identify if the conjunctions in the ST have been implicitated or shifted. Until now, not many researchers, except Øverås (1998) and Becher (2011), have looked for explicitation and implicitation in the same two corpora, even more so the usage of different bi-directional parallel corpora. Using the same corpora gives a better understanding of the correlation between the use of conjunctions. This is to counter the issue addressed by Zanettin (2000) leveled against bi-directional parallel corpora where semantic contents are different. Through this parallel analysis, we will also be able to identify linguistically the reasons for change. By combining the statistics of the TT-NT, the TT-ST, the ST-TT and the ST-NT, I will be able to identify the proportion of the influence of the ST, the proportion of the interpretation process of the translators and the proportion of the influence of the genre conventions of the NT or the target language. The quest regarding differences and similarities between the comparable and parallel corpora has fulfilled the call for this kind of balanced view by Chesterman (2007).

4.2 Selection of Texts

The texts selected are naturally occurring texts, i.e. texts written for actual usage. Overall, the texts that are selected are texts which are available on the Internet, thus already in electronic form. This will minimise the work of scanning the texts into computers to make them into machine-readable forms. Most of the time, texts that are scanned, especially Chinese texts, need proofreading. Therefore, compiling texts which are already in electronic form will minimise the workload of scanning and proofreading, which is tedious, time-consuming and also error-prone. Furthermore, institutional texts are abundant on the Internet; thus, there will not arise any need for resorting to printed media. Unlike contracts, which are mostly private and confidential, thus, are not easily available in large amounts to the public, institutional texts are usually available freely through the Internet and usage for the purpose of education is encouraged, as stated on the World Trade Organization's website.

4.2.1 Selection of Source Texts

In terms of the criteria for the selection of the data, the English ST (see Appendix 1) are selected based on the availability of the Chinese TT on the Internet. Consequently, the selection of the data starts from browsing through the Chinese websites and identifying international agreements translated into Chinese, and then only will their correspondence in English be identified.

The best data is where the ST are written originally in English, and only then will we totally eliminate the possibility that the ST may be of a different language. However, there are not many agreements where the English is the absolute authentic texts as other languages, like French or Russian, may have equal status alongside the English texts as authentic[14] texts. Although the selection of these texts may undermine the credibility of my data as there might be an argument that the Chinese translations might be based on French or Russian, and that the use of conjunctions might be due to the influence of these languages other than English, it is positively stressed here that it is customary for the Chinese versions to be produced based on English, rather

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[14] The word "authentic" is used here to denote agreements that are made exactly the same as the original, i.e. executed in due process.

than other language texts. It is also stressed that most of the Chinese TT are presented with their ST as parallel texts, thus it is right to assume that most translations of the Chinese institutional texts are based on the English ST as English is a more popular language.

The best data is also where the Chinese texts are not the authentic text in the ST agreements. This is also vital to ensure that the Chinese texts are not of the same status as the English texts, i.e. that they are not drafted at the same time and that both are equally binding.

4.2.2 Selection of Translated Texts

As stated in the previous section, the selection of the TT (see Appendix 1) is based on criteria for the ST that English is the authentic ST, and that Chinese is not the authentic ST.

The TT are selected through China's database websites to eliminate the possibility of texts translated for readers in Hong Kong, Taiwan and Singapore. Hong Kong and Taiwan use traditional Chinese, while Singapore uses simplified Chinese. Although it seems that the only difference is regarding simplified or traditional characters, the usage of Chinese in these regions has subtle differences. For example, Chen (2006), who compares Mainland and Taiwan TT from the same English ST, finds that there are differences in the treatment of conjunctions for the readership of these two regions. Thus, this procedure of selecting from only China's database is to ensure the homogeneity of texts.

The selection of the TT found on the Internet may pose a problem regarding whether the TT are done by professional translators or not. The issue of competent translators and the effect on the product of translation are very much related. In order to ensure that the Chinese translations are adequate, data is taken from good and reliable sites and if possible from official sites related to government agencies to eliminate

disputes that might be made against the choices of the TT[15]. Unlike literary texts and their translations where the status of the authors or the translators plays a crucial role, the institutional texts, on the other hand, focus on the subject matter; thus the status of the authors or the translators is not so significant provided that the translations are translated satisfactorily.

4.2.3 Selection of Non-Translated Texts

The Chinese NT (see Appendix 2), sometimes called the reference corpus, will be taken from understandings, treaties, protocols or agreements[16] between Mainland China and other countries, and also amongst the provinces in China which have documents authentically written in Chinese. Like the Chinese TT, the Chinese NT are selected from China's database websites to avoid any discrepancy due to regional differences.

In the selection of the NT, the truth is that there are not many international agreements written originally in Chinese. The agreements drafted are usually bilateral agreements between China and other countries, like Russia or India. In some cases, it is written in the agreement that, in case of any dispute, the interpretation will be based on English texts. Such texts will not be selected. However, in other cases, where it is written that, in case of any dispute, the interpretation will be based on, for example, both Chinese and English, these texts will then be selected, as one country whose official language is English might have drafted the agreements together, thus the Chinese and the English agreements are of

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[15] Some of texts are taken from websites like *China's Law and Regulations Information* (中国法律法规资讯) at http://www.86148.com, *Civil Aviation Administration of China* (中国民用航空局) at http://www.caac.gov.cn, *Website of Intellecutal Property: Professor XiaoQing Feng* (冯晓青知识产权网) at http://www.fengxiaoqingip.com, *Chinalawinfo* (北大法律信息网) at http://www.chinalawinfo.com, *WIPO* (世界知识产权组织) at http://www.wipo.int, etc.

[16] Only 协定 xieding [agreement], 协议 xieyi [agreement] and 议定书 yidingshu [protocol] are selected. 函 han [letter], 公报 gongbao [official report] and 换文 huanwen [exchange of diplomatic notes] are not selected.

equal authentic status. As Cao (2007) points out, very often, bilateral agreements are written in the two languages of the two countries involved in the agreement.

For this research, only texts with running words of more than 500 will be selected. In reality, there are many agreements with running words less than 500 as they are simple agreements between two countries. However, they were not selected as they are very short, too short to give a good representation of the use of conjunctions which may involve more complex clauses. Texts selected may also sometimes contain some kind of repetition in the sense that China may draft similar agreements with a few countries where sometimes phrases may be cut and pasted and recycled in different agreements. However, in reality, they are authentic texts which are used officially to govern the relationships between two countries. Due to the fact that despite some similarities, there are also some added differences in the texts and due to the fact that these texts which are long are limited, they will be selected as part of the corpus.

4.3 Tools

Having discussed the data used in this research, the focus is now on describing the corpus linguistics tools used in assisting this research. Corpus linguistics tools are able to perform a lot of functions to facilitate linguistic research. The tools employed for the investigation of the comparable analysis and the parallel analysis in this research are CLAWS, ICTCLAS, WordSmith and ParaConc. With the help of these tools, texts can be annotated with parts of speech (POS) tagging in order to facilitate the identification of conjunctions; the types and frequencies of the use of conjunctions can be presented and the log-likelihood can be obtained; the ST and the TT can be aligned for parallel analysis to identify cases of explicitation, implicitation and other shift of conjunctions. The section below is devoted to describing these tools and their functions in assisting my research.

4.3.1 CLAWS and ICTCLAS

All three corpora in this research will be tagged with POS tagging. This grammatical information allows easy identification of conjunctions. The two taggers used in this study are CLAWS and ICTCLAS for English and Chinese respectively.

CLAWS, which stands for the Constituent Likelihood Automatic Word-tagging System, is a tagging system with advanced hidden Markov models to check for the possibilities of sequences to ensure higher accuracy rate in tagging, and is used to annotate English texts with part of speech information. It has also been used by the British National Corpus (BNC) for the tagging of about 100 million words. This software, which was developed by the University Centre for Computer Corpus Research on Languages (UCREL) at Lancaster University in the United Kingdom in the early 1980s, will be able to facilitate the identification of the entire repertoire of conjunctions used in the English texts. In this thesis, I will be using CLAWS latest version, CLAWS 4, the horizontal tagging system, and C7 tagset (see Appendix 3). Horizontal tagging arrangement starts with the word in the texts and is followed by an underscore and followed by the abbreviation of the part of speech and continues with the next word in the texts and so on and so forth, for example "word_tag", like "apple_n", which means "apple" is a "noun". C7 tagset is a standard tagset where conjunctions are divided into CC (coordinating conjunction), CCB (adversative coordinating conjunction), CS (subordinating conjunction), CSA ("as" as conjunction), CSN ("than" as conjunction), CST ("that" as conjunction) and CSW ("whether" as conjunction). More detailed information on the selection of these will be found in Section 4.4.4.

ICTCLAS (Institute of Computing Technology, Chinese Lexical Analysis System) developed by the Institute of Computing Technology, the Chinese Academy of Sciences (Zhang et al., 2003), is a Chinese tagger which not only segment the Chinese texts but also provides POS tagging. The segmentation process is vital for the Chinese texts to be analysed electronically as the Chinese characters do not have spacing between them to denote words, unlike English which is made up of orthographic words separated by spaces. One word in Chinese may consist of one, two or more characters. Thus, by segmenting the running Chinese characters into

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words or spaced token (words), we will be able to identify meaningful words. This will be able to give a more realistic word count or to retrieve a particular class of words like conjunctions. In this sense also, the Chinese texts will give a more accurate word count compared to the English texts. For example, in English "in order" will always be counted as two words (for this purpose, the total running words of English is not used for comparison) but 从而 conger [thus] is counted only as one. The tagging method that I have selected is detailed tagging (细粒度切) and Level 1 POS category (计算所一级标注) which has 22 categories altogether (see Appendix 4).

The use of these two taggers is not without its problems. Overall, it is known that the conjunctions tagged by CLAWS and ICTCLAS are based on traditional classifications of word classes not based on SFL. So far, there is still no tool that can be able to tag based on SFL approach to categorisation. I do understand that there is also the Penman project, based on semantic/sense tagging by category or type, but, it is still at the stage of manual annotation which I feel would be very time consuming and not economical. On top of that, manual tagging may not decrease the inaccuracy rate as there may be too much data to be analysed by the researcher, hence allowing human errors to creep in. Thus, it is felt that by using the taggers, the groundwork and the basis of the selection has already been made; and the post-editing work will be like a double-check on the work done. The lack of SFL corpus tools is also acknowledged by Halliday and Matthiessen (2004: 48), when they state that 'even now we are still some way away from being able to input a text in orthographic form and come out with a description of its grammar – particularly a rich systemic and functional description'. This problem is faced by English taggers, even more so in the Chinese language where the introduction of SFL is still at its primary stage.

In this situation, there is bound to be some compromise about what should be included in this study, i.e. whether it should include only tags proposed by the traditional categorisation or only conjunctions recognised by the SFL. Here, I would like to take a middle position. As most traditional categorisations of conjunctions are known to academics and lay people alike, and there are usually also conjunctions in SFL, they will be retained as conjunctions in this study. However, there are also

some adverbs like "nevertheless" and "in addition" which are tagged as adverbs but are considered as conjunctions in SFL. They will be changed into conjunctions, as they do bind sentences or paragraphs. In order to obtain an exhaustive list of what people usually consider as conjunctions, other taggers like AUTASYS tagger developed by Fang (1996) for English and CKIP [17] developed by the Taiwan Academic Sinica (CKIP, 1998) for Chinese are also used in the texts, to identify other possible conjunctions. This list of possible conjunctions will be placed one by one as a search word in the Concord and further scrutiny will be performed to identify whether these words appear in the texts and function as conjunctions. If they do function as conjunctions but are tagged differently, changes will be made accordingly. There are also many words according to their functions which are considered conjunctions in SFL but not in the traditional categorisation, as such, therefore they will be ignored. For example, the infinitive "to" is a non-finite which forms part of the element in the hypotactic conjunctive category in SFL (see Table 2.2) but not in the traditional categorisation; and 在 zai [in] is a preposition in the traditional categorisation but a conjunction in SFL, for example (在)…以后 (zai)…yihou [after] and 在…(之)前 zai…(zhi) qian [before] (see Table 2.4). Hence, these words will not be considered conjunctions.

In addition to the differences between the traditional categorisation and SFL, these taggers also face the problem of accuracy. The claimed accuracy rate of CLAWS is 96.97% and ICTCLAS is 98.54%. The initial thought is that the claim by both taggers of 95% and above is a very reasonable accuracy rate. Unfortunately after all the conjunctions have been tagged, it is found that the accuracy rate is far lower than claimed. In fact, the accuracy rate would go down to about 70% for CLAWS and 60% for ICTCLAS. My thoughts on the wide difference between what is claimed and what actually has happened is that the claimed percentage is a general percentage which includes other word tags like nouns and verbs, while my claim of 70% and 60% accuracy rates is based on the tagged conjunctions alone. The ICTCLAS accuracy rate is lower partly due to its segmentation process which increases the risk of incorrect tagging. As this is a very detailed study where instances are picked to

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[17] In order for the texts which are in simplified Chinese to be used in CKIP, the texts need to be changed into traditional Chinese.

identify whether explicitation, implicitation and shift occur, post-editing is undertaken to ensure that the conjunctions picked are at least 90% accurate. The conservative 90% accuracy rate is to take into consideration some conjunctions like 并 bing [and] and 而 er [and] which may link verbs and not clauses, and may not be able to be siphoned out, and some calculation is based on sampling through frequency hits. This is also one of the reasons why the total of all the corpora is limited to one million words, as a detailed study is performed. Some details of post-editing will be found in Section 4.4.4.

There also arises the problem of typological differences between these two different languages of English and Chinese. According to Lamiroy (1994), this has caused variation between the languages. For the purpose of this research, there is no action taken to normalise the typological differences between these two languages on what conjunctions should be but only based on both languages' perception suggested by the two taggers. For example, 当 dang [when] is always tagged as a preposition in Chinese but tagged as a conjunction in SFL. There is, however, no adjustment on this 当 dang [when] in the Chinese texts. It will be brought up for discussion only if this word occurs in the midst of research (see Section 6.2.5.2) and may cause differences in the statistics.

Despite these short-comings of the two POS taggers, they are able to identify most of the conjunctions which are already helpful enough with the word count of the texts of a total of one million words. These taggers provide the basic source of information that is needed.

4.3.2 WordSmith

WordSmith is a well-known and very powerful software package created by Mike Scott in 1996. Since then, many versions of it have been released and I am using Version 5 (Scott, 2009). It is used not only by teachers and researchers of language but also by Oxford University Press in their lexicographic work. It was chosen because it can be used not only for the English language, but it can also be used to analyse Chinese characters. WordSmith consists of three main tools namely

WordList, Concord and KeyWords. Generally, WordList gives a list of all words in the text and provides some statistics; Concord displays the search word in the centre with its respective contexts and also gives information of the collocation of the search word; KeyWords will help identify the outstanding words in the texts. For the purpose of this research, I will utilise WordList to generate a wordlist based on the tag specified in order to obtain the types and the tokens of conjunctions, and the tokens of all running words. Although initial thought was to use it also to calculate the type-token ratio (TTR) and the standardised TTR, it was found that the accuracy of these ratios is questionable for the specific tagged words, thus, the study was redesigned to eliminate the possiblility of incorrect statistics. Therefore, in this study, the TTR is calculated without the help of Wordlist while the standardized TTR is totally dropped. Unlike in Wang and Qin (2010), and Xiao, He and Yue (2010) whose research is able to create an overall TTR and standardised TTR for all words, making a TTR for the specific tagged words in this study is a problem for WordSmith as mentioned earlier. Besides the Wordlist tool, KeyWords is used to calculate the log-likelihood value to identify the distinctive conjunctions in the TT and in the NT. Concord, even though not directly utilised in this study, has been very helpful in identifying words for post-editing, i.e. to identify words that may be conjunctions which are not tagged as conjunctions and words which are not conjunctions but are tagged as conjunctions. Although it is claimed in the WordSmith menu (Scott, 2009: 114) that direct access to the texts can be made in Concord in order to make changes in the original texts, it was found to be unable to do that. Despite its limitation, this corpus tool has gone a long way and it is hoped that in future, these problems may be solved.

4.3.3 ParaConc

Although WordSmith is able to do most of the work for this research, it could not search for a search word, for example in the ST, and display the concordance line and later identify the corresponding target sentences. WordSmith has a utility called View and Aligner which is only able to align both texts by displaying alternate sentences of the ST and the TT, but it will not be able to select more detailed pairs of sentences based on the search word. As a result, for parallel analysis, ParaConc is

used. ParaConc is a multilingual parallel concordancer developed by Michael Barlow (1995) which has made possible the parallel investigation of the ST and the TT electronically. It was first created in 1995 as a Macintosh program while the Windows version was produced in 1996.

If a query of a conjunction (or a tag) is entered into the system, ParaConc will display all the instances where this particular conjunction occurs and this conjunction will appear in the middle of the window with its contexts. This process is called key-word-in-context. At the bottom of the screen are their counterparts. ParaConc will be able to automatically retrieve their target sentential counterparts once alignment is established. However, it will not automatically retrieve the conjunctive counterparts as the alignment in this research is only based on sentences. However, with Hot Words search query found in ParaConc, some possible translations for that particular conjunction might be able to be identified. The Hot Words utility is an automatic suggestion by the program of possible translations with a ranked list of candidates of relative strength of the different words. However, sometimes the Hot Word utility does not necessarily provide the correct corresponding word. This is also mainly due to the nature of the institutional texts. Where the sentences are too long, there may be more than one conjunction in a sentence. Sometimes, even though it may seem that a conjunction in an ST sentence, for example, is the formal correspondence in the TT, it might be that the conjunction used in the TT is used to bind different elements. Therefore, this way of locating possible conjunctions is used with reservations; and therefore is coupled with manual comparisons as well. ParaConc is able to highlight the search word in the sentence and the corresponding sentence with selected highlights of hot words. With that groundwork laid, I continue with manual comparisons. The search can start from either the ST or the TT. Starting from the ST will help to identify implicitation and shift; while starting from the TT will help identification of explicitation and shift. Another function in the ParaConc that is utilised is the Frequency of Hits; there are a few conjunctions with high frequency rates, like 并 bing [and], 如 ru [if], 而 er [and], 则 ze [then], 但 dan [but] and 如果 ruguo [if], 以 yi [so that], "and", "if" and "where". A selection of about 200 samples of each of these conjunctions is taken by using the frequency hit. Cases of changes like explicitation, implicitation and shift,

and cases of formal correspondence, based on these samples will then be multiplied again with a number to get back the original frequencies and adjustments are made to ensure that the calculations tally. The samples may not give us an accurate count, but they are sufficiently representative of the phenomena of conjunctions. Although ParaConc has a corpus frequency list, it only lists all words but not selected conjunctions based on tags; thus Wordsmith will perform a better job in calculating the statistics relatively speaking.

4.4 Preparation of Electronic Texts

The section below is dedicated to the description of the mechanics from downloading the texts, to preparing the texts for computation and comparison, and to the computation processes and the comparisons of conjunctions.

4.4.1 Downloading and Cleaning Texts

After the texts (which are suitable based on the selection criteria explained in the previous section) have been selected, the English ST and their corresponding Chinese TT, and the Chinese reference corpus are downloaded in the Rich Text format (Word document) as this is the format that is easily convertible to other formats. This format will be just a copy of the original but it will not be used in CLAWS, ICTCLAS, ParaConc and Wordsmith, as these tools will not be able to recognise Word documents.

From the Word document format, the texts are cleaned by deleting table of contents, some appendixes, graphics and other unnecessary texts, footnotes and hidden formatting symbols like " º ". The English ST and the Chinese TT are cleaned side-by-side, even to the point of aligning the paragraphs so that they can be viewed simultaneously. The table of contents, some appendixes and the graphics are deleted because they do not contain sentences that can be relevant to conjunctions. Other unnecessary texts may be texts or explanations added by the translators, which are not in the ST, to facilitate the understanding of the institutional texts, like explanations of the agreements before the commencement of the real agreement.

There are cases where annexes are not translated, and where some information is added in the ST which is not found in the TT. Thus, proper adjustment will be taken to ensure that the ST and TT pair tallies.

Even though footnotes might contribute towards the size of the corpus, when the texts are changed into plain text, the footnotes will disappear and what remains in the plain texts are the numbering of footnotes which used to be in superscript form but are now in normal-sized font in the plain texts. So, cleaning is needed to delete the superscript numbering of the footnotes in the Word document. This can be done by going to the References icon in the Word Document and looking for the button "Next Footnote". Once the footnote is identified, I use the delete key on the keyboard to delete it, followed by the next footnote. The procedure goes on until all footnotes are cleared. In addition, the hidden formatting symbols also cause anomalies like garbled accents in the plain texts. Consequently, by displaying the paragraph mark (¶), other hidden formatting symbols will be displayed too and these symbols are cleaned.

Some of the jobs above will automatically disappear when converted into plain texts. However, as stated above, for example on the footnotes, there may be some limitations of what plain texts may perform. Thus, it has to be resorted to using the Word document to perform a better job.

4.4.2 Tagging and Preparing Chinese Translated Texts and Chinese Non-Translated Texts

The next step in preparing the Chinese texts to be tagged is to identify paragraph marks (¶) by changing them into a special symbol like the asterisk, " * ". This step can only be done in the Word document by using the "Find and Replace" function. To find paragraph marks, first go to Find| More| Special| Paragraph mark. To replace, just type " * ". This step is necessary because when they are both loaded into ICTCLAS, the paragraphs will disappear, making it difficult to identify them, especially for ST and TT alignment.

The cleaned Rich Text format (Word document) will now be changed into plain text ANSI format, as it is the format recognised by ICTCLAS. These texts will be loaded into ICTCLAS for segmentation and tagging. The result will first be saved as plain text, which are the only recognisable texts and later converted into Word documents. In this Word format, the " * " which are now tagged as "*/n" will be changed back into paragraph marks so that the original paragraphing is retained.

Next, the tagged format of "word/tag" needs to be changed into "word_tag" so that it can be converted into word<tag> using WordSmith, a format recognised by Concord. First the Word documents have to be converted into Unicode. This is done manually text by text, as although WordSmith is supposedly able to change all texts into Unicode at the click of a button; it failed to do so. After they have been converted into Unicode, at "search and replace" command in Text Converter utilities (Controller | Utilities | Text Converter | "Search and Replace"), we change "/" into "_". This is then saved as a copy in the Unicode format. After that, using this Unicode format, by using the Text Converter utilities (Controller | Utilities | Text Converter | Conversion) the "word_tag to word<tag> mark-up" is to be checked to convert "word_tag" into "word<tag>" to be used in Concord. As mentioned earlier, Concord is used at this moment to identify the errata in tagging. Once the errata are found, correction will be made in the Word Documents (word/tag).

Later, this post-edited Word document will then be converted again into word_tag format in WordSmith with a copy saved in ANSI format for ParaConc usage, with another copy in Unicode which will then be changed into word<tag> format for Concord and <tag>word format for Wordlist. This conversion can be done easily at the Text Converter utilities at Controller | Utilities | Text Converter | Conversion with the check of the "swap tag and word" command.

4.4.3 Tagging and Preparing English Source Texts

As for the English ST, like the Chinese texts, paragraphs have to be identified by placing a special symbol like " ** " to identify them. However, they do not need to be changed into plain texts format before CLAWS is able to tag them, as I use the

online service[18] where I copied and pasted the texts from the word document for tagging. After the tagging process in CLAWS, the "**_FO" or "**_FU" will be replaced by the initial markings of the paragraphing. Later, the texts are saved in Unicode format so that they can be changed from word_tag to word<tag> to be used in Wordsmith Concord where the program is used to assist in identifying errata in tagging. Like the cases in the Chinese texts, the errors in the English texts will be corrected in the Word document. After all texts are edited, the texts are changed into plain text ANSI format to be used both in ParaConc and WordSmith. Although Chinese texts need to be converted into Unicode, WordSmith 5 accepts ANSI format for English texts.

4.4.4 Post-Editing and Categorising

In this section, I will first attempt to discuss the post-editing of the Chinese texts, then the English texts.

Firstly, post-editing is performed on the words which are wrongly segmented, contributing to incorrect tagging. There are cases where non-conjunctions are tagged as conjunctions because of incorrect segmentation. For example some 因此 yinci[19] are tagged as conjunctions, because the Chinese language does have the word 因此 yinci which means "therefore", but in some sentences, the actual meaning should be separated as 因_c yin[because] 此_r ci[this] which is usually followed by a noun, to mean "because of this thing…". There are also some instances like 如其 ruqi[[if] which do exist as conjunctions and are tagged thus, but in the sentences, it means 如_c ru[if] 其_r qi[that person…]. Then there is 与其 yuqi [rather than] which is incorrectly tagged as a conjunction but in the context it means "and its…"; and so is 加之 jiazhi [moreover] which although is a conjunction but does not function as such in this context and it should perhaps be tagged as 加_v 之_u, e.g. in 所 加 之 标志 sou jia zhi biaozhi [the symbol added]. Additionally, there are also other cases like 反之 fanzhi [otherwise] which may be a conjunction but in the context it is not, e.g.

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[18] http://ucrel.lancs.ac.uk/claws/trial.html.
[19] Romanised Pinyin glosses for easy reading.

相反 之 程序 xiangfan zhi chengxu which means "the opposite procedure". Next there is 是以 shiyi [consequently] which should be 是_v is 以_p. There is also another example where 故 gu which is a conjunction to mean "so" is tagged as such, but in the context it should be joined with the word 事 shi [incident] in front to make 事故_n shigu [accident]. Another example is 非独 feidu [not merely] which may be a conjunction, but not in any of the cases tagged by ICTCLAS, where 非独 feidu which is tagged as conjunction are 非 独占 的 fei duzhan de and 非 独立 feiduli which mean "non-monopoly" and "not independent" respectively. Contrarily, there are cases where words are separated which in fact should be joined to make conjunctions. For example, some instances of 因此 yinci [therefore] are wrongly tagged as 因_c yin [because] 此_r ci [this] or 因_p yin [because of] 此_r ci [this]; some examples of 但是 danshi [but] are tagged as 但_c dan [but] dan 是_v shi [is]; some examples of 只要 zhiyao [if only] are wrongly tagged as 只_d zhi [only] 要_v yao [want]; some instances of 不论 bulun [no matter] are tagged as 不_d bu [no] 论 _v lun [discuss]; 以便 yibian [so that] are wrongly tagged as 以_c yi [so that] 便_a bian [convenient]; 与此同时 yuchitongshi [at the same time] are wrongly tagged as 与_p 此_r 同时_n; 若是 ruoshi [if] are tagged separately as 若_c 是_v; 只有 zhiyou [only if] are tagged as 只_d 有_v or 只_q 有_v; 并且 bingqie [and] are separated into 并 bing [and] and 且 qie [and] as two conjunctions. All these examples should be joined to make conjunctions. There is also another example where one of the characters is a conjunction, but is segmented to join with another character to make a noun, i.e. 内因 neiyin [internal cause] is joined to make a noun, but in the context, the 内 nei [internal] should be separated, while 因 yin [because] should be tagged as a conjunction. In addition, another example occurs when a conjunction is joined with other words to make a wrong multiword unit but it should stand alone as a conjunction. For example, the usage of 则 ze [then] which is tagged wrongly together with other words like 緒则 xuzhe, 则报告 zebaogao and 则格 zege, but in fact it should stand by itself as a conjunction.

On the other hand, there are also cases of polysemous words where the tagger cannot pinpoint the exact functions. Some conjunctions are not tagged as conjunctions, but

some others which are not conjunctions are tagged as conjunctions. Examples of conjunctions not tagged as conjunctions are some occurrences of 并 bing [and] which are tagged as its polysemous adverb to mean "equally" or "(not) at all"; some like 则 ze [then] are tagged as adverbs; some others like 若 ruo [if] are wrongly tagged as verbs; yet some others like 一旦 yidan [once] are wrongly tagged as adverbs; still some others like 一俟 yisi [as soon as] are tagged as adverbs. Also there are the occurrences of 那么 name [then] which are tagged as pronouns; and 纵 zong [even if] which are wrongly tagged as verbs. The 以 yi [so that] and 以便 yibian [so that] are tagged interchangeably as prepositions and conjunctions without obvious distinction between their functions. In fact, the distinction is not easily drawn. It has to be brought to the reader's attention here that Chinese sometimes omits subjects in a clause, thus, the selection of 以 yi [so that] and 以便 yibian [so that] and even other conjunctions as conjunctions is based on either the occurrence of a clause with a subject or a clause with the occurrence of a verb without a subject, which may be a form of a phrase. Sometimes Chinese clauses/phrases are made in a succession segmented with or without commas, with subject ellipsis. The use of 以 yi [so that] and 以便 yibian [so that] right before a verb usually functions like the infinitive "to" in English. Thus, the decision to include all instances of 以 yi [so that] and 以便 yibian [so that] as conjunctions may cause shift when the ST use infinitive "to" or any equivalent prepositions.

Contrarily, there are also some polysemous words which are not conjunctions in the contexts but are tagged as such. For example, some 只有 zhiyou [only], 首先 shouxian [first], 只是 zhishi [only], 另外 lingwai [besides] and 甚至 shenzhi [even] should be tagged as adverbs instead of as conjunctions. Most others like 可 ke [can] which are tagged as conjunctions and which can actually mean "but" function as verbs; and all instances of 既 ji [already] which are tagged as conjunctions are actually not. There are also many cases where the same word is tagged with a few different tags and mistakes can be in two ways, i.e. either conjunctions not tagged as conjunctions or non-conjunctions tagged as conjunctions. Thus, careful reading is needed for each sentence where the word occurs and editing is performed. For example, some instances of 如 ru [if] are wrongly tagged as verbs to mean "like", at

the same time there are also some cases of 如 ru [example][20] which are wrongly tagged as conjunctions. This is also true for 同时 tongshi [at the same time] which may be a conjunction, a noun or an adverb depending on the context and are almost always tagged wrongly by ICTCLAS. A similar case is found in the use of 由于 youyu [due to], 因 yin [because] and 因为 yinwei [because] where these words can function as conjunctions or prepositions depending on the context but the taggers are unable to differentiate the functions; and thus many wrong taggings are found and need to be edited. The editing process is not easy as it was mentioned earlier that the Chinese language sometimes omits the subject, and sometimes the verb which purportedly follows the omitted subject can also function as a noun. Thus, in situations like these, only in cases where the word most probably functions as the main verb will 由于 youyu [due to], 因 yin [because] and 因为 yinwei [because] be tagged as conjunctions.

The next editing work is to eliminate conjunctions which bind words and phrases. It has been stated earlier in Chapter 2, Section 2.1, that the research only concentrates on conjunctions which bind clauses, but not words and phrases. One of the main reasons is that by researching conjunctions which bind clauses, I will be able to detail the cognitive process of the translators based on their linkage of the propositions of matters or ideas, not disturbed by the intrusion which is caused by the combination of, for example, two objects. The second reason is that, the frequency of use of conjunctions between conjunctions used for clauses and conjunctions used for words and phrases may be different. An example of such research is Jin's (2008) work who finds that the TT which are translated from Chinese into English have more use of coordinating conjunctions then the English reference corpus has. An initial pilot study of the conjunctions which bind only the words and phrases also shows that the NT do use more of this type of conjunction than the TT do. Thus, based on these two reasons, conjunctions which bind words and phrases are excluded. In tagging, however, there is no difference in this type of

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[20] 如 ru [example] which means "for example" will not be included in the research, even though the SFL places it as part of conjunctions, but traditionally, it is usually tagged as a verb in the Chinese language. In traditional English grammar, its function is usually not specified; and it is usually considered as an idiom (The Free Dictionary, 2012), or an adverb introducing appositional constructions (CLAWS).

categorisation; therefore, we need to eliminate conjunctions which are usually used for joining words and phrases, or which are checked in their usage in the corpora and found to be joining phrases and words instead of joining clauses. Among them are 和 he [and], 及 ji [and], 与 yu [and], 以及 yiji [and], 一方面 yifangmian [on the one hand], 另一方面 lingyifangmian [on the other], 乃至 naizhi [and even], 既 ji[also], 不仅 bujin [not only], 不但 budan [not only], 或 huo [or], 或者 huozhe [or], 或是 huoshi [or], 还是 haishi [or] , 又 you [also], 而是 ershi [is], 无论是 wulunshi [regardless] and 不论是 bulunshi [regardless].

There are also other words which are not detected by ICTCLAS as conjunctions but are detected as such by CKIP and sometimes the usage is confirmed in SFL. One example is 起见 qijian [for the sake of] which is tagged as a clause-final subordinating conjunction. There are also 即或 jihuo [even though], 以致 yizhi [with the result that (bad result)], 致 zhi [(so)…that], 借以 jieyi [for the purpose of], 俾 bi [so that], 另 ling [in addition] and 鉴于 jianyu [in view of] which are all tagged as conjunctions in the CKIP. There are also 无论如何 wulunruhe [in any case] and 除此以外 chuciyiwai [besides] which are tagged as sentential adverbials in the CKIP. 尽管 jinguan [although] is tagged as correlative conjunctions but there are cases which are followed by 如此 ruci which will make a conjunctive adjunct 尽管如此 jinguan ruci [despite this]; thus they are joined and tagged as conjunctions. With this statement, it may seem that CKIP can perform a better job. However, this is not true. Like ICTCLAS, CKIP has its own set of problems just like ICTCLAS with wrong segmentation and wrong identification of conjunctions, and with the inability to identify some conjunctions. This may have to do with the manner in which the foundation of each tagger is laid, how each tagger perceives conjunctions and more importantly how accurate they can perform the task. Cases of wrong segmentation are like 原 yuan [source], which is separated from 因 yin [reason]; and 因 yin [reason] is tagged as a conjunction which is wrong in the context, as it should be joined with 原 yuan [source] to make a common noun 原因 yuanyin [reason]. There are also cases where conjunctions are found in ICTCLAS but not found in CKIP like 然后 ranhou [then], 同时 tongshi [moreover] and many more of other conjunctions.

Comparing both taggers, each has its own strengths and weaknesses, and as a researcher I endeavor to make do with what is best for the research.

Next, we will move on to the post-editing of conjunctions in the English texts. CLAWS divides the conjunctions into different categories, i.e. coordinating conjunction (CC), *adversative* coordinating conjunction (CCB), subordinating conjunction (CS), "as" as conjunction (CSA), "than" as conjunction (CSN), "that" as conjunction (CST) and "whether" as conjunction (CSW). As for CC, CLAWS identifies "and", "or" and "nor". As mentioned earlier this work concentrates on conjunctions which bind clauses but not phrases or words, I have resorted to leaving out "or" and "nor" in this research. As through my own initial pilot study, these words are usually, if not in most cases, used to bind phrases and words in these texts. Moreover, the similar correspondences in the Chinese texts like 或 huo [or], 或者 huozhe [or] etc. are also left out of the study. Some other related correlative conjunctions like "both", "either", "neither" which are tagged as general adverbs are not included in this study. Other possible conjunctions like "not only", "on the other hand" and "on the one hand" are found to be linking words and phrases in most contexts[21], thus they are also not included in the research. As for "and", only "and" that binds clauses are selected. CLAWS' CCB includes "but" and CS includes "if", "because", etc., and all these will be included in the study. As for "as" which is separated into CSA, it is a very problematic word. "As" has many different functions, i.e. as an adverb, a pronoun, a conjunction and a preposition. Even as a conjunction, it also has many functions, like *causal: reason* and *causal: purpose*. If you look at some of the examples given below, like on the wrong tagging of conjunctions of "as_CSA soon_RR as_CSA", "as_RG soon_RR as_CSA", "as_RG far_RR as_CSA", etc., you will find that the probability of "as" being tagged wrongly is very high. Thus, careful post editing is performed on all "as" in order to identify the conjunctions. "Than" (CSN) will be ignored in this research as it is used as a comparison which may be translated as 比 bi which is not a conjunction but more like a preposition in Chinese which mean "than". The conjunctive or complementiser "that" (CST) will not be included as the usage is also due to systemic differences of the languages where there is no obvious correspondence in

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[21] All instances of "not only" (5) and "one the one hand" (7) link words or phrases, while six out of ten for "on the other hand".

the Chinese language except the usage of 的 de (an auxiliary word). Together with "that", "whether" and some of "if" form complement clauses and are considered as projection clauses in SFL. Thus, they are not studied in this research. Of about 40 or more "if" which were found to be CSW (functioned like "whether") by the tagger, only two really function as CSW. The phrase "whether or not" which is mainly tagged as subordinating conjunctions, are mostly in fact, part of a statement, not conjunctions, and hence they are not considered as part of this study.

The second type of editing is words which are tagged differently but may function as conjunctions. Included in this category is "in order" which is tagged as a before-clause marker (BCL). However, occasionally, this phrase may be tagged as "in_II order_NN1" which will also be changed into a conjunction. Just like "in order", "so as" is also tagged as before-clause marker (BCL), but occasionally some are tagged as "so_RR as_CSA" which should all be changed back into a conjunction. "Whenever" which is tagged as wh-ever general adverb (RRQV) is also included as a subordinate conjunction; so is "then" which is tagged as a quasi-nominal adverb of time (RT). "First" which is tagged as an ordinal number (MD) is also included as a coordinating conjunction. There is also "and then" which is tagged as "and_CC then_RT", "but also" tagged as "but_CCB also_RR" and "and thus" tagged as "and_CC thus_RR". All these multi-word units need to be grouped together and retagged as conjunctions. Other adverbs which are used as conjunctive adjuncts and which are usually tagged as general adverbs (RR) will be included in the study, like "however", "therefore", "furthermore", "nevertheless", "in addition", "accordingly", "moreover", "thus", "consequently", "likewise", "also", "as well", "otherwise", "similarly" and "yet". Sometimes "however" is tagged as a general adverb (RR), sometimes wh-ever as a degree adverb (RGQV) and sometimes wh-ever as a general adverb (RRQV). The categorisation may not be correct and a detailed study is performed to ensure that only the "however" which functions as a conjunctive adjunct will be selected.

There are some multi-word units which cause some problems in identification. For example, although some "as soon as" are tagged by CLAWS as conjunctions, some other "as soon as" are tagged as "as_CSA soon_RR as_CSA" which consist of "as"

as a type of conjunction followed by "soon" which is a type of adverb and "as" again a type of conjunction, and sometimes "as_RG soon_RR as_CSA". Thus, careful editing is required to ensure that all these are tagged as conjunctions, according to their functions. A similar example is in the usage of "as far as", although some are already tagged as conjunctions by CLAWS, they are also tagged as "as_RG far_RR as_CSA". Most "as long as" are tagged correctly as conjunctions, but some others are tagged as "as_CSA long_RR as_CSA". Certain "as if" is able to be identified by the CLAWS except a few which are tagged as "as_CSA if_CS". Some "so long as" are tagged as "so_RG long_RR as_CSA"; "in any case" are tagged as "in_II any_DD case_NNI"; although most "so that" are tagged correctly as conjunctions, one is tagged wrongly as "so_CS that_DD1". Although the CLAWS is able to look for "rather than", I found a few "rather than" which are tagged as "rather_II21 than_II22" which are used as conjunctions. Even though some multiword conjunctions like "as soon as" are tagged as "as_CS31 soon_CS32 as_CS33" as multiword units of conjunctions, they will post a problem in the calculation. This problem of multiword conjunctive units is solved by identifying these types of phrases in Concord and joining them as "assoonas" in the post-edited texts so that WordSmith and ParaConc are able to identify them as one entity. Although this may not be a very good way of representing these multiword conjunctions, the word-cluster format of "as_soon_as" which may be accepted by Wordsmith is considered tagging by ParaConc. Accordingly, the format proposed here will be the best. When these words are later presented in the thesis, they will be written in their original forms.

The next editing step is polysemous words. For example, "thus" can sometimes function as an adverb, some other times as a conjunction; and so for the word "yet". Thus, careful editing is required. Sometimes the function is fused and I will only select obvious conjunctions, especially the ones after a full stop or a comma. One "in case" tagged as a conjunction is found to be not used as a conjunction. Nearly half of the forms "since" which are tagged as conjunctions are in fact functioning as prepositions. Each occurrence of "when" and "where" is also checked carefully as there are some which really function as conjunctions but some others may function as relative pronouns to make non-defining relative clauses which may form hypotactic *elaboration*, but will not be included in the research. There are also cases where CLAWS finds some conjunctions but in fact in the contexts, all of these words

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are not functioning as conjunctions; some examples are "except", "for", "so", "considering", "given that" and "seeing that".

Post-editing work takes up a huge amount of time and requires a lot of precision. Without precision, this thesis would not take shape as each case was compared to identify whether explicitation, implicitation or shift took place. It can be noted that Chen's (2006) work, which is based on the identification of this CKIP tagger without much differentiation between 就是 jiushi which may function as a conjunction to mean "even if", or which may function as a verb to mean "is/are/am", or which may function as an adverb to mean "precisely/except/simply", will not do justice to the connectives that are being studied. Moreover, even though conjunction is considered as a closed word class, there seems to be no agreement about what should be included in the list, and therefore the list I have is not exhaustive.

In terms of the categorisation of conjunctions into semantic categories, Alcaraz and Hughes (2002) place "if", "when", "where", "whenever", "wherever", "provided that", "in the event that/of", "assuming that", "so long as", "should", etc. as part of *conditional* and *hypothetical* formulations, while "unless", "failing", "should…not", "except/as/where/if[22]", "but for", etc. are *negative conditional* and *hypothetical* formulations. However, differences between "if" and "where" are acknowledged by Li (2012) where he finds that "where" is used more like a situation while "if" is more confined as *conditional*; and "where" is more encompassing while "if" is less-inclusive. Thus, the placement will be according to SFL expounded in Chapter 2. Placement of conjunctions into semantic categories is based on the most obvious category, like "but" which may be *adversative*, *concessive* and *variation* are always grouped as *conditional: concessive/adversative*.

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[22] In this research, because I base my work on SFL by Halliday and Matthiessen (2004) which does not make a separate category for "except as", "only if", "except where", etc., I thus ignore the adverbs placed in front and only group them as base words like "as", "if" and "where".

4.4.5 Working with WordSmith

When the texts are ready to be loaded into WordSmith, there are some background steps that need to be set in WordSmith before it can fully and successfully process the texts. It is vital to let WordSmith know that it is dealing with the Chinese language. By default, the software chooses English together with a few other languages. In order to add Chinese as a language to be processed, I go to Controller| Utilities| Language Chooser, and drag Chinese language in the Available Languages dropdown menu to the right to the Chosen Languages.

WordSmith has a very powerful utility which is the Text Converter utility (found in Controller| Utilities| Text Converter) which can do a few vital conversions on a batch of files which may save some time from converting file by file. At the "whole files" tab (Controller | Utilities | Text Converter | Conversion | Whole files), I can change word_tag into word<tag> mark-up to be utilised in Concord. Then, I can also change the word<tag> mark-up into <tag>word mark-up to be used in WordList.

For post-editing purposes, once the texts are loaded, WordSmith's Concord is able to search for the search word, the tags, or the search words with tags, with its contexts. Therefore, once errors in tagging are identified and the texts' titles are shown in WordSmith, manual one-by-one editing is performed, as mentioned earlier WordSmith is unable to directly access the texts in Concord, although it claims that it can.

To compute a word-list of conjunctions based on tags, besides converting the format into <tag>word, in the WordList setting (Controller | Settings | Adjust Settings | WordList), we need a stoplist. A stoplist is a list of words and their tags which will not be included in the wordlist of conjunctions. To make a stoplist, first, I need to make a list of all the words with their tags. In order to do that, I must ensure that "tags as "prefix" to words" at the Wordlist setting is checked. After the wordlist is obtained, the list is saved in plain text and later in Word documents. In Word documents, conjunctions and their tags are deleted using the Find command. What remains is a list of words and their tags which are not conjunctions. This list will

then be saved in plain text and serves as our stoplist. With that, we can continue to make the wordlist for conjunctions.

Like the previous section for making a stoplist, we must make sure that the "tags as prefix" is checked. In the Tags setting (Controller | Settings | Adjust Settings | Tags), "mark-up to ignore" should be <*> to ignore all mark-ups, and "mark-up to include" should be a plain file consisting of all tags used to identify the conjunctions. The stoplist made earlier should be loaded into the Setting/adjust setting/lists and the "continuous" radio button checked to exclude computing stoplist in the statistics to ensure only conjunctions are calculated. With that, Wordlist will list the conjunctions according to frequency order. With these steps, three wordlists are computed, i.e. the ST wordlist (see Appendix 5), the TT wordlist (see Appendix 6) and the NT wordlist (see Appendix 7).

The total of running words for each corpus of the TT and the NT[23] is taken from Wordsmith. The total running words selected is the one that ignores numbers. This frequency is computed by WordSmith where it does not count numbers as ordinary words. The total conjunctions can be found in the WordList frequency window by going to View | Column Totals. The types of conjunctions can be found in the WordList frequency window.

WordSmith is also used to compute the log-likelihood of conjunctions in the TT and the NT. This can be done by comparing the two WordLists computed by WordSmith, i.e. the TT wordlist and the NT wordlist. The "compare 2 wordlists" command in WordList makes this process very easy. By opening the wordlist of the TT, then go to File | Compare 2 wordlists, and choose the wordlist of the NT, the result can be obtained by opening the tab at the bottom of the screen with the name "KW with amalgamated NT. lst." This will allow the making of the TT log-likelihood list compared to the NT. In order to make a NT log-likelihood list, the procedure has to start from the NT. The setting for the comparison of two wordlists is controlled by the settings in the KeyWords. In the KeyWords setting, which can be accessed through Controller | Settings | Adjust Settings | KeyWords, I check the

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[23] The total running words for the ST is not calculated as it is not used as comparison.

log-likelihood radio button to choose this procedure as my keyness test. I set P value[24] as 0.1 to ensure that I can obtain more words to compare. I set the minimum frequency to 1 so that even conjunctions with a low frequency will be calculated. I also set the maximum wanted to the maximum 90,000 to ensure that all instances are calculated. Other background steps include the checking of minimal processing to instruct the programme not to compute plots, links and keyword clusters which will not be used in this research in order to reduce the processing time, checking the box to exclude negative keywords as we will not need them for the fact that we are making two wordlists, and unchecking the box for full lemma processing as lemmas are not used in this research.

4.4.6 Alignment

The English ST and the Chinese TT will be loaded into ParaConc for alignment, although pre-alignment has been performed earlier in the Word document. The pre-alignment process is vital and more easily performed in the Word document as the commands are easier. For example, the Chinese TT may have two paragraphs marks (¶) to denote one paragraph, in the Word document; this will destroy the alignment process in ParaConc. Thereby, by using the Find and Edit command in the Word document, this problem can be rectified easily compared to ParaConc. The pre-aligned documents will be loaded into ParaConc for correct alignment. Correct alignment is vital when using ParaConc, as it will only call-up the corresponding sentences according to the alignment set. If there are sentences which are not aligned properly, the comparison will not be successful.

There are many ways of aligning the texts. Some use word alignment, clause alignment, sentence alignment or paragraph alignment (Hansen-Schirra, Neumann and Steiner, 2006), depending on the tools. In this research, the alignment is based on sentence alignment. Initially an attempt was made to use paragraph alignment. It is because of the nature of the institutional texts where paragraphs will mostly

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[24] According to Scott (2009: 153), P value is a value used in some statistical tests to denote the danger of error in claiming a relationship. P value, or probability value, ranges from 0 to 1. If the P value is 0.05, it suggests that there is 5 percent danger of being wrong in claiming a relationship. The lower the P value the fewer words with greater statistical significance will be selected.

consist of 4 to 5 sentences and the paragraphs are more or less aligned as they are numbered according to the articles of the agreements. However, after these two corpora were loaded into ParaConc, it was found that there are paragraphs which are too long which hindered searching for their conjunctions in the corresponding texts. In addition, ParaConc will perform sentence alignment automatically. Hence, it has been determined that sentence alignment is best for this research. Adjustment is also performed, as sometimes two sentences are merged into one in the TT or vice versa, or no sentence in the ST is added with a sentence in the TT or vice versa.

In order to instruct ParaConc to align based on sentences, first, I have to go to Files| Load corpus files, and ensure that the Align format is New Line Delimiter. Although these tools purportedly perform automatic alignment based on new lines, or punctuation marks like full stops, question marks and exclamation marks, manual editing of the alignment is needed as they are not all accurate. In the View Corpus Alignment window in ParaConc, there are commands which help to join or split the paragraphs or sentences to align the texts. The mechanism for joining and splitting in ParaConc is very time consuming. Once the alignment is done, this is saved and exported to be used by ParaConc for analysis.

4.4.7 Working with ParaConc

There are generally two functions that ParaConc is employed for in this research. ParaConc is first used to select about 200 sentences for the conjunctions with large number of sentences so that a detailed study can be performed on the selected sample. This is done through the usage of the "Frequency of Hits" command in ParaConc. Based on samples chosen by the Frequency of Hits, cases of explicitation, implicitation and shift are identified. Later, the frequencies of these cases are multiplied by the number used in the "Frequency of Hits" and the estimation of these cases may be obtained. Estimation is only performed on conjunctions whose frequency of more than 400 as it is too time consuming to identify explicitation, implicitation and shift through the reading of each case. Thus for these types of conjunctions, samples are taken.

Secondly, ParaConc is used to help align the sentences to identify explicitation, implicitation and shift. This is done by, first, typing in the searched conjunctions with their tags, selecting the Hot Word suggested, or typing in the possible counterpart, so that it will be highlighted when the texts are saved in the plain text. In order to view the whole segment/sentence, I need to instruct ParaConc by going to the Display/Context Type/Segment. The plain text will then be saved as a Word document for comparison as the Word document has more functions, like highlighting with colours to assist in searching for the changes, assigning categories and later counting the numbers of categories by using commands like Find and Replace (with the same categories) where Word will indicate how many instances have been replaced.

Having discussed the texts used as the data, the selection of the texts, the tools used to facilitate the research of this data, and the preparatory procedures for the electronic texts, this section will move on to the methodology employed, which includes some techniques used in answering the research questions proposed in Section 1.2 in dChapter 1. The first research question deals with comparable investigation which will be dealt with in Chapter 5; while the second research question evaluates the parallel investigation in Chapter 6. The third and the forth research questions will be investigated in Chapter 7 where the third research question concentrates on the influence of change and the fourth research question elicits the effects of change.

4.5 Methodology for Research Question 1: Comparable Investigation

> (1) To what extent does the use of conjunctions in Chinese TT
>   in the institutional texts differ from or is similar to that of
>   Chinese NT?

This research question is to identify the differences/similarities between the use of conjunctions in Chinese TT and the use of conjunctions in Chinese NT. This is done through the interpretation of some statistics generated by WordSmith based on the total running words, the total types of conjunctions, the frequency of each conjunction and the log-likelihood values in both texts. The quantitative aspects that will be utilised are:

(a) Percentage of total conjunctions

This is used to compare the proportion of conjunctions between the TT and the NT. The percentages of total conjunctions are computed using the total conjunctions used in the texts divided by the total running words in the texts in percentage (Formula: total conjunctions/total running words x 100). The figures are able to exhibit which corpus uses more conjunctions. The higher the figure the more conjunctions are used.

(b) Frequency count of the top-5 conjunctions

The Wordlist's frequency list is arranged according to the order of the highest frequency to the least use of conjunctions. This provides an avenue for detailed comparison of the top-5 conjunctions.

(c) Type-token ratio 1 (TTR1)

Type-token ratio (TTR) can be used to measure repetition and lexical variety (Olohan 2004). Generally, "token" means the number of words in a text. Accordingly, if a text has 10,000 words, the token of the text is 10,000. "Type" means different words that occur in the text; in this case, the different conjunctions used in the texts. Thus if a text has 10,000 tokens and from these 10,000 tokens, there are 30 different conjunctions, these 30 different conjunctions are called types. The TTR will be calculated by dividing 30 to 10,000 and multiply by 100 (Formula: total types of conjunctions/total token of running words x 100). For the comparison of two corpora of the same size, the corpus with the higher value uses more variety of conjunctions among all the words in the texts. However this kind of TTR is not able to identify the degree of repetition in the use of conjunctions, which can be fulfilled through the inverse TTR2.

(d) Type-token ratio 2 (TTR2) and inverse type token ratio

In this research, TTR2 refers to the relations between the number of types of conjunctions used and the total frequency of conjunctions in the texts. The TTR2 can be calculated manually based on the figures given by WordList. The ratio is calculated by dividing the total types of conjunctions used in the

corpus by the total numbers of conjunctions used and multiplying by 100 (Formula: total types of conjunctions/total numbers of conjunctions x 100). For this ratio, the higher the value of the corpus, the more varied it is in the usage of the types of conjunctions among all conjunctions used in the texts.

TTR1 relates how many types of conjunctions are used in the texts while TTR2 relates how many types of conjunctions in all the conjunctions used. Many researchers' TTR consists of either TTR1 or TTR2, but they do not specify the differences. Thus, this may cause some confusion. For example, if the types of conjunctions in Corpus A is 10, the token of conjunctions is 500 and the total running words is 10,000, while the types of conjunctions in Corpus B is 10, the token of conjunctions is 1000 and the total running words is 10,000, TTR1 will yield a value of 0.1 for both corpora, but TTR2 will give Corpus A a value of 2 and Corpus B a value of 1. From the result of TTR1, it can be inferred that both corpora are equal in terms of diversity in usage of types of conjunctions; but from the result of TTR2, it can be deduced that Corpus A gives a wider range in the usage of types of conjunctions among all the conjunctions used. As a consequence, in order to give a better representation of variety in the use of conjunctions, both formulae are used.

Inverse TTR2 is needed to measure how many times a type of conjunction is used in a corpus. This is based on a comparison of the total conjunctions in the corpus in relation to the types of conjunctions. This is calculated by dividing the tokens of conjunctions by the types of conjunctions (Formula: total tokens of conjunctions/total types of conjunctions). This formula is able to show the degree of repetition of conjunctions. The higher the number, the higher the repetition. High repetition can occur when writers or translators use more conjunctions but of limited types.

(e) Frequency of conjunctions in TT and NT against the 21 most common conjunctions in Chinese
This is a comparison of the distribution of the 21 most common conjunctions in the Chinese language with the conjunctions used in the TT and the NT.

The 21 most common conjunctions are taken from Chen's (2006) work; he has extracted them from the Sinica Corpus which has five million words. There are a total of 55,303 word types in the Sinica Corpus, and of all the word types there are 455 items which have an accumulated frequency of running words of 49.99%. These types include the 21 most common conjunctions. The first 50% of the total tokens of running words is selected based on the findings that these types selected are the most frequently used types. This is also a method employed by many researchers (Kennedy, 1998; Sutarsyah et al., 1994; Kosseim, 2003, cited in Chen, 2006: 215) in looking for the most common words.

(f) Distinctiveness of conjunctions

Distinctiveness of conjunctions can be assessed through the comparison of two wordlists and a report on the words which are more significant than others. In this section, the comparison of the two wordlists is the wordlist result of the TT and the wordlist result of the NT. In this research, there will be two lists, one of which is the comparison of the TT with the NT, the other will be a comparison of the NT with the TT. In the lists, the highest distinctiveness/keyness will be placed at the top. These results can be generated through the Keyword tool in WordSmith.

The test of distinctiveness in this research is based on the log-likelihood test. The log-likelihood test is one of the quantitative tests to identify the distinctiveness of individual usage of a word, in this case conjunctions, between two corpora. The log-likelihood test takes into account the frequency of a conjunction in a corpus and compares that with the frequency of similar conjunctions in another corpus. The formula used by WordSmith to generate the log-likelihood result is based on the formula discussed by Oakes (1998, cited in Scott, 2009: 284).

$$
\begin{aligned}
\text{Formula: 2 times } (a \, \mathrm{Ln}\, a + b\, \mathrm{Ln}\, b + c\, \mathrm{Ln}\, c + d\, \mathrm{Ln}\, d \\
- (a+b)\, \mathrm{Ln}\, (a+b) \\
- (a+c)\, \mathrm{Ln}\, (a+c) \\
- (b+d)\, \mathrm{Ln}\, (b+d) \\
- (c+d)\, \mathrm{Ln}\, (c+d) \\
+ (a+b+c+d)\, \mathrm{Ln}\, (a+b+c+d))
\end{aligned}
$$

a = joint frequency
b = frequency of word 1
c = frequency of word 2
d = frequency of pairs involving neither word 1 nor word 2
Ln = means Natural Logarithm

By comparing the wordlist of the TT and the NT, WordList creates a keyword list with the highest keyness/log-likelihood (LL) value ((+) plus sign) of the TT conjunctions placed at the top, followed by the second highest keyness and so on until the least keyness. This is a sign of explicitation. Comparing the wordlist of the NT and the TT will generate a keyword list where the NT has the higher keyness/log-likelihood value than the TT. This is a sign of implicitation. The higher the log-likelihood value, the more distinct and significant the use of conjunctions.

(g) Frequency and proportion of taxis and textual categories

Besides the usual statistical comparison highlighted in (a) through (f), conjunctions are grouped according to their taxis and textual categories to identify the different preferences in the use of conjunctions of different metafunctional purposes for these two texts. In this section, the conjunctions are grouped based on SFL's categorisation of the taxis and the textual categories. The textual categories can be identified through selection from the paratactic conjunctions which are preceded by full stops and semicolons[25], and also of conjunctions which are conjunctive adjuncts.

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[25] For example, the use of paratactic 并 bing [and] in "审计院应审检共同体所有收支帐户。并应审检共同体所建立的一切机构的所有收支帐户…[Back translation: The Court of Auditors shall examine the accounts of all revenue and expenditure of the Community. And shall examine the accounts of all revenue and expenditure of all bodies set up by the Community…]" (24_EU), will be considered as textual in this section.

The next three parameters are to help determine lexical patterning of conjunctions used in both texts.

(h) Frequency of correlative conjunctions

In this section, the syntactic relationships of the correlative conjunctions in both texts are identified. A comparison is made to see if there are differences in the usage of correlative conjunctions in both texts.

(i) Frequency and proportion of correlative constructions vs. stand-alone constructions

By deducting the frequencies of the correlative conjunctions from the total frequency of the individual conjunctions, we will obtain the frequencies of the stand-alone conjunctions. A comparison is made to check the proportions of the usage of the correlative constructions and the stand-alone constructions between the TT and the NT to identify the differences/similarities.

(j) Frequency of double conjunctions

In this section, the frequencies of conjunctions that appear side-by-side will be examined. Double conjunctions can be searched using the tag search in Concord by inserting search words, like *<cc> *<cc>. They are then grouped together according to the same categories.

4.6 Methodology for Research Question 2: Parallel Investigation

There are two sets of research question 2, one is where the conjunctions located in the TT, and the ST are checked in relation to the conjunctions that are translated, in order to identify what are the elements in the ST that cause the use of conjunctions in the TT. The second is where the conjunctions located in the ST, and the TT are checked in relation to the conjunctions in the ST to identify what happens to the conjunctions of the ST in the TT. This dichotomy of methodology is needed as it is impossible to identify explicitation and implicitation at the same time without this division.

We will now go to the first part of the research question where explicitation and shifts are identified.

(2a) What are the conjunctions that are made more explicit or have shifted in the Chinese translation of the English institutional texts? What are the linguistic reasons for the change?

As has been mentioned earlier, the methodology for this question is that conjunctions are first identified in the TT. This section may substantiate that there is explicitation in the TT as the search word which is in the TT already exists, alongside other cases of formal correspondence and shifts from conjunctions or the shifts from non-conjunctions into conjunctions.

In ParaConc, the TT will be placed as the first texts while the ST will be placed as the second texts for manual identification. In this section, every single occurrence of formal correspondence, explicitation, shift from other conjunctions and shift from other word groups will be identified. This is to give a more realistic account of all the conjunctions in the TT. Listed below are some of the aspects to be researched.

(a) **Frequency and percentage of pure S-explicitation**
In parallel comparison, explicitation can only be validated by identifying the conjunctions in the TT and in the event that there is no equivalent word in the ST, then we can infer that there is pure explicitation. The frequencies and the percentages of explicitation will give us an idea of the translators' own intervention in the translation.

(b) **Frequency and percentage of pure S-explicitation based on semantic categories[26]**
Based on the explicitation found for each conjunction, subsequently, these conjunctions are placed in Halliday and Matthiessen's (2004) semantic categories to identify which semantic categories are most

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[26] The placement of conjunctions into semantic categories is based on the most obvious and most used function of the conjunctions. Whenever possible, if the conjunction has two functions, it will be separated as so based on the usage in the contexts. For a whole list of the placement of the conjunctions, please refer to Appendix 8.

explicitated by the translators. This is necessary to identify the translators' mind processes when they translate.

(c) Reasons of pure explicitation of conjunctions

Based on the top ten conjunctions which experience pure explicitation, all of the possible linguistic reasons are presented.

(d) Frequency and percentage of shift into conjunctions

As mentioned in Section 3.5 on the notion of change in the use of conjunctions, shift is identified based on two categories, one is shift from other conjunctions and one is shift from other non-conjunctive words into conjunctions.

(e) Reasons of shift into conjunctions

Based on the TT-ST comparison, the ten most common shifts that have been previously identified will be inspected in detail to look for possible elements that trigger the shift into conjunctions.

Next, we will move on to the second part of the research question where implicitation and shifts are identified.

(2b) What are the conjunctions that are made more implicit or have shifted in the Chinese translation of the English institutional texts? What are the linguistic reasons for the change?

In order to identify implicitation in parallel analysis, the conjunctions in the ST will be identified and scrutinised in relation to the TT. Like the study from the TT, the study from the ST will also have its fair share of shifts which will also be identified. Listed below are some aspects that will be researched.

(a) Frequency and percentage of pure S-implicitation

As for implicitation, the research will start from the ST where the given conjunctions are chosen based on the tagged texts and then in the event that there is no equivalent tangible element in the TT, we can infer that pure implicitation has happened. Unlike (2a), this time the search word

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will begin in the source language, and the ST sentence will be checked to identify the conjunctions which are implicitated in the translations.

(b) Frequency and percentage of pure S-implicitation based on semantic categories

The conjunctions which are implicitated and found in the previous section will be placed based on their semantic categories, and the percentages of implicitation in the semantic categories will be identified to also check on the translators' mind processes when they translate.

(c) Reasons of pure implicitation of conjunctions

The top ten conjunctions which have experienced pure implicitation will be scrutinised in detail and the possible linguistic reasons for the implicitation will be identified.

(d) Frequency and percentage of shift-out of conjunctions

Shift-out of conjunctions may include shifts into other conjunctions which give a different meaning, and shift-outs into other non-conjunctions.

(e) Reasons of shift-out of conjunctions

Of the top ten conjunctions which have shifted, a detailed study will be carried out to identify the possible reasons.

4.7 Methodology for Research Question 3: Combined Investigation

(3) Can the causes of explicitation, implicitation and shift in the Chinese translation of English institutional texts be attributed to influence of the ST, interpretation of the translators, or influence of genre conventions of the NT or the target language?

This section is to identify how the interplay of various factors, namely the influence of the ST, the interpretation of the translators or the influence of the genre conventions of the NT or the target language, affects the translated product of the

institutional texts in English-Chinese translation. In this section, the three corpora, namely the ST, the TT and the NT, will be placed together. The total combination of the statistics, the top three semantic categories and the distinctive conjunctions with value more than LL: 50[27] of the TT and the NT will be gathered and studied in detail. In addition, there is also a section on the comparison of semantic categories of the use of conjunctions in these three corpora. In this section (see Section 7.1.2), conjunctions of the same semantic category will be grouped based on Halliday and Matthiessen's (2004) framework to create a list based on the semantic categories. This allows the comparison of the percentages of the usage of the semantic categories between the ST, the TT and the NT. This will also permit possible identification of the inferential process of the translators.

The comparison between the conjunctions found in the ST, the TT and the NT does not seem to be perfectly analogous, as the taggers used for the two languages are different. Even though both taggers seem to have been able to identify conjunctions, both languages' practitioners and academia may have their own system to determine what constitutes conjunctions. With these typological differences, this research can only be an approximation. The argument supporting this methodology is that the comparison is valid as it is based on what each language's practitioners and academia have labeled as conjunctions.

Some parameters for comparison are:
    (a) Whether the TT have more conjunctions than the NT and the ST;
    (b) Whether the ST have more conjunctions than the NT;
    (c) Whether the influence of the ST formal correspondence is more than the NT;
    (d) Whether the influence of the ST conjunctions (inclusive of formal correspondence and conjunctions shifted from conjunctions) is more than the NT;
    (e) Whether the influence of the ST (inclusive of formal correspondence, conjunctions shifted from conjunctions and conjunctions shifted from non-conjunctions) is more than that in the NT;

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[27] The selection of distinctive value more than LL: 50 will help to select the few conjunctions which have the sharpest contrast in the use of conjunctions in the TT and the NT.

(f) Percentage of the influence of the ST (addition of the percentage of formal correspondence, conjunctions shifted from conjunctions and conjunctions shifted from non-conjunctions) and percentage of explicitation;

(g) Whether the explicitation is more than the implicitation;

(h) Whether the explicitation by the translators far exceeds the frequency of conjunctions in the NT?

4.8 Methodology for Research Question 4: Effects of T-change

(4) What are the possible effects of change on the TT when compared to the NT?

Based on the semantic properties of conjunctions with value more than LL: 50, this research will postulate the possible effects of the differences between the use of conjunctions in the TT and in the NT.

4.9 Concluding Remarks

This chapter has provided information on the data, tools, preparation of electronic texts and methodologies used in this research. The corpus of a total of one million words divided between three corpora, namely, the English ST, the Chinese TT and the Chinese NT will be the data used. The comparable and parallel comparison ensures that the conjunctions are studied from many angles. The text selection criteria make certain that only texts that are compatible are chosen for comparison. The introduction of the tools used, namely, WordSmith, ParaConc, CLAWS and ICTCLAS, provides some knowledge of the nature of the tools and some functions that will be used to facilitate the research. There is also a section that touches on how formal labeling is placed in functional contexts. A detailed explanation of how the texts are prepared before they are loaded into WordSmith for computation or into ParaConc for comparative analysis, like cleaning the texts, tagging, aligning and setting up of WordSmith and ParaConc is also provided. Clear and detailed exposition of the methodologies provides the working procedures for this research.

CHAPTER 5
Comparable Analysis of Conjunctions

With the groundwork laid, I will now proceed to the analysis. Chapter 5 concentrates on the comparison between TT and NT; while Chapter 6 focuses on the comparison between TT and ST. Chapter 7 deals with the combination of a comparison among ST, TT and NT, and the effects of change in the TT compared with the corresponding elements in the NT.

This chapter aims to answer research question 1 stated in Chapter 1 where research question 1 is mainly quantitative research, identifying how different or how similar the use of conjunctions is in both the TT and the NT.

The first research question on the statistical comparison is:

> (1) To what extent does the use of conjunctions in Chinese TT in the institutional texts differ from or is similar to that of Chinese NT?

This question is addressed through the calculation of the percentage of total conjunctions in Section 5.1, the frequency count for the top-5 conjunctions in Section 5.2, the type-token ratio in Section 5.3, the frequency against the 21 most common conjunctions in Section 5.4, the distinctiveness of conjunctions in Section 5.5, the frequency and proportion of taxis and textual categories in Section 5.6, and the frequency and percentage of lexical patterning of conjunctions in Section 5.7.

5.1 Total Conjunctions

By calculating the frequency[28] of conjunctions based on the tagged conjunctions and the number of running words in the TT and in the NT using Wordsmith, we are able to identify if the TT or the NT use more conjunctions. Generally, in comparable research, if the TT use a greater proportion of conjunctions, it can be claimed that there is T-explicitation in the TT.

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[28] The term "frequency" is used throughout this thesis to mean the number of occurrences.

Table 5.1 Percentage of total conjunctions in translated texts and non-translated texts

Description	Translated texts	Non-translated texts
Corpus size in words (a)	339,895	342,043
Occurrences of conjunctions (b)	8,382	5,192
Percentage (Calculation: b/a * 100%)	2.47%	1.52%

From Table 5.1 above, overall, the TT use more conjunctions (2.47%) than the NT (1.52%) with an increase of 62.50%[29] with the LL value[30] of +39,778.23. If the argument of T-explicitation of conjunctions is based on these percentages and log-likelihood value, then they confirm the explicitation hypothesis. Generally, based on this research, we can confirm that indeed the TT are more closely knitted with more use of conjunctions than those in the NT.

5.2 Top-5 Conjunctions

If we examine the frequency count of the top-5 conjunctions in Table 5.2, it is also found that the total of the top 5 conjunctions is more in the TT than in the NT, with the LL value of +13,218.08, showing signs of T-explicitation in the top-5 conjunctions. The LL value of +13,218.08 is less than the LL value of +39,778.23 of the overall conjunctions in the previous section. This could imply that the frequency of conjunctions in the TT does not totally rely on the top-5 conjunctions in the TT but is spread out, and/or the frequency of conjunctions in the NT may rely quite heavily on the top-five conjunctions. Table 5.2 shows that there are 4 most frequent conjunctions with a frequency of more than 1,000 in the TT; while there is only 1 most frequent conjunction with frequency of more than 1,000 in the NT. This shows that the most frequent words have a greater proportion in the TT.

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[29] The percentage is based on the diference between the frequencies.
[30] This LL value is calculated by the LL calculator found in http://ucrel.lancs.ac.uk/llwizard.html.

Table 5.2 Frequency count of the top-5 conjunctions in translated texts and non-translated texts

No.	Translated texts		Non-translated texts	
	Conjunctions	Frequency	Conjunctions	Frequency
1.	并 bing[and]	1,390	并 bing[and]	1,598
2.	如 ru[if]	1,242	如 ru[if]	886
3.	而 er[and]	1,127	但 dan[but]	780
4.	则 ze[then]	1,058	而 er[and]	490
5.	但 dan[but]	498	如果 ruguo[if]	293
	Total	5,315		4,047

In the table above, in both texts, 并 bing [and] tops the list followed by 如 ru [if]. 而 er [and] and 但 dan [but] also occur in both lists except that the ranking in both lists is slightly changed where 而 er [and] and 但 dan [but] rank the third and fifth in the TT, but they rank fourth and third respectively in the NT. 则 ze [then] ranks fourth in the TT, but it is not in the top-5 conjunctions list of the NT; instead, 如果 ruguo [if] is ranked fifth in the NT. These findings reveal that, generally, the usage of the types of conjunctions is quite similar with the 4 conjunctions in the top-5 conjunctions occurring in both lists, where 并 bing [and] and 而 er [and] are considered *additive*, 如 ru [if] is *conditional: positive: if...then*, and 但 dan [but] is *adversative*. This could further imply that the logical-semantic relations in both the institutional texts texts very much rely on these binding functions.

The percentages of the total conjunctions and the frequency count for the top-5 conjunctions have shown that indeed there is a greater proportion of conjunctions in the TT. The study on the top-5 conjunctions indicates that the most frequent words show a greater proportion in the TT. This has prompted me to take the next level of comparison by testing if a greater proportion of the top-5 most frequent words may extend to a greater variety beyond the top-5 conjunctions. Section 5.3.1 below checks on the variety of the conjunctions used while Section 5.3.2 will touch on the degree of repetition.

5.3 Type-Token Ratio (TTR)

As has been mentioned, two variations of TTR will be calculated here. The first, the TTR1 in Section 5.3.1, will be able to identify if the types of conjunctions are more varied in the entire corpus. The second, the TTR2 in Section 5.3.2, will be able to examine if the types of conjunctions are repeated more often among the total conjunctions identified.

5.3.1 Type-Token Ratio 1 (TTR1)

Table 5.3 below shows that the TT feature 64 types of conjunctions compared to 52 in the NT. The TTR1 indicates that the TT use more variety of conjunctions per running words, with the higher value of the TTR1 of 0.019 as compared to 0.015 in the NT. This shows that the use of conjunctions is more varied and diverse in the TT as compared to their usage in the NT.

Table 5.3 Type-token ratio 1 (TTR1)

Description	Translated texts	Non-translated texts
Types of conjunctions (a)	64	52
Tokens (running words) (b)	339,895	342,043
Type-token ratio (a/b * 100)	0.019	0.015

Comparing the conjunctions in more detail (see Appendix 6 and Appendix 7), there are 18[31] conjunctions that can be found in the TT but not the NT. Conversely, there are only 6[32] conjunctions that can be found in the NT but not the TT. Thus, here find much more untypical lexicogrammatical selections of conjunctions which do not adhere to the NT norms. Adding up the frequencies of the types of conjunctions not found in the other texts, it is found that the TT have a total of 97[33] conjunctions, but

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[31]无论如何 wulunruhe [in any case](31), 俾 bi [so that](16), 虽然 suiran [although](11), 以致 yizhi [with the result that (bad result)](7), 致 zhi [(so)…that](5), 借以 jieyi [for the purpose of](4), 起见 qijian [for the sake of](4), 尽管如此 jinguanruci [despite this](4), 假使 jiashi [if](2), 若是 ruoshi [if](2), 设若 sheruo [if](2), 不管 buguan [regardless of](2), 即或 jihuo [even though](2), 总之 zongzhi [in short](1), 除此以外 chuciyiwai [besides](1), 进而 jiner [and then](1), 故 gu [so](1), and 于是 yushi [hence](1).

[32]若非 ruofei [were it not for](2), 以至 yizhi [up to](1), 结果 jieguo [as a result](1), 假如 jiaru [if](1), 纵使 zongshi [even though](1) and 即便 jibian [even if](1).

[33] The frequency is taken by adding the frequency of conjunctions listed in Footnote 31.

there are only seven[34] in the NT. This may suggest that the TT do not only use far more types of conjunctions not found in the NT, these "extra" conjunctions are also used more frequently than the conjunctions not found in the TT but found in the NT. This suggests that the TT use conjunctions which are untypical of the TT norms more frequently.

5.3.2 Type-Token Ratio 2 (TTR2)

In terms of TTR2, the result shows that the TT have a lower TTR2 value of only 0.76 as compared to 1.00 for the NT, indicating that the TT are less varied among the usage of the total conjunctions, despite the TT having more types of conjunctions than the NT have. This could further mean that, although the TT use more types of conjunctions, these conjunctions are also used more frequently and thus more repeatedly. This total reverse from the result of TTR1 is due primarily to fewer tokens of the total conjunctions in the NT as compared to those in the TT, which may have caused the ratio to increase in the NT far greater than the ratio in the TT. The findings, where the use of conjunctions is repeated more in the TT, are also accentuated by inverse TTR2 where the higher value in the TT shows the higher degree of conjunction repetition. The result indicates that a conjunction can be repeated 131 times in the TT as compared to only 100 times in the NT.

Table 5.4 Type-token ratio 2 (TTR2) and its inverse type-token ratio

Description	Translated texts	Non-translated texts
Types of conjunctions (a)	64	52
Tokens (total conjunctions) (b)	8,382	5,192
Type-token ratio (a/b * 100)	0.76	1.00
Inverse type-token ratio (b/a)	131	100

In this research, the two different types of TTR, i.e. TTR 1 and TTR 2, provide very exciting findings. In more detail, TTR 1 shows the degree of lexical variety where the TT have used more types of conjunctions, while TTR 2 shows the degree of repetition of the use of conjunctions, with the TT having higher levels of repetition of conjunctions. These findings demonstrate that the TT do not only use more types

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[34] The frequency is taken by adding the frequency of conjunctions listed in Footnote 32.

of conjunctions but that these conjunctions are repeated more frequently. This could also suggest that the T-explicitation of conjunctions in the institutional texts is affirmed through the usage of more varied types of conjunctions more repeatedly.

5.4 The 21 Most Common Conjunctions in Chinese

This section presents the results of an investigation into how the conjunctions in these two texts fare in relation to the 21 most used conjunctions found in the Sinica Corpus, i.e. researching these texts on a more neutral platform. It is interesting to know if there are more conjunctions of a common kind in the TT than in the NT to account for the T-explicitation hypothesis.

Table 5.5 Frequency of conjunctions in translated texts and non-translated texts against the 21 most common conjunctions in Chinese

No.	Conjunctions	Frequency in translated texts	Frequency in non-translated texts
1.	而 er[and]	1,127	490
2.	但 dan[but]	498	780
3.	因为 yinwei[because]	9	3
4.	所以 suoyi [so]	0	0
5.	并 bing[and]	1,390	1,598
6.	如果 ruguo[if]	430	293
7.	因此 yinci [therefore]	61	7
8.	但是 danshi[but]	238	31
9.	由于 youyu [due to]	45	14
10.	因 yin [because]	30	31
11.	虽然 suiran[although]	11	0
12.	而且 erqie[and]	27	10
13.	不过 buguo[yet]	0	0
14.	可是 keshi[nevertheless]	0	0
15.	若 ruo [if]	62	24
16.	那 na[then]	0	0
17.	只要 zhiyao[if only]	210	33
18.	以 yi[so that]	420	141
19.	的话 dehua[if]	0	0
20.	然而 raner[even so]	5	9
21.	且 qie[and]	283	96
A	Total occurrence (a)	4,846	3,560
B	Size of corpus (b)	339,895	342,043
	Per mille (a/b * 1000)	14.26‰	10.41‰

From Table 5.5 above, it is found that the total occurrences of the top 21 most common conjunctions are more in the TT with 14.26‰ as compared to only 10.41‰ in the NT. The LL value for the TT is +16,819.52. This indicates that the most common conjunctions in the Sinica Corpus are also explicitated more in the TT, supporting the T-explicitation hypothesis. The higher level of usage of the 21 most common conjunctions in the TT is spread out to most of conjunctions in the TT except 但 dan [but] and 并 bing [and] which occur much more in the NT.

The frequencies of conjunctions of the TT and of the NT above against the ranking of conjunctions in the Sinica Corpus also entail that indeed the use of conjunctions in the genre of the institutional texts is somewhat different from the general patterns in the Sinica Corpus. For example, 所以 suoyi [so], 不过 buguo [yet], 可是 keshi [nevertheless], 那 na [then] and 的话 dehua [if] are ranked in the top 21 in the Sinica Corpus, but they are not used at all in my two corpora. Most of these conjunctions, except for 所以 suoyi [so], are considered less formal, which explains their absence in my texts. In addition, the ranking of conjunctions based on the Sinica Corpus is totally different from the ranking of conjunctions in my two texts. This also shows there is a difference in the use of conjunctions in my genre in relation to the common conjunctions used.

A comparison of the common conjunctions against a neutral ground has shown that there are more conjunctions in the TT than in the NT. Again, the statistics confirm the spread of conjunctions of higher frequencies in the TT. The figures also verify diversity in the use of conjunctions in different genres.

5.5 Distinctiveness of Conjunctions

With some types of conjunctions occurring more in the TT and some others more in the NT, it has led me to probe further in exploring how significant the use of conjunctions in these two texts is. Table 5.6 shows the distinctive conjunctions of the TT compared with those in the NT; while Table 5.7 exhibits the distinctive conjunctions of the NT compared with those in the TT. Only the conjunctions with a

keyness value above 3.84[35] are presented, as the others with keyness value below 3.84 are too negligible to be included[36]. This keyness value is calculated using WordSmith. There is also a column on the semantic types[37] of conjunctions, where conjunctions are categorised based on their functions in the SFL categories and comparisons are made.

Table 5.6 Distinctive conjunctions of translated texts compared with non-translated texts

No.	Conjunctions	Frequency in translated texts	Keyness	Frequency in non-translated texts	Semantic types
1.	则 ze[then]	1,058	572.5756	224	[CoPITP][38]
2.	而 er[and]	1,127	244.9664	490	[AP] [AT] [CoCAP]
3.	但是 danshi[but]	238	176.3241	31	[CoCAP] [CoCAT]
4.	只要 zhiyao[if only]	210	140.0773	33	[CoPALAH]
5.	以 yi[so that]	420	139.325	141	[CaPH]
6.	且 qie[and]	283	92.51771	96	[AP] [AT]
7.	尽管 jinguan[although]	69	73.47256	3	[CoCAH]
8.	如 ru[if]	1,242	52.61731	886	[CoPITH]
9.	因此 yinci[therefore]	61	48.03973	7	[CaRT]
10.	除非 chufei[unless]	279	46.4931	137	[CoNH]

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[35] Log-likelihood value of >3.84 is selected in this research because it is the critical value for a difference to be significant. The comparison of the frequencies of conjunctions which are not included can be found in Footnote 36 below.

[36] These are the conjunctions not included as their keyness values are low: 一俟 yisi[as soon as] (9, 3), 因为 yinwei[because] (9, 3), 倘 tang[if] (9, 3), 不论 bulun[no matter] (56, 49), 因 yin[because] (30, 31), 然后 ranhou[then] (29, 30), 虽 sui [though](27, 20), 另 ling [in addition] (2, 1), 另外 lingwai [besides](1, 1), 与此同时 yuchitongshi[at the same time] (2, 1), 那么 name [then] (5, 1), 即或 jihuo [even though](2, 0), 假使 jiashi [if](2, 0), 若是 ruoshi [if](2, 0), 设若 sheruo [if] (2, 0), 不管 buguan [regardless of] (2, 0), 只有 zhiyou [only if](8, 3), 进而 jiner [and then] (1, 0), 于是 yushi [hence] (1, 0), 总之 zongzhi [in short](1, 0), 除此以外 chuciyiwai [besides](1, 0), 故 gu [so](1, 0), 纵 zong [even if] (3, 1), 首先 shouxian [first](3, 1), 若非 ruofei [were it not for] (0, 2), 即便 jibian [even if] (0, 1), 纵使 zongshi [even though](0, 1), 假如 jiaru [if](0, 1), 结果 jieguo [as a result](0, 1), 以至 yizhi [up to] (0, 1), 倘若 tangruo [if] (1, 1), 如若 ruruo [if] (1, 1), 然而 raner [even so] (5, 9) and 即令 jiling [even though] (2, 1).

[37] They are written in abbreviated form where the full form can be found in Appendix 8 or in the Abbreviation section.

[38] The categorisation of conjunctions into the semantic categories is based on the most obvious or most used category for that conjunction. There may be other functions of that conjunction which may not be able to be identified as the corpus is large.

11.	并且 bingqie[and]	96	44.73774	24	[AP] [AT]
12.	无论如何 wulunruhe[in any case]	31	42.31614	0	[ET]
13.	从而 conger[thus]	47	41.74658	4	[CaPP]
14.	同时 tongshi[at the same time]	98	32.35478	33	[AP] [TSP] [TST]
15.	无论 wulun[whether]	72	30.09985	20	[CoPWH]
16.	此外 ciwai[moreover]	43	25.64707	8	[AT]
17.	如果 ruguo[if]	430	23.29046	293	[CoPITH]
18.	俾 bi[so that]	16	21.84025	0	[CaPH]
19.	若 ruo[if]	62	16.58286	24	[CoPITH]
20.	由于 youyu[due to]	45	16.47937	14	[CaRH]
21.	即使 jishi[even if]	42	15.47887	13	[CoCAH]
22.	虽然 suiran[although]	11	15.01509	0	[CoCAH]
23.	以便 yibian[so that]	154	14.50128	92	[CaPH]
24.	否则 fouze[otherwise]	37	12.8468	12	[CoNP] [CoNT]
25.	一旦 yidan[once]	27	12.13556	7	[TSH]
26.	以致 yizhi[with the result that (bad result)]	7	9.55502	0	[SHEH]
27.	因而 yiner[therefore]	17	8.386083	4	[CaRP]
28.	而且 erqie[and]	27	7.752426	10	[AP] [AT]
29.	致 zhi[(so)…that]	5	6.825	0	[SHEH]
30.	起见 qijian[for the sake of]	4	5.459995	0	[CaPH]
31.	尽管如此 jinguanruci[despite this]	4	5.459995	0	[CoCAT]
32.	借以 jieyi[for the purpose of]	4	5.459995	0	[CaPH]
					[ET]: 1 [AP]:5 [AT]: 5 [TSP]: 1 [TSH]: 1 [TST]: 1 [SHEH]:2 [CaRP]: 1 [CaRH]: 1 [CaRT]: 1 [CaPP]: 1 [CaPH]: 5 [CoPITP]: 1 [CoPITH]: 3 [CoPALAH]:1 [CoPWH]: 1 [CoNP]: 1 [CoNH]: 1 [CoNT]: 1

					[CoCAP]: 2 [CoCAT] :2 [CoCAH]: 3
	Total	6,266	2000.38	2,606	Total: 41

Table 5.7 Distinctive conjunctions of non-translated texts compared with translated texts

No.	Conjunctions	Frequency in translated texts	Keyness	Frequency in non-translated texts	Semantic types
1.	但 dan[but]	498	69.05212	780	[CoCAP] [CoCAT]
2.	并 bing[and]	1,390	19.37121	1,598	[AP] [AT]
3.	鉴于 jianyu[in view of]	7	13.94654	28	[CaRH]
4.	以免 yimian[lest]	4	5.211603	13	[CaPH]
					[AP]: 1 [AT]: 1 [CaRH]:1 [CaPH]: 1 [CoCAP]: 1 [CoCAT] : 1
	Total	1,899	107.58	2,419	Total: 6

Comparing Table 5.6 and Table 5.7, it is found that the TT have 32 types of conjunctions which have positive keyness with a total of 6,266 hits; while the NT only have four types of conjunctions with positive keyness and 2,419 hits. The TT also have a higher keyness value of 2000.38 compared to the NT of 107.58. The distinctiveness in the TT in Table 5.6 also shows the top five conjunctions with keyness more than 100. They are 则 ze [then], 而 er [and], 但是 danshi [but], 只要 zhiyao [if only] and 以 yi [so that], with 则 ze [then] having keyness value of more than 500. This is a phenomenon not found in the distinctiveness of conjunctions in the NT in Table 5.7, as the highest keyness value in the NT is only 69 for 但 dan [but]. The LL value of the total TT and NT conjunctions in the TT distinctive table is

+129,107.83[39], while in the NT distinctive table is only -9,448.99[40]. All these findings generally show that there are more types of conjunctions which are used more distinctively in the TT as compared to those in the NT. This supports T-explicitation. This also confirms that conjunctions in the TT are more spread out with more types which have higher frequencies.

It has to be especially mentioned here that Table 5.7 indicates that these are the conjunctions which are distinctively implicitated in the TT, i.e. there are much more in the NT.

Comparing the total types of semantic categories of conjunctions which are distinctive, it is perceptibly found that there are more types of semantic categories which are distinctive in the TT as compared to those in the NT. Table 5.8 is the tabulated findings of the types of conjunctions which are distinctive according to given semantic categories.

Table 5.8 Distinctive semantic categories of conjunctions in translated texts and non-translated texts

Semantic categories	Types of conjunctions which are distinctive in translated texts	Types of conjunctions which are distinctive in non-translated texts
Elaboration	1	-
Additon	10	2
Temporal	3	-
Spatial/situation	2	-
Causal	9	2
Conditional	16	2
Total	41	6

Table 5.8 shows that there are 41 types of conjunctions which are distinctive in the TT, while there are only six types in the NT. In the TT, there is one type which is

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[39] This LL value is calculated by the LL calculator found in http://ucrel.lancs.ac.uk/llwizard.html. This value is different from the value calculated by WordSmith. The reason to use the LL calculator here is that some previous calculations are based on this LL calculator. This is to assist easy comparison.
[40] This LL value is calculated by the LL calculator found in http://ucrel.lancs.ac.uk/llwizard.html. This value is different from the value calculated by WordSmith. The reason to use the LL calculator here as some previous calculations are based on this LL calculator. This is to assist easy comparison.

elaborative, ten types which are *additive*, three types which are *temporal*, two types which are *spatial/situational*, nine types which are *causal* and 16 types which are *conditional*. On the other hand, in the NT, there are only two types of *additive*, two types of *causal* and two types of *conditional*. All the semantic categories are under-represented in the NT, especially the *elaborative*, the *temporal* and the *spatial situational* which have no conjunction which are distinctive in the NT. Here, we can infer that the TT not only have more types of individual conjunctions which are distinctive, in terms of semantic categories, the TT also utilise more varied semantic categories which are distinctive compared to the number used in the NT.

Having found that there are more conjunctions and more types of semantic categories in the TT which are more distinctive than the the number found in the NT, we will now move on to identify the preferences of each text towards the usage of taxis and textual categories.

5.6 Taxis and Textual Categories

Based on Halliday and Matthiessen's (2004) SFL, the conjunctions are now categorised into their respective tactic and textual categories.

Table 5.9 Frequency and proportion of taxis and textual categories of conjunctions in translated texts compared with non-translated texts

Taxis and textual categories	Frequency of conjunctions in translated texts (a)	Proportion	Frequency of conjunctions in non-translated texts (b)	Proportion
Paratactic	4,657	55.56	3,131	60.30
Hypotactic	3,275	39.07	1,826	35.17
Textual	450	5.37	235	4.53
Total	8,382	100.00	5,192	100.00

The findings in this section show that all the paratactic, hypotactic and textual categories have higher frequencies in the TT, confirming the explicitation hypothesis in comparable analyses. The LL value of +27557.41 for paratactic, +58635.14 for

hypotactic and +72126.19 for textual category indicates a significant increase in the explicitation of conjunctions in TT based on taxis and textual categories.

Paratactic conjunctions have the highest frequency, followed by hypotactic and textual in both texts, signifying that the structural makeup of both texts is generally the same. The proportion of usage in Table 5.9 shows that there is a higher preference in the NT for more paratactic conjunctions (60.30%) as compared to the preference in the TT (55.56%). The TT, on the other hand, have a higher proportion of hypotactic conjunctions and textual conjunctions. This result shows that, generally, in terms of the sequence in usage of taxis or textual conjunctions, both the TT and the NT demonstrate the same makeup; however, the TT show a higher preference for hypotactic and textual constructions while the NT have a higher preference for paratactic.

As has been mentioned in Chapter 4, the calculation for textual category is based on conjunctions that occur after full stops or semicolons. In general, the TT have 9,777 full stops and 2,283 semicolons; while the NT have 10,409 full stops and 2,562 semicolons. Despite having more full stops and semicolons in the NT, the usage of the textual conjunctions is less in the NT both in terms of the frequency and the percentage as compared to the usage in the TT. These findings can imply that despite there being more punctuation in the NT, it is not a norm in the NT to use more conjunctions to denote relationships between sentences.

Generally, this section echoes the findings where there is more T-explicitation, even when conjunctions are separated into paratactic, hypotactic and textual categories. Even though the sequence of preference is the same in both texts, i.e. higher preference for paratactic conjunctions, followed by hypotactic conjunctions and textual conjunctions, it seems that the NT prefer paratactic conjunctions and also use fewer textual conjunctions despite having more sentences or clauses. In the next section, I will bring in lexical patterning as a form of comparison between the two texts.

5.7 Lexical Patterning of Conjunctions

In Section 5.7.1, conjunctions which are usually correlative of each other will be identified to investigate how different or similar the usage of correlative conjunctions in both texts is. In Section 5.7.2, on the other hand, the frequencies and the proportions of correlative conjunctions will be compared to stand-alone conjunctions to identify if there are more correlative conjunctions or more stand-alone conjunctions in both texts. In Section 5.7.3, conjunctions that occur side-by-side will be identified to investigate the patterns of conjunctions used.

5.7.1 Correlative Conjunctions

In this section, the patterns of Chinese correlative conjunctions are singled out to identify the differences and similarities between the usage of correlative conjunctions in the TT and in the NT.

Table 5.10 Frequency of correlative constructions in translated texts compared with non-translated texts

No.	Correlative constructions	Frequency in translated texts	Frequency in non-translated texts
1.	因 yin[because]… 而 er[and]	22	15
2.	由于 youyu[due to]…而 er[and]	20	7
3.	因为 yinwei[because]…而 er[and]	3	3
4.	由于 youyu[due to]…则 ze[then]	1	0
5.	如 ru[if]…则 ze[then]	769	131
6.	如果 ruguo[if]…则 ze[then]	166	43
7.	若 ruo[if]…则 ze[then]	27	6
8.	若是 ruoshi[if]…则 ze[then]	1	0
9.	设若 sheruo[if]…则 ze[then]	2	0
10.	除非 chufei[unless]…则 ze[then]	0	28
11.	只要 zhiyao[if only]…则 ze[then]	19	0
12.	一旦 yidan[once]…则 ze[then]	4	0
13.	如 ru[if]… 如果 ruguo[if]…则 ze[then]	14	0
14.	如果 ruguo[if]… 只要 zhiyao[if only]…则 ze[then]	1	0
15.	如果 ruguo[if]… 一旦 yidan[once]…则 ze[then]	1	0
16.	除非 chufei[unless]… 否则 fouze[otherwise]	35	6
17.	如果 ruguo[if]… 那么 name[then]	5	1
18.	尽管 jinguan[although]... 但 dan[but]	8	1

19.	虽 sui[though]…但 dan[but]	15	3
20.	虽然 suiran[although]…但 dan[but]	7	0
21.	即使 jishi[even if]…但 dan[but]	5	0
22.	尽管 jinguan[although]…但是 danshi[but]	46	0
23.	虽然 suiran[although]…但是 danshi[but]	4	0
24.	即使 jishi[even if]…但是 danshi[but]	1	0
25.	首先 shouxian[first]… 然后 ranhou[then]	2	0
	Total	1,178	244

From Table 5.10, it is found that correlative conjunctions are widely used in the TT with a total frequency of 1,178 but not in the NT which have a total frequency of only 244. The LL value is +388,413.12. These findings, again, confirm the explicitation hypothesis in the TT, and could suggest that explicitation of conjunctions in the TT can be due to rampant correlative constructions that occur in the TT.

The vast difference in the numbers can be attributed to the usage of 如 ru [if]…则 ze [then] which has a frequency of 769 in the TT but only 131 in the NT. The LL value is +479,942.31. Other correlative *conditional* conjunctions like 如果 ruguo [if]…则 ze [then], 若 ruo [if]…则 ze [then], 若是 ruoshi [if]…则 ze [then] and 设若 sheruo [if]…则 ze [then], constitute a total of 965 in the TT and 180 in the NT in the usage of correlative conjunctions, with the LL value of +436,603.72.

Comparing the *conditional: concessive/adversative* correlative conjunctions, it is shocking to find that the NT only use a total of four[41] of this kind of correlative conjunctions, but the TT use a staggering 86[42] times, with the LL value of +1,215,457.12. Even though in the earlier research we have found in Section 5.2 that the usage of 但 dan [but] is higher in the NT, this does not warrant the usage of correlative conjunctions. Except for 尽管 jinguan [although]...但 dan [but] and 虽 sui [though]…但 dan [but], most of these correlative conjunctions, like 虽然 suiran [although]… 但 dan [but], 即使 jishi [even if]…但 dan [but], 尽管 jinguan

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[41] Addition of 尽管 jinguan [although]... 但 dan [but] (1) and 虽 sui [though]…但 dan [but] (3).

[42] Addition of 尽管 jinguan [although]... 但 dan [but] (8), 虽 sui [though]…但 dan [but] (15), 虽然 suiran [although]…但 (7), 即使 jishi [even if]…但 dan [but] (5), 尽管 jinguan [although]…但是 danshi [but] (46), 虽然 suiran [although]…但是 danshi [but] (4) and 即使 jishi [even if]…但是 danshi [but] (1).

[although]…但是 danshi [but], 虽然 suiran [although]…但是 danshi [but] and 即使 jishi [even if]…但是 danshi [but] are not even found in the NT. It can be deduced that the *conditional: concessive/adversative* correlative conjunctions are used much more with more types in the TT.

The usage of correlative *causal* conjunctions with *additive* like 因 yin [because]…而 er [and], 由于 youyu [due to]…而 er [and] and 因为 yinwei [because]…而 er [and], even though they are not straightforward hypotactic and paratactic constructions, are usually used to form phrases in Chinese[43]. They are found to be used more in the TT with a total of 45 compared to 25, with the LL value of +59,341.62. The hits of the usage of the correlative *conditional: positive* 只要 zhiyao [if only]…则 ze [then] is 19 in the TT compared to none in the NT; the usage of correlative *conditional: negative* 除非 chufei [unless]… 否则 fouze [otherwise] is 35 in the TT compared to six in the NT; the usage of triple correlative construction, on the other hand, like 如 ru [if]… 如果 ruguo [if]…则 ze [then], 如果 ruguo [if]… 只要 zhiyao [if only]…则 ze [then], and 如果 ruguo [if]… 一旦 yidan [once]…则 ze [then] is totally not found in the NT. All these examples show why conjunctions are explicitated in the TT, with the exception of 除非 chufei [unless]…则 ze [then] which is found in the NT but not in the TT.

Checking on the types of correlatives, it is found that the TT have 24 types of correlative conjunctions while the NT have 11 types, thus showing the high differences between the patterns of correlative conjunctives used in the TT as compared to their usage in the NT.

All in all, this section has supported T-explicitation where correlative conjunctions are used more in the TT. The usage of correlative conjunctions is also more spread out with more types of higher frequencies in the TT.

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[43] For example '…如果申请人依该国国内法因为不是发明人而没有资格提出国家申请，则指定局可以拒绝国际申请。[Back translation: …where the applicant *is not qualified according to the national law of that State to file a national application because he is not the inventor, the international application may be rejected by the designated Office.]' (30_patent)

5.7.2 Correlative Constructions vs. Stand-Alone Constructions

In this section, the frequencies of correlative constructions and stand-alone constructions (of only conjunctions with correlative constructions) will be calculated, and the proportion calculated. This is to find out how far correlative constructions are used against stand-alone constructions in the TT and in the NT.

Table 5.11 Frequency and proportion of correlative constructions vs. stand-alone constructions in translated texts compared with non-translated texts

Conjunctions	Translated texts					Non-translated texts				
	Correlative conjunctions	Proportion	Stand-alone conjunctions	Proportion	Total	Correlative conjunctions	Proportion	Stand-alone conjunctions	Proportion	Total
而 er[and]	45	3.99	1,082	96.01	1,127	25	5.10	465	94.90	490
则 ze[then]	1,005	94.99	53	5.01	1,058	208	92.86	16	7.14	224
那么 name[then]	5	100.00	0	0.00	5	1	100.00	0	0.00	1
否则 fouze[otherwise]	35	94.59	2	5.41	37	6	50.00	6	50.00	12
但 dan[but]	35	7.03	463	92.97	498	4	0.51	776	99.49	780
但是 danshi[but]	51	21.43	187	78.57	238	0	0.00	31	100.00	31
然后 ranhou[then]	2	6.90	27	93.10	29	0	0.00	30	100.00	30
因 yin[because]	22	73.33	8	26.67	30	15	48.39	16	51.61	31
由于 youyu[due to]	21	46.67	24	53.33	45	7	50.00	7	50.00	14
因为 yinwei[because]	3	33.33	6	66.67	9	3	100.00	0	0.00	3
如 ru[if]	783	63.04	459	36.96	1,242	131	14.79	755	85.21	886
如果 ruguo[if]	187	43.49	243	56.51	430	44	15.02	249	84.98	293
若 ruo[if]	27	43.55	35	56.45	62	6	25.00	18	75.00	24
若是 ruoshi[if]	1	50.00	1	50.00	2	0	0.00	0	0.00	0
设若 sheruo[if]	2	100.00	0	0.00	2	0	0.00	0	0.00	0
除非 chufei[unless]	35	12.54	244	87.46	279	34	24.82	103	75.18	137
只要 zhiyao[if only]	20	9.52	190	90.48	210	0	0.00	33	100.00	33
一旦 yidan[once]	5	18.52	22	81.48	27	0	0.00	7	100.00	7
尽管 jinguan[although]	54	78.26	15	21.74	69	1	33.33	2	66.67	3
虽 sui[though]	15	55.56	12	44.44	27	3	15.00	17	85.00	20
虽然 suiran[although]	11	100.00	0	0.00	11	0	0.00	0	0.00	0
即使 jishi[even if]	6	14.29	36	85.71	42	0	0.00	13	100.00	13
首先 shouxian[first]	2	66.67	1	33.33	3	0	0.00	1	100.00	1
Total	**2,372**	**43.27**	**3,110**	**56.73**	**5,482**	**488**	**16.09**	**2,545**	**83.91**	**3,033**

From the above table, it is found that of all the conjunctions which have correlative conjunctions in this research, there is 43.27% correlative conjunctions in the TT but there are only 16.09% correlative conjunctions in the NT. Inevitably, this statistics also shows that there is a far lesser proportion of stand-alone conjunctions in the TT with a percentage of 56.73% than in the NT with a percentage of 83.91%. Although these percentages demonstrate that both the TT and the NT use more stand-alone constructions than correlative constructions, they also imply that there is a far higher preference in the TT for the usage of correlative conjunctions, but there is a far higher preference for the NT to use stand-alone constructions.

From this table, the highest frequency for the correlative conjunctions in the TT is 则 ze [then] (1,005). The proportion shows that 94.99% of the usage of 则 ze [then] is correlatively joined with other conjunctions while there is only 5.01% of stand-alone usage. The same 则 ze [then] has also the highest frequency in the NT (208), albeit far fewer than in the TT. The proportion of the correlative conjunctions and the stand-alone conjunctions are quite similar to that of the TT with the correlative taking a higher portion of 92.86% as compared to a meager 7.14% of stand-alone constructions. It can be deduced here that whenever the paratactic 则 ze [then] is used, it has a higher chance that it is used correlatively with other conjunctions in both the TT and the NT.

The second highest frequency for correlative conjunctions in the TT is 如 ru [if] (783). From Table 5.11 above, the TT use 63.04% of the correlative conjunctions and 36.96% of the stand-alone conjunctions of 如 ru [if]. As for the NT, nevertheless, although in terms of ranking, it is also the second highest in frequency (131), the usage of 如 ru [if] with its correlative is much less than the usage of its stand-alone construction, with 14.79% used as correlative conjunctions compared to 85.21% as stand-alone constructions. The rest of the hypotactic *conditional* conjunctions also show a higher preference in the usage of correlative conjunctions in the TT but a lesser preference of such usage in the NT, for example 如果 ruguo [if] is used 43.49% as correlative and 56.51% as stand-alone in the TT, but only 15.02% as correlative

and 84.98% as stand-alone in the NT; 若 ruo [if] is used 43.55% as correlative and 56.45% as stand-alone construction, but the NT use only 25.00% as correlative and 75.00% as stand-alone construction. These findings indicate that when the hypotactic *conditional: positive: if...then* conjunctions are used in the TT, they are used preferably only slightly more as correlative when compared to the NT.

Despite the NT having more paratactic 但 dan [but] (780), this does not entail a far higher frequency in the usage of 但 dan [but] with its correlatives in the NT. In fact, the proportion of correlative conjunctions in the NT itself is only 0.51% compared to stand-alone constructions of 99.49%. Comparing the usage of 但 dan [but] in the TT, there are at least 7.03% of 但 dan [but] which are used correlatively, with stand-alone conjunctions of 92.97%. The same scenario happens with the usage of 但是 danshi [but] which sees a higher percentage in the usage of correlative conjunctions in the TT (21.43%) with none in the NT. This again shows how the TT deviate from the norms of the NT. The slightly higher usage of correlative conjunction of 但 dan [but] and 但是 danshi [but] in the TT is due to the higher usage of their correlative counterparts in the TT. Their correlative counterparts are 尽管 jinguan [although], 虽 sui [though], 虽然 suiran [although] and 即使 jishi [even if]. All of these show a higher percentage of usage of correlatives in the TT as compared to the usage of their counterparts in the NT, i.e. 尽管 jinguan [although] (78.26% vs. 33.33%), 虽 sui [though] (55.56% vs. 15%), 虽然 suiran [although] (100%, vs. 0%) and 即使 jishi [even if] (14.29% vs. 0%). At least for 尽管 jinguan [although], 虽 sui [though] and 虽然 suiran [although], the usage of their correlatives is more than 50% higher in the TT. These findings suggest that hypotactic *concessive/adversative* conjunctions are more likely to be followed by paratactic correlative conjunctions in the TT. However, in the NT, these conjunctions are used sparingly and usually they appear as stand-alone constructions. Other correlative conjunctions which are more preferred in the TT are 只要 zhiyao [if only], 否则 fouze [otherwise], 一旦 yidan [once] and 然后 ranhou [then].

Although we have found in Table 5.10 that correlative 因 yin [because]… 而 er [and], 由于 youyu [due to]…而 er [and], 因为 yinwei [because]…而 er [and], and 由于 youyu [due to]…则 ze [then] are used more in the TT in terms of frequency, when comparing the proportion of the correlative constructions in each corpus only 因 yin [because] in the TT is used more as a correlative conjunction (73.33% vs. 48.39%). On the other hand, 由于 youyu [due to] (46.67% vs. 50%) and 因为 yinwei [because] (33.33%. vs. 100%) are utilised in a lesser proportion as correlative conjunctions in the TT compared to their usage the NT. The same applies to the main correlative 而 er [and], where there is a lower proportion in the usage of correlative constructions in the TT (3.99%) as compared to those in the NT (5.10%). The same goes for 除非 chufei [unless] where the proportion of usage shows that it is more preferred to use correlative conjunctions in the NT (24.82%) than in the TT (12.54%). These findings point out that in general, there is more usage of correlative conjunctions in the TT where the frequency of the individual correlative shows that there are more correlative conjunctions of that type; and with the comparison between the proportion of the correlative constructions and the stand-alone constructions, we can identify that there might be some cases where the proportion of the correlative conjunctions is higher in the NT.

On the whole, both texts have an inclination to use stand-alone conjunctions more than correlative conjunctions. However, there are some conjunctions where the TT prefer to use much more correlative conjunctions as compared to those used in the NT, i.e.如 ru [if], 如果 ruguo [if], 若 ruo [if], 但 dan [but], 但是 danshi [but], 尽管 jinguan [although], 虽 sui [though], 虽然 suiran [although], 即使 jishi [even if], 因 yin [because], 只要 zhiyao [if only], 否则 fouze [otherwise], 一旦 yidan [once] and 然后 ranhou [then].There are also some conjunctions in the NT with much higher preference in the usage of correlative conjunctions when the proportion are compared, i.e. 由于 youyu [due to], 因为 yinwei [because], 而 er [and] and 除非 chufei [unless].[44] This section also has highlighted that 则 ze [then] is usually used as a correlative conjunction in the TT and the NT, a sign of similarity.

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[44] There are also some conjunctions where the frequencies are too low to be representational, i.e. 那么 name [then], 若是 ruoshi [if], 设若 sheruo [if] and 首先 shouxian [first].

5.7.3 Double Conjunctions

In this section, conjunctions that are placed side by side will be examined to identify if the TT use more of these double conjunctions, which in turn partly causes explicitation of conjunctions. This section is to identify if the patterns of use of conjunctions in the TT are similar to or deviate from the patterns of use of conjunctions in the NT.

Table 5.12 Frequency of double conjunctions in translated texts and non-translated texts

No.	Double conjunctions	Frequency in translated texts	Frequency in non-translated texts
1.	并 bing[and] 从而 conger[thus]	1	0
2.	并 bing[and] 如 ru[if]	2	0
3.	并 bing[and] 以 yi[so that]	1	0
4.	并 bing[and] 因 yin[because]	1	0
5.	并且 bingqie[and] 除非 chufei[unless]	0	1
6.	并且 bingqie[and] 只有 zhiyou[only if]	1	0
7.	而 er[and] 不论 bulun[no matter]	1	0
8.	而 er[and] 如果 ruguo[if]	2	0
9.	而 er[and] 无论 wulun[whether]	2	1
10.	而 er[and] 与此同时 yuchitongshi[at the same time]	1	0
11.	且 qie[and] 除非 chufei[unless]	3	0
12.	且 qie[and] 如 ru[if]	2	0
13.	且 qie[and] 如果 ruguo[if]	22	0
14.	且 qie[and] 若 ruo[if]	1	0
15.	且 qie[and] 无论如何 wulunruhe[in any case]	3	0
16.	且 qie[and] 只要 zhiyao[if only]	10	0
17.	同时 tongshi[at the same time] 并 bing[and]	1	0
18.	因此 yinci[therefore]如 ru[if]	1	0
19.	但 dan[but] 如 ru[if]	22	26
20.	但 dan[but] 如果 ruguo[if]	6	2
21.	但 dan[but] 若 ruo[if]	3	0
22.	但 dan[but] 无论如何 wulunruhe[in any case]	6	0
23.	但 dan[but] 只有 zhiyou[only if]	0	1
24.	但是 danshi[but] 除非 chufei[unless]	1	0
25.	但是 danshi[but]如 ru[if]	17	0
26.	但是 danshi[but] 只要 zhiyao[if only]	1	0
27.	则 ze[then] 除非 chufei[unless]	4	0
28.	则 ze[then] 即使 jishi[even if]	2	0
29.	则 ze[then] 尽管 jinguan[although]	1	0
30.	则 ze[then] 只要 zhiyao[if only]	1	0
31.	那么 name[then] 只要 zhiyao[if only]	1	0

32.	否则 fouze[otherwise]如 ru[if]	1	0
33.	如 ru[if] 尽管 jinguan[although]	2	0
34.	如 ru[if] 因 yin[because]	1	7
35.	如 ru[if]由于 youyu[due to]	4	0
36.	如果 ruguo[if]并且 bingqie[and]	1	0
37.	如果 ruguo[if] 虽然	1	0
38.	如果 ruguo[if] 由于 youyu[due to]	0	3
39.	倘 tang [if] 因 yin[because]	1	0
40.	只要 zhiyao[if only]由于 youyu[due to]	2	0
41.	除非 chufei[unless]如 ru[if]	1	0
42.	尽管 jinguan[although] 因为 yinwei[because]	1	0
	Total	135	41

From this table, it is found that there are more double conjunctions in the TT with a frequency of 135 compared to such conjunctions in the NT with a frequency of 41, with the LL value of +231,579.44, suggesting that the usage of double conjunctions may also be one of the reasons that there is explicitation in the TT.

Among the most frequently used double conjunctions in the TT are 且 qie [and] 如果 ruguo [if] (22, 0), 但是 danshi [but] 如 ru [if] (17, 0) and 且 qie [and] 只要 zhiyao [if only] (10, 0) - all of which have no usage in the NT. On the other hand, 并且 bingqie [and] 除非 chufei [unless] (0, 1), 但 dan [but] 如 ru [if] (22, 26), 如 ru [if] 因 yin [because] (1,7), 如果 ruguo [if] 由于 youyu [due to] (0, 3) are used more frequently in the NT compared their usage in the TT. Of the 39 types of conjunctions found in the TT, there are 35 types of these double conjunctive patterns that are not found in the NT; and of the seven types of the double conjunctions found in the NT, there are only three types of the double conjunctive patterns not found in the TT. This suggests that the TT use a lot more double conjunctive patterns which are usually not used in the NT. Based on Table 5.12, we can also see that high frequency of double conjunctions is spread out among the different types, and the usage of double conjunctions in the two texts is very different.

5.8 Summary of Findings for Statistical Comparison Between Translated Texts and Non-Translated Texts

This chapter basically compares the comparable texts to identify quantitative differences and similarities between them. The analysis is carried out based on different statistical analyses. Listed below is a summary of the findings.

1. The percentage of total conjunctions used in relation to the total of running words in the TT is 2.47% and the NT is 1.52%, showing that overall there is T-explicitation with the LL value of +39,778.23, showing a great difference in the frequency of the use of conjunctions.

2. The frequency of the total top-5 conjunctions in the TT is 5,313 and the NT is 4,047, with the LL value of +13,218.08 in the TT compared to the NT. The difference between the rise of the total conjunctions and the rise of the total top-5 conjunctions suggests that explicitation of conjunctions in the TT does not totally rely on the top-5 conjunctions but is spread out; while the implicitation of conjunctions is due predominantly to a few conjunctions. The occurrence of four out of five of the top-5 conjunctions in both lists, i.e. 并 bing [and], 如 ru [if], 而 er [and] and 但 dan [but], suggests that there may be some similarities in the usage of the types of conjunctions at some points.

3. TTR1 for the TT is 0.019 while TTR1 for the NT is 0.015. These figures show that the TT is more varied in the usage of the types of conjunctions. TTR2 for the TT is 0.76 and for the NT is 1.00; while the inverse TTR for the TT is 131 and for the NT is 100. TTR1 and TTR2 demonstrate that the TT use more varied conjunctions more repeatedly.

4. The 21 most common conjunctions are higher in the TT with 14.26‰ compared with the NT with 10.41‰, with the LL value of +16,819.52, supporting T-explicitation even among the most common conjunctions found in the Sinica Corpus, the third party list. It is also found that conjunctions of higher frequency are spread out in the TT. Compared with the Sinica Corpus, it is found that there are some conjunctions that are not found at all in the

institutional texts, and also the ranking in the use of conjunctions in the institutional texts is rather different from the common conjunctions in a corpus of mixed genres, signifying the specificity of the genre in the use of conjunctions.

5. The distinctiveness test shows that there are 32 types of conjunctions which are distinctive in the TT compared to only four such types in the non-translated texts. There is a total of 6,266 for conjunctions which are distinctive in the TT compared to 2,419 in the NT. There is a total of 2000.38 keyness value for the TT compared to 107.58 for the NT; and there are also four conjunctions with keyness value of more than 100 in the TT with none in the NT. The LL value for the conjunctions found in TT and NT is +129,107.83 in the TT distinctive table. All these support T-explicitation where there are more types of conjunctions spread out in the TT which are more distinctive, i.e. having much greater frequencies. Interestingly, the research also shows four conjunctions which are distinctively implicitated in the TT.

The findings also show that the TT have 41 types of semantic categories which are distinctive while the NT have only six types, implying that there are more semantic types of conjunctions in the TT which are more distinctive. The three most distinctive types of the semantic categories for the TT are *condition* (16 types), *addition* (10 types) and *cause* (9 types). These imply that there are many variations of *condition*, *addition* and *cause* conjunctions which are distinctive in the TT, whereas the NT have only two of each category.

6. As for the paratactic, hypotactic and textual categories, it is also found that the TT show T-explicitation in all these categories despite the division, with the LL value of +27,557.41 for the paratactic category, +58,635.14 for the hypotactic and +72,126.19 or the textual category. Although in both texts, as a sign of similarity, the paratactic category has the highest frequency followed by the hypotactic and the textual categories, it is noted in that the

NT prefer the use of paratactic conjunctions. The higher usage of full stops and semicolons in the NT does not see a higher usage of textual conjunctions.

7. The frequency of correlative conjunctions in the TT is 1,178 which is higher than that in the NT of only 244. The LL value is as high as +388,413.12, showing a huge difference in the usage of correlative conjunctions, supporting T-explicitation.

    The usage of correlative conjunctions of *conditional: positive: if...then* in the TT is 965 in the TT and 180 in the NT, showing a greater proportion of usage in the TT. In terms of the usage of correlative conjunctions of *conditional: concessive/adversative*, there are 86 in the TT while there are only four in the NT, with the staggering LL value of +1,215,457.12, even though the NT use more of the paratactic aspect of this correlative conjunction. There are also more types of this kind of different combinations of correlative conjunctions in the TT, like the usage of 虽然 suiran [although]…但 dan [but], 即使 jishi [even if]…但 dan [but], etc. which are not even found in the NT. There are also many examples where correlative conjunctions are found more in the TT except 除非 chufei [unless]…则 ze [then].

8. In terms of the relation of correlative constructions and stand-alone conjunctions, the findings show that, similarly, both texts use more stand-alone conjunctions (56.73%, 83.91%), but the TT prefer to use more correlative conjunctions as compared to those conjunctions in the NT, and conversely the NT prefer stand-alone conjunctions to using correlative conjunctions.

    The usage of 则 ze [then] as a correlative conjunction is 94.99% in the TT and 92.86% in the NT showing that both texts prefer to use 则 ze [then] correlatively, a sign of similarity, although 则 ze [then] is used far more in the TT with hits as high as 1,005 compared to the NT with hits of only 208.

The proportion of the usage of most conjunctions as correlative conjunctions is more in the TT except in some types where the proportions show preference of using them as correlative conjunctions in the NT.

9. There are 135 double conjunctions in the TT and only 41 in the NT. The LL value is +231,579.44, supporting T-explicitation.

There are 39 types of double conjunctions in the TT but 35 of them are not found in the NT. Meanwhile, there are seven types of double conjunctions in the NT, but three types of double conjunctions in the NT are not used in the TT. Thus, the usage of the double conjunctions in the TT is with more types and higher frequencies. All these also show the deviation of the patterns on the usage of the double conjunctions between the TT and the NT.

5.9 Concluding Remarks

The chapter has presented a statistical comparison between the TT and the NT. Generally it is found that there are more hits of conjunctions, more types of conjunctions used more repeatedly and more distinctively, more types of conjunctions based on semantic categories, more hypotactic conjunctions, more correlative conjunctions and more double conjunctions in the TT compared to the NT.

By studying the percentage of total conjunctions used, the top-5 conjunctions, the TTR, the 21 most common conjunctions, the distinctive conjunctions, the tactic and the textual categories, the correlative conjunctions, the stand-alone conjunctions and the double conjunctions, we are able to uncover the similarities and differences between the use of conjunctions in the TT and in the NT. This quantitative study points out to us that the frequencies and patterns of the use of conjunctions in the TT and in the NT are mostly different with a tinge of similarities.

CHAPTER 6
Parallel Analysis of Conjunctions

As Chapter 5 focuses on comparable analysis, Chapter 6 will focus on parallel analysis, i.e. comparison between the ST and the TT to identify explicitation, implicitation and shift in translation in the parallel texts.

The analytical procedure will be based on the description in Chapter 4 to answer research questions 2a and 2b. These two research questions are quantitative and qualitative analyses. In the first research question, conjunctions will be first identified in the TT, and cases of explicitation and shift into conjunctions together with their reasons will be discussed. In the second research question, however, the starting point to look for implicitation is the ST. In this section, conjunctions which are implicitated and conjunctions which are shifted into other word forms will be identified, and reasons of change will be discussed.

6.1 Explicitation and Shift into Conjunctions

I will begin the research by looking for conjunctions in the TT and later I will identify if the occurrence of conjunctions in the TT is due to pure explicitation of conjunctions by the translators or due to conjunctions in the TT which are shifted from other non-conjunctions[45]. Here is the research question:

> (2a) What are the conjunctions that are made more explicit or have shifted in the Chinese translation of the English institutional texts? What are the linguistic reasons for the change?

To answer the above research question, we will identify the frequency and the percentage of explicitation in Section 6.1.1.; present the frequency and the percentage of explicitation based on semantic categories in Section 6.1.2; offer reasons of explicitation in Section 6.1.3; interpret the frequency and the percentage

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[45] This section focuses on pure explicitation and shift into conjunctions. Comparing the TT and the ST, there will also be cases of formal correspondence which will be brought forth for investigation in Chapter 7.

of shift into conjunctions in Section 6.1.4; and provide reasons for shift in Section 6.1.5.

6.1.1 Pure Explicitation

This section only features conjunctions which appear in the TT which do not have any tangible entity in the ST. In this research, they are labeled as "pure explicitation".

Table 6.1: Frequency and percentage of pure S-explicitation

No.	Conjunctions	Frequency of conjunctions	Explicitation	Percentage
1.	并 bing[and]	1,390	154	11.08
2.	如 ru[if]	1,242	150	12.08
3.	而 er[and]	1,127	858	76.13
4.	则 ze[then]	1,058	1,048	99.05
5.	但 dan[but]	498	200	40.16
6.	如果 ruguo[if]	430	40	9.30
7.	以 yi[so that]	420	36	8.57
8.	且 qie[and]	283	24	8.48
9.	除非 chufei[unless]	279	1	0.36
10.	但是 danshi[but]	238	51	21.43
11.	只要 zhiyao[if only]	210	7	3.33
12.	以便 yibian[so that]	154	8	5.19
13.	同时 tongshi[at the same time]	98	69	70.41
14.	并且 bingqie[and]	96	5	5.21
15.	无论 wulun[whether]	72	13	18.06
16.	尽管 jinguan[although]	69	1	1.45
17.	若 ruo[if]	62	10	16.13
18.	因此 yinci[therefore]	61	4	6.56
19.	不论 bulun[no matter]	56	6	10.71
20.	从而 conger[so that]	47	19	40.43
21.	由于 youyu[due to]	45	2	4.44
22.	此外 ciwai[moreover]	43	0	0.00
23.	即使 jishi[even if]	42	0	0.00
24.	否则 fouze[otherwise]	37	35	94.59
25.	无论如何 wulunruhe[in any case]	31	0	0.00
26.	因 yin[because]	30	10	33.33
27.	然后 ranhou[then]	29	2	6.90
28.	一旦 yidan[once]	27	2	7.41

29.	而且 erqie[and]	27	3	11.11
30.	虽 sui[though]	27	10	37.04
31.	因而 yiner[so as]	17	4	23.53
32.	俾 bi[so that]	16	2	12.50
33.	虽然 suiran[although]	11	1	9.09
34.	一俟 yisi[as soon as]	9	0	0.00
35.	倘 tang[if]	9	4	44.44
36.	因为 yinwei[because]	9	2	22.22
37.	只有 zhiyou[only if]	8	0	0.00
38.	以致 yizhi[with the result that (bad result)]	7	4	57.14
39.	鉴于 jianyu[in view of]	7	0	0.00
40.	然而 raner[even so]	5	0	0.00
41.	致 zhi[(so)…that]	5	3	60.00
42.	那么 name[then]	5	5	100.00
43.	以免 yimian[lest]	4	0	0.00
44.	借以 jieyi[for the purpose of]	4	0	0.00
45.	尽管如此 jinguanruci[despite this]	4	0	0.00
46.	起见 qijian[for the sake of]	4	2	50.00
47.	纵 zong[even if]	3	0	0.00
48.	首先 shouxian[first]	3	0	0.00
49.	不管 buguan[regardless of]	2	0	0.00
50.	与此同时 yuchitongshi[at the same time]	2	0	0.00
51.	假使 jiashi[if]	2	0	0.00
52.	即令 jiling[even though]	2	0	0.00
53.	即或 jihuo[even though]	2	0	0.00
54.	另 ling[in addition]	2	2	100.00
55.	若是 ruoshi[if]	2	0	0.00
56.	设若 sheruo[if]	2	0	0.00
57.	于是 yushi[hence]	1	0	0.00
58.	倘若 tangruo[if]	1	0	0.00
59.	另外 lingwai[besides]	1	0	0.00
60.	如若 ruruo[if]	1	0	0.00
61.	总之 zongzhi[in short]	1	0	0.00
62.	故 gu[so]	1	1	100.00
63.	进而 jiner[and then]	1	0	0.00
64.	除此以外 chuciyiwai[besides]	1	0	0.00
	TOTAL	8,382	2,798	33.38

From the table above, 33.38% of the use of conjunctions in the TT is due to pure explicitation of conjunctions by the translators. Of all 64 types of conjunctions, there are 38 types (or 59.38%) which experience explicitation,

Based on the percentages, the occurrence of 那么 name [then], 另 ling [in addition] and 故 gu [so] is totally due to explicitation by the translators. Besides these conjunctions, the other uses of conjunctions which is mostly due to pure explicitation by the translators are 则 ze [then], 否则 fouze [otherwise], 而 er [and] and 同时 tongshi [at the same time]. The high percentages of pure explicitation of some conjunctions, like the ones mentioned earlier which is more than 70%, seems to suggests that usage of certain conjunctions is high due to pure explicitation by the translators.

6.1.2 Pure Explicitation Based on Semantic Categories

Based on Halliday and Mattheissen's (2004) semantic categories, the types of conjunctions and their frequencies are grouped according their semantic categories. Below is a list of pure explicitation according to semantic categories.

Table 6.2: Frequency and percentage of pure S-explicitation based on semantic categories

Semantic categories	Translated texts	Percentage
Elaboration	0	0
Addition	1,046	37.38
Temporal: same time	71	2.54
Temporal: different time	2	0.07
Spatial/situation: point	0	0.00
Spatial/situation: extend	7	0.25
Causal: reason	23	0.82
Causal:purpose	67	2.39
Conditional: positive: if...then	1,257	44.92
Conditional: positive: as long as	7	0.25
Conditional: positive: only if	0	0.00
Conditional: positive: whatever	19	0.68
Conditional: negative	36	1.29
Conditional: concessive/adversative	263	9.40
Manner	0	0.00
Total	2,798	100.00

The table above shows that translators prefer to make explicit *conditional: positive: if...then* with a percentage of 44.92%, followed by *addition* with a percentage of 37.38% and *conditional: concessive/adversative* of 9.40%. This section has generally shown us the inference process of the translators.

6.1.3 Reasons for Pure Explicitation of Conjunctions

In this section, by investigating the sentences where pure explicitation occurs, reasons for pure explicitation will be identified. Only the top ten of pure explicitation of conjunctions with a total of combined percentage of 94.39%[46] will be discussed, i.e. 则 ze [then], 而 er [and], 但 dan [but], 并 bing [and], 如 ru [if], 同时 tongshi [at the same time], 但是 danshi [but], 如果 ruguo [if], 以 yi [so that] and 否则 fouze [otherwise].

6.1.3.1 After or In Replacement of Punctuations

Some cases of explicitation of 并 bing [and], 而 er [and], 则 ze [then] are due to "logogenesis"[47] of sentences denoted by semicolons, commas or full stops in the ST but made explicit by conjunctions in the TT, thus explicitating the relationship between the clauses. They can occur after punctuation or as a replacement for the punctuation. It can also be said that the relationship is embedded in linear sequences made explicit in the TT. An example can be seen below where 而 er [and] is added right after a semicolon.

Example 1
> The provision that on 1 January 1958, and on other days determined pursuant to paragraph 1, a contracting party "may ... modify or withdraw a concession" means that on such a day, and on the first day after the end of each period, the legal obligation of such contracting party under Article II is altered; *it does not mean that the changes in its customs tariff should necessarily be made effective on that day.
> 关于一缔约方在 1958 年 1 月 1 日和根据第 1 款确定的其他日期"可...修改或撤销一项减让"的规定，是指在该日期和第一期限结束后的第一天，该缔约方在第 2 条下的法律义务已改变；<u>而</u>并非指其关税的改变必须在该日生效。(48_tariffs and trade[48])
> [Back translation[49]: …; <u>and</u> it does not mean that…]

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[46] 2,641/2,798*100

[47] "Logogenesis" means 'the creation of meaning in the course of the unfolding of text' (Halliday and Matthiessen, 2004: 530).

[48] Please refer to Appendix 1. In (48_tariffs and trade), 48 is the number found in Appendix 1 while "tariffs and trade" is a short-form name for the text.

[49] It has to be noted here that the back translation does not provide a translation which is natural but more like a word-for-word translation to understand the language pattern of the Chinese language.

The above translation is considered correct without the addition of 而 er [and]. This is an example of interpretation by the translators made explicit in the TT. As much as this phenomenon is observed, the reverse is also true where conjunctions in the ST are "translated" using punctuation marks, as will be discussed in Section 6.2.3.1.

6.1.3.2 Before Phrases of Source Texts

Pure explicitation of conjunctions also occurs in the translation of phrases from the ST. Examples 2, 3 and 4 below show how phrases beginning with the prepositional phrase "subject to" have triggered three different usages of conjunctions, namely 并 bing [and], 同时 tongshi [at the same time] and 但 dan [but], even though the English sentences do not have any conjunction before the phrases. The same phrase has also triggered the usage of 但是 danshi [but]. Again, in cases like this, the logogenesis of phrases is made explicit by the translator through his or her own inferential interpretation. Of all three translations, 但 dan [but] is more explicit, because 并 bing [and] and 同时 tongshi [at the same time] are more neutral but 但 dan [but] gives more meaning where the notion of *adversity* is added. Here, the examples demonstrate that similar phrases triggered by the same lexis may be interpreted differently by the translators through the use of conjunctions. At this point, it is to be noted that the explicitation of 但 dan [but] and 并 bing [and] is not a negative strategy but a positive one, as it is found to be more rampant in the NT.

Example 2
> If, however, as a result of the consultations, the CONTRACTING PARTIES determine that the restrictions are being applied in a manner involving an inconsistency of a serious nature with the provisions of this Section or with those of Article XIII (*subject to the provisions of Article XIV) and that damage to the trade of any contracting party is caused or threatened thereby, they shall so inform the contracting party applying the restrictions and shall make appropriate recommendations for securing conformity with such provisions within a specified period.
> 但是，如作为磋商结果，缔约方全体确定正在实施的限制包含与本条规定或第 13 条的规定（并需遵守第 14 条的规定）严重不一致处，且对任何缔约方的贸易造成损害或威胁造成损害，则它们应如此通知实施限制的缔约方并应提出适当建议，以便在指定期限内符合此类规定。
> (48_tariffs and trade)
> [Back translation:…(and should adhere to the provisions of Article XIV)…]

Example 3

All restrictions applied for balance-of-payments purposes shall be subject to periodic review in the Committee under paragraph 4(b) of Article XII or under paragraph 12(b) of Article XVIII, *subject to the possibility of altering the periodicity of consultations in agreement with the consulting Member or pursuant to any specific review procedure that may be recommended by the General Council.

为国际收支目的而实施的所有限制应根据第 12 条第 4 款（b）项或第 18 条第 12 款（b）项在委员会中进行定期审议，<u>同时考虑</u>与磋商成员议定的修改磋商周期的可能性，或根据总理事会可能建议的任何具体审议程序。 (41_balance-of-payments)

[Back translation: …<u>at the same time</u> consider the possibility…]

Example 4

If there is no neutral physician in a country where the services of a Mixed Medical Commission seem to be required, and if it is for any reason impossible to appoint neutral doctors who are resident in another country, the Detaining Power, acting in agreement with the Protecting Power, shall set up a Medical Commission which shall undertake the same duties as a Mixed Medical Commission, *subject to the provisions of Articles 1, 2, 3, 4, 5 and 8 of the present Regulations.

在 需要 混合 医务 委员会 工作 之 国家 若 无 中 立国 之 医生 ， 及 因 其他 原因 而 未能 指派 在 另 一 国内 之 中立国 医生 时 ， 则 拘留 国 应 与 保护 国 协议 后 设立 一 医务 委员会 担任 与 混合 医务 委员会 相同 之 任务 ， <u>但</u> 应 受 本 规则 第一 、 二 、 三 、 四 、 五 及 八 各 条 之 规定 之 限制 。 (01_treatment of prisoners)

[Back translation: …<u>but</u> should be limited by…]

There are also some phrases beginning with "with" and "without" which have triggered usage of 并 bing [and]), 而 er [and] and 如果 ruguo [if]. Example 5 below shows that a phrase beginning with "without" is translated as *condition: positive: if…then* clause, adding condition to the source information by the translator's interpretation. This is an example of explicitation of meaning.

Example 5

With a view to maintaining budgetary discipline, the Commission shall not make any proposal for a Community act, or alter its proposals, or adopt any implementing measure which is likely to have appreciable implications for the budget <u>without</u> providing the assurance that that proposal or that measure is capable of being financed within the limit of the Community's own resources arising under provisions laid down by the Council pursuant to Article 173.

为维护预算纪律，委员会不得对共同体法规做出任何建议或修改其建议，或制定对预算具有明显影响的实施措施，<u>如果</u>不能保证该项建议或措施能够在按照理事会依第１７３条所作规定，所筹集的共同体自有资金范围内得到资助。 (24_EU)

[Back translation: …<u>if</u> cannot assure…]

There are also phrases beginning with words ending with "ed" and "ing" that form traditionally categorised past-participle phrases and present-participle phrases. In SFL, however, they are categorised as *elaborative clarification* of hypotactic non-finite conjunctions. With that, we can also define this explicitation as a form of meaning explicitation where *elaborative clarification* of lesser meaning is translated into *extension* and *enhancement* like 并 bing [and], 而 er [and], 以 yi [so that] and 如果 ruguo [if] of greater meaning. Example 6 below shows that ST "ing-clause" is explicitated with 并 bing [and].

Example 6

> If a member fails to fulfill any of its obligations to the Bank, the Bank may suspend its membership by decision of a majority of the Governors, *exercising a majority of the total voting power.
> 如果会员国不履行对银行的任何一项义务，银行经半数以上理事<u>并</u>持有过半数总投票权的表决，得暂停其会员国资格。(03_IBRD)
> [Back translation: …the Bank through the majority of the Governors <u>and</u> having a majority …]

Another example is excessive explicitation of 同时 tongshi [at the same time] which is due to the usage of present-participle phrases beginning with words ending with "ing" which also means "present". The explicitation of 同时 tongshi [at the same time] has caused explicitation of meaning as the morpheme "-ing" is explicitated into a full word conjunction. Many of usages of 同时 tongshi [at the same time] are triggered by the word 考虑 kaolyu [consider], like example 7. This can also be a form of influence from the target language where these two words are close collocations, but this may not be influence of the target institutional texts, as it is found that there are only two instances of 同时考虑 tongshi kaolyu [at the same time consider] in the NT.

Example 7

> The Committee shall review annually the implementation and operation of Parts II and III of this Agreement <u>having</u> regard to its objectives.
> 委员会应每年审议本协定第二部分和第三部分的执行和运用情况，<u>同时考虑</u>本协定的目标。(42_implementation of article7)
> [Back translation:…<u>at the same time</u> consider the objectives of this agreement.]

Indeed, this section has demonstrated how conjunctions are added before phrases due to the different interpretations of the translators based on the logogenesis of sentences, and may also be due to the overrepresentation of certain fixed or semi-fixed phrases of the target language which involve conjunctions. The next section will demonstrate how certain words occur in sentences which may have caused the explicitation of conjunctions.

6.1.3.3 Triggered by Other Lexis

Other words which trigger the usage of 但 dan [but] are "except", "exception", "without", "other than", "on the condition", "on condition", "mutatis mutandis", "excluding" and even the negations "not" and "no" and the restrictive "only". It is because these words illuminate negativity, that the translators, through their interpretations, make the negativity explicit or more obvious. Similarly, the usage of words like "with the exception", "only" and "no" also trigger the use of 但是 danshi [but]. The word "only" triggers the use of 而 er [and]. These examples show how a negative element in other words has triggered use of negative conjunctions; or how negative elements in other words are stressed with use of conjunctions. One example of a negative element being explicitated is as follows.

Example 8
> The Occupying Power shall take all necessary steps to facilitate the identification of children and the registration of their parentage. *It may <u>not</u>, in any case, change their personal status, nor enlist them in formations or organisations subordinate to it.
> 占领国应采取一切必要步骤以便利儿童之辨认及其父母之登记。<u>但</u>该国绝不得改变彼等之个人地位，亦不得使其参加隶属于该国之各种组织。
> (02_convention 4)
> [Back translation: …<u>But</u> that country should not…]

In addition, expressions like "in the case of", "in the absence of" and "in an emergency" trigger usage of 如 ru [if]; while expressions like "in the case of" and "in the absence of" trigger explicitation of 如果 ruguo [if]. The use of "in the absence of" also triggers the use of 但 dan [but]. Due to the interpretations of the translators, these conjunctions add meaning to the clauses. They could be interpreted as, for example, "if in the absence of", "but in the absence of", "and in the absence

of", "when in the absence of", "where in the absence of" etc… like example 9 below where the translator interprets it as "if".

Example 9

> In the absence of special agreements between the Powers concerned on the conditions for the receipt and distribution of collective relief shipments, the rules and regulations concerning collective shipments, which are annexed to the present Convention, shall be applied.
> 有关各国对于集体救济装运物资之接受与分配之条件，如无特别协定，则应适用本公约所附关于集体装运物资之条款与规则。 (01_treatment of prisoners)
> [Back translation:…if there is no special agreement…]

6.1.3.4 Change of Structure

There are many English structures like relative clauses beginning with "which", "who", "that", "of which", "for which", "whose", "as", "where" and "when"[50] which are not found in the Chinese language, thus special attention is required from the translators to tackle this problem. Many translators, in the process of changing the structure, have added conjunctions such as 并 bing [and], 如 ru [if], 而 er [and], 但 dan [but], 如果 ruguo [if] and 以 yi [so that]. In SFL, these relative clauses are placed in the hypotactic finite *elaboration: descriptive* category, as part of the conjunctive system. However, it is not so in traditional grammar. In terms of meaning, there will be explicitation if the *elaborative: descriptive* category with lesser meaning is explicitated into *extension* or *enhancement* of a more specific meaning. Example 10 below shows how a relative clause which commences with a relative pronoun "which" is interpreted as *conditional: concessive/adversative* 但 dan [but]. In terms of structure, there is an explicitation where the relative clause augments a clause "internally", but it has been translated by augmenting "externally" by means of another clause in a complex structure.

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[50] In this research, structural change prompted by the occurrence of the relative pronouns "which" and "that" will also be considered as pure explicitation because these words do not provide extra semantic meaning. However, if relative pronouns like "where", "when" and "as" are translated into conjunctions, they will be considered as shifts as these pronouns carry meaning.

Example 10

> This Convention shall be open to accession by all States not members of the United Nations Educational, Scientific and Cultural Organization <u>which</u> are invited to accede to it by the Executive Board of the Organization.
> 本公约应开放给非联合国教育、科学及文化组织成员<u>但经本组织执行局邀请加入本公约的</u>所有国家加入。(05_illicit import)
> [Back translation: …<u>but</u> by the Executive Board of the Organization are invited to accede.]

Next, we move on to explicitation of 而 er [and] which is partly due to the patterns of correlative constructions utilised by the translators like 因 yin[because]… 而 er [and] and 由于 youyu[due to]…而 er [and] which show *cause* and *effect*, and partly due to "correlative prepositions" like 根据 genjyu [according to], 依 yi [in accordance with], 为了 weile [for the sake of], 对于 duiyu [as regards], 对 dui [as regards], 依照 yizhao [according to], 按 an [according to], 为 wei [for], 通过 tongguo [through], 以 yi [according to], 从 cong [through], 作为 zuowei [as], 由 you [through], 出于 chuyu [originating from] and 按 an [according to] followed by 而 er [and] which means "according/through…and causes". This shows that 而 er [and] is not only used as an *additive* conjunction in a normal clause; it is also used together with other constructions to form groups of phrases in Chinese[51], like, example 11 below where the object of the sentences "their reasonable expenses incurred on behalf of the Bank" is translated as "due to the Bank's affairs and causes reasonable expenses". This kind of explicitation may be language-related as this construction may be common in the Chinese language[52]. However, it may not be common in the NT of the institutional texts as there are only 15 instances of 因 yin [because]… 而 er [and] in the NT, but 22 in the translation; and seven of 由于 youyu [due to]…而 er [and] in the NT, but 20 in the TT.

Example 11

> They shall be paid <u>their reasonable expenses *incurred on behalf of the Bank.</u>
> 其<u>**因**银行事务**而**发生的合理费用</u>应由银行支付。(03_IBRD)
> [Back translation: Their due to the Bank's affairs <u>and</u> causes reasonable expenses shall be paid by the Bank.]

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[51] This is an example where the conjunctions selected may not be solely used to bind clauses, as the siphoning may not be able to eliminate cases like this. Moreover, 而 er [and] is selected as it is followed by verbs.

[52] An example from A comprehensive Chinese-English dictionary (2004) which uses '他因锅炉爆炸而受伤。 [He was injured as the result of a boiler explosion.]' shows similar pattern.

There are other cases of change of structure and, in the process, addition of conjunctions like 而er [and], 以yi [so that], 如ru [if], 但dan [but] and 但是danshi [but] are added. Example 12 shows how rephrasing causes the use of 以yi [so that]. Based on this example, we can see that the translator has changed the main verb in the ST "shall be facilitated" into a hypotactic construction beginning with 以yi [so that]. It is hard to argue if this explicitation has caused explicitation of structure or explicitation of meaning as the focus in the TT has totally changed to focus on "members adhering to the agreement" rather than "the participation being facilitated".

Example 12

> The increasing participation of developing country Members in world trade shall be *facilitated through negotiated specific commitments, by different Members pursuant to Parts III and IV of this Agreement, relating to…
> 不同成员应按照本协定第三部分和第四部分的规定，通过谈判达成有关以下内容的具体承诺，<u>以</u>便利发展中国家成员更多地参与世界贸易…(54_trade in services)
> [Back translation: Different Members should adhere to Parts III and IV of this Agreement, through negotiation come to an agreement on the specific commitments below, so as to facilitate the increasing participation of developing country Members in world trade…]

6.1.3.5 Translators Added Phrases or Clauses Not in the Source Texts

There are also examples of 而 er [and] that is added because the translators added phrases not in the ST, like in example 13 below where the phrase "and at such age" is added even though it is not in the ST. This is an example of explicitation by the translators perhaps due to the effort by the translators to make the sentence more fluent and natural. This phenomenon is observed by Weissbrod (1992) and Øverås (1998) where new clauses are added together with the addition of conjunctions. Øverås (1998) believes that this is due to an interpretation process.

Example 13

> The Occupying Power may not compel protected persons to work unless they are over eighteen years of age, *and then only on work which is necessary either for the needs of the army of occupation, or for the public utility services, or for the feeding, sheltering, clothing, transportation or health of the population of the occupied country.

占领国不得强迫被保护人工作，除非彼等已满十八岁，<u>而</u>届此年龄，亦只能派任占领军，公用事业或被占领国居民之衣、食、住、行或保健所需要之工作。 (02_convention 4)

[Back translation: … unless they are over eighteen years of age, <u>and at such age</u>, then only can be deployed as army of occupation…]

6.1.3.6 Correlative Conjunctions

Pure explicitation can also lead to the addition of one part of correlative conjunctions by the translators. For example, it is found that of all the 1048 cases of explicitation of 则 ze [then], 1005 are due to the occurrence of 如 ru [if], 如果 ruguo [if], 若 ruo [if], 若是 ruoshi [if], 设若 sheruo [if], 只要 zhiyao [if only] , 一旦 yidan [once] and 由于 youyu [due to]. Another example is explicitation of 但是 danshi [but] and 但 dan [but] which are also due to paring with 尽管 jinguan [although], 虽 sui [though] and 虽然 suiran [although] which are triggered by English hypotactic conjunctions like "although", "even though" or English prepositions like "notwithstanding". In addition, the use of 否则 fouze [otherwise] is mostly due to the presence of its correlative 除非 chufei [unless]; its use is mostly due to the word "unless" in the ST. These examples may not show direct explicitation of meaning, but rather reinforcement of the logical-semantic meaning through the addition of the other counterpart of the correlative conjunctions. From the research discussed in Section 5.7.2, it is observed that 则 ze [then] is usually used as a correlative conjunction in the NT, but conjunctions like 如 ru [if], 如果 ruguo [if], 若 ruo [if], 但 dan [but], 但是 danshi [but], 尽管 jinguan [although], 虽 sui [though], 虽然 suiran [although], 即使 jishi [even if], 只要 zhiyao [if only], 否则 fouze [otherwise], and 一旦 yidan [once] are used more as stand-alone constructions. Thus, it should be advocated that some adjustments should be performed in the TT to mimic the norms of the NT. Example 14 below shows how paratactic 但 dan [but] is added due to the use of 虽然 suiran [although] which is triggered by "although" in the ST. In this example, with the addition of 但 dan [but], we can omit 虽然 suiran [although] to make the TT sentence closer to the norms of the NT.

Example 14

"similar goods" means goods which, <u>although</u> not alike in all respects, *have like characteristics and like component materials which enable them to perform the same functions and to be commercially interchangeable.
"类似货物"指<u>虽然</u>不是在所有方面都相同，<u>但</u>具有相似的特性、相似的 组成 材 料 ， 从 而 使 其 具 有 相 同 功 能 ， 在 商 业 上 可 以 互 换 的 货 物 。
(42_implementation of article vii)
[Back translation:…<u>although</u> not alike in all respects, <u>but</u> have like characteristics…]

The above reasons and examples give us some insights into why there is pure explicitation in the TT. This knowledge is essential as we must know in what situation translators explicitate conjunctions. Such awareness will help shed some light on how to avoid unnecessary explicitation, such as avoiding the use of correlative conjunctions unnecessarily, and how to explicitate if it is required, like in the use of 但 dan [but] and 并 bing [and] where there is more use of these conjunctions in the NT.

6.1.4 Shift from Other Conjunctions and Non-Conjunctions into Conjunctions

In this section, we will move on to shift. The two types of shift, i.e. the first type is shift from other conjunctions of different semantic meaning into conjunctions and the second type is shift from other word groups (i.e., non-conjunctions) into conjunctions, which may or may not cause explicitation, depending on the type of shift. In the table below, two types of shift are tabulated and their percentages are computed.

Table 6.3 Frequency and percentage of shift into conjunctions

No.	Chinese conjunctions	Shifts from other conjunctions	Percentage	Shifts from other non-conjunctions	Percentage	Total shifts	Percentage
1.	并 bing [and][53]	3	0.22	29	2.09	32	2.30
2.	如 ru [if]	304	24.48	91	7.33	395	31.80
3.	而 er [and]	13	1.15	126	11.18	164	12.33

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[53] The order of the placing of conjunctions is based on the most used conjunctions to the least used conjunctions (see Appendix 6).

No.	Word					
4.	则 ze [then]	0	0.00	0	0.00	0	0.00
5.	但 dan [but]	82	16.47	0	0.00	82	16.47
6.	如果 ruguo[if]	93	21.63	42	9.77	135	31.40
7.	以 yi[so that]	1	0.24	335	79.76	336	80.00
8.	且 qie[and]	5	1.77	1	0.35	6	2.12
9.	除非 chufei [unless]	4	1.43	55	19.71	59	21.15
10.	但是 danshi [but]	52	21.85	0	0.00	52	21.85
11.	只要 zhiyao [if only]	44	20.95	21	10.00	65	30.95
12.	以便 yibian [so that]	0	0.00	92	59.74	92	59.74
13.	同时 tongshi[moreover]	15	15.31	8	8.16	23	23.47
14.	并且 bingqie[and]	1	1.04	1	1.04	2	2.08
15.	无论 wulun [whether]	0	0.00	59	81.94	59	81.94
16.	尽管 jinguan [although]	1	1.45	63	91.30	64	92.75
17.	若 ruo [if]	7	11.29	7	11.29	14	22.58
18.	因此 yinci [therefore]	0	0.00	11	18.03	11	18.03
19.	不论 bulun [no matter]	0	0.00	50	89.29	50	89.29
20.	从而 conger [thus]	14	29.79	12	25.53	26	55.32
21.	由于 youyu [due to]	2	4.44	25	55.56	27	60.00
22.	此外 ciwai[moreover]	0	0.00	5	11.63	5	11.63
23.	即使 jishi [even if]	1	2.38	11	26.19	12	28.57
24.	否则 fouze [otherwise]	0	0.00	0	0.00	0	0.00
25.	无论如何 wulunruhe[in any case]	1	3.23	28	90.32	29	93.55
26.	因 yin [because]	0	0.00	16	53.33	16	53.33
27.	然后 ranhou[then]	0	0.00	23	79.31	23	79.31
28.	一旦 yidan[once]	7	25.93	3	11.11	10	37.04
29.	而且 erqie [and]	0	0.00	1	3.70	1	3.70
30.	虽 sui[though]	2	7.41	6	22.22	8	29.63
31.	因而 yiner [so as]	2	11.76	9	52.94	11	64.71
32.	俾 bi[so that]	0	0.00	9	56.25	9	56.25
33.	虽然 suiran[although]	2	18.18	2	18.18	4	36.36
34.	一俟 yisi[as soon as]	1	11.11	0	0.00	1	11.11
35.	倘 tang [if]	1	11.11	2	22.22	3	33.33
36.	因为 yinwei [because]	0	0.00	0	0.00	0	0.00
37.	只有 zhiyou [only if]	7	87.50	1	12.50	8	100.00
38.	以致 yizhi[with the result that (bad result)]	2	28.57	1	14.29	3	42.86
39.	鉴于 jianyu [in view of]	2	28.57	5	71.43	7	100.00
40.	然而 raner[even so]	0	0.00	0	0.00	0	0.00

41.	致 zhi[(so)…that	1	20.00	0	0.00	1	20.00
42.	那么 name [then]	0	0.00	0	0.00	0	0.00
43.	以免 yimian [lest]	0	0.00	2	50.00	2	50.00
44.	借以 jieyi [for the purpose of]	0	0.00	3	75.00	3	75.00
45.	尽管如此 jinguanruci [despite this]	0	0.00	0	0.00	0	0.00
46.	起见 qijian [for the sake of]	0	0.00	2	50.00	2	50.00
47.	纵 zong [even if]	0	0.00	1	33.33	1	33.33
48.	首先 shouxian [first]	0	0.00	1	33.33	1	33.33
49.	不管 buguan [regardless of]	0	0.00	2	100.00	2	100.00
50.	与此同时 yuchitongshi [at the same time]	0	0.00	1	50.00	1	50.00
51.	假使 jiashi [if]	0	0.00	0	0.00	0	0.00
52.	即令 jiling[even though]	0	0.00	0	0.00	0	0.00
53.	即或 jihuo [even though]	0	0.00	2	100.00	2	100.00
54.	另 ling[in addition]	0	0.00	0	0.00	0	0.00
55.	若是 ruoshi [if]	0	0.00	1	50.00	1	50.00
56.	设若 sheruo [if]	0	0.00	0	0.00	0	0.00
57.	于是 yushi[hence]	0	0.00	1	100.00	1	100.00
58.	倘若 tangruo [if]	0	0.00	1	100.00	1	100.00
59.	另外 lingwai[besides]	0	0.00	0	0.00	0	0.00
60.	如若 ruruo [if]	0	0.00	1	100.00	1	100.00
61.	总之 zongzhi[in short]	1	100.00	0	0.00	1	100.00
62.	故 gu [so]	0	0.00	0	0.00	0	0.00
63.	进而 jiner [and then]	1	100.00	0	0.00	1	100.00
64.	除此以外 chuciyiwai [besides]	0	0.00	0	0.00	0	0.00
	Total	672	8.02	1,168	13.93	1,840	21.95

The shift from other conjunctions is 8.02%; while the shift from other non-conjunctions is 13.93%. In total, including the shift from other conjunctions and shift from other non-conjunctions, there is 21.95% of shift into conjunctions in the TT. Of all the 64 cases of conjunctions in the TT, 51 cases, or 79.69%, are used partly because of shift.

The top-10 shifts are 如 ru [if], 以 yi [so that], 而 er [and], 如果 ruguo [if], 以便 yibian [so that], 但 dan [but], 只要 zhiyao [if only], 尽管 jinguan [although], 除非 chufei [unless] and 无论 wulun [whether].

From these top-10 shifts, 如 ru [if], 如果 ruguo [if], 但 dan [but] and 只要 zhiyao [if only] are mostly due to shift from other conjunctions while 以 yi [so that], 而 er [and], 以便 yibian [so that], 尽管 jinguan [although], 除非 chufei [unless], 无论 wulun [whether]) are due to shift from non-conjunctions.

6.1.5 Reasons for Shift from Other Conjunctions and Non-Conjunctions into Conjunctions

Considering the ten highest frequencies of shifts that make up 78.86%[54] of total shifts into conjunctions, Sections 6.1.5.1 through 6.1.5.5 below provide some reasons accounting for such shifts.

6.1.5.1 Shifted from Other Conjunctions

There are many cases of shifts from the other conjunctions. Some cases of 如 ru [if] are shifted from conjunctions like "where", "when", "whenever", "provided", "provided that", "as long as", "unless" and "in order" (For the number of occurrences of each case, please refer to Appendix 6). Shifts of conjunctions into 如果 ruguo [if] are also triggered by the same conjunctions as 如 ru [if], except that there are also other additions of "insofar as", "while" and "as soon as". Here we can see some shift from *temporal* ("when", "whenever", "while", "as soon as") and *spatial/situation*[55] conjunctions ("where", "insofar as") into *conditional: positive: if...then*. 如 ru [if] and 如果 ruguo [if] may be natural equivalents to some of these

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[54] 1,451/1,840*100

[55] Addition of *situation* to the *spatial* category is due to the researcher's belief that "where" and "insofar as" are not solely used for the description of the spatial relation but also used as a description of the situational relation. For example in the sentence 'Where the European Communities exercise their right to vote, they shall have a number of votes equal to the number of their member States which are Members of the WTO.' (62_WTO), "where" is not used to indicate time but more so as indication of situation.

conjunctions given in a particular context, although they may not formally correspond. Even SFL seems to acknowledge 如果…的时候 ruguo…de shihou [if…the time] as equivalent to "when" (see Table 2.4), with the addition of 的时候 de shihou [the time]. Also, it has been mentioned in Section 4.4.4 that Alcaraz and Hughes (2002) view some of these conjunctions as part of *conditional* and *hypothetical* formulations. Therefore, it has to be stressed, at the moment, that this research does not support that only formal correspondence is the translation for certain conjunctions. Thus, I am not here to argue against or for shifts, but this research is meant to highlight shifts that have taken place or strategies that the translators have employed. Therefore, for cases like these, as there is indeed shift of functions, i.e. from *temporal* or *spatial/situation* into *conditional: positive: if... then*, it will be reported as such. As for "provided", "provided that" and "as long as", they also have been grouped as part of *conditional* and *hypothetical* formulations by Alcaraz and Hughes (2002). Although the English SFL does not differentiate further these conjunctions from the *conditional: positive: if...then*, the Chinese SFL does so (see Table 2.4). The Chinese SFL gives a more detailed difference between these words which should be more formally translated as 只要 zhiyao [if only], i.e. *conditional: positive: as long as*, rather than 如 ru [if] and 如果 ruguo [if]. Other shifts are "unless"- a *conditional: negative* and "in order"- a *causal: purpose* conjunction which are shifted into *conditional: positive: if...then*. All these shifts, formally speaking, cause changes of logical-semantic meaning, although they may be of natural equivalence. Based on the meaning of the relationship, it is hard to pinpoint if the shifts have caused explicitation or implicitation of meaning. Thus, I can only resort to saying that there are some partial shifts in meaning.

There are also many other conjunctions which have shifted into 而 er [and], which is not monolithic as it can be *additive* or *adversative*. Among conjunctions that are shifted into 而 er [and], are "provided", "unless", "as", "thus", "and thus", "since", "therefore", "while" and "so as". There are also cases where 但 dan [but] is translated from "except that" which is a *subtractive variation* conjunction, "provided that" and "provided" which are *conditional: positive: as long as*, "unless" which is a *conditional: negative* conjunction, "in any case" which is a textual *elaborative dismissive* conjunction and "if" which is a *conditional: positive* conjunction. These

kinds of shift may cause slight shifts of meaning, even though some may be natural equivalents. 但 dan [but] is also shifted from the more meaningful *conditional: concessive/adversative* to the less meaningful of the *additive* "and", as additive "and" is considered as conjunctions with low semantic meaning (Halverson, 2004). This is implicitation.

In addition, *conditional: positive: as long as* 只要 zhiyao [if only] has shifted from "whenever" which is a *temporal* conjunction and "if" which is a *conditional: positive: if...then* conjunction. 只要 zhiyao [if only] also has been translated from "wherever" which is tagged as RRQV (wh-ever general adverb) but should be tagged as a hypotactic *spatial/situational* conjunction, and translated from "providing" which is tagged as VVG (-ing participle of lexical verb) but should also be tagged as *conditional: positive: as long as*. This shows some limitations of tagging and calls for more accurate taggers. 除非 chufei [unless], a *conditional: negative*, has been shifted from "except that", a *subtractive variation*, which may also give a subtle shift of meaning, although they may be natural equivalents.

There is also 尽管 jinguan [although] which has been translated from "nevertheless", changing from a textual into a hypotactic conjunction. This changes the construction but not the meaning as both are *conditional: concessive*. Perhaps this shift may be interpreted as implicitation when textual conjunctions which are used to organise texts at the inter-sentential level are downgraded to taxis conjunctions which are used at the intra-sentential level.

Example 15 below shows how the conjunction "provided", a *conditional: positive: as long as*, is shifted into 如果 ruguo [if], a *conditional: positive: if...then*. Looking at the sentence, use of 如果 ruguo [if] seems a natural equivalent. However, if care is taken in providing a formal correspondent, 只要 zhiyao [if only] may be a better choice. Nevertheless, 只要 zhiyao [if only] is not rampantly used in the NT; there are 44 in the NT as opposed to 210 in the TT. This raises questions regarding how the NT may have linked this logico-semantic relationship without the use of conjunctions.

Example 15

> The provisions of this Article shall not prevent the development of closer cooperation between two or more Member States on a bilateral level, in the framework of the WEU and the Atlantic Alliance, <u>provided</u> such cooperation does not run counter to or impede that provided for in this Title. (24_EU)
> 本条款不阻止在西欧联盟和大西洋同盟框架内两个或多个成员国之间发展更紧密的双边合作，<u>如果</u>该合作不违背或损害本条款所述内容。
> [Back translation:…<u>if</u> such cooperation does not…]

6.1.5.2 Shifted from Prepositions or Prepositional Phrases

Shift into conjunctions may also be due to shift from prepositions or prepositional phrases. For example, 如 ru [if] and 如果 ruguo [if] are shifted from the preposition "in the event of". According to the table of conjunctions in SFL (see Table 2.2), "in the event of" gives the same meaning as the *conditional: positive: if...then*, except that it is a non-finite preposition, since "in the event of" should be followed by a non-finite verb. However, example 16 below shows that "in the event of" is followed by "a complaint" which is a noun. Very interestingly, the *Synoptic Summary of Expansion* (Halliday and Matthiessen, 2004: 598-600) places this prepositional phrase which is followed by a noun as circumstantiation, and it is also a type of *enhancement: conditional: positive*. This is also an example of a congruent grammatical metaphor. Thus, in terms of meaning, "in the event of" will provide the same meaning, however, in terms of syntax, "in the event of" is a preposition; thus from a minor phrase, now shifted into a major clause which is a structural explicitation. Besides "in the event of", the preposition "for" is also shifted into 如 ru [if], which may have some form of shift of meaning as "for" is usually used as *causal: purpose*, but 如 ru [if] is a *conditional: positive: if...then*.

以 yi [so that], a *causal: purpose* conjunction, is said to be "shifted" from the prepositions "for", "in", "towards", "by", "against" and "at", and also the prepositional phrases like "with the aim of", "in support of", "with the objective of" and "to the end"; and 以便 yibian [so that], is also "shifted" from the preposition "for" and the prepositional phrases "with the aim of", "with the objective of", "with a view to", "for the purpose of", "to the end that" and "on the basis of". "For" is

listed in SFL as a non-finite preposition which does the work of *causal: purpose*; similar to the prepositional phrase "with the aim of". Accordingly, there is no change of meaning. "In", "towards", "in support of", "with the objective of", "to the end", etc. which also might do the work of *causal: purpose* are not listed in Halliday and Matthiessen's (2004) SFL list. Here, I would like to propose a more thorough list with words added on as new entries in the list. The use of the preposition "against" in "against unfair commercial use" is once more a type of circumstantial construction. The translation of "against unfair commercial use" into 以防止不正当的商业使用 [back translation: to prevent unfair commercial use] where the prepositional "against" is translated into 以防止 yi fangzhi [to prevent] is a natural equivalent. Some of the use of "in" is due to phrases like "in faith", "in witness" which is translated into 以昭信守 yi zhao xinshou [literally: to show honour] and 以资证明 yi zi zhengming [literally: to provide proof]; some "at" are due to phrases like "at their disposal" which is translated into 以供使用 yi gong shiyong [literally: to supply use]. These fixed expressions and semi-fixed expressions are target language expressions. Nevertheless, it is found that the use of these fixed or semi-fixed phrases is similar in the TT and the NT where the TT use them 32 times while the NT use them 31 times.

The English prepositional phrases "for the purposes of", "with respect to", "as regards", "in the sense that" and "as the case may be" trigger the 而 er [and] in phrases like 就 jiu [concerning]/对 dui [as regards]…而言 er yan [regarding] which means "as regard"; and they also tigger the usage of the phrase 而定 er ding [and set]. These are types of semi-fixed phrases in the target language, but many are not be found in the NT. There is a total of 158 of these phrases in the TT but only 57 in the NT.

In addition, 只要 zhiyao [if only] is also shifted from prepositional phrases "to the extent" and "on condition that" which give similar meaning. 尽管 jinguan [although] is also translated from the prepositions "notwithstanding" and "despite" which may give the same meaning, but "irrespective of" may have a slight change of meaning.

除非 chufei [unless] is also shifted from the prepositions "except", and "save", which is an old and formal alternative for the word "except". 无论 wulun [whether] is shifted from prepositional "irrespective of" which may give the same meaning, and "notwithstanding" which may cause some shifts in meaning. If the shifts present the same meaning, those would be examples of grammatical metaphor.

If we compare the parallel texts alone, sometimes shift seems inevitable because of language constraints, for example, when the prepositional "notwithstanding" is translated into its closest correspondent 尽管 jinguan [although]. The use of 尽管 jinguan [although] has to be followed by a verb where the translators will add verbs like 有 you [have] to make it grammatically correct.

Example 16 shows how the prepositional phrase of "in the event of" is translated into the conjunction 如 ru [if], changing a minor phrase into a major clause without changing the meaning. This is an example of a grammatical metaphor.

Example 16
> In the event of a complaint by a supplier that there has been a breach of this Agreement in the context of a procurement, each Party shall encourage the supplier to seek resolution of its complaint in consultation with the procuring entity. (53_procurement)
> 如供应商就在一项采购过程中存在违反本协定情况提出申诉，则每一参加方应鼓励该供应商与采购实体进行磋商以寻求解决其申诉。
> [Back translation; If the supplier in the context of procurement in the process breach of this Agreement filed a complaint, then…]

6.1.5.3 Shifted from Infinitive "to"

There are also many cases of 以 yi [so that] and 以便 yibian [so that] which are translated from the infinitive "to". In fact, the use of 以 yi [so that] and 以便 yibian [so that] can be considered as perfect formal correspondences for "to", as "to" is listed in SFL as a non-finite preposition which does the work of *causal: purpose/result* (see Table 2.2), similar to the function of 以 yi [so that] and 以便 yibian [so that]; and some of the uses of 以 yi [so that] and 以便 yibian [so that] are directly followed by a verb, not the subject. Thus, this "shift" may be a "shift"

because of differences in the categorisation of typology. Example 17 below shows the infinitive "to" has been translated perfectly into 以 yi [so that]. However, it needs to be noted that there are 420 instances of 以 yi [so that] in the TT, but only 141 of 以 yi [so that] in the NT; and 154 of 以便 yibian [so that] in the TT but only 92 in the NT.

Example 17
> The provisions of paragraphs 4 through 8 below shall not be used by a Member to refuse to conduct negotiations or to conclude bilateral or multilateral agreements.
> 一成员不得使用以下第 4 款至第 8 款的规定，以拒绝进行谈判或订立双边或多 边协定。(40_ intellectual property rights)

6.1.5.4 Shifted from Adverbs/Relative Pronouns

There are also some cases where 以 yi [so that] shifts from the adverb "thereby" and "so"; 以便 yibian [so that] is shifted from the relative pronoun "when"; 无论 wulun [whether] is also shifted from adverbs such as "however", "whether", "either", "neither", "whatever", "wherever", "irrespective of", "regardless" and "notwithstanding" which may be natural equivalents, depending on context. These may be examples of grammatical metaphors if they give congruent meaning. There are cases where meaning is changed, for example the "when" which is tagged as RRQ (wh-general adverb) and can be considered as a pronoun for the non-defining relative clause, is transferred into 以便 yibian [so that] in example 18 below, where there are changes of the relationship from *elaboration: description of time* into *enhancement: causal: purpose.*

Example 18
> Such notifications shall take place at an early appropriate stage, when amendments can still be introduced and comments taken into account… (52_barriers)
> 此类通知应在早期适当阶段做出，以便进行修正和考虑提出的意见…
> [Back translation;…to carry out amendments and …]

6.1.5.5 Shifted from Verbs

There are also a few cases where 以 yi [so that] and 以便 yibian [so that] are shifted from verbs which may trigger their use, like "aim". The verb "aim" can be a form of a main verb, or a verb in a relative clause like "which aims", or a verb as part of a

participle construction like "aimed at" in example 19 below. In this example, based on SFL, translation into 以 yi [so that] from the past-participle "aimed at" has seen a shift from an *elaborative descriptive* of a non-definite relative clause with the overt meaning "aim" into an *enhancement: causal: purpose*. Halliday and Matthiessen (2004) also place verbs like "try" in the same semantic category of *enhancement: causal: purpose*. Presumably, the word "aim" gives a similar meaning as "try" and will be a grammatical metaphor.

Example 19

Without prejudice to other provisions of this Treaty, Member States shall coordinate their action <u>aimed at</u> protecting the financial interests of the Community against fraud.
在不违背本条约其他条款情况下，成员国应协调行动，<u>以</u>保护共同体的财政利益免遭欺诈。(24_EU)

The use of 如 ru [if] and 如果 ruguo [if] is also caused by the usage of "should" and "had". These are model verbs sometimes used to refer to possible events. The shift in example 20 is a natural equivalent shift.

Example 20

<u>Should</u> the Conference adopt a new Convention revising this Convention in whole or in part, then, unless the new Convention otherwise provides…
如大会通过一项对本公约作全部或局部修正的新公约，除该新公约另有规定外，则…(17_ILO)

The above six reasons shed some light on linguistic shifts which may or may not change meaning, and which may or may not change structure[56]. This information is vital to inform research on situations where the translators may shift elements in the ST into conjunctions.

6.1.6 Summary of Findings for Analyses of Explicitation and Shift Into Conjunctions

1. This research has found that there is 33.38% pure explicitation. Types that experience pure explicitation are 38, or 59.38%, compared to the total types of 64. Of these 38 types, three types of conjunctions are due totally to pure

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[56] This is due to the typological differences between the languages.

explicitation of the translators, while four have a percentage of pure explicitation more than 70%.

2. The semantic categories of pure explicitation have shown us the general inferential makeup of the translators where the *conditional: positive: if...then* (44.92%) is followed by *addition* (37.38%) and *conditional: concessive/adversative* (9.40%).

3. Based on the ten most explicitated conjunctions, six reasons are found to account for pure explicitation of conjunctions in institutional texts. These are: conjunctions are added after or in replacement of punctuations; conjunctions are added before phrases in the ST; conjunctions are explicitated because of the presence of other lexis; conjunctions are added after a change of structure; conjunctions are added because the translators added phrases or clauses that are not found in the ST; and conjunctions are added as their correlative counterparts.

Explicitation may be due to the translators explicitating the logogenesis of the sentence, but different translators may have different interpretations of such logogenesis. Pure explicitation causes addition of meaning as the meaning is carried by the conjunctions. However, sometimes, when the whole structure is reshuffled in the Chinese language, where the focuses are changed, it is hard to pinpoint whether explicitation of conjunctions has caused explicitation of meaning. As for the explicitation of the other counterparts of correlative conjunctions, occurrences may reinforce the binding of clauses. Explicitation of conjunctions can also be due to the "influence" of the target language where there is an overrepresentation of typical fixed or semi-fixed phrases of the target language, and not so much influence of the NT. Some cases of explicitation also cause syntactical explicitation where relative clauses are changed into main clauses. Not all cases of pure explicitation are negative moves by the translators, as it is found that there are more 但 dan [but] and 并 bing [and] in the NT, where explicitation is most welcome.

4. Shifts from other conjunctions is 8.02%, while the shifts from other word groups comprise 13.93%, making a total 21.95% of shifts into conjunctions in the TT. 54 types out of 61 types of conjunctions used, 79.69% of types, are partly due to shifts.

5. Based on the top ten most common shifts from other conjunctions and non-conjunctions into conjunctions, six reasons have been found account for the shifts into conjunctions. They are shift from other conjunctions, shift from prepositions or prepositional phrases, shift from the infinitive "to", shift from adverbs/relative pronouns, and shift from verbs.

Some shifts from other conjunctions may be natural equivalents although they may give some subtle shifts in the logical-semantic relations. Some examples have also shown that shifts cause implicitation of meaning as the conjunctions are shifted into conjunctions with lesser meaning. Shifts from other non-conjunctions may also be natural equivalents where SFL calls them grammatical metaphors, as there are no changes in meaning but changes in form. There are also cases where meaning is changed.

In terms of syntactical shift, there is also shift from textual into hypotactic conjunctions which may not change the meaning but may be interpreted as syntactical implicitation, as textual construction is used to organise the texts while hypotactic construction is used to join events at sentence level. In some cases, the shift from prepositions or prepositional phrases may not cause changes in meaning but may cause changes from a minor construction, i.e. a phrase, into a major construction, i.e. a clause. So, we can interpret it as syntactical explicitation.

Due to the tagging criteria and some typological differences between languages, it is found that shifts from some prepositions, prepositional phrases and the infinitive "to" into 以 yi [so that] and 以便 yibian [so that] may sometimes be considered as formal correspondences, as both present the same semantic functions and syntax. It is also interesting to find that some of

the conjunctions used are so integrated into the clauses/phrases that they are more or less fixed or semi-fixed clauses/phrases of the target language like 以昭信守 yi zhao xinshou [literally: to show honour] which is a norm in the NT, but 而言 er yan [regarding] which is not.

The study on shift has also shown us some problems in tagging where there may be some conjunctions which are left out like "wherever" which should be tagged as conjunctions, although some others are truly adverbs. By studying shifts, it is also confirmed that the list which Halliday and Matthiessen (2004) provides in SFL is not exhaustive, as there are many more prepositions and prepositional phrases, like "in support of" which may perform the same semantic functions and so they should be also added to the list.

By studying cases of shift, and comparing their occurrences with the corresponding elements in the NT, we may understand that although the conjunctions may be natural equivalents for the source language, the use of these conjunctions is not rampant in the NT. Sometimes, when comparing ST-TT, shift seems "inevitable" because of language constraints.

The above findings exhibit that there is pure explicitation and shift into conjunctions. In the next section, we shall explore pure implicitation and shift-out of conjunctions.

6.2 Implicitation and Shift-Out of Conjunctions

While Section 6.1 deals with explicitation and shift into conjunctions, this section focuses on implicitation and shift-out of conjunctions. For this part, the conjunctions will be first identified in the ST and the corresponding rendition of the ST conjunctions will be identified to check for implicitation and shift. The section is to answer research question 2b.

> (2b) What are the conjunctions that are made more implicit or have shifted in the Chinese translation of the English institutional texts? What are the linguistics reasons for the change?

6.2.1 Pure Implicitation

In this section, conjunctions in the ST which are tagged but their equivalent tangible elements cannot be found in the TT, will be counted as implicitation. Table 6.4 gives evidence that translators not only explicitate but also implicitate.

Table 6.4 Frequency and percentage of pure S-implicitation

No.	Conjunctions	Frequency of conjunctions	Implicitation	Percentage
1.	and	2,278	559	24.54
2.	if	1,144	80	6.99
3.	where	479	56	11.69
4.	as	350	105	30.00
5.	when	342	21	6.14
6.	unless	249	2	0.80
7.	but	203	9	4.43
8.	provided that	200	5	2.50
9.	however	197	6	3.05
10.	after	166	0	0.00
11.	in order	148	7	4.73
12.	as soon as	102	0	0.00
13.	before	90	0	0.00
14.	whenever	64	1	1.56
15.	until	61	5	8.20
16.	so as	59	6	10.17
17.	while	57	5	8.77
18.	insofar as	50	13	26.00
19.	provided	48	11	22.92
20.	as far as	43	2	4.65
21.	therefore	29	1	3.45
22.	as long as	28	3	10.71
23.	furthermore	27	1	3.70
24.	nevertheless	27	2	7.41
25.	even if	26	0	0.00
26.	because	23	1	4.35
27.	in addition	21	0	0.00
28.	so that	20	2	10.00
29.	considering that	19	0	0.00
30.	as if	15	3	20.00
31.	except that	15	0	0.00
32.	accordingly	14	0	0.00

33.	once	13	1	7.69
34.	then	13	0	0.00
35.	although	12	0	0.00
36.	and then	10	1	10.00
37.	but also	10	0	0.00
38.	even though	10	0	0.00
39.	rather than	10	0	0.00
40.	moreover	9	0	0.00
41.	so long as	8	1	12.50
42.	whilst	8	3	37.50
43.	since	7	0	0.00
44.	thus	7	0	0.00
45.	whereas	7	0	0.00
46.	consequently	6	0	0.00
47.	in any case	6	1	16.67
48.	likewise	6	0	0.00
49.	even when	4	0	0.00
50.	in case	4	0	0.00
51.	though	3	0	0.00
52.	also	2	1	50.00
53.	and thus	2	0	0.00
54.	as well	2	1	50.00
55.	first	2	0	0.00
56.	otherwise	2	0	0.00
57.	providing that	1	0	0.00
58.	similarly	1	0	0.00
59.	yet	1	0	0.00
	Total	6,760	915	13.54

Based on the figures in the above table, the total amount of implicitation is 13.54%, a percentage which is far less than the explicitation of 33.38%. Of all the 59 types of conjunctions, 31 types, or 52.54%, experience implicitation, which is only slightly fewer than the types of conjunctions which experience explicitation, i.e. 59.38%.

Based on the percentages, unlike in the explicitation section where there are three conjunctions which are totally explicitated by the translators, here there is no conjunction which is totally implicitated. Also unlike the explicitation section where there are four conjunctions with pure explicitation of more than 70%, here there are only two conjunctions, i.e. "also" and "as well" in which the implicitation percentage is 50%, but even that too does not give a very good representation of the

implicitation in the TT because both of their total frequencies is just two. Beside these two conjunctions, there are only two more conjunctions with implicitation of more than 30%, i.e. "as" with 30% and "whilst" with 37.50%. These findings suggest that although there is implicitation in the translation of conjunctions, the percentage of individual implicitation is not as high as explicitation.

6.2.2 Pure Implicitation Based on Semantic Categories

Like the percentages of explicitation of semantic categories, the table below shows how conjunctions are grouped, based on Halliday and Matthiessen's (2004) semantic categories and their percentages of implicitation:

Table 6.5 Frequency and percentage of pure S-implicitation based on semantic categories

Semantic categories	Frequency in source texts	Percentage
Elaboration	1	0.11
Addition	562	61.42
Temporal: same time	10	1.09
Temporal: different time	27	2.95
Spatial/situation: point	56	6.12
Spatial/situation: extend	2	0.22
Causal: reason	2	0.22
Causal: purpose	120	13.11
Conditional: positive: if...then	80	8.74
Conditional: positive: as long as	33	3.61
Conditional: positive: only if	0	0.00
Conditional: positive: whatever	0	0.00
Conditional: negative	2	0.22
Conditional: concessive/adversative	17	1.86
Manner	3	0.33
Total	915	100.00

The table above shows that translators prefer to implicitate *addition* with a percentage of 61.42%, followed by *causal: purpose* with a percentage of 13.11% and *conditional: positive: if...then* with a percentage of 8.74%.

6.2.3 Reasons for Pure Implicitation of Conjunctions

Understanding the reasons for implicitation will help translators to recognise in what situation conjunctions can be implicitated. Based on the top ten most implicitated conjunctions, i.e. "and", "as", "if", "where", "when", "insofar as", "provided", "but", "in order" and "however"[57], with combined percentage of pure implicitation of 94.75%[58], Sections 6.2.3.1 through 6.2.3.5 below provide some findings.

6.2.3.1 Replacement with Punctuation

There are some cases where conjunctions are replaced with punctuation. For example, some cases of "and" have been implicitated, in turn, substituted by use of semicolons and full stops. Example 21 illustrates this phenomenon where a long sentence which is connected by "and" is translated by adding a full stop without explicitation of *additive* conjunctions. This shows implicitation of meaning as the absence of conjunctions may give the reader a freer hand in interpretation of the relationships based on what they perceive as the logogenesis of the sentence. This may be a good move as it is found that there are more full stops in the NT.

Example 21

> Done in Paris this seventeenth day of November 1970, in two authentic copies bearing the signature of the President of the sixteenth session of the General Conference and of the Director-General of the United Nations Educational, Scientific and Cultural Organization, which shall be deposited in the archives of the United Nations Educational, Scientific and Cultural Organization, <u>and</u> certified true copies of which shall be delivered to all the States referred to in Articles 19 and 20 as well as to the United Nations.
> １９７０年１１月１７日订于巴黎。两个正式文本均有大会第十六届会议主席和联合国教育、科学及文化组织总干事的签名，将交存于联合国教育、科学及文化组织的档案库中。验证无误之副本将分送第十九条到第二十条所述之所有国家和联合国。(05_means of prohibiting)

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[57] There are two conjunctions which have the same frequency, i.e. "however" (6) and "so as" (6). "However" has been chosen as it appears first.
[58] 867/915*100

6.2.3.2 Change of Structure

There are also cases where structures are changed and, in the process, implicitation of conjunctions arises. Among the conjunctions which experience this are "where", "when", "in order" and "insofar as". Example 22 shows "in order" omitted when the structure of the whole sentence is changed, thus implicitating the relationship denoted by the conjunction. This example also shows the uniqueness of the Chinese language where two verbs can occur in a language without being linked by conjunctions, i.e. in this example, 召开 会议 [study the revision matter], 研究 修改事宜 [revise the matter] are connected without a conjunction. The verb-phrase 1 (VP1) – verb-phrase 2 (VP2) structure is very common in Chinese, with the action denoted by VP2 as the purpose for the action denoted by VP1, or with the action denoted by VP1 as the manner of the action denoted by VP2. Again, this strategy of binding without use of conjunctions may be employed by the translators.

Example 22

> A conference shall be convened by the Director General of the International Atomic Energy Agency at any time after the expiry of a period of five years from the date of the entry into force of this Convention <u>in order</u> to consider the revision thereof, if one-third of the Contracting Parties express a desire to that effect.如果三分之一的缔约国表示愿意修改本公约，国际原子能机构总干事应在本公约生效之日起五年期满后的任何时候召开会议*研究修改事宜。(06_Vienna)
> [Back translation: If one-third of the Contracting Parties considers the revision of this agreement, the Director General of the International Atomic Energy Agency should at any time after the expiry of a period of five years from the date of the entry into force of this Convention convene a conference *study the revision matter.]

6.2.3.3.1 Complete Implicitation

There are also many conjunctions which experience complete implicitation, among them are "and", "if", "as", "where", "when", "but", "in order", "provided", "insofar as" and "however". Example 23 below is a case where the conjunction "insofar as" is completely implicitated giving precedence to use of the adverb "except" which is shifted into 除非 chufei [unless]. Looking at the translation, it seems that although the TT may not give the full meaning as the ST, the translation seems natural.

Example 23
> Except <u>insofar as</u> the law of the Installation State may provide to the contrary, the operator shall not be liable for nuclear damage caused by a nuclear incident directly due to a grave natural disaster of an exceptional character.
> 管理人对由特大自然灾害直接引起的核事件所造成的核损害不负任何责任，除非*装置国的法律有相反的规定。 (06_Vienna)
>
> [Back translation: …unless the law of the Installation State may provide to the contrary.]

6.2.3.4 Omitted Phrases or Clauses

There are also cases where phrases or clauses are completely omitted causing the conjunctions that go with them to disappear. Some of conjunctions that experience this are "if", "as" and "where". Example 24 shows the phrase "if any" which is the ellipsis of "if there is any" and which has been omitted in the translation.

Example 24
> With a view to assessing for each person referred to in Article 10 the amount of annual contributions due, <u>if any</u>, and taking account of the necessity to maintain sufficient liquid funds, the Assembly shall for each calendar year make an estimate in the form of a budget of…
> 为了估算按第十条所述第人应缴纳的年度摊款金额和*考虑到维持足够的流动基金的需要，大会须于每一日历年以预算的形式对下列项目作出估计…
> (12_oil pollution damage)

6.2.3.5 Double Conjunctions into Single Conjunctions

There are also cases where the ST uses two conjunctions side-by-side and they are replaced by one conjunction. For example, "provided" is not translated as there is another conjunction "however" which is present. Example 25 below showcases this phenomenon where "provided" is not translated, but "however" in the ST has been translated as 但 dan [but].

Example 25
> The provisions of paragraph 2 shall not apply to photographic works or to works of applied art; <u>provided, however</u>, that the term of protection in those Contracting States which protect photographic works, or works of applied art insofar as they are protected as artistic works, shall not be less than ten years for each of said classes of works.

本条第（二）款的规定不适用于摄影作品或实用美术作品；但这些缔约国对摄影作品或实用美术作品作为艺术品给予保护时，对上述每一类作品规定期限不得少于１０年。(04_copyright)

All the reasons and examples given in this section indicate to us that, indeed, some conjunctions are implicitated by translators when they translate and can be implicitated. In the section below, we will move on to look at the identification of shift-out of conjunctions.

6.2.3 Shift into Other Conjunctions and Non-Conjunctions

Shift-out of conjunctions happens when the conjunctions in the ST are shifted either to other conjunctions or into other word groups.

Table 6.6 Frequency and percentage of shift-out of conjunctions

No.	English conjunctions	Shifts into other conjunctions	Percentage	Shifts into non-conjunctions	Percentage	Total shifts	Percentage
1.	and	27	1.19	43	1.89	70	3.07
2.	if	20	1.75	50	4.37	70	6.12
3.	where	269	56.16	154	32.15	423	88.31
4.	as	9	2.57	209	59.71	218	62.29
5.	when	114	33.33	207	60.53	321	93.86
6.	unless	11	4.42	17	6.83	28	11.24
7.	but	1	0.49	5	2.46	6	2.96
8.	provided that	99	49.50	5	2.50	104	52.00
9.	however	1	0.51	5	2.54	6	3.05
10.	after	0	0.00	166	100.00	166	100.00
11.	in order	5	3.38	96	64.86	101	68.24
12.	as soon as	1	0.98	90	88.24	91	89.22
13.	before	0	0.00	90	100.00	90	100.00
14.	whenever	39	60.94	23	35.94	62	96.88
15.	until	0	0.00	56	91.80	56	91.80
16.	so as	8	13.56	12	20.34	20	33.90
17.	while	6	10.53	40	70.18	46	80.70
18.	insofar as	3	6.00	22	44.00	25	50.00
19.	provided	18	37.50	1	2.08	19	39.58

20.	as far as	0	0.00	41	95.35	41	95.35
21.	therefore	1	3.45	0	0.00	1	3.45
22.	as long as	2	7.14	7	25.00	9	32.14
23.	furthermore	0	0.00	10	37.04	10	37.04
24.	nevertheless	1	3.70	12	44.44	13	48.15
25.	even if	0	0.00	0	0.00	0	0.00
26.	because	0	0.00	2	8.70	2	8.70
27.	in addition	0	0.00	1	4.76	1	4.76
28.	so that	4	20.00	1	5.00	5	25.00
29.	considering that	0	0.00	19	100.00	19	100.00
30.	as if	0	0.00	12	80.00	12	80.00
31.	except that	15	100.00	0	0.00	15	100.00
32.	accordingly	0	0.00	2	14.29	2	14.29
33.	once	0	0.00	2	15.38	2	15.38
34.	then	0	0.00	1	7.69	1	7.69
35.	although	0	0.00	0	0.00	0	0.00
36.	and then	5	50.00	2	20.00	7	70.00
37.	but also	0	0.00	5	50.00	5	50.00
38.	even though	0	0.00	0	0.00	0	0.00
39.	rather than	0	0.00	1	10.00	1	10.00
40.	moreover	0	0.00	4	44.44	4	44.44
41.	so long as	0	0.00	5	62.50	5	62.50
42.	whilst	1	12.50	2	25.00	3	37.50
43.	since	1	14.29	0	0.00	1	14.29
44.	thus	2	28.57	0	0.00	2	28.57
45.	whereas	0	0.00	1	14.29	1	14.29
46.	consequently	2	33.33	1	16.67	3	50.00
47.	in any case	0	0.00	6	100.00	6	100.00
48.	likewise	0	0.00	0	0.00	0	0.00
49.	even when	0	0.00	1	25.00	1	25.00
50.	in case	0	0.00	0	0.00	0	0.00
51.	though	2	66.67	0	0.00	2	66.67
52.	also	0	0.00	0	0.00	0	0.00
53.	and thus	2	100.00	0	0.00	2	100.00
54.	as well	0	0.00	1	50.00	1	50.00
55.	first	0	0.00	0	0.00	0	0.00
56.	otherwise	0	0.00	0	0.00	0	0.00
57.	providing that	0	0.00	1	100.00	1	100.00
58.	similarly	0	0.00	1	100.00	1	100.00
59.	yet	0	0.00	0	0.00	0	0.00
	Total	669	9.90	1,432	21.18	2,101	31.08

The total percentage of shift-out of conjunctions is 31.08%, which is more than the total percentage of shift into conjunctions of 21.95%. This total shift is a combination of shift into other conjunctions which are not of similar meaning (9.90%) and shift into non-conjunctions (21.18%). There are 50 types out of 59 types of conjunctions, or 84.75% of the types of conjunctions, which experience shift-out of conjunctions.

The top ten shifts are "where", "when", "as", "after", "provided that", "in order", "as soon as", "before", "and" and "if". From these, "where" and "provided that" are mostly due to shifts into other conjunctions; while "when", "as", "after", "in order", "as soon as", "before", "and" and "if" are mostly due to shifts into non-conjunctions. These top ten shifts accounts for 78.72%[59] of shifts.

6.2.3 Reasons for Shift into Other Conjunctions and Non-Conjunctions

Subsections 6.2.5.1 through 6.2.5.5 provide some reasons for shift. By researching the reasons of shift, we may understand in what situation translators have shifted, especially into non-conjunctions. Perhaps, these strategies can make the TT more like the NT.

6.2.5.1 Shifted into Other Conjunctions

There are many cases where conjunctions are shifted into other conjunctions. For example, the conjunction "as" which is usually a hypotactic *causal: reason/purpose* is shifted into 从而 conger [thus] which is paratactic *causal: purpose*. This shift will not change the meaning of the relationship but perhaps there may be some minor changes in the syntax. When a hypotactic conjunction is shifted into a paratactic conjunction, it can be said to be explicitation as the paratactic construction is a major construction compared to the hypotactic construction. "As", which is a hypotactic *causal: reason/purpose*, is also shifted into 一俟 yisi [as soon as] which is a

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[59] 1,654/2,101*100

temporal: same time conjunction and 以致 yizhi [with the result that (bad result)] which is a *spatial/situation: extend* conjunction, which may be a natural equivalent depending on the context. However, changes like these may have caused subtle changes in meaning. "As" is also translated using more neutral conjunctions or conjunctions with little semantic content like 而 er [and] and 并 bing [and] which bind sentences with *additive* meaning. It is also translated as 以及 yiji [as well as], which is a phrasal coordinating conjunction forming phrase/group complexes. In this case, we may say that there is an implicitation of meaning.

An example of a conjunction which shifts into another conjunction is "where" which is *spatial/situation: point*. It is shifted into 如 ru [if], 如果 ruguo [if] and 若 ruo [if], which are *conditional: positive: if...then*; and 如 ru [if]…时 shi [time], 如果 ruguo [if]... 时 shi [time] and 如 ru[if] 在 zai [in]… 时 shi [time] which are combinations of the *conditional: positive: if...then* and the *temporal: different time* with the addition of 时 shi [time]. Even though they may be natural equivalents, these shifts can cause some shifts in meaning. "Where" is also shifted into 一旦 yidan [once], 但是 danshi [but] and 虽 sui [though].

"When" is shifted into 如 ru [if], 如果 ruguo [if], 如 ru [if]…时 shi [time], 如果 ruguo [if]... 时 shi [time], 如 ru [if] 在 zai [in]…中 zhong [in], 如 ru [if] …后 hou [after] and 若 ruo [if]. The *conditional: positive: if...then*, like 如 ru [if], seems to be quite a popular translation for "when". Even in the conjunctive table given by Li (2007) (see Table 2.4), Li also considers 如 ru [if] with 时 shi [time] as an equivalent for "when". Technically, 如 ru [if] alone is not a formal correspondence for "when", however, it can be a natural equivalent with a slight change of meaning. Together with 时 shi [time], usually tagged as a noun (n), the 如 ru [if]… 时 shi [time] construction is a full formal correspondence of "when". The use of 在 zai [in]…中 zhong [in] and 后 hou [after] after the *conditional: positive: if...then* may also be a form of conjunction and therefore, in future, it is hoped that the automatic tagger of SFL will be able to identify these constructions as part of words that make up

conjunctions. "When" is also shifted to a word of lesser meaning, namely 且 qie [and].

"Provided that" which is *condition: positive: as long as* is shifted into 如果 ruguo [if] which is *conditional: positive: if...then*. "Provided that" is also translated as 但下列情况下在此限 [but the situation below is limited…] where the target conjunction is has an extra phrase so that the whole construction is closer to the source conjunctions. In addition, "provided that" has also been translated into a word of lesser meaning of 并且 bingqie [and].

"In order", which is a hypotactic *causal: purpose* conjunction, has been shifted into 从而 conger [thus] which is paratactic *causal: purpose*, causing explicitation syntactically but without any change of meaning. In addition, "in order" is translated into 如 ru [if], which is *conditional: positive: if...then* which is of different meaning, and *additive* 并 bing [and] which is of lesser meaning.

"As soon as" is a *temporal: same time* which is shifted into 如果 ruguo [if]…事先已 shixian yi [before hand] which is *conditional: positive: if...then* with an added adverb phrase which gives added meaning to complete the meaning set forth by the ST conjunctions.

"And" which is quite a neutral conjunction in the *additive* semantic category is translated as 同时 tongshi [at the same time]. "And" and 同时 tongshi [at the same time] are quite similar and the changes in meaning are not that different, except that 同时 tongshi [at the same time] gives more emphasis on time. "And" is also translated into 进而 jiner [and then] which is *temporal: different time*, 致 zhi [(so)...that] which is *spatial/situation: point*, 但是 danshi [but] and 但 dan [but] which are *conditional: concessive/adversative*, 从而 conger [thus] which is *causal: purpose*. These shifts cause explicitation of meaning. Shift in the usage of "and" has been predicted by many scholars (Schiffrin, 1987; Carston and Blakemore, 2005) as "and" is a semantically minimal content conjunction which relies on pragmatic interpretation.

"If", which is *conditional: positive: if...then*, is translated as 虽然 suiran [although], 即使 jishi [even if] and 但 dan [but] which are *conditional: concessive/adversative*, 由于 youyu [due to] which is *causal: reason* and 只要 zhiyao [if only] which is *conditional: positive: as long as*. All these show some shifts in meaning. As for "if" which is "shifted" into 只有 zhiyou [only if] which is *conditional: positive: only if* because of the tagging based on the POS which does not join "only if" together, and also because of the English SFL which does not have a special category for this.

An example of shift is presented in example 26 where "as" has been translated into 一俟 yisi [as soon as]. This example shows a shift of meaning.

Example 26
> Any significant changes and/or developments in the agreements should be reported <u>as</u> they occur.
> 协定中任何重大变更和/或进展<u>一俟</u>发生即应报告。(46_article 24)
> [Back translation: Any significant changes and/or developments in the agreementsas soon as they occur should be reported.]

6.2.5.2 Shifted into Prepositions and Prepositional Phrases

The percentage of shift into other word groups is quite high. This is partly due to tagging limitations based on the traditional word categorisation where some words which would be tagged as conjunctions in SFL are tagged as prepositions or other word groups like nouns in the Chinese texts. For example, 当 dang [when]…时 shi [time] is tagged as a preposition…noun, 直至 zhizhi [until] is tagged as a verb, 在 zai[in]…前 qian [before] is tagged as a preposition…direction. If these words were to have been tagged in SFL, they would have been considered as perfect formal translations, and therefore, there would have been more formal correspondences. This has indeed shown that SFL is a better model to follow.

There are also many conjunctions which have been shifted into prepositions. The first type is the use of a preposition followed by 时 shi [time]. An example has been given in Section 6.1.5.1 where the shift is from other conjunctions into conjunctions followed by 时 shi [time]. Some prepositions are followed by 时 shi [time]; and even

some use of 时 shi [time] alone should also be changed into conjunctions based on SFL. In this study, I found that "if" is shifted into prepositions, such as 在 zai [in]/于 yu [in] …时 shi [time] and 时 shi [time]. Even though they may be natural equivalents, there will still be some subtle changes of meaning. "When" is shifted into other prepositions followed by 时 shi [time] and sometimes 时 shi [time] alone with the same meaning, and should be considered as formal correspondence. "As soon as" is also shifted into 在 zai [in]… 时 shi [time] which may involve some shift in meaning. "As soon as" is also translated as 在 zai [in]… 时 shi [time] with the addition of 即 行 jixing [immediate implementation] which completes the whole meaning of the conjunction, and can be a form of grammatical metaphor. "Where" is also translated into 在 zai [in]… 时 shi [time]/时候 shihou [time], 于 yu [in]… 时 shi [time] and 时 shi [time] alone, which may be natural equivalents with some changes in meaning. "As" is also shifted into 在 zai [in]… 时 shi [time], which may not change any meaning if it is used in the *temporal* sense, thus making it a formal correspondence.

Moving on, some of 前 qian [before] and 后 hou [after] which are tagged as directional words (f) should also be changed to be tagged as conjunctions if they function as such. "Before" is shifted into 在 zai [in]/对 dui [as regards]…之前 zhiqian [before]/前 qian [before] /以前 yiqian [before], 经 jing [through]… 后 hou [after] and 之前 zhiqian [before], which will not cause any change in meaning. "After" is shifted mostly to 后 hou [after], sometimes with prepositions like 在 zai [in]/ 经 jing [through], and some other times without, which will not change the meaning. Hence, these can be considered as formal correspondences. "When" is also translated as 后 hou [after], 在 zai [in]…后 hou [after], 当 dang [when]… 后 hou [after] and 以 yi [according to]… 后 hou [after], which should also be tagged as conjunctions, although the usage of 后 hou [after] may cause some shift in meaning.

The usage of 当 dang [when], which is traditionally tagged as a preposition should also be tagged as a conjunction in SFL. "As soon as" is translated into 当 dang [when] …即 ji [immediately], which is a grammatical metaphor. "Where" is shifted

also to 当 dang [when] and 当 dang [when]… 时 shi [time], which may be natural equivalents with some shifts in meaning.

Other uses of prepositions are for English conjunctions like "after", "in order", "when", "where" and "as" are as follows:

Table 6.7 Chinese prepositions as translations for "after", "in order", "when", "where" and "as"

No.	English Conjunctions	Prepositions
1.	after	经 jing [through], 经过 jingguo [through]
2.	in order	为 wei [for], 为了 weile [for]
3.	when	在 zai [in], 在 zai [in]…下 xia [in]/中 zhong [in], 如 ru [like], 按照 anzhao [according to], 为 wei [for the purpose of], 除 chu [except]…外 wai [besides]
4.	where	在 zai [in], 根据 genju [according to], 按 an [in compliance with], 对 dui [as regard], 在 zai [in]…/内 nei[in]/下 xia [below]
5.	as	与 yu [with], 在 zai [in], 按 an [according to], 由 you [by means of], 根据 genju [according to], 按照 anzhao [according to], 对 dui [as regard], 对于 duiyu [with regard to], 为 wei [for the purpose of], 为了 weile [for the purpose of], 于 yu [in], 经 jing [through], 依照 yizhao [according to], 依照 yizhao [according to] 由 you [by means of], 随着 suizhe [along with], 如 ru [like]

Some of these prepositions may again function as conjunctions like 为了 weile [for], 除 chu [except]…外 wai [besides] and 由 you [by means of] which are considered as conjunctions in Li's (2007) conjunctive table (see Table 2.4), depending on the constructions which are formed. Other shifts into prepositions seem natural or give similar meanings, and may be considered as grammatical metaphors; but some other shifts may cause more obvious changes in meaning. Changes from clause to phrase may also cause syntactical implicitation.

Example 27 shows that the conjunctive "after" is shifted into the prepositional phrase 在 zai [in]…后 hou [after], which gives the same meaning as in the ST, which literally means "after". With this example, my earlier statement in 4.4.4 has to be reemphasized here, namely that it is not easy to differentiate between clauses and phrases in Chinese; for example in 在 注册 后 zai zhuce hou [in register after], the

注册 zhuce can mean "register" which is a verb or "registration" which is a noun. Such a grey area has to be taken into account and perhaps in the future some 在 zai [in]…后 hou [after] should be tagged as a conjunctive phrase.

Example 27

> Members shall publish each trademark either before it is registered or promptly <u>after</u> it is registered and shall afford a reasonable opportunity for petitions to cancel the registration.
> 各成员应在商标注册前或在注册后迅速公布每一商标，并应对注销注册的请求给予合理的机会。此外，各成员可提供机会以便对商标的注册提出异议。
> (40_intellectual property rights)

6.2.5.3 Shifted into Adverbs

In this section conjunctions which are shifted into adverbs will be examined. Some of the adverbs are very close to conjunctions as some adverbs and some conjunctions have the same form. From this study, it is found that "as" is shifted into 一经 yijing [as soon as] which may cause some shifts in meaning. Like some "prepositions" examined in the previous sections, 一经 yijing [as soon as] may be a conjunctive element, depending on the usage. Another example is where "as soon as" is shifted into 一经 yijing [as soon as], and also shifted into 一经 yijing [as soon as]…即 ji [at once]/立即 liji [at once]/尽快 jinkuai [as soon as possible], a double adverb, to reinforce the meaning of "as soon as". "After" is also shifted into 一经 yijing [as soon as] which shows some change of meaning. "As soon as" is also shifted into the adverb 尽快 jinkuai [as soon as possible], 尽早 jinzao [as early as possible], 尽速 jinsu [as quickly as possible], 从速 congsu [promptly], and 立即 liji [immediately], usually from ST phrases like "as soon as possible" or "as soon as practical". "As soon as possible" and "as soon as practical" are semi-fixed expressions in the source language with noun/ pronoun ellipsis. The non-ellipsis of the noun/ pronoun should be "as soon as it is possible" and "as soon as it is practical". It is found that the translation is natural (see example 28) and can be a form of grammatical metaphor.

There is also the use of "as" which is translated as 甚至 shenzhi [even to the extent], 不致 buzhi [not likely to] and 就 jiu [then]; and "where" which is shifted into 凡 fan

[every]; "before" which is shifted into 先 xian [first]…时 shi [time], 已 yi [already] and 未 wei [not yet]; and "and" which is shifted into the adverb 还 hai [also]. Most of these words are tagged as adverbs, however, some of them like 甚至 shenzhi [even to the extent], 就 jiu [then], 凡 fan [every], 先 xian[first] and 还 hai [also] have also crept into Li's (2007) conjunctive table (see Table 2.4). Indeed, some of these cases, if they function as conjunctions, should be included in the future SFL tagger, or future study, in order that all cases can be inclusively added in the research.

Example 28 gives an example where "as soon as possible" is shifted into 尽快 jinkuai [as soon as possible] which is a legitimate translation.

Example 28
 Each Party shall report to the Director of the South Pacific Bureau for Economic Co-operation (the Director) <u>as soon as possible</u> any significant event within its jurisdiction affecting the implementation of this Treaty.
 每个缔约国应<u>尽快</u>向南太平洋经济合作局主任（主任）汇报在其管辖范围内影响该条约实施的任何重大事件。(07_nuclear free zone)
 [Back translation: Each Party shall <u>as soon as possible </u>report to the Director of the South Pacific Bureau for Economic Co-operation (the Director) any significant event within its jurisdiction affecting the implementation of this Treaty.]

6.2.5.4 Shifted into Verbs

There are also some cases where conjunctions are shifted into verbs. For example, "as" which is categorised as hypotactic *causal: purpose*, is translated as 视 shi [view] which is target language related. Example 29 illustrates this example, where "as" which is a conjunction and which means "in a way in which", is used in the clause "as the case may be". It has been translated as a verb 视 shi [view] in the phrase 视情况 shi qingkuang [view the situation] which means "according to the situation". 视 shi [view] and "as" may not seem to be grammatical metaphors, but the whole phrase "as the case may be" is a grammatical metaphor for 视 情况 shi qingkuang [view the situation], and the phrase 视 情况 shi qingkuang [view the situation] is a common target language phrase, but is not too commonly used in the NT of the institutional texts. There are in total 15 of these phrases in the TT but only five in the NT.

"As" is also translated into 应 ying [should]. The other shifts of "as" are into 使 shi [to enable], 系 xi [is] , 应使 yingshi [should enable], 采取 caiqu [adopt], 实现 shixian [realise], 遵守 zunshou [abide], 以期 yiqi [in hope of], 致使 zhishi [lead to] and 在于 zaiyu [determine by]. Besides "as", "when" is also translated into a verb, i.e. translated into 出现 chuxian [appear]. "Provided that" is also translated as the verb 需 xu [need]; "in order" is translated as a verb like 使 shi [to enable], 用以 yongyi [use as] and 以期 yiqi [in the hope of].

Overall, the shifts into verbs do not change a lot of the semantic meanings embedded in the conjunctions, however, the structures have been changed. Hence, some may be considered as mere grammatical metaphors.

Example 29
  The schemes for the maintenance of rights in course of acquisition referred to in Article 21 shall provide for the adding together, to the extent necessary, of periods of insurance, employment or residence, as the case may be, completed under the legislation of the Members concerned for the purposes of acquisition, maintenance or recovery of rights and, <u>as </u>the case may be, calculation of benefits.
  为获得、维护或恢复权利以及<u>视情况</u>计算津贴，第２１条所述维护正在获得中权利的各制度应规定，在必要程度上视情况累计按照有关会员国立法已完成的保险、就业或居住期。(25_social security)
  [Back translation: For the purposes of acquisition, maintenance or recovery of rights and <u>according to the situation</u> calculate the benefits…]

6.2.5.5 Shifted into Phrases

There are also conjunctions which are shifted into phrases. A conjunction such as "where", which is *spatial/situation: point*, is shifted into phrases like 的情况 de qingkuang [the situation of] and "when" which is *temporal: same time* is translated as 的时间 de shijian [time of], which yields the same meaning. "Provided that" is also shifted into phrases like 条件是 tiaojian shi [the condition is that] which gives a similar meaning. These are examples of grammatical metaphors. Example 30 shows "when" translated into 的时间 de shijian [time of].

Example 30
The Bank shall notify members <u>when</u> it is ready to commence operations.
银行应通知各会员国准备开业<u>的</u>时间。(03_IBRD)
[Back translation: The Bank shall notify members commence operations' time.]

6.2.5.6 Shifted into Auxiliary Words

There are also cases like "as" which is shifted as auxiliary 所 suo[60] and 地 de[61].
Example 31 shows the clause "as appropriate" which is an ellipsis from "as it is
appropriate" and which has been translated as 适时 地 shishi de [at the right moment]
which is natural in the target language and yields the same meaning; and thereby, is
also a grammatical metaphor.

Example 31
During the second stage, each Member State shall, <u>as</u> appropriate, start the process
leading to the independence of its central bank, in accordance with Article 108.
Article 109f
依据第１０８条，第二阶段期间每个成员国应适时<u>地</u>开始实其中央银行独立
性的进程。(24_EU)
[Back translation: …should appropriately start the process…]

6.2.6 Summary of Findings for Analyses of Implicitation and Shift-Out of Conjunctions

Based on the present study on implicitation and shift-out of conjunctions, listed in
(1) through (5) is a summary of the findings.

1. Implicitation with a percentage of 13.54% is lower than explicitation which
   has a total percentage of 33.38%. 31 types of conjunctions (or 52.54%)
   undergo implicitation which is slightly lower compared to the explicitation

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[60]所 suo is an auxillaary used as a few functions. Among some uses are:
  (a) 'used together with 为 wei or 被 bei in the passive voice';
  (b) 'used before the verb in the subject-predicate structure to make it passive';
  (c) 'used between noun or pronoun and verb to stress the relation between the doer of an action
     and the action itself'; and
  (d) 'used before the verb to form a substantive structure'
     (The contemporary Chinese dictionary, 2003).
[61]地 de is an auxillary 'used after an adjective or phrase to form an adverbial adjunct before the verb'
(The contemporary Chinese dictionary, 2003).

percentage of 59.38%. There are no types of conjunctions which are totally implicitated. There are only four types with implication whose percentages are higher than 30%.

2. The top-3 semantic categories which have experienced implication are *addition* with 61.42%, *causal: purpose* with 13.11% and *conditional: positive: if...then* with 8.74%. Comparing the semantic categories of explicitation, it was found that they share two of the categories, namely *conditional: positive: if...then* and *addition*.

3. Based on the top ten most implicitated conjunctions, it is found that there are five situations where the translators have omitted conjunctions: they are (a) conjunctions replaced with punctuations; (b) conjunctions omitted when the structures are changed; (c) conjunctions completely implicitated; (d) conjunctions omitted because the whole phrase or clause is not translated and (e) double conjunctions translated as single conjunctions.

Implicitaion of conjunctions may give the reader a freer hand in connecting the logogenesis of the sentences and sometimes the omission seems natural in the TT. Compared to the corresponding cases in the ST, implication may cause omission of meaning. But when are compared to the corresponding cases in the TT, implication of some conjunctions may be the norm of the NT or the target language culture, and some of these strategies may be available to the translators.

4. Shift into other conjunctions is 9.90%, and shift into other non-conjunctions is 21.18%, making a total of 31.08%. This total shift-out of conjunctions is more than the total shift into the conjunctions of 21.95%. 50 out of 59 types of conjunctions, or 84.75%, are shifted out. This percentage is higher than the percentage of conjunctions shifted into other conjunctions, which is 79.69%.

5. Based on the top ten conjunctions which are mostly shifted from conjunctions into other conjunctions and into non-conjunctions, it is found that there are six ways that the conjunctions in the ST are shifted; that is, conjunctions are

shifted into other conjunctions, into prepositions, into adverbs, into verbs, into phrases, and into auxiliary words.

There are cases where shifts into other conjunctions do not cause changes in meaning; however, such shifts may cause syntactical explicitation when hypotactic conjunctions are shifted into paratactic conjunctions. Some shifts into other conjunctions seem to be natural equivalents; nevertheless, there seem to be some subtle changes in meaning. There are also cases where shifts show obvious shifts in meaning, either into more meaning, lesser meaning or simply just different meaning. There are also cases where conjunctions are translated with lesser meaning conjunctions but with added phrases to make-up for the meaning losses.

When conjunctions are translated into other non-conjunctions, there may be cases of "formal correspondence" because of limitations in tagging. There may also be cases of natural equivalents with subtle changes of meaning. Sometimes, like some shifts into conjunctions, limitations in the use of a particular conjunction are made complete with added phrases, or with two adverbs, or with prepositions and adverbs, which may result in grammatical metaphors. Sometimes, when clauses with conjunctions are translated into non-conjunctions, they seem like natural equivalents and do not shift meaning, thus they can be grammatical metaphors. Syntactically, the change from clauses to phrases may cause syntactic implicitation. There are also cases where the shifts seem very natural in the TT and they are target language related rather than adhering to the norms of the NT, like the change from "as the case may be" into 视 情况 shi qingkuang [view the situation].

The study of shift-out of conjunctions also shows us some limitations in the tagging by using POS taggers which may be due to the different theoretical frameworks employed by them. For example, "only if" is separately tagged as "only" and "if" in the ST, while there is one conjunction in the Chinese language which is 只有 zhiyou [only if], which can be a form of formal correspondence. This may have caused some differences in the calculations. There are also some constructions which provide an indication of time, like

时 shi [time] and 后 hou [after] in 如 ru [if]…时 shi [time] and 如 ru [if] … 后 hou [after], which could not be identified as part of conjunctions with POS taggers. There are also cases where prepositions like 在 zai [in], 于 yu [in], 对 dui [as regards], 经 jing [through] and 当 dang [when] which are used together with 时 shi [time], 前 qian [before] and 后 hou [after], or the use of 时 shi [time], 前 qian [before] and 后 hou [after] alone, can form conjunctive clauses, and should be tagged as such. Some prepositions like 为了 weile [for], 除 chu [except]…外 wai [besides] and 由 you [by means of] and some adverbs like 一经 yijing [as soon as], 甚至 shenzhi [even to the extent], 就 jiu [then], 凡 fan [every], 先 xian [first] and 还 hai [also] may also be conjunctions and should be included in any future study of conjunctions.

6.3 Concluding Remarks

This chapter has presented conjunctions which are the result of pure explicitation, conjunctions which are shifted and conjunctions which are implicitated. It is also able to identify the linguistic reasons of change; thus one of the reasons of pure explicitation is the change of structure performed by the translators; one of the reasons of shift is that a conjunction in the ST may be shifted into a preposition in the TT; and one of the reasons of implicitation is that some double conjunctions are translated into single conjunctions.

By studying explicitation, shift from conjunctions, shift from non-conjunctions, implicitation, shift into conjunctions and shift into non-conjunctions; and by studying the linguistic elements which have caused the changes or through which the changes have taken place, this chapter has been able to identify distinctively the various conjunctions that have undergone changes in the Chinese translations of English institutional texts. The combination of quantitative and qualitative appproaches employed here has enabled us to demonstrate that changes (lexical, structural and semantic) inevitably do happen between the ST and the TT; and that this understanding of the changes may inform translators about conscious or unconscious acts while translating.

CHAPTER 7
Combined Analysis of Conjunctions and Effects of T-change

Having performed comparable analysis and parallel analysis in the last two chapters, this chapter brings them together provide an overview of how each corpus fares in relation to the others. This will be conducted in Section 7.1 where the ST, the TT and the NT are placed side-by-side to have a better comparison between these texts. In Section 7.2, however, the focus is on the effects of change on the TT. These effects are viewed in relation to the NT, i.e. T-change.

7.1 Influence of Source Texts, Intervention of Translators or Influence of Norms in Non-Translated Texts or Target Langauge

This section is to identify whether the TT is influenced by the ST, interpretation of the translators or the NT/target language. This is to answer research question 3.

> (3) Can the causes of explicitation, implicitation and shift in the Chinese translation of English institutional texts be attributed to influence of the ST, interpretation of the translators, or influence of genre conventions of the NT or the target language?

Firstly, in Section 7.1.1, concentration is on global combined statistics where the total of occurrences is collected together with frequencies of formal correspondence, explicitation, implicitation and shift. In Section 7.1.2, the total occurrences of conjunctions in each text are categorised into their semantic categories and a comparison of the inferential process of the writers/translations is made. Later, the top three semantic categories in the TT and the NT found in Section 7.1.2, which happens to be the same, are inspected in detail to discover how these semantic categories behave in the ST, the TT and the NT. Section 7.1.3 will concentrate on the *addition* semantic category; Section 7.1.4 the *conditional: positive: if...then*; and Section 7.1.5 the *conditional: concessive/adversative*. Later, in Section 7.1.6, individual conjunctions which are found to have distinctiveness more than LL: 50 in Section 5.5 are also placed in the same parameters to check on the patterns of occurrences of these individual conjunctions. This is to also see how individual conjunctions fare in each text, which in turn influences the frequencies in the

semantic categories and later the frequencies in the global combined statistics. Section 7.1.7 covers the combined results of analyses performed on the global statistics, the three semantic categories, and the individual conjunctions.

7.1.1 Global Combined Statistics

Based on the tagged conjunctions in each corpus, the statistics in Table 7.1 are as follows:

Table 7.1 Global combined statistics

Description	Based on conjunctions in source texts (implicitation)		Based on conjunctions in translated texts (explicitation)		Conjunctions in non-translated texts
	Frequency	Percentage	Frequency	Percentage	Frequency
Total conjunctions	6,760	100	8,382	100	5,192
Explicitation or implicitation	915	13.54	2,798	33.38	
Formal correspondences	3,744	55.38	3,744	44.67	
Shifts into/from other conjunctions	669[62]	9.90	672	8.02	
Shifts into/from other non-conjunctions	1,432	21.18	1,168	13.93	

From Table 7.1, we can see that the TT have 8,382 conjunctions but the ST only have 6,760, and the NT only have 5,192. This is a general echo of the main findings that the TT have more conjunctions than the ST (Vanderauwera, 1985; Blum-Kulka, 1986; Séguinot, 1988; Klaudy and Károly, 2005; Chen, 2006; Wang, 2010) and NT (Vehmas-Lehto, 1989; Pápai, 2004; Abdul-Fattah, 2010; Chen, 2006; Wang and Qin, 2010; Xiao, He and Yue, 2010). The LL value for the TT when compares with the ST is +501.03; and the LL value for the TT when compares with the NT is +776.96. Comparing the ST and the NT, it is found that the NT have fewer conjunctions than the ST, with the LL value for ST when compares to the NT as +43.00. This also echoes the general findings in contrastive linguistics that English texts use more

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[62] The difference here is because there are three "provided that" which are translated into two conjunctions 但 dan [but] 如果 ruguo [if] and 但 dan [but] 如 ru [if].

conjunctions than Chinese texts (Zhu, Zheng and Miao, 2001; Pan, 2004; Wang and Qin 2010).

Looking at the conjunctions that occur in the ST and in the TT, it is found that there is a total of 3,744 formal correspondences. This amount is not sufficient to cause explicitation in the TT compared to the NT.

It is also found that there is a total of 4,416[63] conjunctions in the TT which are influenced by the ST's conjunctions, while there is a total of 4,416[64] conjunctions which are translated into conjunctions from the ST. The numbers are the same as they are reciprocal. This amount, however, is also not sufficient to draw a conclusion that explicitation of conjunctions in the TT is due chiefly to influence from the ST's conjunctions. This is because, the total amount of 4,416 is not much larger than 5,192 of the NT. However, if the calculation above includes shifts from non-conjunctions with a total of 5,584[65], we can infer that these ST influences are sufficient to cause explicitation in the TT when compared to the NT, without pure explicitation by the translators. This paragraph points out that ST conjunctions, including the formal correspondences and conjunctions shifted from other conjunctions only, together are not sufficient to cause explicitation in the TT when compared to those in the NT. However, with the addition of shifts from other non-conjunctions like prepositions, the total influence of the ST is able to account for explicitation in the TT.

Combining the percentages of conjunctions which are translated formally, conjunctions which are shifted from other conjunctions, and conjunctions which are shifted from other word groups, there is a total of 66.62% of ST influence in the TT, which also means that there is 33.38% of explicitation by the translators in the TT.

Comparing the percentage of pure explicitation of 33.38% with the percentage of pure implicitation of 13.54% shows very clearly that there is more pure explicitation

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[63] formal correspondences (3,744) + conjunctions shifted from other conjunctions (672).
[64] formal correspondences (3,744) + conjunctions shifted into other conjunctions (669) + one conjunction translated into two conjunctions (3).
[65] formal correspondences (3,744) + conjunctions shifted from other conjunctions (672) + shift from other non-conjunctions (1,168)

with 2,798 cases than pure implicitation with 915 cases. As a result, implicitation is not sufficient to weaken the effects of explicitation.

Although, in general, the statistics above agree with frequent findings of most researchers especially concerning the TT having the most conjunctions, the ST having more conjunctions than the NT, and explicitation being more than implicitation in the TT, however, based on study of the individual semantic categories or the individual conjunctions, the statistics also show more detailed variations.

Before we go on to look at how the top-3 semantic categories and later the individual conjunctions fare in relation to the parameters discussed above, the research will detour for the time being to look at conjunctions grouped according to their semantic categories in each corpus to identify the preference usage of logical-semantic relations which indirectly reflect the inferential processes of the translators.

7.1.2 Global Combined Statistics Based on Semantic Categories

In this section, all the conjunctions identified will be categorised according to Halliday and Matthiessen's (2004) SFL to take a closer look at the distribution of conjunctions according to their semantic categories (for the details please refer to Appendix 8).

Table 7.2 Global combined statistics based on semantic categories

Semantic categories	Source texts	Percentage	Translated texts	Percentage	Non-translated texts	Percentage
Elaboration	6	0.09	32	0.38	0	0.00
Addition	2,367	35.0	2,946	35.15	2,228	42.91
Temporal: same time	587	8.68	135	1.61	44	0.85
Temporal: different time	331	4.90	33	0.39	31	0.60
Spatial/situation: point	479	7.09	0[66]	0	0	0.00
Spatial/situation: extend	44	0.65	12	0.14	1	0.02
Causal: reason	106	1.57	170	2.03	88	1.69
Causal: purpose	576	8.52	649	7.74	250	4.82
Conditional: positive: if...then	1,159	17.14	2,815	33.58	1,434	27.62
Conditional: positive: as long as	333	4.93	210	2.51	33	0.64
Conditional: positive: only if	0[67]	0	8	0.10	3	0.06
Conditional: positive: whatever	0[68]	0	130	1.55	69	1.33
Conditional: negative	251	3.71	316	3.77	151	2.91
Conditional: concessive/adversative	497	7.35	926	11.05	860	16.56
Manner	24	0.36	0[69]	0.00	0	0.00
Total	6,760	100.00	8,382	100	5,192	100

From this table, it is found that the top semantic categories are the same in both the TT and in the NT, beginning with *addition, conditional: positive: if...then, conditional: concessive/adversative* and *causal: purpose*. As for the semantic categories in the ST, the sequence of the most used semantic categories in the ST is quite similar to those used in the TT and in the NT with *addition* and *conditional: positive: if...then* topping the list. The difference is that the usage of *temporal: same time* is quite prominent in the ST. This may be due to limitations of tagging as the Chinese language tagger does not categorise 当 dang [when] or 在 zai [in] …时 shi [time], which is a type of *temporal: same time*, as conjunctions, rather it is conventionally tagged as a preposition. Perhaps, if Chinese 当 dang [when] or 在 zai [in] …时 shi [time] were to be included, the findings may have been different. Thus, disregarding the *temporal* semantic category, the next category is *causal: purpose*, then only followed by *conditional: concessive/adversative*. The position is inverted

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[66] The absence of *spatial/situation: point* in the Chinese language is because 当 dan [when]…在那里/地方 zainali/defang [in the place] are not tagged as conjunctions in Chinese.

[67] The absence of *condition: positive: only if* in English is because the CLAW tagger and the SFL do not group them together. Thus, the "if" in "only if" is joined as *condition: positive: if...then*.

[68] The *condition: positive: whatever* category is not found in Halliday and Matthiessen's (2004) English SFL but is found in Li (2007)'s Chinese SFL.

[69] The absence of *manner* in Chinese is because words like 同样 tongyang [similar] and 亦 yi [also] where the source texts' word are translated into are tagged as adverbs.

where the TT and the NT prefer to use *conditional: concessive/adversative* followed by *causal: purpose*. This points to a very intriguing finding where *purpose* takes precedence over *concessive/adversative* in the ST but the reverse is true in the TT and the NT.

If we look at the semantic categories of pure explicitation (Section 6.1.2) and pure implicitation (Section 6.2.2), we can see some changes that have taken place which may partly alter the semantic categories of the ST to the TT. The translators explicitate *conditional: positive: if...then*, followed by *addition* and followed by *conditional: concessive/adversative*, but implicitate *addition*, *causal: purpose* and *conditional: positive: if...then*. Here, we see a rise in *conditional: concessive/adversative*, but a decrease of *causal: purpose* on the part of the translators without the influence of the ST.

These fascinating findings show that despite the TT overall using more types of conjunctions at a higher frequency, more distinctively and more spread out than the NT, despite the ST being the base for the translation, the inferential makeup of the TT and the NT is very much the same, placing the importance firstly on close-knittedness of the texts, secondly on the positive condition laid, on the concessive and adversative relations, and on purpose. Like Skrandies (2007) who finds change of point of view between the ST and the TT, these findings show change of logical interpretation in the TT which mimic towards the logical interpretation of the NT.

In the next section, statistics of the most used semantic category, i.e. the *addition* semantic category, will be presented and discussed.

7.1.3 Combined statistics of *addition* semantic category

Addition is the highest category of conjunctions used the ST, TT and NT.

Table 7.3   Combined statistics of *addition* semantic category

Description	Based on conjunctions in source texts (implicitation)		Based on conjunctions in translated texts (explicitation)		Conjunctions in non-translated texts
	Frequency	Percentage	Frequency	Percentage	Frequency
Total conjunctions	2,367	100	2,946	100	2228
Explicitation or implicitation	562	23.74	1,046	35.51	
Formal correspondences	1,715	72.45	1,715	58.21	
Shifts into/from other conjunctions	29[70]	1.23	22	0.75	
Shifts into/from other non-conjunctions	61	2.58	163	5.53	

Once again, it is found that the TT have 2,946 *additive* conjunctions, which is higher than the figures in both the ST (with 2,367, LL value = +179.42) and the NT (with 2,228, LLvalue = +104.53), echoing the general findings of explicitation of conjunctions in TT. For contrastive study purposes, the figures in Table 7.3 also show that the ST have more slightly more *additive* conjunctions than the NT, however when LL value is computer it shows that ST has the LL value of – 7.83. This means that the *additive* conjunctions used in the ST is less significant than that in the NT. The number of formal correspondences of 1,715 is not sufficient to cause explicitation compared with 2,228 in the NT, that is, they are not sufficient even with the addition of shifts from conjunctions and shifts from non-conjunctions with a total of 1,900. There is a total of 64.49% of influence of the ST[71] with a remaining 35.51% of pure explicitation. Like the global combined statistics, even though there is T-implicitation, the percentage of pure T-implicitation of 23.74% is not as much as the percentage of pure T-explicitation of 35.51%.

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[70] Unlike the global combination statistics where the shifts into and the shifts from from other conjunctions should be the same, there is a difference here between the shifts into and the shifts from other conjunctions because the research now is based on categories not on the whole.
[71] Formal correspondences, shifts from other conjunctions and shifts from other non-conjunctions.

7.1.4 Combined Statistics of 'conditional: positive: if...then' Semantic Category

In this section, the focus is shifted to *conditional: positive: if...then.* Section 7.1.4 presents the combination of statistics of the *conditional: positive: if...then.* In Section 7.1.4.1 and Section 7.1.4.2, this semantic category will be divided into paratactic[72] and hypotactic categories.

Table 7.4 Combined statistics of *conditional: positive: if…then* semantic category

Description	Based on conjunctions in source texts (implicitation)		Based on conjunctions in translated texts (explicitation)		Conjunctions in non-translated texts
	Frequency	Percentage	Frequency	Percentage	Frequency
Total conjunctions	1,159	100.00	2,815	100.00	1,434
Explicitation or implicitation	80	6.90	1,257	44.65	
Formal correspondences	1,007	86.89	1,007	35.77	
Shifts into/from other conjunctions	20	1.73	405	14.39	
Shifts into/from other non-conjunctions	52	4.49	146	5.19	

Like the global combined statistics, there are more *conditional: positive: if...then* conjunctions in the TT than in the NT (LL value = +465.85) and in the ST (LL value = +981.28). Unlike the global combined statistics, the NT with a total of 1,434 have more conjunctions than the ST with a total of only 1,159, which is another sign of deviation from the global statistics. The LL value for the ST is -81.87. The total number of 1,412 cases of influence of ST conjunctions is not sufficient to cause explicitation when compared to those in the NT, however, like the global combined statistics, the addition of shifts from other non-conjunctions with a total of 1,558 is sufficiently more to cause explicitation in the TT. The total percentage of influence of the ST in the TT is 55.35% while pure explicitation of the translators is 44.65%. Comparing the percentage of pure explicitation which is 44.65% and pure

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[72] It has to be noted that the textual category is assimilated in the paratactic category, because of the close approximation between the two categories and also because of the insignificant percentage of the usage of the textual category.

implicitation which is 6.9%, it is also found that pure explicitation is more than pure implicitation.

Sections 7.1.4.1 and 7.1.4.2, elucidate more on how these figures in Section 7.1.4 have been obtained.

7.1.4.1 Combined Statistics of Paratactic *'conditional: positive: if...then'* Semantic Category

This subsection concentrates on paratactic *conditional: positive: if...then*.

Table 7.5 Combined statistics of paratactic *conditional: positive: if…then* semantic category

Description	Based on conjunctions in source texts (implicitation)		Based on conjunctions in translated texts (explicitation)		Conjunctions in non-translated texts
	Frequency	Percentage	Frequency	Percentage	Frequency
Total conjunctions	11	100.00	1,064	100.00	225
Explicitation or implicitation	0	0.00	1,053	98.97	
Formal correspondences	10	90.91	10	0.94	
Shifts into/from other conjunctions	0	0.00	0	0.00	
Shifts into/from other non-conjunctions	1	9.09	1	0.09	

Comparing the total frequency of paratactic *conditional: positive: if...then*, it is found that there are more conjunctions in the TT, than in the NT (LL value = +598.53) and in the ST (LL value = +1530.97). The contrastive comparison, however, shows that the NT with a total of 225 have far more paratactic conjunctions than the ST with a total of only 11, where the LL value for the ST is -270.08. Although the English language allows correlative "if…then", unlike "although…but", the usage of only 11 "then" shows a preference in the English language as opposed to usage in the NT. As a consequence, ST influence is far from causing explicitation compared to the NT. This is definitely not the case where the

ST influence the use of conjunctions in the TT as there is only 1.03% influence from the ST through the usage of formal correspondences (10) and shifts (1). It means that reliance on the ST is very minimal, thus the main occurrence of this semantic category is due to pure explicitation by the translators with a percentage of 98.97%. The low percentage of changes in the ST shows that whenever the paratactic *conditional: positive* conjunctions, i.e. "then", are in the ST, they are translated using formal correspondences. On the other hand, the high percentage of changes in the TT shows that the TT of this category is very much different from the usage in the ST. Pure explicitation is excessive, with a percentage of 98.97%, but implicitation is absolutely absent.

7.1.4.2 Combined Statistics of Hypotactic *'conditional: positive: if...then'* Semantic Category

This subsection presents hypotactic *conditional: positive: if...then* in some detail.

Table 7.6 Combined statistics of hypotactic *conditional: positive: if...then* semantic category

Description	Based on conjunctions in source texts (implicitation)		Based on conjunctions in translated texts (explicitation)		Conjunctions in non-translated texts
	Frequency	Percentage	Frequency	Percentage	Frequency
Total conjunctions	1,148	100.00	1,751	100.00	1,209
Explicitation or implicitation	80	6.97	204	11.65	
Formal correspondences	997	86.85	997	56.94	
Shifts into/from other conjunctions	20	1.74	405	23.13	
Shifts into/from other non-conjunctions	51	4.44	145	8.28	

The total frequency of conjunctions in each corpus shows that the TT with a total of 1,751 have more conjunctions than both the NT (LL value = +103.25) and the ST (LL value = +232.66). Unlike the global combined statistics, this category shows that the NT have more hypotactic *conditional: positive: if...then* than the ST (LL value =

-22.38). Thus, translating with formal correspondences from the ST alone is not sufficient to cause explicitation compared to similar elements in the NT. However, with the addition of shifts from other conjunctions, the ST conjunctions are sufficient to cause explicitation when compared with the NT. The high usage of shift from other conjunctions into conjunctions is due to the categorisation strategy employed in this research where *temporal* conjunctions like "when" and *spatial/situational* conjunctions like "where" are not included as *conditional: positive*, even though Alcaraz and Hughes (2002) have placed them as *conditional* and *hypothetical* formulas, as I feel that there are still some minor differences between these conjunctions, and they also have more formal correspondences in the target language like 当 dang [when] or 在 zai [in] …时 shi [time] for "when" and 在 zai [in]… 下 xia [below] for "where". Combining the percentages of ST influence, it is 88.35%, while pure explicitation is lower with 11.65%. At the same time, pure explicitation is also more than pure implicitation.

This completes the study *conditional: positive: if...then*. Next, we will move on to *conditional: concessive/adversative* semantic category, the third top category in the TT and the NT.

7.1.5 Combined Statistics of *'conditional: concessive/adversative'* Semantic Category

Like the combined statistics of *conditional: positive: if...then*, this category is divided into paratactic[73] and hypotactic. This section presents mainly the combined statistics of *condition concessive/ adversative* conjunctions, while paratactic and hypotactic conjunctions are dealt with in Subsections 7.1.5.1 and 7.1.5.2 respectively.

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[73] All textual conjunctions are included in the paratactic category, similar to Section 7.1.4, because of the close approximation between the two categories and also because of the insignificant percentage of the usage of the textual category.

Table 7.7 Combined statistics of *conditional: concessive/adversative* semantic category

Description	Based on conjunctions in source texts (implicitation)		Based on conjunctions in translated texts (explicitation)		Conjunctions in non-translated texts
	Frequency	Percentage	Frequency	Percentage	Frequency
Total conjunctions	497	100	926	100	860
Explicitation or implicitation	17	3.42	263	28.40	
Formal correspondences	438	88.13	438	47.30	
Shifts into/from other conjunctions	20	4.02	140	15.12	
Shifts into/from other non-conjunctions	22	4.43	85	9.18	

From Table 7.7, it is found, like the previous findings on explicitation of conjunctions in the global statistics, that there are more *conditional: concessive/adversative* conjunctions in the TT with a total of 926 than both the ST (LL value = +203.43) and the NT (LL value = +2.87). However, comparing the ST and the NT, it is found that the ST, with the LL value of -157.22, have a fewer number of the *conditional: concessive/adversative* conjunctions than the NT have. This is unlike the findings in the global statistics. Thus, it is found that the total influence of the ST, i.e. 663, is not sufficient to cause explicitation. Looking at the TT alone, it is found that 71.60% of the use of conjunctions in TT is due to the total influence of the ST, thus pure explicitation is 28.40%. Pure explicitation of 28.40% is also more than pure implicitation of 3.42%.

7.1.5.1 Combined Statistics of Paratactic '*conditional: concessive/adversative*' Semantic Category

In this section, the paratactic *conditional: concessive/adversative* semantic category will be observed in some detail.

Table 7.8 Combined statistics of paratactic *conditional: concessive/adversative* semantic category

Description	Based on conjunctions in source texts (implicitation)		Based on conjunctions in translated texts (explicitation)		Conjunctions in non-translated texts
	Frequency	Percentage	Frequency	Percentage	Frequency
Total conjunctions	442	100.00	770	100.00	820
Explicitation or implicitation	17	3.85	251	32.60	
Formal correspondences	385	87.10	385	50.00	
Shifts into/from other conjunctions	18	4.07	134	17.40	
Shifts into/from other non-conjunctions	22	4.98	0	0.00	

From this table, unlike the global combined statistics, it is found that there are fewer paratactic *conditional: concessive/adversative* conjunctions in the TT than in the NT (LL value = -1.27); although compared to the ST, the TT still have more conjunctions, with the LL value of +145.67. These findings suggest that there may be times where the TT are implicitated when compared to the NT, but compared to the ST, there is still S-explicitation. Contrary also to the global statistics, there are more conjunctions in the NT than the ST, with the TT value for the ST as -175.56. Thus, the combined influence of the ST is not sufficient to cause explicitation in the TT compared to those in the NT. The total percentage of influence of the ST is 67.40% and pure explicitation is 32.60%. Comparing pure explicitation and pure implicitation, it is also found that pure explicitation of 32.60% exceeds pure implicitation of 3.85%. This time, explicitation is considered a good move towards a closer resemblance to the NT norms.

7.1.5.2 Combined Statistics of Hypotactic *'conditional: concessive/adversative'* Semantic Category

This subsection presents the combination statistics of the hypotactic *condition concessive/ adversative* semantic category.

Table 7.9 Combined statistics of hypotactic *conditional: concessive/adversative* semantic category

Description	Based on conjunctions in source texts (implicitation)		Based on conjunctions in translated texts (explicitation)		Conjunctions in non-translated texts
	Frequency	Percentage	Frequency	Percentage	Frequency
Total conjunctions	55	100.00	156	100	40
Explicitation or implicitation	0	0.00	12	7.69	
Formal correspondences	53	96.36	53	33.97	
Shifts into/from other conjunctions	2	3.64	6	3.85	
Shifts into/from other non-conjunctions	0	0.00	85	54.49	

From Table 7.9, it is found that with a figure of 156 the TT have the highest frequency, compared to conjunctions in the ST (LL value = +66.66) and in the NT (LL value = +74.09). This is in line with the global statistics. Similar to the global statistics, the hypotactic *conditional: concessive/adversative* conjunctions in the NT are also fewer compared to those in the ST, with the LL value for ST as +0.72. Checking on the influence of the ST, it is found that by merely using formal correspondences in translating hypotactic *conditional: concessive/adversative* of 53 units from the ST has already caused explicitation in the TT, not needing to add the shifts from other conjunctions and shifts from other non-conjunctions. The percentage of influence of the ST is very high with a total of 92.31%, which is inclusive of shifts from other non-conjunctions, especially the usage of the preposition "notwithstanding". With high ST influence, therefore, pure explicitation is merely 7.69%. There is no pure implicitation of conjunctions, but there is 7.69% of pure explicitation.

7.1.6 Combined Statistics of Individual Conjunctions

After concentrating on the top three semantic categories, this section focuses on a comparison of the individual distinctive conjunctions to inquire further in order to test how individual conjunctions affect the statistics in the semantic categories which in turn affect the global statistics. Based on the distinctive conjunctions with value more than LL: 50 of the TT and the NT above, the conjunctions identified will be examined in detail to see if the distinctiveness/non-distinctiveness of conjunctions in the TT is due to formal correspondences, shifts from other conjunctions, shifts from other word groups, explicitation or implicitation by the translators, or influence from the NT.

Table 7.10 Combined statistics of individual conjunctions

Conjunctions	则 ze[then]	而 er[and]	但是 danshi[but]
Formal correspondences (a)	10	130	135
Percentage	0.95	11.54	56.72
Shifts from other conjunctions (b)	0	13	52
Percentage	0.00	1.15	21.85
Total ST conjunctive influence (a+b)	10	143	187
Percentage	0.95	12.69	78.57
Shifts from other non-conjunctions (c)	0	126	0
Percentage	0.00	11.18	0.00
Total influence % (a+b+c)	0.95	23.87	78.57
Translators' interpretation (d)	1,048	858	51
Percentage	99.05	76.13	21.43
Frequency in translated texts (a+b+c+d)	1,058	1,127	238
Frequency in non-translated texts	224	490	31

但 dan[but]	如 ru[if]	尽管 jinguan [although]	且 qie[and]	以 yi[so that]	只要 zhiyao[if only]
216	697	4	253	48	138
43.37	56.12	5.80	89.40	11.43	65.71
82	304	1	6	1	44
16.47	24.48	1.45	2.12	0.24	20.95
298	1001	5	259	49	182
59.84	80.60	7.25	91.52	11.67	86.67
0	91	63	0	335	21
0.00	7.33	91.30	0.00	79.76	10.00
59.84	87.93	98.55	91.52	91.43	96.66
200	150	1	24	36	7
40.16	12.08	1.45	8.48	8.57	3.33
498	1242	69	283	420	210
780	886	3	96	141	33

As has been noted in Section 5.5, these individual conjunctions are much more in the TT, except for 但 dan [but] which it is more distinctive in the NT.

Looking at 则 ze [then] and 而 er [and], it is found that the total number of ST formal correspondences, shifts from other conjunctions and shifts from other non-conjunctions is not sufficient to cause the TT to have more conjunctions than the NT. All in all, influence of the ST is only 0.95% for 则 ze [then] and 23.97% for 而 er [and], thus explicitation of the translators is as high as 99.05% for 则 ze [then] and 76.13% for 而 er [and]. Comparing the frequency of pure explicitation and the

frequency of conjunctions in the NT, it is found that explicitation by the translators far exceeds the usage of 则 ze [then] and 而 er [and] in the NT.

For 但是 danshi [but], 只要 zhiyao [if only], 且 qie [and] and 尽管 jinguan [although], they are already more in the TT where these conjunctions are translated formally from the ST, i.e. those words have already caused more explicitation in the TT compared to the NT. Their percentages of ST influence are very high, for example the influence of the ST for 但是 danshi [but] is 78.57%, 只要 zhiyao [if only] is 96.66%, 且 qie [and] 91.52% and 尽管 jinguan [although] 98.55%. Therefore, their pure explicitation is much lower where 但是 danshi [but] has 21.43% pure explicitation, 只要 zhiyao [if only] has 3.33%, 且 qie [and] has 8.48% and 尽管 jinguan [although] has 1.45%. Comparing just pure explicitation and the NT, it is found that pure explicitation of 但是 danshi [but] has caused explicitation in the TT, but not 只要 zhiyao [if only], 且 qie [and] and 尽管 jinguan [although].

As for 以 yi [so that], influence of the ST's formal correspondences and shifts from conjunctions is not sufficient to cause explicitation compared to the NT, but with shifts from other non-conjunctions, are able to cause explicitation. This is not the case with 如 ru [if] where the combination of ST formal correspondences and shifts from conjunctions has caused explicitation, without adding units of shifts from other non-conjunctions. The influence of the ST for both is very high with 91.43% for 以 yi [so that] and 87.93% for 如 ru [if], making the percentage of pure explicitation as low as 8.57% for 以 yi [so that] and 12.08% for 如 ru [if]. Pure explicitation of these conjunctions is not sufficient to cause explicitation when compared to those in the NT.

As for 但 dan [but], the combination of influence of the ST formal correspondences, influence of the ST conjunctions which are shifted from other conjunctions or from other non-conjunctions and even addition of pure explicitation by the translators is obviously not sufficient to mimic the norms of the NT. The influence of the ST is only 59.84%. Pure explicitation is a quite high percentage - 40.16%, but it is not

sufficient to cause explicitation in the TT. It is also found that explicitation of 但 dan [but] is welcome here, and the number should have been much greater.

7.1.7 Comparison of Results

Based on the above findings, below is the comparison of the results grouped together based on the parameters.

1. The first comparison is the difference between the total frequency of conjunctions found in the ST, the TT and the NT.

Table 7.11 Comparison of the total frequencies for conjunctions in source texts, translated texts and non-translated texts

Description	Is TT more than ST?[74]	Is TT more than NT?[75]	Is ST more than NT?[76]
Global combined statistics	yes	yes	yes
Combined statistics of *addition* semantic category	yes	yes	no
Combined statistics of *conditional: positive: if...then* semantic category	yes	yes	no
Combined statistics of paratactic *conditional: positive: if...then* semantic category	yes	yes	no
Combined statistics of hypotactic *conditional: positive: if...then* semantic category	yes	yes	no
Combined statistics of *conditional: concessive/adversative* semantic category	yes	yes	no
Combined statistics of paratactic *conditional: concessive/adversative* semantic category	yes	no	no
Combined statistics of hypotactic *conditional: concessive/adversative* semantic category	yes	yes	yes
则 ze[then]		yes	
而 er[and]		yes	
但是 danshi[but]		yes	
只要 zhiyao[if only]		yes	
以 yi[so that]		yes	
且 qie[and]		yes	
尽管 jinguan[although]		yes	
如 ru[if]		yes	
但 dan[but]		no	

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[74] This is based on LL value.
[75] This is based on LL value.
[76] This is based on LL value.

The results, which are based on the log-likelihood value of the global combined statistics/semantic categories/individual conjunctions, show that the TT have more conjunctions compared to what the ST have in all categories researched here. These results confirm an overall S-explicitation of conjunctions. When comparing to the NT, although most results confirm an overall T-explicitation of conjunctions in the TT, there is one exceptional category. The exception, T-implicitatoin, found in the paratactic *conditional: concessive/adversative* semantic category is triggered by use of 但 dan [but] which occurs more frequently in the NT. This also shows that there may be individual cases which are different, or that realisation of the overall frequency may be due to some internal fluctuation.

Comparing the log-likelihood value in the ST and in the NT, for contrastive study purposes, we can find that although, generally, the global combined statistics show that indeed the ST have a greater log-likelihood value of conjunctions, in a more detailed study, we have found that many of the semantic categories studied here have lower log-likelihood value in the ST compared to the number in the NT. The first category is the *addition* semantic category which although, in terms of frequency, ST have more conjunctions, in terms of log-likelihood value, ST have lower value than NT. The second category is the *conditional: positive: if...then* semantic category. A closer check finds that it is due to both the paratactic and hypotactic *conditional: positive: if...then* semantic categories. A further check on "if" and "in case" (see Appendix 5 or Appendix 8), and the possible use of hypotactic *conditional: positive: if...then* in the ST, highlights that they have a total of 1,148; while these hypotactic conjunctions in the NT have a total of 1,209 (with the log-likelihood for ST as -22.38). A possible account for this difference may be the use of "when" and "where" which may function as *conditional: positive: if...then* but are not grouped as such in the ST in this research. However, as has been mentioned in Subsection 7.1.4.2, these conjunctions show subtle differences from *conditional: positive: if...then*, and, moreover, the Chinese language has its equivalents for these two words, thus this reasoning can be discounted. With a closer scrutiny of "then", the conjunction that makes up the paratactic aspect of the *conditional: positive: if...then*, it is found that the ST only use 11 as opposed to 225 则 ze [then] in the NT. All in all, we can conclude that, indeed, the TT have more the *conditional: positive: if...then* than the

ST. These captivating findings also show that the higher number of these kinds of semantic categories in the TT is very much due to intervention by the translators where the translators added conjunctions (pure explicitation), shifted from other conjunctions and other non-conjunctions, together with formal correspondences. In the second category in which the TT has higher frequency of use than what the ST have is the *condition concessive/adversative* semantic category. Unlike the *conditional: positive: if...then* semantic category, it is mostly due to the paratactic *conditional: concessive/adversative* semantic category in which 但 dan [but] has been used excessively in the NT. Even with the addition of pure explicitation by the translators, the resultant figure would not have been adequate to match usage of the same in the NT.

2. The second comparison is to check ST influence in the TT, i.e. whether they have caused explicitation when compared with the NT.

Table 7.12 Source texts influence in translated texts to cause explicitation when compared to non-translated texts

Description	Influence of ST to cause explicitation compared to NT		
	ST formal correspondences	**ST formal correspondences + shift from other conjunctions**	**ST formal correspondences + shift from other conjunctions + shift from other non-conjunctions**
Global combined statistics	no	no	yes
Combined statistics of *addition* semantic category	no	no	no
Combined statistics of *conditional: positive: if...then* semantic category	no	no	yes
Combined statistics of paratactic *conditional: positive: if...then* semantic category	no	no	no
Combined statistics of hypotactic *conditional: positive: if...then* semantic category	no	yes	yes
Combined statistics of *conditional: concessive/adversative* semantic category	no	no	no
Combined statistics of	no	no	no

paratactic *conditional concessive/adversative* semantic category			
Combined statistics of hypotactic *conditional: concessive/adversative* semantic category	yes	yes	yes
则 ze[then]	no	no	no
而 er[and]	no	no	no
但是 danshi[but]	yes	yes	yes
只要 zhiyao[if only]	yes	yes	yes
以 yi[so that]	no	no	yes
且 qie[and]	yes	yes	yes
尽管 jinguan[although]	yes	yes	yes
如 ru[if]	no	yes	yes
但 dan[but]	no	no	no

Checking on whether the usage of formal correspondences in the ST alone has caused explicitation when compared with usage in the NT, it is found that overall the global combined statistics show that the use of the ST formal correspondences alone is not sufficient to cause explicitation, except for the hypotactic *conditional: concessive/adversative* semantic category which is found to be due to the use of 尽管 jinguan [although], and other individual conjunctions like 但是 danshi [but], 只要 zhiyao [if only] and 且 qie [and]. These exceptions can mean that either they are a lot in the ST and are translated formally, or they have been used sparingly in the NT.

By adding formal correspondences and conjunctions which are shifted from other conjunctions, the global combined statistics again show that influence of the ST conjunctions is not strong enough to cause explicitation in the TT when compared with those conjunctions in the NT. This is the case for all, except the combined statistics of the hypotactic *conditional: positive: if...then* semantic category which may also be due partly to the individual conjunction, 如 ru [if].

However, by combining formal correspondences, conjunctions which are shifted from other conjunctions and those shifted from other non-conjunctions, only then, can ST influence become sufficient to cause explicitation without pure explicitation by the translators. Again, there is an exception with the *addition* semantic category which is likely due to the use of 而 er [and], with the paratactic *conditional: positive:*

if...then semantic category which may be due to 则 ze [then], and with the *conditional: concessive/adversative* semantic category which is due to the paratactic *conditional: concessive/adversative* semantic category and which in turn be due to the use of 但 dan [but]. Interestingly, these categories are all paratactic conjunctions.

3. The third parameter will identify the percentages of ST influence and the percentages of explicitation in the TT.

Table 7.13 Percentage of source texts influence and percentage of pure explicitation in translated texts

Description	Percentage of ST influence vs. pure explicitation	
	Percentage of ST influence	Percentage of pure explicitation
Global combined statistics	66.62	33.38
Combined statistics of *addition* semantic category	64.49	35.51
Combined statistics of *conditional: positive: if...then* semantic category	55.35	44.65
Combined statistics of paratactic *conditional: positive: if...then* semantic category	1.03	98.97
Combined statistics of hypotactic *conditional: positive: if...then* semantic category	88.35	11.65
Combined statistics of *conditional: concessive/adversative* semantic category	71.60	28.40
Combined statistics of paratactic *conditional: concessive/adversative* semantic category	67.40	32.60
Combined statistics of hypotactic *conditional: concessive/adversative* semantic category	92.31	7.69
则 ze[then]	0.95	99.05
而 er[and]	23.97	76.13
但是 danshi[but]	78.57	21.43
只要 zhiyao[if only]	96.66	3.33
以 yi[so that]	91.43	8.57
且 qie[and]	91.52	8.48
尽管 jinguan[although]	98.55	1.45
如 ru[if]	87.93	12.08
但 dan[but]	59.84	40.16

Generally, the global combined statistics show 66.62% of the influence of the ST compared to 33.38% of pure explicitation by the translators. Examining Table 7.13, it is obvious that these percentages are not without variations when each individual category or type is compared. For example, the percentage of pure explicitation

fluctuates from mostly pure explicitation with 99.05% for 则 ze[then] to depending less on explicitation like 1.45% for 尽管 jinguan [although]. The other percentages of other categories and types are placed between this continuum. The findings show clearly that there are extreme cases and other cases with variations which should be taken into consideration in a corpus linguistics study.

Interestingly also, through table 7.13, we can see that translators tend to prefer to explicitate more of the paratactic conjunctions like 则 ze [then] with 99.05%, 而 er [and] with 76.13%, 但 dan [but] with 40.16% and 但是 danshi [but] with 21.43%, with the exception of 且 qie [and] with only 8.48%. However, when it comes to hypotactic conjunctions, translators do not seem to explicitate as much, with only 1.45% for 尽管 jinguan [although], 3.33% for 只要 zhiyao [if only], 8.57% for 以 yi [so that] and 12.06% for 如 ru [if]. This also means that the use of these conjunctions is mostly due to influence of the ST. If we refer to Subsection 5.7.1 and Subsection 5.7.2, there are 1,005 instances of 则 ze [then] functioning as correlatives conjunctions out of 1,058. The frequencies of correlative conjunctions are very high. This can be an example of use of hypotactic conjunctions which may have triggered the paratactic aspects or the correlative conjunctions.

4. The next parameter is a comparison of implicitation and explicitation based on semantic categories in the ST and the TT.

Table 7.14 Comparison between pure implicitation and pure explicitation

Description	Is pure explicitation more than pure implicitation?	Frequency of pure implicitation	Percentage of pure implicitation in source texts	Frequency of pure explicitation	Percentage of pure explicitation in translated texts
Global combined statistics	yes	915	13.54	2,798	33.38
Combined statistics of *addition* semantic category	yes	562	23.74	1,046	35.21
Combined statistics of *conditional: positive: if...then* semantic category	yes	80	6.90	1,257	44.65
Combined statistics of paratactic *conditional: positive: if...then* semantic category	yes	0	0.00	1,053	98.97
Combined statistics of hypotactic *conditional: positive: if...then* semantic category	yes	80	6.97	204	11.65
Combined statistics of *conditional: concessive/adversative* semantic category	yes	17	3.42	263	29.19
Combined statistics of paratactic *conditional: concessive/adversative* semantic category	yes	17	3.85	251	33.69
Combined statistics of hypotactic *conditional concessive/adversative* semantic category	yes	0	0.00	12	7.69

A constant trend is that pure explicitation by the translators is always more than implicitation by the translators in the global combined statistics and all the semantic categories that are being examined. There are two categories with cases of explicitation but no implicitation, i.e. the combined statistics of the paratactic *conditional: positive: if...then* semantic category and the combined statistics of the hypotactic *conditional: concessive/adversative* semantic category. There are also semantic categories which experience excessive explicitation, i.e. the combined statistics of the paratactic *conditional: positive: if...then* semantic category with the percentage of explicitation going as high as 98.97%. This evidence of extremely high explicitation compared to the low implicitation is another reason for explicitation in the TT.

5. The last comparison is a comparison between total conjunctions explicitated with total conjunctions in the NT.

Table 7.15 Comparison between pure explicitation and non-translated texts

Chinese conjunctions	Is pure explicitation more than NT?	Frequency of pure explicitation in TT	Frequency of NT conjunctions	Log-likelihood value
则 ze[then]	yes	1,048	224	+584.52
而 er[and]	yes	858	490	+104.08
但是 danshi[but]	yes	51	31	+5.05
只要 zhiyao[if only]	no	7	33	-18.19
以 yi[so that]	no	36	141	-65.92
且 qie[and]	no	24	96	-45.81
尽管 jinguan[although]	no	1	3	-1.03
如 ru[if]	no	150	886	-574.68
但 dan[but]	no	200	780	-353.15

Comparing explicitation by the translators with the NT, it is found that explicitation of 则 ze [then], 而 er[and] and 但是 danshi [but] by the translators has far exceeded use of the same elements in the NT. Interestingly, they are paratactic conjunctions.

7.1.8 Summary of Findings for Combined Analyses

Based on the above findings, listed below in (1) through (5) is a summary for the combined analyses.

1. It is found that indeed there are more conjunctions in the TT compared to the occurrence of conjunctions in the ST and in the NT, i.e. there is S-explicitation and T-explicitation, except for some individual cases where the NT have more of certain conjunctions. In addition, generally, the ST have more conjunctions than the NT have, except for the *additive*, the *conditional: positive; if...then* semantic category and the paratactic *conditional: concessive/adversative* semantic category.

2. The second comparison which is based on semantic categories finds that the ST use semantic categories according to the order of *addition, conditional:*

positive: if...then, *temporal: different time*, *causal: purpose* and *conditional: concessive/adversative*. Meanwhile, the TT and the NT show different sequences from the ST, namely *addition, conditional positive: if...then, conditional concessive/adversative, causal: purpose* and *conditional: negative*.

3. Generally, ST influence which includes formal correspondences, shifts from conjunctions and shifts from non-conjunctions has caused explicitation without needing pure explicitation by the translators in all cases except for some paratactic semantic categories and some individual conjunctions.

4. Generally influences from the ST make up 66.62%, with the remaining 33.38% of pure explicitation. However, other semantic categories and individual conjunctions are placed along a continuum from very high to very low influence of the ST or very high to very low percentages of pure explicitation. Interestingly, ST influence is high in the use of hypotactic conjunctions while translators prefer to explicitate paratactic conjunctions.

5. There is more S-explicitation than S-implicitation, which is partly attributable to the general S-explicitation.

6. Pure explicitation of paratactic 则 ze [then], 而 er [and] and 但是 danshi [but] is so high such that with pure explicitation alone, it has already caused T-explicitation.

This ends the section on combined analyses. Now, we will proceed to analysis of the effects on T-change.

7.2 Effects of T-change

Based on the study of distinctive value of conjunctions in Section 5.5, it is found that there are more types of conjunctions in the TT than conjunctions in the NT. In this section, the possible effect on T-changes of the distinctive conjunctions with value

over LL: 50 will be identified to answer research question 4. For ease of reference, research question 4 is repeated here:

> (4) What are the possible effects of change on the TT when compared to the NT?

This section is dedicated to discovering some possible effects of the change in comparable analysis, comparing the TT and the NT. With their specific meanings, conjunctions hold and bind clauses or paragraphs together to form a logical link or a semantic relationship between them. It is hypothesised here that when Chinese readers who always read Chinese texts with fewer conjunctions, except for the use of some conjunctions, though subtle as it may be, the Chinese readers may feel some different effects in their reading.

Table 7.16 shows distinctive conjunctions with a value over LL: 50 in the TT compared with those conjunctions in the NT; while Table 7.17 shows the opposite. From Table 7.16, the possible effects of changes will be categorised according to the effects of the changes and discussion made.

Table 7.16 Distinctive conjunctions of translated texts over LL: 50 compared with non-translated texts

No.	Conjunctions	Frequency in translated texts	Frequency in non-translated texts
1.	则 ze[then]	1,058	224
2.	而 er[and]	1,127	490
3.	但是 danshi[but]	238	31
4.	只要 zhiyao[if only]	210	33
5.	以 yi[so that]	420	141
6.	且 qie[and]	283	96
7.	尽管 jinguan[although]	69	3
8.	如 ru[if]	1,242	886

Table 7.17 Distinctive conjunctions of non-translated texts over LL: 50 compared with translated texts

No.	Conjunctions	Frequency in translated texts	Frequency in non-translated texts
1.	但 dan[but]	498	780

In Section 3.7, I have discussed the effects of change proposed by other researchers. Here, I would like to suggest, based on the functional properties which are attached to conjunctions, that explicitation/implicitation of conjunctions would explicitate/implicitate the relationships that are attached to the conjunctions. Below are some of the hypothesised effects of changes when a comparison is made between the TT and the NT.

7.2.1 Increased Formalism

Based on the types of conjunctions, Xiao, He and Yue (2010) have found that the TT use more types of informal conjunctions. However, based on the frequency of a conjunction which has formal element in it, explicitating it may cause the texts to be more formal.

The explicitation of paratactic *conditional: positive* 则 ze [then] is found to be most prominent and needless to say, more distinctive, in the TT. It is argued here that due to the semantic load of formalism that the word carries, excessive explicitation of 则 ze [then] may cause the texts to sound formal. The case of 则 ze[then] which has been explicitated in the TT exemplifies this observation.

Example 1
    If there is no such fund, *the detaining authorities shall pay these prisoners a fair working rate of pay.
    若无此项基金，则应由拘留当局对此种战俘付给公平之工资。 (01_treatment of prisoners)

From this sentence, it is quite obvious that 则 ze [then] has been added by the translator due to use of 若 ruo [if] in the preceding clause. If someone who used to reading the original institutional texts (i.e., in the Chinese language) in which the 则 ze [then] is sparingly used (about 200 则 ze [then] in a span of about 300,000 words), would suddenly be presented texts with a lot of 则 ze [then] (about 1000 则 ze [then] in a span of about 300,000), perhaps, it is quite likely that he would have felt that the TT are a bit too formal, a bit too official, not knowing that the feeling of fomalness of the texts is due to explicitation of correlative conjunctions like 则 ze[then].

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7.2.2 Increased Connectedness

The use of conjunctions is to bind and join clauses. Therefore, it is contended here that when the conjunctions that bind and join clauses are explicitated, they may cause the clauses to be more closely-knitted and connected. This statement goes across all conjunctions which are explicitated. This is especially so for the *additive* 而 er [and] and 且 qie [and] which are distinctive in the TT, as the function of these conjunctions is to bind both clauses in a neutral way to add to an argument. Example 2 shows the addition of 且 qie [and] where there was no use of this conjunction in the ST.

Example 2
> If an undertaking is accepted, the investigation of dumping and injury shall nevertheless be completed *if the exporter so desires or the authorities so decide.
> 如承诺被接受，且如果出口商希望或主管机关决定，则关于倾销和损害的调查仍应完成。(43_implementation of article 6)

In this sentence, 且 qie [and] is explicitated due to restructuring by the translators. The *additive* conjunctions are more frequent than those in the NT, despite 并 bing [and] being more distinctive in the NT but not amounting to both the combination of 而 er [and], 且 qie [and] and other *additive* conjunctions. This may cause the texts to have more connectivity, as the conjunction explicitates not only the word itself but the function which comes with it.

7.2.3 Increase of Concessiveness but Decrease of Adversativeness

A third possible effect of change in the TT is the possibility of an increase of concessiveness but a decrease of adversativeness. Concessiveness is represented by hypotactic conjunctions like 尽管 jinguan[although]; while adversativeness is represented by paratactic conjunctions like 但 dan [but]. Comparing the use of paratactic adversative 但 dan [but] in the T-universe, it is found that, unlike other research, there is T-implicitation of conjunctions in the TT as there are more 但 dan [but] in the NT than in the TT. Despite the presence of more 但是 danshi [but] in the TT, they are not sufficient to bring the total usage of 但 dan [but] and 但是 danshi

[but] (736) on a par with the usage of the same conjunctions in the NT (811). These findings suggest that the NT prefer to use more paratactic *adversative* conjunctions. Hence, even if translators explicitate these conjunctions, the conjunctions are not sufficient to make them closer to the norms of the NT. Therefore, there is a decrease of adversativeness. As for the hypotactic *conditional* conjunctions (see Appendix 8), which are partly represented by 尽管 jinguan [although], there is a total of 156 in the TT but only 40 in the NT. This situation may cause the TT to increase in concessiveness. On this point, Halliday's (2006) earlier observation on the English and Chinese conjunctive systems in Section 2.4 seems relevant. He contends that the dependent clause in English has to be marked but the reverse is true for Chinese where the dominant clause has to be marked instead. The relevance of Halliday's observation here are that it seems to provide a structural reason why hypotactic conjunctions are more common in the TT due to the influence of the ST, while paratactic conjunctions are more frequent in the NT.

Comparing the paratactic *adversative* conjunctions with the hypotactic *concessive* conjunctions, it is found that the paratactic *adversative* conjunctions show a more direct contrastive message while hypotactic concessive conjunctions show more concessiveness with less directness. Two examples are provided below, where example 3a shows the use of paratactic conjunctions in the NT, while example 3b shows an addition of hypotactic conjunctions; they may shed some light on the above.

Example 3a
　　在紧急情况下*请求或信息可通过口头形式转达,但应在不晚于七十二小时内以书面形式确认,必要时,使用技术手段转交文本。(44_打击恐怖主义[77])
　　[Back translation: In an emergency, *the request or news can be exchanged orally, <u>but</u> it should be clarified in written no later than 72 hour, when necessary, use technology to exchange the texts.]

Example 3b
　　在紧急情况下尽管请求或信息可通过口头形式转达,<u>但</u>应在不晚于七十二小时内以书面形式确认,必要时,使用技术手段转交文本。(44_打击恐怖主义)

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[77] Please refer to Appendix 2.

[Back translation: In an emergency, <u>although</u> the request or news can be exchanged orally, <u>but</u> it should be clarified in written no later than 72 hour, when necessary, use technology to exchange the texts.]

In example (3a), even though it can be written as (3b) by adding *concessive* conjunctions, it is not the usual practice or norm in the NT. Looking at examples (3a) and (3b), it was found that (3a) has a very direct emphasis on the adversativeness or contrast of the second clause; however, with the addition of the hypotactic conjunction, the focus is now shifted to the concessiveness of the hypotactic clause. In other words, the use of paratactic *adversative* conjunction alone may show bluntness, strong and straightforward instruction of adversativeness, but with the hypotactic *concessive* conjunction, the tone mellows, and instructions may become less direct, perhaps more diplomatic.

7.2.4 Increased Conditionness

More *conditional* conjunctions explicitate the *conditional* relationship and subsequently may cause the texts to be more critical and serious. In the research, 只要 zhiyao [if only] and 如 ru [if], which are *conditional* conjunctions, are distinctive in the TT. There is a difference of 536.36% of 只要 zhiyao [if only] and 40.18% of 如 ru [if] in the TT. Both 只要 zhiyao [if only] and 如 ru [if] are *conditional: positive* conjunctions which set rules and stipulations to be followed. Example 4 is an example where the translators have restructured the ST and in the process have added 如 ru [if].

Example 4
The registration or use of any such aircraft, or of any certificated aircraft part, *in any State other than that in which it was originally certificated shall be at the discretion of the State into which the aircraft or part is imported.
任何此项航空器或任何此项有证书的航空器部件，<u>如</u>在其原发证国以外的其他国家登记或使用，应由此项航空器或航空器部件所输入的国家自行决定能否予以登记或使用。(21_chicago)
[Back translation: Any such aircraft or certificated aircraft part, <u>if used in any State other than</u> that in which it was originally certificated, shall be at the discretion of the State into which the aircraft or part is imported to determine it can be registered or used.]

Looking at the above example, it is noted that the phrase "in any State other than…" is changed to "if used in any State other than…". There is no obvious condition in the ST, as "in any State" only shows the place, but an extra condition has been added in the TT. Conditions are circumstances or a situation which has to happen or to be fulfilled or adhered to in order that the circumstances or the situations in the subsequent clause can be true or can be activated. Therefore, expliciting the *conditional* conjunction may increase conditions such as requirements, rules and circumstances that need to be fulfilled, hence, causing the institutional texts to sound rule-like, critical and serious.

7.2.5 Increased Purposefulness

Comparing 以 yi [so that] which is used in the TT and the NT, there is an increase of purposefulness by 197.87% in the TT. The *causal: purpose* conjunctions, 以 yi [so that] is used to join clauses with a function of purpose, developing the argument of texts. In example 5 below, 以 yi [so that] is explicitated by the translator.

Example 5
The management of each hospital shall at all times hold * at the disposal of the competent national or occupying authorities an up-to-date list of such personnel.
各医院之管理当局应随时备有上述各项工作人员之最近名单，以供本国或占领国主管当局之用。(02_Convention 4)
[Back translation: The management of each hospital shall at all times hold an up-to-date list of such personnel, so as to be at the disposal of the competent national or occupying authorities.]

It is noted that the phrase "at the disposal of the competent national or occupying authorities" has been translated to "so as to be at the disposal of the competent national or occupying authorities", thereby expliciting the purpose of the relationship between the clauses. The explicitation of the *purpose* conjunctions may explicitates a relationship of purpose, aim, intention, motivation, resolve and resolution, increasing the seriousness of the institutional texts.

7.2.6 Summary of Findings for Effects of T-Change

Based on the presentation in Sections 7.2.1 through 7.2.5, below is a summary of the findings. The paratactic *condition* 则 ze[then] has been seen to have made the TT more formal, more official and more serious than the NT. Explicitation of the *additive* 而 er[and] and 且 qie[and] may cause the texts to be more closely knitted together in the TT than the NT. Also the many cases of explicitation of 尽管 jinguan[although] in the TT may cause the TT to be more concessive and more diplomatic. However, the use of 但 dan[but] in the NT may cause the NT to show adversative and contrastive, and presumably may be more direct and more blunt. The explicitation of 只要 zhiyao[if only] and 如 ru[if] may raise the level of conditions which have to be fulfilled in order that the subsequent clause to be true, causing the texts to sound rule-liked, critical and serious. Finally, explicitation of 以 yi[so that] compared to its uses in the NT may cause the TT to be more purpose-oriented and seemingly more serious.

7.3 Concluding Remarks

This chapter has presented an analysis of the relevant corpora to investigate and then to seek the answers to research questions (3) and (4). The statistical analyses provided in Section 7.1 and its subsections have been followed by the findings in (1) to (5) in Section 7.1.8. In general, research question (3) has been answered positively by the findings in (1) through (5) in Section 7.1.8. That is explicitation, implicitation and shift in the Chinese translation of the English institutional texts can affirmatively be attributed to the influence of the ST and interpretation by the translators. In some cases the target language influences have exerted their roles and consequently have caused many different instances of shifts compared to the NT. With respect to research question 4, the findings have been summarized in Section 7.2.7. Those findings generally found that there may be an increase in the formalness, connectedness, concessivenss, conditioness and purposefulness of the TT.

Through the calculation of global statistics, statistics of the top three semantic categories, and statistics of the distinctive conjunctions, based on quantitative terms,

the linguistic elements influencing translation generally and influencing translation individually have been identified. Through the calculation of the semantic categories used in these three texts, it has been possible to explore the likely inferential make-up of the translators. Based on the frequency of usage in the TT and the NT, the effects of change in the use of conjunctions have been made known, showing some possible differences in the stylistic sense between these two text types.

CHAPTER 8
Conclusions and Suggestions for Future Research

This last chapter is the concluding chapter where the interpetation of the findings, discussion of the matters related to this study and implication for future studies will be expounded on.

8.1 Discussion on Research Questions

Based on the findings in Chapter 5 through Chapter 7 through the consolidation of process and product, quantitative and qualitative, parallel and comparable, and computational and manual empirical descriptive research, the sections below discuss the findings in some depth.

8.1.1 Discussion on Research Question 1: Comparable Investigation

The overall quantitative evidence, like the percentage of total conjunctions, the total top-5 frequency count, the total frequency of the 21 most common conjunctions, the total frequency of conjunctions which are distinctive, the frequency of conjunctions in the tactic and the textual categories, the total frequency of correlative constructions, and the total frequency of double conjunctions, seems to indicate that indeed there is T-explicitation, which entail that clauses in the TT be more closely-knitted, with more explicit relationships manifested in the use of conjunctions compared to clauses in the NT. This T-explicitation aligns with the findings of Chen (2006), Wang and Qin (2010) and Xiao, He and Yue (2010) who have researched the English-Chinese pair.

This study also shows that T-explicitation is extensive with the LL value of +39,778.23 for the percentages of total conjunctions; +13,218.08 for the top-5 conjunctions; +16,819.52 for the most common conjunctions; +129,107.83 for the conjunctions which are distinctive in the TT, but with a lower value of -9,448.99 for the conjunctions which are distinctive in the NT; +27,557.41, +58,635.14 and +72,126.19 for the paratactic, the hypotactic and the textual categories respectively;

+388,413.12 for correlative constructions; and +231,579.44 for double conjunctions. The difference of 62.50% for the percentage of total conjunctions compared to 37% in the Taiwanese corpora and and 17% in the Chinese corpora of Chen's (2006) popular science texts indicates either the ST utilise a greater proportion of conjunctions in the institutional texts which in turn influences translation, or the institutional texts are harder texts than the popular science texts which causes greater interpretation on the part of the translators of the TT. The answer to this query can be obtained from the discussion in Section 8.1.3 when all the corpora are combined in the analysis.

Even though the overall quantitative evidence shows a prominence for T-explicitation of conjunctions in the TT, there are also individual conjunctions which are implicitated in the TT, signaling T-implicitation. The distinctive conjunctions of the NT compared with the TT are four (并 bing [and], 但 dan [but], 鉴于 jianyu [in view of] and 以免 yimian [lest]), and the use of correlatives and double conjunctions also shows some lexical patterning with slightly higher hits in the NT. All these serve as evidence for T-implicitation, although the frequencies[78] and types of T-implicitation are far fewer than those of T-explicitation.

The findings also have shown that when conjunctions are explicitated in the TT, they are more spread out, distributed over more numerous types of conjunctions. The evidence can be found in the following: (1) the lower rise of the top-5 conjunctions compared to the higher rise in the percentage of the total conjunctions; (2) more types of conjunctions of over 1,000 hits in the top-5 conjunctions in the TT; (3) the atypical conjunctions found in the TT have also been used far more frequently; and (4) more types and higher frequency in the 21 most common conjunctions, distinctive conjunctions, correlative conjunctions and double conjunctions in the TT. This evidence has refuted part of Laviosa-Braithwaite's (1996) simplification hypothesis[79] where she proposes that lexical usage in TT is less diverse but used

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[78] This evidence is supported by lower LL value of -9,448.99 for conjunctions which are distinctive in the NT as compared to a higher value of +129,107.83 for conjunctions which are distinctive in the TT.
[79] Laviosa's (1998: 4) four patterns of lexical simplification includes 'a relatively lower proportion of lexical words versus grammatical words, a relatively higher proportion of high-frequency versus low-frequency words, relatively greater repetition of the most frequent words, and less variety in the words most frequently used'.

more frequently. It has also refuted the leveling out hypothesis in translation (Baker, 1996) where it is said that there is a tendency for the TT to hover around the centre of any continuum rather than move towards the fringes. In this study, it is found that conjunctions are used more diversely, more frequently and not only hover around the centre of the continuum but also occur towards the fringes. On the other hand, when conjunctions are implicitated, they rely heavily on only two conjunctions, i.e. 并 bing [and] and 但 dan [but].

The research on type-token ratio shows that conjunctions are used more varied and more repeatitive in the TT. On the variety of conjunctions, it is found that, indeed, there are more types of conjunctions in the TT than in the NT, and the conjunctions not found in the NT are considered as atypical conjunctions. The findings on variety are not only supported by the results of TTR1, but are also supported by more types of conjunctions and semantic categories which are distinctive in the TT, more types of correlative conjunctions and more types of double conjunctions where the 'combinatorial preference' (Mauranen, 2000: 127) is different from the original. This part is in agreement with Mauranen's (2000) atypical lexical patterning which has also been extended to the notion of atypical lexicogrammatical selection in this research. The repetition of the use of conjunctions is supported by the results of the TTR2 and the inverse TTR2. This in turn is in alignment with Laviosa-Braithwaite's (1996) hypothesis of more repetition or overuse of most frequent lexis in the TT, although they are infrequent in the NT. This also refutes the findings by Baker (1993) and Toury (1991) that TT tend to avoid repetitions. Here, we find that conjunctions are repeated more in the TT.

Despite the differences, the research also finds some similarities in the behavior of conjunctions in the TT and in the NT. For example, four conjunctions (并 bing [and], 如 ru [if], 而 er [and] and 但 dan [but]) out of the top-5 conjunctions are found to be the same in the TT and the NT; both the TT and the NT use paratactic conjunctions more frequently than they do hypotactic conjunctions, and hypotactic conjunctions are more than the textual; both texts use more stand-alone conjunctions than correlative conjunctions; and 则 ze [then] is generally used to pair correlative constructions in both texts. The quest for identification of similarity here presents

more honest and unprejudiced research, as pointed out by Mauranen (2000: 138), to avoid 'the exaggeration of the differences at the expense of the similarities in the data categories'. Although sequences in the use of paratactic, hypotactic and textual conjunctions are the same in the TT and the NT, it is found that the NT prefer paratactic conjunctions much more. Although both the TT and the NT use more stand-alone constructions, the TT much prefer use of correlative conjunctions compared to use of the same conjunctions in the NT.

From the research, it is evident that the conjunctions used are genre specific. This is made evident through a comparison of the ranking of the 21 most used common conjunctions with conjunctions used in the institutional texts.

All in all, conjunctions are found to be used more frequently, more extensively, more spread out, more variedly and more repeatedly in the TT, making the use of conjunctions based on these parameters in the TT incongruent with the use of conjunctions in the NT. However, there are also cases of implicitation for certain conjunctions, correlative conjunctions or double conjunctions in the TT, but the occurrences are not as rampant as explicitation. Besides these great differences, there are also some similarities, but it seems that the differences in form are greater than the similarities in form. Through this research, it is also confirmed that the use of conjunctions is genre specific.

8.1.2 Discussion on Research Question 2: Parallel Investigation

Parallel analysis has found that there is also more pure explicitation than pure implicitation in the translation of conjunctions in the TT. There are also slightly more types of conjunctions which experience explicitation than implicitation. There are seven types of conjunctions which experience more than 70% of the explicitation but there are only four types of conjunctions which experience more than 30% of the implicitation. All these findings point towards the fact that S-explicitation is a more common phenomenon in the TT.

The top-3 most explicitated semantic categories are *conditional: positive: if...then*, followed by *addition* and *conditional: concessive/adversative*; while the top-3 most implicitated semantic categories are *addition, causal: purpose* and *conditional: positive: if...then*. Despite the plus and minus of pure explicitation and pure implicitation, it is found that translators are more prone to explicitate *conditional: positive: if...then*, followed by *addition* and *conditional: concessive/adversative*.

The reasons of pure explicitation and pure implicitation are sometimes symmetrical, like for pure explicitation where punctuation is replaced by a conjunction and for pure implicitation where a conjunction is replaced by punctuation. Both pure explicitation and pure implicitation are also due to structural change. In addition, both are due to adding or omitting phrases or clauses. Besides similarities, in terms of reasons, there are also differences where explicitation happens before phrases in the ST, and is triggered by other word forms or correlative conjunctions; while implicitation happens when conjunctions are completely implicitated, and double conjunctions are translated into single conjunctions.

In terms of shift, it is found that there are cases of shift from other conjunctions and non-conjunctions into conjunctions, and shift from conjunctions into other conjunctions and non-conjunctions. Comparing the reasons of shift into conjunctions and shift-out of conjunctions, it is found that they also have symmetrical reasons. Among them are reciprocal shift from other conjunctions into conjunctions (viewed from the TT) and shift from conjunctions (viewed from the ST) into other conjunctions. Besides that, there is also reciprocal shift of prepositions and prepositional phrases, adverbs and verbs with conjunctions which are types of class shift (Catford, 1965); and additionally, there are reciprocal shifts when conjunctions are reciprocally shifted into or out of adverbs and verbs, which are types of level shift where grammatical level is shifted into lexical level and vice versa (Catford, 1965). The differences are when conjunctions are shifted from the infinitive "to" and from relative pronouns; and conjunctions are shifted into phrases and auxiliary words.

Generally, looking at the ST, pure explicitation causes addition of meaning as conjunctions do carry meaning while pure implicitation causes a reduction of

meaning. Pure explicitation may be due to the translators' interpretation of the logogenesis of sentences and thus they confine the interpretation of the logogenesis of the sentences based on the translators' interpretation. Pure implicitation, on the other hand, allows readers to interpret the connection between the logogenesis of the sentences. In addition, the research on shift has found that some shifts cause changes into more meaning which will cause explicitation, changes into lesser meaning which will cause implicitation, changes into very different meanings which cause shifts in meaning; changes into what seems a natural equivalent with differences in meaning; and no changes of meaning which can be due to tagging limitations and also due to syntactic changes. Syntactical changes which occur in both directions giving similar meaning, can be natural equivalents, and considered as grammatical metaphor. In terms of syntacti changes where structural shift (Catford, 1965) occurs, a change from a relative clause into a main clause may be syntactic explicitation; a change from textual into hypotactic conjunctions may be syntactic implicitation; and a change from hypotactic into paratactic conjunction may be syntactic explicitation. There are also syntactic changes of unit shift (Catford, 1965), where the change from a phrase into a clause may be syntactic explicitation while the reverse is syntactic implicitation. Sometimes, in order to give the full meaning of the ST conjunctions, translators use interesting combinations like a conjunction with an added phrase, two adverbs, and a preposition and an adverb. Some of these changes occur because it is more common and natural in each systemic language, and can be considered intra-system shift (Catford, 1965).

The study of parallel texts has shown some weakness in the POS taggers when identifying conjunctions, e.g. "wherever" is left out but is found in the SFL list. Some of the conjunctions in the SFL conjunctive lists of English and Chinese which are left out in the POS tagging resurface through research on shift, and this may show that SFL is more accurate and detailed in identifying conjunctions. This research has also shown us some problems in using taggers which are created by different groups based on different traditions, although each tagger professes that its tagging is based on parts of speech. For example, 当 dang [when] is always tagged as a preposition in Chinese although the construction that follows is a clause, and it is indeed a formal correspondent for conjunctive "when". The study on parallel texts

has also shown that the existing SFL lists may not be exhaustive, as there are many more other conjunctions, prepositions or prepositional phrases which give the same semantic functions which may be included in the lists. All in all, SFL is able to identify shift, especially when shift is between semantic functions and also between conjunctions and prepositions, or conjunctions and others; and some cases which give similar meaning can be grouped as grammatical metaphor. Through this research, it is also found that a preposition followed by a noun which has the same base word as a verb may also be part of hypotactic conjunctions. This is probably true only in Chinese, where the subject noun phrase can be optionally dropped. Thus, this research calls for a more accurate tagger which is based on SFL, so that more detailed comparisons can be made.

Frequently, we encounter claims that indicate that the use of conjunctions is not obligatory (Klaudy, 1998), and it may be so in many cases. However, this research has shown that there are many fixed or semi-fixed phrases or formulaic expressions which use conjunctions like 同时 考虑 tongshi kaolyu [at the same time consider], "as appropriate" which is an ellipsis of "as it is appropriate", 以 昭 信守 yi zhao xinshou [literally: to show honour] which uses the conjunctions 以 yi [so that] and 而 言 er yan [regarding] and 而 定 er ding [and set] which use the conjunction 而 er [and]. There are also cases of shift where conjunctions are shifted into more fixed phrases in Chinese, e.g. "as the case may be" is translated into 视 情况 shi qingkuang [view the situation]; and "as appropriate" is shifted into 适时 地 shishi de [at the right moment]. These changes may be language-related making them "more natural" in the TT, just as evidenced by Baker (2004) who found the TT to prefer fluency. Here the phrase "more natural" is in "inverted commas" as it may be a "more natural" use of the Chinese language, but it may not be "more natural" when it is compared to the frequency in use of these formulaic expressions in the NT of institutional texts[80]. This supports the evidence of the law of growing standardisation where use of these fixed or semi-fixed terms is unusually more common in TT than in NT. This is in line with much other research like Baker (1996) who found that

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[80] There are some exceptions, namely the frequency of the usage of the total of 以 昭 信守 yi zhao xinshou [literally: to show honour], 以 资 证明 yi zi zhengming [literally: to provide prove] and 以 供 使用 yi gong shiyong [literally: to supply use] is similar between the TT and the NT.

there is an over-representation of target language expressions in TT. However, the research has found evidence that use of conjunctions in the TT is generally not in accordance with NT' language expressions.

All in all, parallel analysis shows that explicitation of conjunctions is still a more common phenomenon compared to implicitation. In addition, there are also shifts. This research has also shown some more common cognitive inferential processes of the translators. The linguistic causes of the changes found have given us the linguistic reasons of explicitation, implicitation and shift; and these can serve as fundamental references for translators, giving awareness of their own actions or inactions.

When comparing the parallel texts, having known that there is pure explicitation, pure implicitation and shift, a point worth pondering is whether explicitation, implicitation and shift are allowed, especially when it comes to a legal point of view. Would there be any dispute about agreements where conjunctions are added, omitted or shifted, perhaps due to the interpretation of the translators or due to conforming to the norms of the NT or the target language, or due to language constraints differing from the ST? Or to put it another way, can we deviate from the ST logical-semantic relations, and instead use the target language ways of binding? Would there be any legal implications? Sometimes, it does seem that pure explicitation is unavoidable, pure implicitation seems natural, and shift seems "inevitable" because of language constraints.

8.1.3 Discussion on Research Question 3: Combined Investigation

The findings in research question 3 show that there are more conjunctions in the TT than the ST and the NT, or in other words, generally, there is S-explicitation and T-explicitation. However, internally, there are also cases of S-implicitation, but it is found to be always less than S-explicitation. As for T-implicitation, internally, the findings also show some cases of T-implicitation, but they are not sufficiently more than T-explicitation. These findings on explicitation generally support the explicitation hypothesis (Blum-Kulka, 1986) in the TT, be it comparison between

parallel texts or comparable texts. The exceptional cases are the interesting findings of this research which show that the general result is made up of exceptional cases.

The general notion that English is an explicit language while Chinese is an implicit language is supported by the global combined statistics. However, a more detailed study also demonstrates that not all semantic categories are more frequent in the ST compared to the NT, at least not for *additive*, paratactic or hypotactic *conditional: positive: if...then* semantic categories and not for paratactic *conditional: concessive/adversative* semantic category whose log-likelihood is lower in the ST compared to the NT. This again illustrates that the cumulative results may also be constructed by other exceptional cases.

Since the ST generally have more conjunctions than the NT have, we would expect ST influence on the use of conjunctions in the TT to be extensive. However, it is found that formal translation of the ST conjunctions is generally not sufficiently more prominent than the numbers in the NT. Neither are they more than in the NT with the addition of shifts from other conjunctions. The use of formal correspondences in the TT, besides obviously being due to occurrences in the ST, can also be said to arise from decisions made by translators to retain conjunctions. The category of shift from the other conjunctions is found to be between the influence of the ST and also the decisions made by the translators. This shift from the other conjunctions category shows the influence of the ST as conjunctions are present in them. It is also said to be due to a decision made by the translators where the translators decide to shift into other conjunctions based on their own interpretations. This shift may result in natural equivalents. This combination of formal correspondences and conjunctions shifted from other conjunctions is not sufficient to cause explicitation and shows us that conjunctions are not the only source from which translators draw their inspiration to utilise conjunctions in TT. It is only with the addition of conjunctions which are shifted from other non-conjunctions that the frequency in the TT will be more than the frequency in NT. This group may consist of shifts from prepositions or prepositional phrases, infinitive "to", adverbs, relative pronouns and verbs. For this category, looking at this from a parallel analysis' point of view, shifts can be said firstly to be due to the occurrence of other lexis in the ST, secondly to systemic differences between the two

languages, or tagging differences. For example 如 ru [if] is shifted from the prepositional phrase "in the event of", 尽管 jinguan [although] which is shifted from the preposition "notwithstanding", 以 yi [so that] which is shifted from the infinitive "to", 以 昭 信守 yi zhao xinshou [literally: to show honour] which is shifted from "in faith" or "in witness", etc. Finally, they are also due to decisions made by the translators. These shifts may sometimes produce natural equivalents as they may be grammatical metaphors. Indeed, somehow or rather, like the findings of Mauranen (2004) on lexis, interference of the ST is real in the TT. However, looking at this from a comparable analysis' point of view, some of the use of these conjunctions may not be welcome, as some are fewer in the NT. Sometimes, although the phrases used are legitimate natural phrases in the target language, they may not be used so often in the NT of institutional texts.

Again, there are a few exceptional cases where the translation with formal correspondences alone causes explicitation, i.e. 但是 danshi [but], 只要 zhiyao [if only], 且 qie [and] and 尽管 jinguan [although]. There are also other exceptional cases where the total ST influence, inclusive of formal correspondences, conjunctions shifted from other conjunctions and conjunctions shifted from other non-conjunctions, are not more than the NT. They are the *additive* semantic category, the paratactic *conditional: positive: if...then* and the paratactic *conditional: concessive/adversative*. Interestingly, they are all paratactic categories. As these categories are higher in the TT, except for the paratactic *conditional: concessive/adversative*, the other two semantic categories rely quite a bit on the explicitation by the translators in order to be more than the NT.

Ultimately, concluding from the previous two paragraphs, we can make an inference here that ST conjunctions alone are not sufficient to cause explicitation when compared to the NT, even though generally there are more conjunctions in the ST than in the NT. This phenomenon can be due to shifts into other non-conjunctions like shifts into adverbs, prepositions, verbs, etc., and implicitation when translating the ST. Shift into other non-conjunctions and implicitation may be strategies that translators employ in order to cut down use of conjunctions. Not all implicitation is welcome, like the implicitation of 但 dan [but] and a few other conjunctions. Shift

and implicitation can be said to be parts of the intervention by translators, as they are decided by them so, and partly due to the influence of the norms of the target language to express certain clauses with conjunctions differently. It may also be due to differences in the tagging systems.

Basically, general use of conjunctions in the TT compared to those in the ST is 66.62% due to the influence of the ST and 33.38% due to pure explicitation. The findings in Chapter 7 also show very clearly that the cumulative statistics are not sufficient to account for differences that happen individually, as cumulative statistics are made up of statistics which are in a scale, for example, ranging from only 0.95% for use of 则 ze [then] showing the influence of the ST to 98.55% for 尽管 jinguan [although]. Even the 33.38% of so-called pure explicitation may be partly due to the occurrence of correlative conjunctions in the ST (see Section 6.1.3.6). One may even argue that explicitation of 但 dan [but] may be interpreted as NT influence as there are more in the NT. Or perhaps not, as general knowledge may be that Chinese is an implicit language, thus, there should not be explicitation of any type of conjunctions, and they should be used sparingly. Thus, I would interpret explicitation of 但 dan [but] as purely due to explicitation of the interpretation of the translators.

From this research, it was found that certain conjunctions are influenced more by the ST while others are influenced more by the interpretation of the translators. The ST influence in the use of hypotactic conjunctions is very high, so high that even without pure explicitation by the translators, it causes explicitation in the TT compared to the NT. We have found in Chapter 5 that NT prefer paratactic conjunctions. Such a preference can be traced to the cultural background of the Chinese language where poems mostly consisted of lines of equal length and where structures are balanced. In such an environment, the introduction of English hypotactic elements in the TT which places some facts more as important than others in structures of unequal status which causes differences in the TT compared to the NT. Interestingly, the research also shows that generally translators prefer to explicitate paratactic conjunctions. Sometimes, some individual paratactic conjunctions are explicitated by the translators so frequently that even without the influence of the ST, they cause explicitation in the TT compared to the NT.

Interestingly also, although the NT do not exert much overt influence, especially in terms of frequency or form, looking at the combination of semantic categories, the underlying cognitive processes of the translators seems very similar to the cognitive processes of writers in the target culture, despite the influence of the ST. In other words, it seems that translators have the same inferential processes as the native writers. Nonetheless, one may not agree fully that conjunctions are windows to the cognitive processes of the translators as there are many factors which may counter this research direction, among them: (1) there may be underlying logical-semantic relations that is implicit, especially in native Chinese, where these "extra" logical-semantic relations may not be in line with the sequence of cognitive preferences found in this study and (2) other non-conjunctions may also provide the interpretation needed in the texts. Despite these weaknesses, the insistence on using conjunctions to account for cognitive processes is because of the overt, noticeable and long-standing function of conjunction which is to link clauses and propositions, while the functions of other words may be more subdued. Study of the inferential process using conjunctions is fairly unexplored territory and the outcome of this impact of the translators' inferential processes is fairly pleasing. More evidence is needed to support this finding.

We return to the possibility raised in Section 8.1.1 that the percentage of conjunctions increases much more in TT of institutional texts than in TT of popular science texts, and the reasons hypothesised to be due to the influence of the ST or that the texts are harder in the institutional texts thus more interpretation is needed by the translators. It is found that both reasons are legitimate. The first reason for the influence of the ST is supported by the fact that the total ST influence is more than in the NT. The second reason for the level of difficulty of the texts is supported by comparing the percentage of ST influence/the percentage of explicitation between the institutional texts and popular science texts. The total 66.62% of ST influence for institutional texts is less than 74.4% and 77.1% for Taiwanese and Chinese popular science texts [81] (Chen, 2006) respectively. This shows that there is more interpretation or more explicitation by the translators in the institutional texts. That allows us to infer and concur with the findings by Whittaker (2004), that the harder

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[81] These percentages are the average of five conjunctions studied in detail by Chen (2006) in his Taiwanese and Chinese corpora.

the texts are the more interpretation there is by the translators. Therefore, both the influence of the ST and explicitation of the translators play crucial roles in translation of institutional texts causing an increase in the TT of the institutional texts much greater than the increase in the popular science texts.

To answer the research question on whether the causes of explicitation, implicitation and shift in the Chinese translations of English institutional texts are due to influence of the ST, interpretation of the translators or influence of the genre conventions of the NT or target language, I would like to say that there is no clear cut answer, as much as I would like to have one, and as much as I have designed my work orientated to that end. Generally, the influence of the ST conjunctions alone is not strong, but coupling them with the influence of the ST non-conjunctions together causes explicitation in the TT compared to the NT. Adding pure explicitation causes the TT to have many more conjunctions than the NT. The reason the influence of the ST conjunctions is not strong is that some ST conjunctions are shifted into non-conjunctions and others are implicitated. From the research, it is also found that translators are more prone to keeping hypotactic conjunctions and adding paratactic conjunctions. As has been discussed in the previous paragraphs, basic ST formal correspondences may be due to ST influence and also due to decisions to retain by the translators; conjunctions which are shifted from other conjunctions may be said to arise from influence of the ST and the translators; conjunctions which are shifted from non-conjunctions may also be said to arise from influence of the ST, systemic and tagging differences between the two languages, and the translators. Conjunctions which are shifted into non-conjunctions and implicitated may be said to be due to the influence of target language expressions, different tagging systems and interpretation by the translators. Conjunctions which are explicitated are usually due to the translators, but may also be due to the influence of the ST where the ST give the basis for explicitation. Interestingly, changes in conjunctions cause use of the sequences of semantic categories to be the same as the NT but different from the ST. This shows some unconscious cognitive inferential work on the part of Chinese translators which is similar to that of Chinese writers. Although, in terms of the frequency or form, the influence of the NT has lost out to the influence of the ST and the translators, in terms of inferential processes or semantic make-up, the influence of the NT prevails. Thus, I could not pinpoint whether there is foreignisation or

domestication, fidelity or freedom, as the form seems foreignised with ST influence and overt usage of forms by the translators, but the cognitive make-up seems domesticated. Thus, to answer this research question, I would conclude that the TT are the product of intertwining among the influences of the ST, the translators' interpretations, the influences of the target language, and the influences of the NT.

8.1.4 Discussion on Research Question 4: Effects of T-change

As pointed out by Øverås (1998: 562) 'the number of shifts at micro level does not necessarily result in a sense of significant shifts at the macro level in the overall interpretation of the texts, although some kind of cumulative effect might be plausible'. I have looked into that kind of plausible cumulative effect in research question 4. In total, by comparing the functional utility of the semantic aspects of conjunctions with the high distinctiveness value in the TT and the NT, it is found that explicitation of conjunctions like 则 ze [then] , 而 er [and] , 且 qie [and] , 尽管 jinguan [although], 只要 zhiyao [if only], 如 ru [if] and 以 yi [so that] in the TT may cause the TT to be more formal, more official, more knitted together, more concessive, more diplomatic, more serious, more critical, more rule-like and more purpose-oriented. Explicitation of 但是 danshi[but] which does not amount to more than implicitation of 但 dan [but] in the TT, on the other hand, may cause the TT to be more indirect and less blunt than the NT. The TT being more formal is in line with Olohan and Baker's (2000) and Olohan's (2003) surveys where explicitation of "that" causes TT to be more formal. Like the findings by Laviosa (2002) and Kemppanen (2004) who found changes in ideology between the TT and the NT, this research may have found a change of tone in the translations.

However, the effect may be barely perceptible to the target reader as the use is in a span of about 300,000 words. For example the use of 69 instances of 尽管 jinguan [although] spread over a span of about 300,000 words may not be noticed by readers, unless they occur often in a particular text. Furthermore, as has been pointed out by Chesterman (2004b: 11), 'as the sheer quantity of translations grows and target-language norms become blurred, it may be that readers will become more tolerant of

apparent non-nativeness', thus native readers of TT may not recognise any differences.

Based on the findings in Chapters 5 through 7, here are the answers to the research questions laid in Chapter 1.

(1) The use of conjunctions in TT is very much different from use of conjunctions in NT; for example in terms of the LL value, the use of conjunctions in the TT is +39,778.23 compared to NT. Other parameters that attest to the differences are the quantity of the types of conjunctions, the spread, the variedness and the repetition rate. Despite the differences, my work found some similarities, like 4 out of 5 of the top-5 conjunctions are the same, etc.

(2a) The top-10 most explicitated conjunctions in parallel analysis are 则 ze [then], 而 er [and], 但 dan [but], 并 bing [and], 如 ru [if], 同时 tongshi [at the same time, 但是 danshi [but], 如果 ruguo [if], 以 yi [so that] and 否则 fouze [otherwise]. Explicitation happens after or in replacement of punctuations, before phrases in the ST, triggered by other lexis, because of change in structure, because the translators add phrases or clauses not in the ST and because of the addition of the other counterpart of correlative conjunctions.

The top-10 shifts into conjunctions are 如 ru [if], 以 yi [so that], 而 er [and], 如果 ruguo [if], 以便 yibian [so that], 但 dan [but], 只要 zhiyao [if only], 尽管 jinguan [although], 除非 chufei [unless] and 无论 wulun [whether]. These shifts occur because they are shifted from other conjunctions, prepositions, prepositional phrases, the infinitive "to", adverbs, relative pronouns and verbs.

(2b) The top ten most implicitated conjunctions in parallel analysis are "and", "as", "if", "where", "when", "insofar as", "provided", "but", "in order" and "however". Implicitation occurs when conjunctions are replaced with punctuations; or because there are changes in structure, complete implicitation, omitted phrases or clauses, or when double conjunctions are

translated into single conjunctions. The top ten most shifted conjunctions are "where", "when", "as", "after", "provided that", "in order", "as soon as", "before", "and" and "if", which are shifted into other conjunctions, prepositions, prepositional phrases, adverbs, verbs, phrases and auxiliary words.

(3) Through this research, it is found that the TT are a concomitant mixture of ST influence, interpretation by the translators, target language influence in form but not so much as NT influence, and the influence of the target culture's cognitive processes of the NT. The first three influences cause the frequency and form of use of conjunctions in TT to be distinctive from NT, defying the socio-cultural aspect of the paratactic Chinese language; at the same time, the last influence shows that translators still have a Chinese mentality when inferring the logical aspect of sentences.

(4) Based on the frequencies of occurrences of conjunctions which are so much more in the TT compared to the NT, it is found that explicitation of certain conjunctions causes the TT to be more formal, more official, more knitted together, more concessive, more diplomatic, more serious, more critical, more rule-like and more purpose-oriented; while implicitation of certain conjunctions causes the TT to be more indirect and less blunt.

Besides answering the research questions laid in Chapter 1, some other interesting highlights can be identified about use of conjunctions, based on the discussion from Section 8.1.1 through Section 8.1.4.

1. General observation found that there is T-explicitation and S-explicitation (pure explicitation), supporting Blum-Kulka's (1986) and Baker's (1993) claim where there is more explicitness in TT. There is also T-implicitation and S-implicitation (pure implicitation).

2. Overall, both T-explicitation and S-explicitation overwhelm T-implicitation and S-implicitation, in terms of frequency and types.

3. Although explicitation overwhelms implicitation, it is said to cause tighter integration in meaning syntactically and semantically in the TT, especially compared to the ST. Some of the effects may be detrimental when compared to the NT.

4. Hypotactic conjunctions in the TT are usually transferred from the ST while some of the paratactic conjunctions are explicitated by the translators.

5. T-explicitation for institutional texts is excessive, more excessive than that in popular science texts, firstly because of more influence of the ST and also because of the greater interpretation of the translators as the texts are harder.

6. The use or non-use of conjunctions may be language related, especially in fixed or semi-fixed phrases, thus sometimes making use of conjunctions obligatory.

7. The generalisation here is made up of many individual exceptional cases, some sitting in the wide range of a continuum.

This research covers all areas of the models of translation proposed by Chesterman (2000), i.e. comparative, process, and causal. For the comparative model, the TT are compared against the ST and the NT, and the ST is compared against the NT, to find out the differences and the similarities among them. As for the process model, although my model differs from that of Chesterman (2000), the comparison among semantic categories of the TT, the ST and the NT indirectly points to the cognitive translation processes of the translators. As for the causal model which deals with 'why the translation looks the way it does, or what effect it causes' (Chesterman 2000: 19), by comparing the comparable texts, my work is able to identify different language patternings (correlative conjunctions and double conjunctions) as the causes of changes. Comparing parallel texts (TT–ST and ST–TT), my work details the linguistic reasons for changes. At a more macro level, my work sees the combination of different influences on the TT. With changes in the TT, my work has identified the different effects of changes to the TT compared to the NT.

8.2 Issues in the Study of Conjunctions in Translated Texts: Some Explanations

This section rethinks the theoretical framework expounded in Chapter 2 and Chapter 3 in relation to the research conducted, addressing some critical assessments observed through this intensive research, intertwining it with some noted limitations of the research.

8.2.1 Revisiting SFL

Through this research's use of SFL, it is found that SFL is a robust framework which is capable of facilitating the interpretation of use of conjunctions, especially between English and Chinese. Firstly, through the taxonomy of functional semantic categories, conjunctions and their functions are able to be identified. Secondly, when their functions have been identified, appreciable shifts in translation of conjunctions are also able to be identified. Thirdly, with the categorisation of non-defining relative clauses, non-finite present participles "-ing", past participles "-ed" and infinitives "to-" as part of the expansion nestled in the category of *elaboration*, when these are shifted into conjunctions, SFL makes them easier to account for. Fourthly, by placing non-finite prepositions into semantic-functional categories the same as conjunctions, SFL shows us the connections between prepositions and conjunctions. This enables us to account for changes when this type of shift occurs. If the meaning remains the same, or if it is carried over into another word group but gives the same meaning, SFL describes it as grammatical metaphor. Beyond this, with SFL, we are also able to place words of other classes like, nouns, verbs, prepositions and adverbs into the wider expansion of functional semantic categories (Halliday and Matthiessen, 2004), to account for class shift which does not cause shift in meaning. They are again considered to be grammatical metaphors. This study has shown that the categorisation of conjunctions is more accurate than the traditional POS categorisation of conjunctions. For example, SFL has correctly categorised words like 时 shi [time] as conjunctions in some clauses rather than as nouns, in as traditional categorisation. This systematic approach to account for conjunctions provides intricate connections of between meaning, function and syntax is able to be

applied to the analysis and comparison of English-Chinese conjunctions. All these have supported SFL as a very useful descriptive framework.

A diversion from SFL, though still a related topic, is that the research here is based on the word unit. This linguistic unit is considered the most fundamental, simple but at the same time primitive. This word unit may not be the unit of translation by translators, as has been pointed by Oulu (2004: 355): 'in practice, the translator may work without devoting a single thought to the existence of such a unit, at least as long as he is able to transfer the text into the target language without difficulty'. This is the reason we see different kinds of phenomena, such as explicitation, implicitation, formal correspondence, shift from different conjunctions into conjunctions, shift from conjunctions into different conjunctions, shift from non-conjunctions into conjunctions and shift from conjunctions into non-conjunctions. Related to shifts based on SFL, it is noted that shift from different conjunctions into conjunctions is 9.90% and from conjunctions into different conjunctions is 8.02%. Some of the translations of conjunctions, even though they do not provide the same meaning, seem to be natural equivalents nonetheless, and have been labelled as equivalent conjunctions, for example the usage of "where" in the ST is translated as 在 zai [in]… 时 shi [time], 当 dang [when]… 时候 shihou [time] and 如 ru [if], and "provided that" is translated as 但 dan [but]. These have been adopted by some scholars even though (based on SFL) they do seem to have shifted. SFL is not able to account for this type of shift. It is believed that the conjunctions used in the ST together with the context have invoked some form of interpretation by the translators who choose to present logical-semantic relations in what they know to be the closest possible way which is perfectly "correct", without recognising the shift. In addition, the logical-semantic relations are not their focus when translating, thus even though such semantic relations shifted, sometimes the element "provided that" may still be best translated as 但 dan [but] to serve as the formal correspondence of "provided that" since 只要 zhiyao [if only] is rarely used in the NT. Here we have opened up a discussion that even though a conjunction may be a formal correspondence, it may not be used as often in the NT, simply because a natural equivalent may be a better alternative than a formal correspondence. For SFL is not able to account for shift, but Catford (1965) calls it intra-system shift. However, according to Munday (2012), the

categorisation of intra-system shift exhibits flaws or insufficiency of Catford's systemic model of shift. Nevertheless, I believe that this category has to do with the norms which govern translations.

On another related note, as we know the POS taggers' identification of conjunctions is limited, some of the lexis which functions as conjunctions and has already been identified by SFL (see Tables 2.2, 2.3 and 2.4) should be included for any future study on a similar area. Examples are the use of 才 cai [then], 就 jiu [then], 却 que [but], etc. This massive work can only be accomplished if the taggers are accurate as well as sophisticated enough to identify the different functions of lexis.

8.2.2 Revisiting Prescriptive to Descriptive Approach

This is a descriptive study where the phenomena of changes in the use of conjunctions in TT are studied, based on a comparison with ST and NT. Having observed the phenomena of these changes, descriptive studies will usually stop here, as stated by Toury (1995: 2) that descriptive studies 'refuse to draw any conclusions in the form of recommendations for "proper" behavior'. I am in no position here to judge the TT, as I believe strongly that the TT are legitimate products of criss-crossing between languages, cultures, and many other elements. But I am not here just to report on the phenomena without urging application for practical, teaching purposes and perhaps also for the development of machine translation. Ultimately, I am also here to propose a descriptive-back-to-prescriptive exercise to enhance the quality of translation, as the research will be of no value if it only reports on what happens. I am not pleased with explicating, for example that ST may influence TT so much so that they cause explicitation in the TT when compared to the NT, without urging translators to think of ways of solving this problem. Neither am I pleased that pure explicitation is habitualised in the routines of translators, even if it is not needed. As stated by Chesterman (2004b: 11) 'it may be that the more we know about T-universals, for instance, the more scholars or trainers will see them as undesirable features that should be avoided – at least in translations whose skopos includes optimum naturalness'. This shows implicitly how knowledge gained through descriptive studies can be used for pedagogical purposes. In addition, it has also been

suggested by Xia and Li (2010) that the knowledge of compiling and using corpora should be passed on to prospective translators in order that they may use the corpora for reference purposes to improve their translational competence.

Thus some possible implications of this study are that translators have to be careful when adding conjunctions, especially in the English-Chinese direction, as the Chinese language is generally implicit in logical-semantic relations, except for the use of some paratactic conjunctions like 并 bing[and] and 但 dan[but], especially for institutional texts texts. When encountering hypotactic constructions in the ST, translators may, if the constructions permit, change them into paratactic constructions. Translators may also learn strategies of implicitation when translating from English into Chinese, especially mimicking the original Chinese ways of binding logical-semantic relations. Translators also have to be aware that the target language's influence may not be the same as the influence of the specific genre of the NT.

Languages evolve and change over time, so do translation techniques and strategies. As more and more translators become more aware of their actions or inactions and readjust or reconcile their techniques accordingly, TT may change over time, and there may also be possibilities that many other related problems may surface. Translation strategies are constantly changing due to newer trends, just like any other changes, as indicated by polysystem theory which expounds that translated literature is always fluctuating while canonised literature may be taken over by peripheral literature. Therefore, changes will give rise to vibrancy and dynamism in translation studies. However, I foresee that on this occasion, a prescriptive approach will not be so harsh and rigid with "must" and "should"; it will be more flexible and fluid. There should also be continual monitoring of the cause and effect of certain statements put forward by researchers on translators and their products. Therefore, it is hoped that there is a sort of reciprocity, intermingleness, and redefiningness between descriptive studies and prescriptive studies.

8.2.3 Revisiting Corpus-Assisted Study, Tools, Design and their Criticisms

This research would not be successful if it were not based on corpora and assisted by corpus tools. The corpora, even though small with a total of one million words, are able to present very significant findings. Having said that, not all sections are assisted by corpus tools, at least not for parallel analysis where explicitation, implicitation and shift have been identified manually. Notwithstading this fact, it is contended that identification of the behaviours of the items studied has been comprehensive, though it may not be exhaustive. Hence, it is further contended that this approach is justified as the corpus is not too large. It is different to Wang and Qin's (2010) research where the corpus consists of a total of 20 million English words and Chinese characters, in which they can only presume that many features in the TT, inclusive of the use of conjunctions, are to be due to ST interference but could not give more detailed findings.

As I have mentioned earlier, the limitations of the taggers and the corpus linguistic tools has restricted the potential of this type of study. Therefore, I propose that this kind of study using corpora can only be larger and more representative if there are accurate taggers which can tag automatically in both languages using the SFL framework. In Section 4.4.4, I have shown the inaccuracy in using POS taggers which requires a lot of post-editing work in order to ensure higher credibility. Also throughout the parallel analysis research of Chapter 6, I have found how SFL better represents language phenomena. Besides the taggers, the limitations in corpus-linguistic tools like WordSmith expounded in Section 4.3.2 has also restricted this kind of study. Furthermore, this study could only be made larger, if there were tools which could identify the phenomena of implicitation, explicitation or shift automatically. Works by Hansen-Schirra, Neumann and Steiner (2006) who use Machine Translation (Och and Ney, 2003) to align words have found that this can be an alternative to manual identification of explicitation, implicitation and shift. An example given by them is that if a POS tag *prel* (for relative pronoun) is not found in the TT but found in the ST, it will receive an empty link. Throughout the parallel analysis research in Chapter 6, we understood that not all conjunctions would be translated as conjunctions. Perhaps, if this type of comparison could be made based

on SFL where lexis are categorised based on their functions and different types of expansion, I believe that research in translation studies would be more accurate, exciting and larger.

Having commented on some of the weaknesses of the corpus tools, it has to be stressed again that this study would not be successful without the tools. The taggers have assisted in the identification of some conjunctions. Concord of WordSmith has helped in the editing process through concordancing of words and/or tags. I can identify the correct conjunctions through reading of the concorded keywords in their contexts. Wordlist of WordSmith is used to calculate all the conjunctions; while KeyWords in WordSmith aided in the computation of log-likelihood value to identify distinctive conjunctions. ParaConc is also very useful where it is able to identify the keywords and their tags in their contexts and also the corresponding sentences where these keywords may appear.

Regarding research design, this research is based on comparable, parallel E-C and C-E, and a combination of comparable and parallel analysis of the tripartite corpora of ST, TT and NT. Collectively, it is able to identify T-change and S-change, i.e. the product; the reasons of change, what influences the change and the cognitive process of the translators, i.e. the process. This design is an improvement as others have merely concentrated solely on parallel analysis or comparable analysis. This work does not attempt to compare the effects of S-change, except for some comments on whether the S-changes have caused subtle addition, omission or change of meaning, as it is found that the comparison has to be weighed against the NT. This research will be more captivating if there is also a change of directionality in the Chinese-English parallel comparison, and translated English with English reference corpus comparable comparison which will give us a picture of the whole cycle between English and Chinese translation. With the direction of language changed, we may find S-explicitation in Chinese-English translation as an immanent process because English is said to generally have more use of conjunctions, as opposed to English-Chinese translation where there should be more S-implicitation, but confirming Klaudy and Károly's (2005) asymmetry hypothesis, the English-Chinese translation exhibits S-explicitation. However, this time, comparing the Chinese-English translation, we may not be able to differentiate whether S-explicitation of

conjunctions, if there is any, is due to the translation-inherent process or due to loyalty to the norms of the English NT or the target language. This may be one of the reasons why House (2008: 6, 12) contends that 'the quest for a specific translation universal is futile' as 'candidates of universality suggested for one particular translation direction need not necessarily be candidates for universality in the opposite direction'. It would also be very interesting to know if explicitation of conjunctions in the English TT, if there is any, is sufficient to cause T-explicitation when they are compared to the same conjunctions in the English NT; whether there are more paratactic conjunctions in the English TT compared to the English NT if there is influence of the Chinese ST in the use of paratactic conjunctions; or whether the use of hypotactic conjunctions in the English TT is sufficiently more compared to the same in the English NT.

As for criticism on the observer's and participant's stance, I believe that research based on both observer's and participant's points of view is legitimate as we should not limit research to the stance of an observer or a participant exclusively. If this criticism stands, it should be leveled against most translation research, not solely on the translation studies based on corpora, as most studies are based on the observer's point of view. Although as has been pointed out by Toury (1995: 1) that 'what constitutes the subject matter of a proper discipline of translation studies is (observable or reconstructable) facts of real life', I also believe that research based on the observer's stance can be very beneficial to the participants so that this study will not be mainly esoteric. This statement is in line with my argument in Section 8.2.2 where I propose that descriptive studies (observers' stance) can benefit prescriptive studies (to be used by the participants). As Baker (1993: 243) has pointed out, 'the practical question of how to improve our translations will find more reliable and realistic answers once the phenomenon of translation itself is explained in its own terms'. Therefore, observers should take a step forward to spell out the practical implications to the participants to assist the participants' decision-making.

In terms of criticism of generalisation versus individuality, this study has found that creating generality is essential and so is creating individualism. As has been highlighted by Chesterman (2004a), it is through the discovery of generality that science is able to progress to the ability to predict the future or predict unstudied

cases and to connect with other neighbouring disciplines. However, it has to be noted that generality is made up of cases of individuality. From this research, for example, we find that the NT with a total number of conjunctions which is so low does not mean all types of conjunctions used in the NT are low in frequency compared to those conjunctions used in the TT. This is similar to the research by Granger and Tyson (1996) who study the use of conjunctions by EFL students and have found that there is no all-encompassing explicitation of conjunctions by non-native speakers of English, but have found that some conjunctions are overused while some others are underused in their writings. Thus, it is also through the study of individual parameters that the rigid compartmentalised findings proposed by generalisation of corpus-assisted methodology will be washed away, bringing in the flavour of differences and nuances to the research. Appropriately, translation research should be a mixture of generality and individuality, thus a dialectical complementary balance between both.

In terms of criticism of the stress on quantitative terms but not on qualitative terms, it has to be emphazised that quantitative research is vital as has been pointed out by Halliday (2005: 45) that 'frequency in text instantiated probability in the system'; while qualitative research will give a deeper explanation of the phenomenon. Although this study has stressed more the quantitative terms, the qualitative aspects also have been given fairly sufficient space; and far from being neglected, here the qualitative techniques have assisted significantly in identifying some findings such as the reasons for structural changes in the use of conjunctions as well as for the semantic effects to complement the quantitative findings.

In spite of the criticism on corpus-assisted studies and the limitation of the tools, building upon the research done by predecessors, this research is able to advance to another level; for instance there are improvements of corpus design and methodology, and added parameters for comparisons. As the technology in computer sciences is incessantly picking up, more and more research will be based on corpus studies. In such studies, the sheer size of the data will make the research more representational. Thus, I foresee this research paradigm will not only sustain, but also continue to prosper and be more sophisticated in the near future.

8.2.4 Revisiting Notion, Causes, Process and Effects of Change

In this study, the notion of change has been successfully carried out, firstly based on form, and secondly based on meaning. Also this research has made known the differences between T-change and S-change. For T-change, besides the comparison between the individual conjunctions, a comparison has also been made based on the occurrence of different forms of correlative conjunctions and double conjunctions. In terms of change of meaning for T-change, we can only compare the effects of the T-change to understand the different impacts the changes may have on readers. As for S-change, the integrated model of S-change and formal correspondence proposed by the researcher in Table 3.2 is able to help to establish the ideas of S-change where there are pure explicitation, pure implicitation and shifts.

Wherever there are shifts in meaning, a shift into more meaning will be considered as explicitation; while a shift into less meaning is implicitation. There are also cases where it is not easy to establish whether there is more meaning or less meaning; such cases will be regarded as simply meaning change. There are also shifts in structures. Wherever the shifts are into major structures, they are regarded as explicitation, while the shifts to minor structures are considered as implicitation. Some other shifts resist identification/classification in the sense that the shifts cannot be determined whether they are major or minor. As the research is based on form and meaning, it cannot give an account of intra-system change.

Looking at parallel analysis from a micro perspective, we are able to identify the linguistic reasons which have caused pure explicitation, pure implicitation and shift. Such information enlightens translators and researchers on the possible aspects relating to translation work which in turn may trigger translators to act in certain ways. Halliday and Matthiessen (2004) have cautioned against pure explicitation by translators for relationships which are implicit. As they have put it, 'it is like that there will always be other forms of cohesion present' (Halliday and Matthiessen, 2004: 548) and it will limit the interpretation potential by the reader. Many (including Blum-Kulka, 1986: 20) may argue that explicitation of conjunctions is the fruit of incompetency where translators articulate their interpretation. Here, in this research, we find that even though all texts are translated by professionals and even

though institutional texts should be translated faithfully and literally (Newmark, 1991), we also see the interpretation of the translators shining through. Exclusively, I would rather see it as a lack of awareness on the part of the translators and, hopefully, this thesis will help shed some light for them regarding this matter. For pure implicitation, we can see the occasional skillful translation by translators who are able to present the ST ideas with the NT style in mind. As for shift, it reminds us that conjunctions are not always translated into or from conjunctions with the exact same meaning. This may be due to systemic differences between languages and the translators' choices. Looking at comparable analysis, the causes of the difference of forms between the TT and the NT are due to influence of the ST, overt interpretation of the translators, and influence of the target language.

This research has seen how explicitation, implicitation and shift have caused the TT to have a similar sequence of semantic categories to those in the NT, showing the translators' inferential thinking is similar to writers of the NT. In the study of institutional texts, it is never argued here that translators consciously explicitate, implicitate or shift the use of conjunctions as it is assumed that translators are aware that institutional texts should be translated as closely as possible to the ST. However, the existence of the voice of the translators in the institutional texts through explicitation, implicitation and shift seems to have developed out of their perspective of inference acquired through culture.

8.2.5 Revisiting Norms, Laws, Universals and Tendencies

In terms of Toury's (1995) initial norms, anchored in the substantiation of this research, it is found that the force of adequacy of the ST norms is stronger than acceptability of the target norms. Or, in other words, the law of source language interference has a stronger force than the law of growing standardisation, at least in terms of the form of use of conjunctions. This may very well be due to the prestigious position of the ST where, when a dispute happens, they are the texts that are referred to. It is, therefore, a norm that the translators try to adhere to the ST as closely as possible. It can also be due to the presence of ST stimuli which increases the likelihood of transferal into the TT. Source language interference may include

conjunctions translated as formal conjunctions, conjunctions shifted into other conjunctions and some non-conjunctions translated as conjunctions in the TT, which therefore cause the TT to have more conjunctions than the NT. Source language interference can also be found in the use of excessive hypotactic conjunctions in the TT. Source language interference includes some obligatory shifts, i.e. shifts from non-conjunctions into conjunctions, which are due to constraints of the language systems (Toury, 1995).

Despite the stronger source language interference, there are also some forces from the law of growing standardisation in favour of "a target repertoire", like use of fixed and semi-fixed phrases in this research. Based on Toury's formulations on growing standardisation, where he said that 'items tend to be selected on a level which is lower than the one where textual relations have been established in the source texts' (Toury, 1995: 269), and Pym (2008: 4) who further rephrases the law of growing standardisation to mean that the 'translations have less internal linguistic variation than non-translations'. TT are like other translations with 'flatter language' (Pym 2008: 5). My research has found that these statements can be true and untrue. They may be true because there is more repetition in the use of conjunctions, correlative conjunctions and double conjunctions, in accordance with the hypothesis by Laviosa-Braithwaite (1996) where it is hypothesised to have more repetition in TT. It may be false because there are more types of conjunctions, correlative conjunctions and double conjunctions in the TT, causing untypical lexical patterning (Mauranen, 2000), thus making the TT more rather than less diversified.

This research has also been able to identify textual-linguistic norms, especially general translation norms where some conjunctions are shifted to other conjunctions with a different functional meaning, as in intra-system shift. These shifts are quite a norm in translation practices. There are also textual-linguistic norms based on comparison to the NT. It finds that there are a few cases where the TT are in favour of the NT conventions with explicitation of 但 dan [but] and implicitation of some other conjunctions. However, some of these phenomena may happen consciously or subconsciously. In terms of "consciously", it may be due to the knowledge acquired by translators through pedagogical dissemination where the translators learn that

Chinese is an implicit language which favors paratactic conjunctions. In terms of "subconsciously", it may be due to some skillful ability of the translators who are able to present the ST use of conjunctions with the NT or the target language norms. Some shifts in use of conjunctions seem to support Popovič's (1970: 78) idea that translators shift in their quest to faithfully produce the 'intellectual and asthetic value' of the ST, especially when there is grammatical metaphor. Beyond the influence of form, interestingly, this research has found that inferential cognitive processes of the translators seem to follow the textual-linguistic norms of the NT.

From this research, I would also contend that not all phenomena of changes are bound by culture. Based on the overall findings of the comparable and parallel analyses, it is found that explicitation of conjunctions occurs in TT compared to those conjunctions in NT and to those ST. Although each sees some individual conjunctions which are implicitated, the voluminous evidence shows that indeed there are greater tendencies towards explicitation. With all these exceptions, I would not want to claim that explicitation is absolutely translation-inherent and thus an absolute translation universal, but I would rather look at it as a stronger tendency or a more pervasive feature in TT, or a 'high-level regularity' (Toury, 2004b: 24). As has been pointed out by Tymoczko (2003: 3), the universal theory of translation is 'ultimately defeated or only partially realised'. Explicitation can be formed subconsciously by translators who have made explicit their own interpretation – translation-inherent; it can also be formed because translators want to join phrases or clauses with more logical sense so that it will sound more coherent; or it may be due to pedagogical exposure of translators where they are taught to add in order to convey meaning[82].

Therefore, all the evidence substantiates the claim that the TT are an interplay of the law of growing standardisation, the law of interference, textual-linguistic norms and partial universal/translation tendencies[83]. Indeed, the realisation of the use of conjunctions in the TT is complex. The pull of the force depends on what is more

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[82] In her book *In other words*, Baker (1992) has placed "addition" as a strategy of translation.

[83] Looking at norms from the perspective of preliminary norms on canonised and non-canonised texts, Weissbrod's (1992: 153) findings are similar to mine where she states that explicitation is not 'solely a universal tendency or a function of the position of the languages involved in the act of translation on a literacy/orality scale. It is norm-dependent and thus changes with historical circumstances and according to the position of translated literature within the target-culture'.

common and more obvious to the translator. Similar to the reasoning of Tirkkonen-Condit (2004) who finds that the unique items in the target language are under-represented in the TT is because unique items in the target language have no linguistic counterparts in the ST to trigger their use. Thus, the TT are products of negotiation or a 'decision-making process' (Levý, 1967/2000: 148) performed by translators based on various forces. As described by Toury (1995: 57) there is no absolute adequacy or absolute acceptability. This takes us to the notion of 'probabilistic' by Toury (2004a: 15) who defines Translation Studies 'as moving gradually, and in a controlled way, towards an empirically-justified theory which would consist of a system of interconnected, even interdependent probabilistic statements'. Here, I would also like to argue along the same lines that selection is based on a 'degree of entrenchment' (Ding, Noël and Wolf, 2010: 52) depending on what has the stronger influence. The forces are dynamic and are always changing, depending on the dynamism of the forces.

8.3 Implication for Future Studies: Deeper Monolingual Research

Ultimately, when it comes to translation of conjunctions, the TT should follow the NT's style, despite the ST being prestigious texts. Thus, it is proposed here that deeper monolingual research be conducted, especially on Chinese institutional texts to establish how the Chinese language establishes relationships between propositions if there are fewer conjunctions in the institutional texts. There might be other lexis, grammatical words, underlying semantic meaning/interpretation based on the structural arrangement, or the use of punctuation which may help bind the Chinese language, albeit subtly.

Drawing from Martin (1992) who argues that logical-semantic relations should be based on the meaning of the sequences of clauses with or without the use of conjunctions, Halliday (2006) looks at whether the use and non-use of conjunctions is salient to the construction of a given discourse. The point raised by Halliday (2006: 357) is whether there is any difference between the expressions "I felt cold. So I put on my coat" and "I felt cold. I put on my coat", except for the occurrence of the conjunction 'so' in the former.

He finds that the logical-semantic relations that are construed in the grammar can also be used to construe discourse through 'the progressive unfolding of the text' (Halliday, 2006: 361). For example, Halliday (2006: 356) mentions that the logical-semantic relationship of expansion which is inclusive of *elaboration*, *extension* and *enhancement* 'turn up all over the grammar'. The example he gives for *elaboration* is 是 shi [is] in 他 是 教授 ta shi jiaoshou [he is a/the teacher], for *extension* is 有 you [have] in 他 有 汽車 ta you qiche [he has a car], and for *enhancement* 在 zai [at] 他 在 课堂 ta zai ketang [he is in the classroom]. Perhaps institutional texts are configured in wording so the Chinese texts do not use as many conjunctions. Some other research which may support this is Xiao, He and Yue (2010) who find lexical density in the Lancaster corpus of Mandarin Chinese (LCMC) more than their ZJU corpus of translational Chinese (ZCTC), a sign of the use of fewer function words like conjunctions, Wang and Qin (2012) also find that TT use more function words. Another statement is presented by Wang and Qin (2010: 169) that 'as an isolating language, Chinese usually resorts to lexical means to express what is expressed grammatically in English'. This needs to be verified, especially how and which lexical usage or grammatical constructions may assist in binding Chinese propositions. Some scholars like Tsai (1995) who very confidently states that Chinese is disconnected speech and that a skillful translator will know how to rearrange the orders, cut a long sentence into shorter sentences, drop the use of " if" or drop the use of "when" so that sentences are more Chinese. However, no examples are given on how translators may be able to do that. Interestingly, Li (2012), who works on the use of "where" and "if" in translation of legal texts, in his presentation, has shown examples where when the Chinese language is translated into "where" and "if", the Chinese ST does not use conjunctions. In fact, they were translated from the Chinese texts with structures ending with 的 de [a type of auxiliary word to form structures without a centre word] like 法律规定用书面形式的，应当用书面形式。 (Translation: If legal provisions require the entrustment to be written, it shall be effected in writing.) [Literal translation: legal provision require "which" use written form, should use written form.]. Interestingly also, his example shows that if a sentence with "if" or "where" is translated from English into Chinese, conjunctions are always present in Chinese due to the influence of the English

conjunctions. This example found in Li (2012) gives us some strategies for how the Chinese text was originally written without the explicitation of conjunctions.

Halliday (2006) also suggests that the 'generic structure potential' (Hasan, 1984) which defines the structural discourse of a text may assist in finding the embedded logical-semantic relations in the Chinese texts. The examples given by Halliday (2006: 359) are the narratives of personal experience by Labov and Waletsky (1967) where the generic structural potential is as follows:

(Abstract)+[(Orientation+)Complication]+[Evaluation°Resolution](+Coda)[84]

According to Halliday (2006), "complication" is analogous to "but", while "resolution" is like "although". As has been mentioned earlier logical-semantic relations can be construed by the progressive unfolding of the texts, it is, therefore, important to find out how the generic structure potential or the logogenesis of propositions in Chinese may assist interpretation without the use of conjunctions. Understanding what binds the Chinese language will enlighten translators so that they can use the same techniques to bind their translations, and also assist in identifying T-shift.

Of course, this monolingual research should also be extended to contrastive-linguistic research of the English and Chinese languages, in order to map the differences for informing translators of the pull of influence that they may encounter in order to help them make informed choices. Contrastive research should go hand-in-hand with descriptive research (Ulrych and Murphy, 2008) in order that we may obtain a complete overview.

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[84] ( ) = optional
 + = fixed order
 ° = fluid order
 [ ] = limits within which the ordering may be vary

Appendix 1: Titles of parallel texts

No.	ST' title	Year	No. of words	TT' title	Year	No. of words
1.	Relative to the treatment of prisoners of war, Geneva, 12 August 1949	1949	2,2671	1949 年 8 月 12 日关于战俘待遇之日内瓦公约	1949	18,721
2.	Convention iv relative to the protection of civilian persons in time of war, 12 August 1949	1949	20,896	1949 年 8 月 12 日关于战时保护平民之日内瓦公约	1949	18,060
3.	Ibid articles of agreement	1945	10,317	国际复兴开发银行协定	1945	8,890
4.	Universal copyright convention	1952	6,797	世界版权公约	1952	5,831
5.	Convention on the means of prohibiting and preventing the illicit import, export and transfer of ownership of cultural property	1970	2,932	关于禁止和防止非法进出口文化财产和非法转让其所有权的方法的公约	1970	2,554
6.	Vienna convention on civil liability for nuclear damage	1963	4,625	关于核损害的民事责任的维也纳公约	1963	4,177
7.	South Pacific nuclear free zone treaty	1985	3,301	南太平洋无核区条约第三号议定书	1985	2,827
8.	The Antarctic treaty	1959	2,295	南极条约	1959	1,951
9.	Protocol on environmental protection to the Antarctic treaty	1991	12,107	关于环境保护的南极条约议定书	1991	11,259
10.	Convention relating to the status of refugees	1951	5,295	关于难民地位的公约	1951	4,656
11.	International convention for the prevention of pollution of the sea by oil	1954	3,699	国际防止海上油污公约	1954	3,186
12.	International convention on the establishment of an international fund for compensation for oil pollution damage	1971	6,316	设立国际油污损害赔偿基金公约	1971	5,328
13.	International convention on the prevention of marine pollution by dumping of wastes and other matter	1972	4,155	防止倾倒废物及其他物质污染海洋的公约	1972	3,872
14.	International convention relating to intervention on the high seas in cases of oil pollution casualties	1969	3,753	对公海上发生油污事故进行干涉的国际公约	1969	3,178

15.	International convention on civil liability for oil pollution damage	1969	3,781	1969 年国际油污损害民事责任公约	1969	3,194
16.	Protocol of 1976 to the international convention on civil liability for oil pollution damage	1969	1,199	1969 年国际油污损害民事责任公约的议定书	1969	909
17.	ILO convention (no. 163) concerning seafarers' welfare at sea and in port	1987	1,040	海员在海上和港口的福利公约	1987	819
18.	ILO convention (no. 164) concerning health protection and medical care for seafarers	1987	3,161	海员保健医疗公约	1987	2,512
19.	ILO convention (no. 166) concerning the repatriation of seafarers (revised)	1987	2,010	海员遣返公约（1987 年修正本）	1987	1,526
20.	The international Cospas–Sarsat programme agreement	1984	3,145	国际搜救卫星ＣＯＳＰＡＳ－ＳＡＲＳＡＴ系统计划协定	1984	2,703
21.	Chicago convention on international civil aviation	1944	9,313	国际民用航空公约	1944	7,977
22.	International convention for the conservation of Atlantic tunas	1966	3,401	养护大西洋金枪鱼国际公约	1966	2,750
23.	International convention relating to the arrest of sea-going ships	1952	2,419	关于扣留海运船舶的国际公约	1952	2,059
24.	Treaty on European Union	1992	37,672	欧洲联盟条约（马斯特里赫特条约）	1992	30,082
25.	C165 social security (seafarers) convention (revised), 1987	1987	3,812	海员社会保障公约（1987 年修正本）	1987	3,179
26.	Convention on the international regulations for preventing collisions at sea, 1972	1972	1,234	1972 年国际海上避碰规则公约	1972	989
27.	International convention for the protection of performers, producers of phonograms and broadcasting organizations	1961	3,677	保护表演者、录音制品制作者和广播组织的国际公约	1961	3,109
28.	Convention for the protection of producers of phonograms against unauthorized duplication of their phonograms	1971	1,576	保护唱片制作者防止唱片被擅自复制公约	1971	1,344

29.	Budapest treaty on the international recognition of the deposit of microorganisms for the purposes of patent procedure	1977	4354	国际承认用于专利程序的微生物保存布达佩斯条约	1977	3,983
30.	Patent cooperation treaty	1970	14,717	专利合作条约	1970	13,577
31.	Locarno agreement establishing an international classification for industrial designs	1968	3,321	建立工业品外观设计国际分类洛迦诺协定	1968	2,800
32.	Strasbourg agreement concerning the international patent classification	1971	4,420	国际专利分类斯特拉斯堡协定	1971	3,654
33.	Nice agreement concerning the international classification of goods and services for the purposes of the registration of marks	1957	4,113	商标注册用商品和服务国际分类尼斯协定	1957	3,097
34.	Nairobi treaty on the protection of the Olympic symbol	1981	1,053	保护奥林匹克会徽内罗毕条约	1981	885
35.	Convention relating to the distribution of programme–carrying signals transmitted by satellite	1974	1,416	关于播送由人造卫星传播载有节目的信号的公约	1974	1,316
36.	Vienna agreement establishing an international classification of the figurative elements of marks	1973	3,881	建立商标图形要素国际分类的维也纳协定	1973	3,091
37.	General agreement on tariffs and trade 1994	1994	860	1994 年关税与贸易总协定	1994	762
38.	Agreement on safeguards	1947	3,353	GATT 1947 保障措施协定	1947	2,873
39.	Agreement on trade-related investment measures	-	1,350	与贸易有关的投资措施协定	-	1,181
40.	Annex 1c agreement on trade-related aspects of intellectual property rights	-	12,063	附件 1C 与贸易有关的知识产权协定	-	10,811
41.	Understanding on the balance-of-payments provisions of the general agreement on tariffs and	1994	1,627	关于 1994 年关税与贸易总协定国际收支条款的谅解	1994	1,434

	trade 1994					
42.	Agreement on implementation of article vii of the general agreement on tariffs and trade 1994	1994	12,233	关于实施 1994 关税与贸易总协定	1994	10,463
43.	Agreement on implementation of article vi of the general agreement on tariffs and trade 1994	1994	10,583	关于实施 1994 年关税与贸易总协定	1994	9,284
44.	Understanding on the interpretation of article ii:1(b) of the general agreement on tariffs and trade 1994	1994	578	关于解释 1994 年关税与贸易总协定第 2 条第 1 款(b)项的谅解	1994	506
45.	Understanding on the interpretation of article xvii of the general agreement on tariffs and trade 1994	1994	620	关于解释 1994 年关税与贸易总协定第 17 条的谅解	1994	523
46.	Understanding on the interpretation of article xxiv of the general agreement on tariffs and trade 1994	1994	1,361	关于解释 1994 年关税与贸易总协定第 24 条的谅解	1994	1,195
47.	Understanding on the interpretation of article xxviii of the general agreement on tariffs and trade 1994	1994	748	关于解释 1994 年关税与贸易总协定第 28 条的谅解	1994	652
48.	The general agreement on tariffs and trade (GATT 1947)	1947	27,136	关税与贸易总协定 (GATT 1947)	1947	23,537
49.	Agreement on agriculture	-	9,494	农业协定	-	8,325
50.	Agreement on rules of origin	1986	4,229	原产地规则协定	1986	3,595
51.	Agreement on the application of sanitary and phytosanitary measures	-	5055	实施卫生与植物卫生措施协定	-	4,640
52.	Agreement on technical barriers to trade	-	8,390	技术性贸易壁垒协定	-	7,425
53.	Agreement on government procurement	1994	10,825	政府采购协定	1994	9,801
54.	Annex 1b general agreement on trade in services	-	10,973	附件 1B 服务贸易总协定	-	10,047
55.	Agreement on trade in civil aircraft	1979	2,620	民用航空器贸易协定	1979	2,422
56.	Agreement on textiles	1989	7,027	纺织品与服装协定	1989	6,193

				补贴与反补贴措施		
	and clothing					
57.	Agreement on subsidies and countervailing measures	-	16,962	补贴与反补贴措施协定	-	14,626
58.	Agreement on preshipment inspection	1986	3,367	装运前检验协定	1986	3,043
59.	Annex 3 trade policy review mechanism		1,137	附件 3 贸易政策审议机制		1,015
60.	Agreement on import licensing procedures	1979	2,544	进口许可程序协定	1979	2,328
61.	Annex 2 understanding on rules and procedures governing the settlement of disputes		10,561	附件 2 关于争端解决规则与程序的谅解		8,899
62.	Agreement establishing the World Trade Organization		4,322	马拉喀什建立世界贸易组织协定		3,574
63.	Marrakesh protocol to the general agreement on tariffs and trade 1994	1994	802	1994 年关税与贸易总协定 马拉喀什议定书	1994	696

Appendix 2: Titles of non-translated texts

No.	Titles	Year	No. of words
1.	中华人民共和国政府和马来西亚政府民用航空运输协定	1989	3,179
2.	中华人民共和国政府与伊拉克共和国政府贸易和经济技术合作协定	1997	971
3.	中华人民共和国政府与美利坚合众国政府关于在中国实施美国志愿者项目的协议	1998	790
4.	中华人民共和国政府和俄罗斯联邦政府一九九七年经济贸易合作议定书	1997	704
5.	中华人民共和国政府和俄罗斯联邦政府关于简化共同建设黑龙江（阿穆尔河）大桥的人员、建筑材料、施工设备和交通工具经长发屯	1997	632
6.	中华人民共和国政府和喀麦隆共和国政府关于相互促进和保护投资协定	1997	1,825
7.	中华人民共和国政府和意大利共和国政府科学技术合作协定	1998	1,509
8.	中华人民共和国政府和摩洛哥王国政府关于医疗合作的议定书	1998	638
9.	中华人民共和国政府和法兰西共和国政府关于发展和平利用核能合作的协定	1997	1,530
10.	中华人民共和国政府和法兰西共和国政府关于研究与和平利用外层空间合作的协定	1997	1,508
11.	中华人民共和国政府和苏丹共和国政府关于鼓励和相互保护投资协定	1997	1,755
12.	中华人民共和国政府和越南社会主义共和国政府边境贸易协定	1998	635
13.	中华人民共和国政府和阿尔及利亚民主人民共和国政府关于中国派遣医疗队赴阿尔及利亚工作的议定书	1997	737
14.	中华人民共和国政府和马耳他共和国政府贸易和经济合作协定	1997	641
15.	中华人民共和国文化部和白俄罗斯共和国文化部1998-2000 年文化合作议定书	1998	481
16.	中国气象局与法国气象局气象科学技术合作协议	1998	689
17.	中华人民共和国和巴基斯坦伊斯兰共和国睦邻友好合作条约	2005	849
18.	中华人民共和国政府与法兰西共和国政府关于动物检疫的合作协定	1998	918
19.	中华人民共和国和意大利共和国关于民事司法协助的条约	1991	2,495
20.	中华人民共和国和比利时王国关于民事司法协助	1987	1,198

	的协定		
21.	中华人民共和国和法兰西共和国关于民事、商事司法协助的协定	1987	1,879
22.	中华人民共和国和波兰人民共和国关于民事和刑事司法协助的协定	1987	1,955
23.	中华人民共和国和罗马尼亚关于民事和刑事司法协助的条约	1991	2,486
24.	中华人民共和国和蒙古人民共和国关于民事和刑事司法协助的条约	1989	2,310
25.	中华人民共和国和西班牙王国关于民事、商事司法协助的条约	1992	2,274
26.	中华人民共和国政府和老挝人民民主共和国政府关于处理两国边境事务的临时协定	1989	2,898
27.	中华人民共和国政府和蒙古人民共和国政府关于双方公民相互往来的协定	1989	568
28.	中国国际贸易促进委员会北京调解中心和老挝人民民主共和国政府和国北京—汉堡调解中心合作协议	1987	2,948
29.	中国国际贸易促进委员会和法兰西和国全国工业产权局关于解决中法工业产权贸易争议的议定书	1980	687
30.	中华人民共和国政府和俄罗斯联邦政府关于在知识产权保护领域合作的协定	1996	887
31.	中华人民共和国政府和法兰西共和国政府关于知识产权的合作协定	1998	1,159
32.	泛珠三角九省区药品检验合作协议	2004	1,009
33.	泛珠三角九省区药品监督稽查合作协议	2004	1,059
34.	泛珠三角九省区食品药品监管合作框架协议	2004	1,399
35.	泛珠三角区域(九省区)质量技术监督合作框架协议	2004	787
36.	泛珠三角区域合作框架协议	2004	1,621
37.	泛珠三角区域工商行政管理合作协议	2004	708
38.	泛珠三角区域省会城市合作协议	2004	1,880
39.	泛珠三角区域知识产权合作协议	2004	807
40.	中国互联网行业自律公约	2002	1,049
41.	打击恐怖主义、分裂主义和极端主义上海公约	2001	2,390
42.	中华人民共和国政府和加拿大政府关于对所得避免双重征税和防止偷漏税的协定	1996	6,168
43.	中华人民共和国政府和南斯拉夫社会主义联邦共和国联邦执行委员会关于互免国际旅客和(或)货物海洋运输收入税收的协定	1979	512
44.	中华人民共和国政府和德意志联邦共和国关于对所得和财产避免双重征税的协定的议定书	1985	779
45.	中华人民共和国和阿尔巴尼亚人民共和国通商航海条约	1961	1,377

46.	中华人民共和国政府与苏维埃社会主义共和国联盟政府汽车运输协定	1958	1,721
47.	中华人民共和国政府和墨西哥合众国政府海运合作协定	1984	1,124
48.	中华人民共和国政府和新加坡共和国政府关于旅游、民航及展览合作的协定	1986	648
49.	中华人民共和国政府和日本国政府海运协定	1974	1,003
50.	中华人民共和国政府和朝鲜民主共和国政府关于国境河流航运合作的协定	1960	659
51.	中华人民共和国政府和波兰人民共和国政府民用航空运输协定	1986	2,871
52.	中华人民共和国政府和苏维埃社会主义共和国联盟政府关于国境及其相通河流湖泊的商船通航协定	1991	1,316
53.	中华人民共和国政府和荷兰王国政府海运协定	1975	1,079
54.	中华人民共和国政府和赞比亚共和国政府、坦桑尼亚联合共和国政府关于坦赞铁路第五期技术合作的议定书	1986	985
55.	中华人民共和国政府和越南民主共和国政府关于两国间海上运输的协定	1956	599
56.	中华人民共和国政府和锡兰政府联合海运航线协议	1972	915
57.	中华人民共和国政府和阿拉伯叙利亚共和国政府民用航空运输协定	1975	2,698
58.	中华人民共和国船舶检验局和挪威船级社关于船舶技术检验合作的协议	1977	1,243
59.	中国民用航空总局和加拿大运输部关于经营协议航班的技术要求和程序的议定书	1973	799
60.	中华人民共和国政府和乌克兰政府进出口商品合格评定合作协定中	1997	792
61.	中华人民共和国和俄罗斯联邦关于中俄国界西段的协定	1994	589
62.	中华人民共和国政府和俄罗斯联邦政府关于禁止非法贩运和滥用麻醉药品和精神药物的合作协议	1996	784
63.	中华人民共和国政府和俄罗斯联邦政府关于进出口商品合格评定合作协议	1996	816
64.	中华人民共和国政府和俄罗斯联邦政府海关合作与互助协定	1994	2,043
65.	中华人民共和国政府和保加利亚共和国政府关于植物检疫的协定	1994	676
66.	中华人民共和国政府和吉尔吉斯共和国政府关于开放边境口岸及其管理制度的协定	1996	663
67.	中华人民共和国政府和吉尔吉斯共和国政府进出	1995	563

	口商品质量保证协定		
68.	中华人民共和国政府和巴基斯坦伊斯兰共和国政府关于植物检疫的协定	1998	779
69.	中华人民共和国政府和捷克和斯洛伐克联邦共和国政府海关事务合作协定	1992	899
70.	中华人民共和国政府和朝鲜民主主义人民共和国政府兽医防疫、检疫互助合作协定	1984	749
71.	中华人民共和国政府和波兰共和国政府关于植物检疫的协定	1994	713
72.	中华人民共和国政府和越南社会主义共和国政府关于保证进出口商品质量和相互认证的合作协定	1994	682
73.	中华人民共和国和乌克兰领事条约	1992	5,586
74.	中华人民共和国 和亚美尼亚共和国领事条约	1995	6,147
75.	中华人民共和国政府和俄罗斯联邦政府关于植物检疫和植物保护的协定	1995	711
76.	中华人民共和国和匈牙利人民共和国领事条约	1986	4,492
77.	中华人民共和国和印度共和国领事条约	1991	5,829
78.	中华人民共和国和古巴共和国领事条约	1990	5,286
79.	中华人民共和国和吉尔吉斯共和国领事条约	1993	5,090
80.	中华人民共和国和哈萨克斯坦共和国、吉尔吉斯共和国、俄罗斯联邦、塔吉克斯坦共和国	1996	2,742
81.	中华人民共和国和哈萨克斯坦共和国领事条约	1992	4,925
82.	中华人民共和国和土库曼斯坦领事条约	1992	5,061
83.	中华人民共和国和土耳其共和国领事条约	1989	6,300
84.	中华人民共和国和墨西哥合众国领事条约	1986	4,287
85.	中华人民共和国和巴基斯坦伊斯兰共和国领事条约	1992	5,124
86.	中华人民共和国和捷克斯洛伐克社会主义共和国领事条约	1988	5,823
87.	中华人民共和国和摩尔多瓦共和国领事条约	1992	5,796
88.	中华人民共和国和朝鲜民主主义人民共和国领事条约	1985	5,099
89.	中华人民共和国和格鲁吉亚共和国领事条约	1996	4,964
90.	中华人民共和国和玻利维亚共和国领事条约	1992	4,918
91.	中华人民共和国和秘鲁共和国领事条约	1992	5,202
92.	中华人民共和国和突尼斯共和国领事条约	1992	6,050
93.	中华人民共和国和立陶宛共和国领事条约	1992	5,120
94.	中华人民共和国和罗马尼亚领事条约	1991	11,329
95.	中华人民共和国和老挝人民民主共和国领事条约	1989	5,144
96.	中华人民共和国和苏维埃社会主义共和国联盟领事条约	1986	4,974
97.	中华人民共和国和阿拉伯也门共和国领事条约	1990	5,744
98.	中华人民共和国和阿根廷共和国领事条约	1990	3,764

99.	中华人民共和国国务院宗教事务局和缅甸联邦政府宗教事务部	1994	544
100.	中华人民共和国外交部和波兰人民共和国外交部合作协议	1987	625
101.	中华人民共和国政府、蒙古国政府和俄罗斯联邦政府关于三国国界东端交界点叙述议定书	1996	629
102.	中华人民共和国政府与美利坚合众国政府关于在香港特别行政区保留美国总领事馆的协定	1997	1,430
103.	中华人民共和国政府与联合国难民事务高级专员署关于将难民署驻华任务代表处升格为代表处的协定	1995	2,097
104.	中华人民共和国政府和乌克兰政府关于互免公务旅行签证的协定	1992	519
105.	中华人民共和国政府和也门民主人民共和国政府关于互换大使馆馆舍的协议	1988	510
106.	中华人民共和国政府和俄罗斯联邦政府关于互免团体旅游签证的协定	1992	588
107.	中华人民共和国政府和俄罗斯联邦政府关于公民往来签证协定	1993	760
108.	中华人民共和国政府和保加利亚人民共和国政府关于互免签证和方便两国公民往来的协定	1987	530
109.	中华人民共和国政府和加拿大政府领事协定	1997	2,023
110.	中华人民共和国政府和匈牙利人民共和国政府关于互免签证的协定	1988	611
111.	中华人民共和国政府和匈牙利共和国政府关于互免签证的协定	1992	496
112.	中华人民共和国政府和印度共和国政府关于在中印边境实际控制线地区保持和平与安宁的协定	1993	567
113.	中华人民共和国政府和哈萨克斯坦共和国政府关于双方公民相互往来的协定	1992	1,415
114.	中华人民共和国政府和土库曼斯坦政府关于互免公务旅行签证的协定	1992	544
115.	中华人民共和国政府和塔吉克斯坦共和国政府关于互免公务旅行签证的协定	1993	562
116.	中华人民共和国政府和墨西哥合众国政府关于互免持外交、公务（官员）护照者签证的协定	1997	490
117.	中华人民共和国政府和大不列颠及北爱尔兰联合王国政府关于在曼彻斯特设立中国总领事馆和在上海设立英国总领事馆的协议	1984	1,083
118.	中华人民共和国政府和大不列颠及北爱尔兰联合王国政府关于解决历史遗留的相互资产要求的协定	1987	655
119.	中华人民共和国政府和巴基斯坦伊斯兰共和国政府关于标定中国新疆和由巴基斯坦实际控制其防	1965	5,737

	务的各个地区相接壤的边界的议定书		
120.	中华人民共和国政府和摩尔多瓦共和国政府关于互免公务旅行签证的协定	1992	539
121.	中华人民共和国政府和摩尔多瓦共和国政府关于互免团体旅游签证的协定	1992	513
122.	中华人民共和国政府和法兰西共和国政府关于设立领事机构的协议	1980	818
123.	中华人民共和国政府和波兰人民共和国政府关于互免公务旅行签证的协定	1988	524
124.	中华人民共和国政府和波兰人民共和国政府领事条约	1984	5,472
125.	中华人民共和国政府和泰王国政府关于中国佛指舍利赴泰国供奉的协议	1994	624
126.	中华人民共和国政府和牙买加政府关于互免公务旅行签证的协定	1995	507
127.	中华人民共和国政府和老挝人民民主共和国政府边界制度条约	1993	3,424
128.	中华人民共和国政府和老挝人民民主共和国政府边界制度条约的补充议定书	1997	1,004
129.	中华人民共和国政府和苏维埃社会主义共和国联盟政府关于双方公民相互往来的协定	1988	1,276
130.	中华人民共和国政府和蒙古人民共和国政府关于中蒙边界制度和处理边境问题的条约	1988	2,698
131.	中华人民共和国政府和蒙古国政府关于保护和利用边界水协定	1994	786
132.	中华人民共和国政府和蒙古国政府关于保证进出口商品质量和相互认证的合作协定	1994	729
133.	中华人民共和国政府和贝宁共和国政府关于互免签证的协定	1992	532
134.	中华人民共和国政府和越南社会主义共和国政府关于处理两国边境事务的临时协定	1991	1,859
135.	中华人民共和国政府和阿富汗王国政府关于两国边界的议定书	1965	2,948
136.	关于越南问题的国际会议的决议书	1973	738
137.	中华人民共和国中央广播事业局和联合王国英国广播公司广播和电视合作协定	1980	719
138.	中华人民共和国广播电影电视部和马里共和国文化和通讯部关于租用短波广播发射设备议定书	1996	1,004
139.	中华人民共和国政府与联合国工业发展组织关于信托基金的协议鉴于联合国工业发展组织	1989	979
140.	中华人民共和国政府和万国邮政联盟关于第二十二届万国邮联大会组织工作的协议	1997	1,659
141.	中华人民共和国政府和俄罗斯联邦政府关于在中国合作建设核电站和俄罗斯向中国提供政府贷款	1992	3,340

	的协议		
142.	中华人民共和国政府和几内亚共和国政府电信协定	1965	756
143.	中华人民共和国政府和几内亚共和国政府邮政协定	1965	2,241
144.	中华人民共和国政府和国际清算银行关于国际清算银行	1998	3,473
145.	中华人民共和国政府和德意志民主共和国政府邮电合作协定	1983	1,199
146.	中华人民共和国政府和朝鲜民主主义人民共和国政府邮政和电信合作协定	1976	1,513
147.	中华人民共和国政府和罗马尼亚社会主义共和国政府邮政和电信协定	1975	1,097
148.	中华人民共和国政府和越南社会主义共和国政府邮电合作协定	1992	1,009
149.	中华人民共和国邮电部和匈牙利人民共和国邮电总局邮电合作协定	1985	759
150.	中华人民共和国邮电部和波兰人民共和国邮电部邮电合作协定	1986	1,246
151.	中华人民共和国邮电部和美利坚合众国商务部电信科学技术合作议定书及附件	1986	1,706
152.	中华人民共和国邮电部邮政总局和菲律宾共和国邮政总局邮政包裹协定	1978	1,985
153.	中华人民共和国卫生部和也门共和国卫生部关于派遣中国医疗队赴也门共和国工作的双边合作协议	1998	1,175
154.	中华人民共和国和也门共和国体育合作协议为了增进中、也两国之间的友谊、发展两国体育合作和加强体育交流	1998	640
155.	中华人民共和国和日本国渔业协定	1997	2,086
156.	中华人民共和国政府与哈萨克斯坦共和国政府关于保证进出口商品质量和相互认证的合作协定	1996	631
157.	中华人民共和国政府与毛里求斯共和国政府关于相互促进和保护投资协定	1996	2,398
158.	中华人民共和国政府和乌克兰政府关于和平利用与研究宇宙空间合作协定	1995	949
159.	中华人民共和国政府和也门共和国政府关于鼓励和相互保护投资协定	1998	1,923
160.	中华人民共和国政府和俄罗斯联邦政府一九九五年经济贸易合作议定书	1995	618
161.	中华人民共和国政府和俄罗斯联邦政府一九九八年经济贸易合作议定书	1998	772
162.	中华人民共和国政府与俄罗斯联邦政府关于兴凯湖自然保护区协定	1996	618

163.	中华人民共和国政府和俄罗斯联邦政府关于发展两国金刚石－－钻石领域的合作协定	1997	591
164.	中华人民共和国政府和俄罗斯联邦政府关于在载人航天领域进行合作的协议	1996	821
165.	中华人民共和国政府和俄罗斯联邦政府和平利用核能合作协定	1996	1,215
166.	中华人民共和国政府和刚果民主共和国政府关于鼓励和相互保护投资协定	1997	1,754
167.	中华人民共和国政府和南斯拉夫联盟共和国政府科学技术合作协定	1996	564
168.	中华人民共和国政府和南非共和国政府关于相互鼓励和保护投资协定	1997	2,171
169.	中华人民共和国政府和博茨瓦纳共和国政府关于中国派遣医疗队赴博茨瓦纳工作的议定书	1996	773
170.	中华人民共和国政府和吉尔吉斯共和国政府科学技术合作协定	1995	623
171.	中华人民共和国政府和哈萨克斯坦共和国政府关于在石油天然气领域合作的协议	1997	644
172.	中华人民共和国政府和圭亚那合作共和国政府关于派遣中国医疗队赴圭亚那工作的议定书	1997	668
173.	中华人民共和国政府和埃塞俄比亚联邦民主共和国政府关于中国派遣第九批医疗队赴埃塞俄比亚工作的议定书	1996	736
174.	中华人民共和国政府和埃塞俄比亚联邦民主共和国政府贸易、经济和技术合作协定	1996	548
175.	中华人民共和国政府和墨西哥合众国政府关于禁止非法贩运滥用麻醉药品和精神药物及控制化学前体的合作协定	1996	887
176.	中华人民共和国政府和奥地利联邦政府经济、工业、技术和工艺合作协定	1996	1,173
177.	中华人民共和国政府和孟加拉人民共和国政府关于鼓励和相互保护投资协定	1996	1,777
178.	中华人民共和国政府和尼日利亚联邦共和国政府一九九七年至一九九九年文化教育合作与交流执行计划议定书	1997	1,177
179.	中华人民共和国政府和尼日利亚联邦共和国政府贸易、经济和技术合作协定	1996	766
180.	中华人民共和国政府和巴西联邦共和国政府关于植物检疫的协定	1995	753
181.	中华人民共和国政府和巴西联邦共和国政府关于科学技术合作协定和经济技术合作协定的补充协议	1995	678
182.	中华人民共和国政府和毛里塔尼亚伊斯兰共和国政府关于中国派遣医疗队赴毛里塔尼亚工作的议	1996	547

	定书		
183.	中华人民共和国政府和津巴布韦共和国政府关于鼓励和相互保护投资协定	1996	1,849
184.	中华人民共和国政府和科特迪瓦共和国政府贸易协定	1996	849
185.	中华人民共和国政府和突尼斯共和国政府关于中国派遣医疗队赴突尼斯工作的议定书	1995	796
186.	中华人民共和国政府和苏丹共和国政府关于中国派遣医疗队赴苏丹工作的议定书根据一九七〇年八月二十二日	1996	650
187.	中华人民共和国政府和菲律宾共和国政府一九九六年进出口商品议定书	1996	718
188.	中华人民共和国政府和赞比亚共和国政府关于中国派遣医疗队赴赞比亚工作的议定书	1996	660
189.	中华人民共和国政府和赞比亚共和国政府关于鼓励和相互保护投资协定	1996	1,835
190.	中华人民共和国政府和越南社会主义共和国政府卫生合作协定	1996	560
191.	中华人民共和国政府和黎巴嫩共和国政府经济贸易和技术合作协定	1996	603
192.	中华人民共和国水利部与巴西联邦共和国矿产能源部关于小水电合作议定书	1995	987
193.	俄罗斯联邦政府和中华人民共和国政府在高速船建造领域进行合作的协议	1998	574

Appendix 3: CLAWS 7's tagset

APPGE possessive pronoun, pre-nominal (e.g. my, your, our)

AT   article (e.g. the, no)

AT1   singular article (e.g. a, an, every)

BCL   before-clause marker (e.g. in order (that),in order (to))

CC   coordinating conjunction (e.g. and, or)

CCB   adversative coordinating conjunction (but)

CS   subordinating conjunction (e.g. if, because, unless, so, for)

CSA   as (as conjunction)

CSN   than (as conjunction)

CST   that (as conjunction)

CSW   whether (as conjunction)

DA   after-determiner or post-determiner capable of pronominal function (e.g. such, former, same)

DA1   singular after-determiner (e.g. little, much)

DA2   plural after-determiner (e.g. few, several, many)

DAR   comparative after-determiner (e.g. more, less, fewer)

DAT   superlative after-determiner (e.g. most, least, fewest)

DB   before determiner or pre-determiner capable of pronominal function (all, half)

DB2   plural before-determiner (both)

DD   determiner (capable of pronominal function) (e.g any, some)

DD1   singular determiner (e.g. this, that, another)

DD2   plural determiner (these, those)

DDQ   wh-determiner (which, what)

DDQGE wh-determiner, genitive (whose)

DDQV wh-ever determiner, (whichever, whatever)

EX   existential there

FO   formula

FU   unclassified word

FW   foreign word

GE   germanic genitive marker - ('or's)

IF   for (as preposition)

II   general preposition

IO   of (as preposition)

IW   with, without (as prepositions)

JJ   general adjective

JJR   general comparative adjective (e.g. older, better, stronger)

JJT   general superlative adjective (e.g. oldest, best, strongest)

JK   catenative adjective (able in be able to, willing in be willing to)

MC	cardinal number, neutral for number (two, three..)
MC1	singular cardinal number (one)
MC2	plural cardinal number (e.g. sixes, sevens)
MCGE	genitive cardinal number, neutral for number (two's, 100's)
MCMC	hyphenated number (40-50, 1770-1827)
MD	ordinal number (e.g. first, second, next, last)
MF	fraction, neutral for number (e.g. quarters, two-thirds)
ND1	singular noun of direction (e.g. north, southeast)
NN	common noun, neutral for number (e.g. sheep, cod, headquarters)
NN1	singular common noun (e.g. book, girl)
NN2	plural common noun (e.g. books, girls)
NNA	following noun of title (e.g. M.A.)
NNB	preceding noun of title (e.g. Mr., Prof.)
NNL1	singular locative noun (e.g. Island, Street)
NNL2	plural locative noun (e.g. Islands, Streets)
NNO	numeral noun, neutral for number (e.g. dozen, hundred)
NNO2	numeral noun, plural (e.g. hundreds, thousands)
NNT1	temporal noun, singular (e.g. day, week, year)
NNT2	temporal noun, plural (e.g. days, weeks, years)
NNU	unit of measurement, neutral for number (e.g. in, cc)
NNU1	singular unit of measurement (e.g. inch, centimetre)
NNU2	plural unit of measurement (e.g. ins., feet)
NP	proper noun, neutral for number (e.g. IBM, Andes)
NP1	singular proper noun (e.g. London, Jane, Frederick)
NP2	plural proper noun (e.g. Browns, Reagans, Koreas)
NPD1	singular weekday noun (e.g. Sunday)
NPD2	plural weekday noun (e.g. Sundays)
NPM1	singular month noun (e.g. October)
NPM2	plural month noun (e.g. Octobers)
PN	indefinite pronoun, neutral for number (none)
PN1	indefinite pronoun, singular (e.g. anyone, everything, nobody, one)
PNQO	objective wh-pronoun (whom)
PNQS	subjective wh-pronoun (who)
PNQV	wh-ever pronoun (whoever)
PNX1	reflexive indefinite pronoun (oneself)
PPGE	nominal possessive personal pronoun (e.g. mine, yours)
PPH1	3rd person sing. neutral personal pronoun (it)
PPHO1	3rd person sing. objective personal pronoun (him, her)
PPHO2	3rd person plural objective personal pronoun (them)

PPHS1	3rd person sing. subjective personal pronoun (he, she)
PPHS2	3rd person plural subjective personal pronoun (they)
PPIO1	1st person sing. objective personal pronoun (me)
PPIO2	1st person plural objective personal pronoun (us)
PPIS1	1st person sing. subjective personal pronoun (I)
PPIS2	1st person plural subjective personal pronoun (we)
PPX1	singular reflexive personal pronoun (e.g. yourself, itself)
PPX2	plural reflexive personal pronoun (e.g. yourselves, themselves)
PPY	2nd person personal pronoun (you)
RA	adverb, after nominal head (e.g. else, galore)
REX	adverb introducing appositional constructions (namely, e.g.)
RG	degree adverb (very, so, too)
RGQ	wh- degree adverb (how)
RGQV	wh-ever degree adverb (however)
RGR	comparative degree adverb (more, less)
RGT	superlative degree adverb (most, least)
RL	locative adverb (e.g. alongside, forward)
RP	prep. adverb, particle (e.g. about, in)
RPK	prep. adv., catenative (about in be about to)
RR	general adverb
RRQ	wh-general adverb (where, when, why, how)
RRQV	wh-ever general adverb (wherever, whenever)
RRR	comparative general adverb (e.g. better, longer)
RRT	superlative general adverb (e.g. best, longest)
RT	quasi-nominal adverb of time (e.g. now, tomorrow)
TO	infinitive marker (to)
UH	interjection (e.g. oh, yes, um)
VB0	be, base form (finite i.e. imperative, subjunctive)
VBDR	were
VBDZ	was
VBG	being
VBI	be, infinitive (To be or not... It will be ...)
VBM	Am
VBN	been
VBR	are
VBZ	is
VD0	do, base form (finite)
VDD	did
VDG	doing
VDI	do, infinitive (I may do... To do...)
VDN	done

VDZ	does
VH0	have, base form (finite)
VHD	had (past tense)
VHG	having
VHI	have, infinitive
VHN	had (past participle)
VHZ	has
VM	modal auxiliary (can, will, would, etc.)
VMK	modal catenative (ought, used)
VV0	base form of lexical verb (e.g. give, work)
VVD	past tense of lexical verb (e.g. gave, worked)
VVG	-ing participle of lexical verb (e.g. giving, working)
VVGK	-ing participle catenative (going in be going to)
VVI	infinitive (e.g. to give... It will work...)
VVN	past participle of lexical verb (e.g. given, worked)
VVNK	past participle catenative (e.g. bound in be bound to)
VVZ	-s form of lexical verb (e.g. gives, works)
XX	not, n't
ZZ1	singular letter of the alphabet (e.g. A, b)
ZZ2	plural letter of the alphabet (e.g. A's, b's)

NOTE: "DITTO TAGS"

Any of the tags listed above may in theory be modified by the addition of a pair of numbers to it: e.g. **DD21, DD22** This signifies that the tag occurs as part of a sequence of similar tags, representing a sequence of words which for grammatical purposes are treated as a single unit. For example the expression *in terms of* is treated as a single preposition, receiving the tags:

> in_II31 terms_II32 of_II33

The first of the two digits indicates the number of words/tags in the sequence, and the second digit the position of each word within that sequence.

Such *ditto tags* are not included in the lexicon, but are assigned automatically by a program called **IDIOMTAG** which looks for a range of multi-word sequences included in the **idiomlist**. The following sample entries from the idiomlist show that syntactic ambiguity is taken into account, and also that, depending on the context, ditto tags may or may not be required for a particular word sequence:

> at_RR21 length_RR22
>
> a_DD21/RR21 lot_DD22/RR22
>
> in_CS21/II that_CS22/DD1

Appendix 4: ICTCLAS's tagset

n   名词 (noun)

t   时间词 (time word)

s   处所词 (location word)

f   方位词 (direction word)

v   动词 (verb)

a   形容词 (adverb)

b   区别词 (difference word)

z   状态词 (status word)

r   代词 (pronoun)

m   数词 (figure word)

q   量词 (measurement word)

d   副词 (adverb)

p   介词 (preposition)

c   连词 (conjunction)

u   助词 (auxiliary)

e   叹词 (interjection)

y   语气词 (modal particle)

o   拟声词 (onomatopoeia)

h   前缀 (prefix)

k   后缀 (suffix)

x   字符串 (alphabetic string)

w   标点符号 (punctuation)

Appendix 5: Source texts' conjunctions

No.	English conjunctions	Total conjunctions	Formal correspondences	Frequency of formal correspondences	Total of formal correspondences	Shifts	Frequency of shifts	Total of shifts	Shifts into conjunctions	Total shifts into conjunctions	Shifts into non-conjunctions	Total shifts into non-conjunctions	Implicitation
1.	and	2,278	且	252		进而	1		1				
			而	87		致	1		1				
			并	1,199		同时	14		14				
			而且	21		但是	1		1				
			并且	89		从而	1		1				
			此外	1		但	9		9				
					1,649	还_d	43	70		27	43	43	559
2.	if	1,144	如	659		虽然	1		1				
			如… 时_n	35		但	1		1				
			如果 … 时_n	10		即使	1		1				
			如果	245		由于	2		2				
			若	38		只要	9		9				
			倘	2		只有…时_n	6		6				
			假使	2		在_p/于_p … 时_n	10				10		
			设若	2		(from 'only_RR if_CS') 只_d 在_p … 时_n	5				5		
			若是	1		时_n	25				25		
						为_p	5				5		

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					994	对于_p	5	70		20	5	50	80
3.	where	479	nil	0		如	183		183				
						如…时_n	6		6				
						如 在_p…时_n	2		2				
						如果	58		58				
						如果…时_n	4		4				
						若	5		5				
						一旦	7		7				
						但是	3		3				
						虽	1		1				
						在_p… 时_n /时候_n	43			43			
						在_p…内_f/ 下_f/	33			33			
						在_p	25			25			
						当_p…时_n /下_f	16			16			
						当_p	10			10			
						于_p..时_n	4			4			
						时_n	7			7			
						凡_d	4			4			
						根据_p	4			4			
						按_p	4			4			
						对_p	2			2			
					0	的_u 情况_n	2	423		269	2	154	56
4.	as	350	以 使_v	20		从而	3		3				
			以便	2		一俟	1		1				
			俾	1		以致	2		2				

			以免	1		而	2	2			
			由于	3		并	1	1			
						以及	2			2	
						与_p	3			3	
						在_p	21			21	
						按_p	50			50	
						由_p	16			16	
						视_v	15			15	
						根据_p	16			16	
						按照_p	14			14	
						应_v	12			12	
						使_v	10			10	
						对_p	3			3	
						系_v	2			2	
						如_v	6			6	
						对_p 于_p /对于_p	2			2	
						为_p/v	4			4	
						在_p … 时_n	2			2	
						为了_p	1			1	
						应_v 使_v	2			2	
						于_p	1			1	
						采取_v	1			1	
						经_p	5			5	
						实现_v	1			1	
						遵守_v	1			1	
						地_u	1			1	
						所_u	4			4	

						依照_p	3				3		
						就_d	1				1		
						依照_p 由_p	1				1		
						以期_v	1				1		
						随着_p	2				2		
						甚至_d	1				1		
						不致_d	1				1		
						致使_v	1				1		
						在于_v	2				2		
					27	一经_d	1	218		9	1	209	105
5.	when	342	nil	0		如	91		91				
						如...时_n	6		6				
						如 在_p...中_f	1		1				
						如 ...后_f	1		1				
						如果	11		11				
						如果...时_n	2		2				
						且	1		1				
						若	1		1				
						在_p...时_n	89				89		
						当_p...时_n	33				33		
						于_p...时_n	4				4		
						自_r...时_n	2				2		
						经_...时_n	1				1		
						时_n	39				39		
						在_p	2				2		
						如_v	1				1		

#	Eng		译			搭配						
						在_p...后_f	10			10		
						在_p...下_v/中_f	11			11		
						后_f	5			5		
						当_p...后_f	3			3		
						以_p...后_f	1			1		
						的_u 时间_n	1			1		
						按照_p	1			1		
						除_p...外_f	2			2		
						为_p	1			1		
					0	出现_v	1	321	114	1	207	21
6.	unless	249	除非	219		只有	1		1			
						但	4		4			
						但...除外_v	1		1			
						如果...不_d	2		2			
						如...不_d	1		1			
						如 未经_d	1		1			
						而...不_d	1		1			
						除_p...外_f/ 之外_f	16			16		
					219	之外_f	1	28	11	1	17	2
7.	but	203	但	155		不_d...同时 也_d	1		1			
			但是	8		或者_c	1			1		
			而	25		(from 'only') 惟_d	2			2		
						而是_v	2			2		
					188			6	1		5	9

No.	English	Freq	Chinese	Freq		Chinese phrase							
8.	provided that	200	只要	91		但	45			45			
						但下列_b 情况_n 下_f 在_p 此_r 限_v	1			1			
						但 如果	2			2			
						但 如	1			1			
						但是	44			44			
						如果	5			5			
						并且	1			1			
						条件_n 是_v	4						4
					91	需_v	1	104		99	1	5	5
9.	however	197	但	56		无论如何	1						1
			但是	126		亦_d	1						1
			尽管如此	1		惟_v	4						4
			然而	2	185			6		1		5	6
10.	after	166	nil	0		同_p…后_f/之后_f	58					58	
						后_f	13					13	
						在_p…后_f/之后_f	74					74	
						之后_f	1					1	
						经_p/经过_p…后_f/之后_f	7					7	
						一经_d	1					1	
						经_p	8					8	
						经过_p	1					1	
					0	按_p…后_f	3	166		0	3	166	0
11.	in order	148	以 使_v	14		从而	2			2			

			以便	25		如	2		2				
			借以	1		并	1		1				
						为_v/_p	62				62		
						使_v	6				6		
						用_v 以_p	2				2		
						以期_v	1				1		
					40	为了_p	25	101		5	25	96	7
12.	as soon as	102	一俟 ...尽快/即行/立即/即将/即	8		如果 事先_d 已_d	1		1				
			一旦…立即	3		尽快_d /尽早_d /尽_v速_n/ 从速_d /立即_d	67				67		
						一经_d...即_v/d /立即_d /尽快_d	12				12		
						一经_d	8				8		
						当_p...即_v	1				1		
						在_p...时_n	1				1		
					11	在_p...时_n...即 行	1	91		1	1	90	0
13.	before	90	nil	0		在/对…之前/前 /以前	85				85		
						之前_f	1				1		
						经_p...后_f	1				1		
						先_d...时_n	1				1		
						已_d	1				1		
					0	未_d	1	90		0	1	90	0

14.	whenever	64	一旦	1		只要	35	35				
						如果	1	1				
						如	2	2				
						倘	1	1				
						当_p/每当-p...(时_n)	5			5		
						凡_d...(时_n)	7			7		
						在_p...时_n	5			5		
						时_n	5			5		
					1	随时_d	1	62		39	1	23	1
15.	until	61	nil	0		直至_v	8			8		
						直至...为止_u	2			2		
						至_p	2			2		
						至_p...为止_u /后_f/时_n/止_v	13			13		
						直到_v	4			4		
						直到_v...时_n / 为止_u	4			4		
						一直_d...至_v/到_v...为止_u	3			3		
						在_p ...后_f	3			3		
						只有_d 在_p...后_f	1			1		
						之后_f	2			2		
						在_p...前_f/以前_f	9			9		
						之前_f	1			1		
						只有_d 在_p	1			1		
						再_d 过_u	2			2		
					0	只_d	1	56		0	1	56	5

16.	so as	59	以便	17		从而	5		5				
			以使_v	13		因而	1		1				
			俾	2		而	2		2				
			以免	1		使_v	2			2			
						至_p	1			1			
						可_v...之_u	2			2			
						尽可能_d	1			1			
						应_v	4			4			
						的_u 目的_n	1			1			
					33	须_d	1	20		8	1	12	6
17.	while	57	与此同时	1		而	2		2				
			同时	5		虽	1		1				
						虽然	1		1				
						如果	1		1				
						若...时_n	1		1				
						当_p	2			2			
						在…p	5			5			
						时_n	4			4			
						在_p...时_n /下/期间/同时	28			28			
					6	特别_d 是_v	1	46		6	1	40	5
18.	insofar as	50	只要	11		如果	2		2				
			致	1		以	1		1				
						在…p	1			1			
						在_p...下/内/方面	9			9			
						时_n	1			1			

No.	English	Total	Chinese	Freq	Freq2	Pattern	N1	N2	N3	N4	N5	N6	N7
						当_p…时_n	1			1			
						凡_d 属_v	1			1			
						只有_d	2			2			
						范围_n	2			2			
						至少_d	1			1			
						仅_d 限于_v	1			1			
						的_u 关系_n 方面	1			1			
					12	尽可能_d	2	25		3	2	22	13
19.	provided	48	只要	18		但	8		8				
						如果	4		4				
						如	5		5				
						而	1		1				
					18	在_p…下_f	1	19		18	1	1	11
20.	as far as	43	nil	0		尽可能 _d	21			21			
						就_p	11			11			
						尽量_d	3			3			
					0	在_p…内/时/下	6	41		0	6	41	2
21.	therefore	29	因此	26		而	1		1				
			因而	1									
					27			1		1		0	1
22.	as long as	28	只要	15		如	2		2				
			一旦	1		对_p…期间_f	2			2			
						在_p…期间_f	4			4			

No.	English	n	译词1	c1	n2	译词2							
					16	在_p…的_u 范围_n 和_c 时期_n 内_f	1	9		2	1	7	3
23.	furthermore	27	此外	11		亦_d	3			3			
			除此以外	1		又_d	6			6			
			且	1		均_d	1			1			
			并	3	16		10	0		10	1		
24.	nevertheless	27	但	5		尽管	1	1					
			但是	1		亦_d	1			1			
			然而	3		仍_d	8			8			
			尽管如此	3		仍然_d	3			3			
					12		13	1		12	2		
25.	even if	26	即使	20		nil	0						
			即令	1									
			纵	2									
			虽	2									
			虽然	1	26		0	0		0	0		
26.	because	23	因	2		因_p	2	0		2			
			由于	11									
			因为	7	20		2	0		2	1		
27.	in addition	21	此外	19		还_d	1			1			
			另外	1	20		1	0		1	0		
28.	so that	20	以便	10		从而	3	3					

			以	1		因而	1		1				
			俾	2		即_v	1				1		
					13			5		4		1	2
29.	considering that	19	nil	0	0	考虑_v 到_v	19	19		0	19	19	0
30.	as if	15	nil	0		如同_v	8				8		
						当作_v	1				1		
						同_p...一样_u	1				1		
						一样_u	1				1		
					0	以_p...的_u 态度_n	1	12		0	1	12	3
31.	except that	15	nil	0		除非	4		4				
						但	9		9				
					0	但是	2	15	2	15		0	0
32.	accordingly	14	因此	12	12	为此_b	2	2		0	2	2	0
33.	once	13	一旦	10	10	一经_d	2	2		0	2	2	1
34.	then	13	则	10		即_d	1				1		
			然后	2	12			1		0		1	0
35.	although	12	虽	5		nil	0						
			虽然	5									
			尽管	2	12			0		0		0	0
36.	and then	10	然后	2		且	4		4				

						并	1		1				
						亦_d	1			1			
					2	以后_f	1	7		5	1	2	1
37.	but also	10	并	1		也_d	2			2			
			而且也_d	1		还要_d	1			1			
			而 同时_n 也_d	2		而是_v	2			2			
			同时 也_d	1	5		5	0		5	0		
38.	even though	10	即令	1		nil	0						
			虽	1									
			即使	6									
			尽管	2	10		0	0		0	0		
39.	rather than	10	而非_b	6		nil	0						
			而 不_d 是_v	4	10		0	0		0	0		
40.	moreover	9	此外	6		又_d	1			1			
			而且	1									
			并	1	8		1	0		1	0		
41.	so long as	8	只要	3		在_p _...之_u 期中_t	1			1			
						在_p…以前_f	1			1			
						对_p…时_n	1			1			
					3	在_p…的_u 情况_n 下_f	1	4		0	1	4	1
42.	whilst	8	nil	0		在_p…期间_f	3			3			
					0	在_p…时_n	2	5		0	2	5	3

43.	since	7	因	2		而	1		1				
			由于	2		自_p	1			1			
					4	经_p 就_d…以来_f	1	3		1	1	2	0
44.	thus	7	因此	5		而	1		1				
			从而	1	6			1		1		0	0
45.	whereas	7	而	5	5	鉴于	2	2	2	2		0	0
46.	consequently	6	因此	3		为此_d	1			1			
			因而	1									
			从而	1	5			1		0		1	0
47.	in any case	6	无论如何	2		但	1		1				
						总之	1		1				
					2	在_p 任何_r 情形_n 下_f	1	3		2	1	1	1
48.	likewise	6	nil	0		同样_d	2			2			
					0	亦_d	4	6		0	4	6	0
49.	even when	4	即使	4	4	nil	0	0		0		0	0
50.	in case	4	如	3	3	在_p…的_u 情况_n 下_f	1	1		0	1	1	0
51.	though	3	虽	1		但是	2		2				
					1			2		2		0	0

No.	English	count	Chinese			Chinese							
52.	also	2	此外	1	1	nil	0	0		0		0	1
53.	and thus	2	nil	0	0	而	2	2	2	2		0	0
54.	as well	2	nil	0	0	也_d	1	1		0	1	1	1
55.	first	2	首先	2	2	nil	0	0		0		0	0
56.	otherwise	2	否则	2	2	nil	0	0		0		0	0
57.	providing that	1	nil	0	0	规定_v	1	1		0	1	1	0
58.	similarly	1	nil	0	0	同样_d	1	1		0	1	1	0
59.	yet	1	而	1	1	nil	0	0		0		0	0
	Total	**6,760**		**3,744**	**3,744**		**2,101**	**2,101**	**669**	**669**	**1,432**	**1,432**	**915**

Appendix 6: Translated texts' conjunctions

No.	Chinese conjunctions	Total conjunctions	Formal correspondences	Frequency of formal correspondences	Total formal correspondences	Shifts	Frequency of shifts	Total shifts	Shifts from other conjunctions	Total shifts from other conjunctions	Shifts from other non-conjunctions	Total shifts from non-conjunctions	Explicitation
1.	并 bing [and]	1,390	and	1,199		as	1		1				
			moreover	1		and then	1		1				
			but also	1		in order	1		1				
			furthermore	3		nor	1				1		
						as well as	7				7		
						followed by	7				7		
						together with	7				7		
					1,204	also	7	32		3	7	29	154
2.	如 ru [if]	1,242	if	694		where	191		191				
			in case	3		when	99		99				
						unless	2		2				
						provided	5		5				
						whenever	2		2				
						in order	2		2				
						provided that	1		1				

						as long as	2	2					
						should	12				12		
						for	6				6		
						in the event of	18				18		
					697	(others)	55	395		304	55	91	150
3.	而 er [and]	1,127	and	87		provided	1		1				
			rather than (translated to 而不/而非)	10		as	2		2				
			yet	1		thus	1		1				
			whereas	5		and thus	2		2				
			but also	2		since	1		1				
			but	25		therefore	1		1				
						while	2		2				
						so as	2		2				
						unless	1		1	13			
					130	for the purpose of, with respect to, as regards, in the sense that, as the case may be	126	139			126	126	858
4.	则 ze [then]	1,058	then	10	10	nil	0	0		0		0	1,048
5.	但 dan [but]	498	but	155		except that	9		9				

			however	56		provided that	49			49			
			nevertheless	5		provided	8			8			
						and	9			9			
						unless	5			5			
						in any case	1			1			
					216	if	1	82	1	82		0	200
6.	如果 ruguo[if]	430	if	255		where	62			62			
						when	13			13			
						whenever	1			1			
						unless	2			2			
						insofar as	2			2			
						provided	4			4			
						provided that	7			7			
						while	1			1			
						as soon as	1			1			
						should	12				12		
						had	2				2		
						in the event of	2				2		
					255	(others)	26	135		93	26	42	40
7.	以 yi[so that]	420	as	20		insofar as	1			1			
			in order	14		to	221				221		

			so that	1		for	70				70		
			so as	13		with the aim of	2				2		
						in support of	6				6		
						with the objective of	2				2		
						to the end	2				2		
						aimed at	4				4		
						which aims	2				2		
						thereby	2				2		
						towards	2				2		
						by	2				2		
						in	14				14		
						against	2				2		
						at	2				2		
					48	so	2	336		1	2	335	36
8.	且 qie [and]	283	and	252		when	1			1			
			furthermore	1		and then	4			4			
						nor	1				1		
					253			6		5		1	24
9.	除非 chufei [unless]	279	unless	219		except that	4			4			
						except	54				54		
					219	save	1	59		4	1	55	1

10.	但是 danshi [but]	238	however	126		except that	2		2				
			but	8		provided that	44		44				
			nevertheless	1		and	1		1				
						though	2		2				
						(only) where	2		2				
					135	(except) where	1	52	1	52		0	51
11.	只要 zhiyao [if only]	210	provided that	91		whenever	35		35				
			provided	18		if	9		9				
			as long as	15		wherever	13			13			
			so long as	3		providing	1			1			
			insofar as	11		to the extent	6			6			
					138	on condition that	1	65		44	1	21	7
12.	以便 yibian [so that]	154	so that	10		when_RRQ	2			2			
			in order (to)	25		to	39			39			
			so as (to)	17		for	29			29			
			as	2		with the aim of	1			1			
						with the objective of	1			1			
						with a view to	10			10			
						for the purpose of	7			7			
						to the end that	1			1			

						on the basis of	1				1		
					54	aimed at_v	1	92		0	1	92	8
13.	同时 tongshi [at the same time]	98	while	5		and	14		14				
			but also	1		but	1		1				
						on the one hand	1				1		
						at the same time	2				2		
						together_RL with_IW	1				1		
						along_II21 with_II22	1				1		
					6	also	3	23		15	3	8	69
14.	并且 bingqie [and]	96	and	89		provided that	1		1				
					89	or	1	2		1	1	1	5
15.	无论 wulun [whether]	72	nil	0		however_adv	1				1		
						whether_adv	37				37		
						either_adv	6				6		
						neither_adv	3				3		
						whatever_adv	4				4		
						wherever	1				1		
						irespective of	5				5		
						regardless	1				1		
					0	notwithstanding	1	59		0	1	59	13

16.	尽管 jinguan [although]	69	although	2		nevertheless	1		1				
			even though	2		notwithstanding	61				61		
						irrespective of	1				1		
					4	despite	1	64		1	1	63	1
17.	若 ruo [if]	62	if	38		when	1		1				
						where	5		5				
						while	1		1				
						should	1				1		
						but for	1				1		
						in the event of	3				3		
					38	in case of	2	14		7	2	7	10
18.	因此 yinci [therefore]	61	therefore	26		then	1				1		
			thus	5		accordingly	1				1		
			accordingly	12		because of this	1				1		
			consequently	3		it follows that	1				1		
						to this end	5				5		
					46	thereupon	2	11		0	2	11	4
19.	不论 bulun [no matter]	56	nil	0		at any time	1				1		
						irrespective of	7				7		

						whatever	7				7		
						regardless of	3				3		
						notwithstanding	1				1		
						whatsoever	3				3		
						wheresoever	2				2		
						wherever	4				4		
						whomsoever	2				2		
						whether	10				10		
						any	2				2		
						either	1				1		
						whether or not	3				3		
						howsoever	1				1		
						irrespective of whether	1				1		
						whichever	1				1		
6					0	whatever or not	1	50		0	1	50	6
20.	从而 conger [thus]	47	thus	1		so that	3			3			
			consequently	1		so as	5			5			
						in order	2			2			
						as	3			3			
						and (hence)	1			1			
						thereby	4				4		
						by	3				3		

No.	Term		Word			Phrase						
						resulting in	1			1		
						in a manner	2			2		
					2	with a view to	2	26	14	2	12	19
21.	由于 youyu [due to]	45	because	11		if	2	2				
			since	2		as a result of	6			6		
			as	3		by virtue of	2			2		
						by reason of	2			2		
						because of	2			2		
						due … to	2			2		
						on account of	1			1		
						in light of	1			1		
						resulted	1			1		
						called for	1			1		
						through	2			2		
						given	1			1		
						by	2			2		
						is caused by	1			1		
					16	resulting from	1	27	2	1	25	2
22.	此外 ciwai [moreover]	43	furthermore	11		further	4			4		
			in addition	19		plus	1			1		
			moreover	6								

#													
			also	1									
			and (provided further that)	1	38			5		0		5	0
23.	即使 jishi [even if]	42	even if	20		if	1	1					
			even though	6		even	10					10	
			even when	4	30	notwithstanding	1	12		1	1	11	0
24.	否则 fouze [otherwise]	37	otherwise	2	2	nil	0	0		0		0	35
25.	无论如何 wulunruhe [in any case]	31	in any case	2		however	1	1					
						in any case	6					6	
						in no way	1					1	
						in no way whatsoever	1					1	
						in any way	1					1	
						in no case	7					7	
						in any event	11					11	
					2	in all events	1	29		1	1	28	0
26.	因 yin [because]	30	because	2		caused	1					1	
			since	2		by	2					2	
						for	3					3	

						suffers from	1				1		
						resulting from	1				1		
						owing to	1				1		
						on account of	1				1		
						by the fact that	1				1		
						in respect of	1				1		
						as to	1				1		
						subject to	1				1		
						by reason of	1				1		
					4	given	1	16		0	1	16	10
27.	然后 ranhou [then]	29	then	2		thence	21				21		
			and then	2		thereafter [not as conjunction. Should propose as conjunction]	1				1		
					4	then	1	23		0	1	23	2
28.	一旦 yidan [once]	27	as long as	1		where	7		7				
			as soon as	3		upon	1			1			
			once	10		in the event of	2			2			
			whenever	1	15			10		7		3	2
29.	而且 erqie [and]	27	moreover	1		nor	1				1		

			and	21									
			but also	1	23			1		0		1	3
30.	虽 sui[though]	27	although	5		while	1		1				
			though	1		where	1		1				
			even if	2		in spite of	3					3	
			even though	1		notwithstanding	2					2	
					9	even	1	8		2	1	6	10
31.	因而 yiner [therefore]	17	consequently	1		so as	1		1				
			therefore	1		so that	1		1				
						thus	1					1	
						which result	1					1	
						does not entail	1					1	
						thereupon	1					1	
						therefrom	1					1	
						in respect of	1					1	
						to this extent	1					1	
						thereby	1					1	
					2	by	1	11		2	1	9	4
32.	俾 bi [so that]	16	so as	2		to	6					6	
			so that	2		with a view to	1					1	

			as	1		for the purpose of	1				1		
					5	which will enable	1	9		0	1	9	2
33.	虽然 suiran [although]	11	even if	1		while	1		1				
			although	5		if	1		1				
					6	notwithstanding	2	4		2	2	2	1
34.	一俟 yisi [as soon as]	9	as soon as	8	8	as	1	1	1	1		0	0
35.	倘 tang [if]	9	if	2		whenever	1		1				
					2	should	2	3		1	2	2	4
36.	因为 yinwei [because]	9	because	7	7	nil	0	0		0		0	2
37.	只有 zhiyou [only if]	8		0		unless	1		1				
						(only) if	6		6				0
					0	only	1	8		7	1	1	
38.	以致 yizhi [with the result that (bad result)]	7	nil	0		as	2		2				
					0	to such an extent that	1	3		2	1	1	4
39.	鉴于 jianyu [in view of]	7	nil	0	0	whereas	2		2				

						in view of	5	7		2	5	5	0
40.	然而 raner [even so]	5	however	2		nil	0						
			nevertheless	3	5			0		0		0	0
41.	致 zhi [(so)…that]	5	insofar as	1	1	and	1	1	1	1		0	3
42.	那么 name [then]	5	nil	0	0	nil	0	0		0		0	5
43.	以免 yimian [lest]	4	as	1		against	1				1		
			so as	1	2	without	1	2		0	1	2	0
44.	借以 jieyi [for the purpose of]	4	in order	1		to	2				2		
					1	for the purpose of	1	3		0	1	3	0
45.	尽管如此 jinguanruci [despite this)	4	however	1		nil	0						
			nevertheless	3	4			0		0		0	0
46.	起见 qijian [for the sake of]	4	nil	0		for	1				1		
					0	for the purpose of	1	2		0	1	2	2

47.	纵 zong [even if]	3	even if	2	2	even	1	1		0	1	1	0
48.	首先 shouxian [first]	3	first	2	2	a first charge	1	1		0	1	1	0
49.	不管 buguan [regardless of]	2	nil	0		whether	1				1		
					0	notwithstanding	1	2		0	1	2	0
50.	与此同时 yuchitongshi [at the same time]	2	while	1	1	at the same time	1	1		0	1	1	0
51.	假使 jiashi [if]	2	if	2	2	nil	0	0		0		0	0
52.	即令 jiling [even though]	2	even though	1		nil	0						
			Even if	1	2			0		0		0	0
53.	即或 jihuo [even though]	2	nil	0	0	even	2	2		0	2	2	0
54.	另 ling[in addition]	2	nil	0	0	nil	0	0		0		0	2
55.	若是 ruoshi [if]	2	if	1	1	had the compensation been paid	1	1		0	1	1	0
56.	设若 sheruo [if]	2	if	2	2	nil	0	0		0		0	0

No.													
57.	于是 yushi [hence]	1	nil	0	0	then_RT	1	1		0	1	1	0
58.	倘若 tangruo [if]	1	nil	0	0	in the event of	1	1		0	1	1	0
59.	另外 lingwai [besides]	1	in addition	1	1	nil	0	0		0		0	0
60.	如若 ruruo [if]	1	nil	0	0	in the event of	1	1		0	1	1	0
61.	总之 zongzhi [in short]	1	nil	0	0	in any case	1	1	1	1		0	0
62.	故 gu [so]	1	nil	0	0	nil	0	0		0		0	1
63.	进而 jiner [and then]	1	nil	0	0	and (as a consequence)	1	1	1	1		0	0
64.	除此以外 chuciyiwai [besides]	1	furthermore	1	1	nil	0	0		0	0	0	0
	Total	**8,382**		**3,744**	**3,744**		**1,840**	**1,865**	**672**	**672**	**1,168**	**1,168**	**2,798**

Appendix 7: Non-translated texts' conjunctions

No.	Conjunctions in the non-translated texts	Frequency of conjunctions
1.	并bing[and]	1,598
2.	如ru[if]	886
3.	但dan[but]	780
4.	而er[and]	490
5.	如果ruguo[if]	293
6.	则ze[then]	224
7.	以yi[so that]	141
8.	除非chufei[unless]	137
9.	且qie[and]	96
10.	以便 yibian[so that]	92
11.	不论bulun[no matter]	49
12.	只要zhiyao[if only]	33
13.	同时tongshi[at the same time]	33
14.	但是danshi[but]	31
15.	因yin[because]	31
16.	然后ranhou[then]	30
17.	鉴于jianyu[in view of]	28
18.	并且bingqie[and]	24
19.	若ruo[if]	24
20.	无论wulun[whether]	20
21.	虽sui[though]	20
22.	由于youyu[due to]	14
23.	以免 yimian[lest]	13
24.	即使jishi[even if]	13
25.	否则fouze[otherwise]	12
26.	而且erqie[and]	10
27.	然而 raner[even so]	9
28.	此外ciwai[moreover]	8
29.	一旦yidan[once]	7
30.	因此yinci[therefore]	7
31.	从而conger[thus]	4
32.	因而yiner[therefore]	4
33.	一俟yisi[as soon as]	3
34.	倘tang[if]	3
35.	只有zhiyou[only if]	3
36.	因为yinwei[because]	3
37.	尽管jinguan[although]	3
38.	若非ruofei[were it not for]	2
39.	与此同时yuchitongshi[at the same time]	1
40.	以至yizhi[up to]	1

41.	倘若tangruo[if]	1
42.	假如jiaru[if]	1
43.	即令jiling[even though]	1
44.	即便jibian[even if]	1
45.	另ling[in addition]	1
46.	另外lingwai[besides]	1
47.	如若ruruo[if]	1
48.	纵 zong[even if]	1
49.	纵使zongshi[even though]	1
50.	结果jieguo[as a result]	1
51.	那么name[then]	1
52.	首先shouxian[first]	1
	Total	**5,192**

Appendix 8: Semantic categories

Semantic categoris	Source texts					Translated texts					Non-translated
	Translated into formal correspondences	Shifted to other conjunctions	Shifted into other non-conjunctions	Implicitation by translators	Total	Translated from formal correspondences	Shifted from other conjunctions	Shifted from other non-conjunctions	Explicitation by translators	Total	Total
Elaboration (textual) [*ET*]											
无论如何 wulunruhe[in any case]						2	1	28	0	31	0
总之 zongzhi[in short]						0	1	0	0	1	0
in any case	2	2	1	1	6						
Total	**2**	**2**	**1**	**1**	**6**	**2**	**2**	**28**	**0**	**32**	**0**
Addition (paratactic) [*AP*]											
并 bing[and]						1,204	3	29	154	1,390	1,598
且 qie[and]						253	5	1	24	283	96

并且 bingqie[and]						89	1	1	5	96	24
而且 erqie[and]						23	0	1	3	27	10
而 er[and]						105	13	126	858	1,072	490
此外 ciwai[moreover]						38	0	5	0	43	8
另 ling[in addition]						0	0	0	2	2	1
另外 lingwai[besides]						1	0	0	0	1	1
除此以外 chuciyiwai[besides]						1	0	0	0	1	0
同时 tongshi[but also]						1	0	0	0	1	0
and	1,649	27	43	559	2,278						
moreover	8	0	1	0	9						
furthermore	16	0	10	1	27						
in addition	20	0	1	0	21						
yet	1	0	0	0	1						
whereas	5	2	0	0	7						
also	1	0	0	1	2						
as well	0	0	1	1	2						
rather than	10	0	0	0	10						
but also	5	0	5	0	10						
Total	**1,715**	**29**	**61**	**562**	**2,367**	**1,715**	**22**	**163**	**1,046**	**2,946**	**2,228**
***Temporal: same time* (paratactic) [*TSP*]**											
同时 tongshi[at the same time]						5	15	8	69	97	33

与此同时 yuchitongshi[at the same time]						1	0	1	0	2	1
while	6	6	40	5	57						
whilst	0	0	5	3	8						
Total	**6**	**6**	**45**	**8**	**65**	**6**	**15**	**9**	**69**	**99**	**34**
***Temporal: same time* (hypotactic) [*TSH*]**											
一旦 yidan[once]						15	7	3	2	27	7
一俟 yisi[as soon as]						8	1	0	0	9	3
as long as	1	0	0	0	1						
as soon as	11	1	90	0	102						
once	10	0	2	1	13						
whenever	1	39	23	1	64						
when	0	114	207	21	342						
Total	**23**	**154**	**322**	**23**	**522**	**23**	**8**	**3**	**2**	**36**	**10**

Temporal: different time (paratactic) [*TDP*]											
然后 ranhou[then]						4	0	23	2	29	30
进而 jiner[and then]						0	1	0	0	1	0
首先 shouxian[first]						2	0	1	0	3	1
and then	2	5	2	1	10						
first	2	0	0	0	2						
then	2	0	0	0	2						
Total	**6**	**5**	**2**	**1**	**14**	**6**	**1**	**24**	**2**	**33**	**31**
Temporal: different time (hypotactic) [*TDH*]											
until	0	0	56	5	61						
after	0	0	166	0	166						
before	0	0	90	0	90						
Total	**0**	**0**	**312**	**5**	**317**						
Spatial/situation: point (hypotactic) [*SPH*]											
where	0	269	154	56	479						
Spatial/situation: extend (hypotactic) [*SEH*]											
以致 yizhi[with the result that (bad result)						0	2	1	4	7	0
致 zhi[(so)…that]						1	1	0	3	5	0
以至 yizhi[up to]						0	0	0	0	0	1

insofar as	1	0	0	0	1						
as far as	0	0	41	2	43						
Total	**1**	**0**	**41**	**2**	**44**	**1**	**3**	**1**	**7**	**12**	**1**
***Causal: reason* (paratactic) [*CaRP*]**											
因而 yiner[therefore]						2	2	9	4	17	4
故 gu[so]						0	0	0	1	1	0
therefore	1	0	0	0	1						
consequently	1	0	0	0	1						
Total	**2**	**0**	**0**	**0**	**2**	**2**	**2**	**9**	**5**	**18**	**4**
***Causal: reason* (hypotactic) [*CaRH*]**											
因 yin[because]						4	0	16	10	30	31
由于 youyu[due to]						16	2	25	2	45	14
因为 yinwei[because]						7	0	0	2	9	3
鉴于 jianyu[in view of]						0	2	5	0	7	28
because	20	0	2	1	23						
since	4	1	2	0	7						
as	3	0	0	0	3						
considering that	0	0	19	0	19						
Total	**27**	**1**	**23**	**1**	**52**	**27**	**4**	**46**	**14**	**91**	**76**

Causal: reason (textual) [*CaRT*]											
因此 yinci[therefore]						46	0	11	4	61	7
结果 jieguo[as a result]						0	0	0	0	0	1
therefore	26	1	0	1	28						
thus	5	1	0	0	6						
accordingly	12	0	2	0	14						
consequently	3	0	1	0	4						
Total	**46**	**2**	**3**	**1**	**52**	**46**	**0**	**11**	**4**	**61**	**8**
Causal: purpose (paratactic) [*CaPP*]											
从而 conger[thus]						2	14	12	19	47	4
thus	1	0	0	0	1						
consequently	1	0	0	0	1						
Total	**2**	**0**	**0**	**0**	**2**	**2**	**14**	**12**	**19**	**47**	**4**
Causal: purpose (hypotactic) [*CaPH*]											
以 yi[so that]						48	1	335	36	420	141
以便 yibian[so that]						54	0	92	8	154	92
俾 bi[so that]						5	0	9	2	16	0
借以 jieyi[for the purpose of]						1	0	3	0	4	0
起见 qijian[for the sake of]						0	0	2	2	4	0
以免 yimian[lest]						2	0	2	0	4	13

so that	13	4	1	2	20						
in order	40	5	96	7	148						
so as	33	8	12	6	59						
as	24	9	209	105	347						
Total	**110**	**26**	**318**	**120**	**574**	**110**	**1**	**443**	**48**	**602**	**246**
Conditional: positive: if…then **(paratactic)** **[***CoPITP***]**											
则 ze[then]						10	0	0	1,048	1,058	224
那么 name[then]						0	0	0	5	5	1
于是 yushi[hence]						0	0	1	0	1	0
then	10	0	1	0	11						
Total	**10**	**0**	**1**	**0**	**11**	**10**	**0**	**1**	**1,053**	**1,064**	**225**
Conditional: positive: if…then **(hypotactic)** **[***CoPITH***]**											
如 ru[if]						697	304	91	150	1,242	886
如果 ruguo[if]						255	93	42	40	430	293
若 ruo[if]						38	7	7	10	62	24
倘 tang [if]						2	1	2	4	9	3
假使 jiashi[if]						2	0	0	0	2	0
若是 ruoshi[if]						1	0	1	0	2	0
设若 sheruo[if]						2	0	0	0	2	0
倘若 tangruo[if]						0	0	1	0	1	1

如若 ruruo[if]						0	0	1	0	1	1
假如 jiaru[if]						0	0	0	0	0	1
if	994	20	50	80	1,144						
in case	3	0	1	0	4						
Total	**997**	**20**	**51**	**80**	**1,148**	**997**	**405**	**145**	**204**	**1,751**	**1,209**
Conditional: positive: as long as **(hypotactic) [*CoPALAH*]**											
只要 zhiyao[if only]						138	44	21	7	210	33
provided that	91	99	5	5	200						
provided	18	18	1	11	48						
as long as	15	2	7	3	27						
so long as	3	0	4	1	8						
insofar as	11	3	22	13	49						
providing that	0	0	1	0	1						
Total	**138**	**122**	**40**	**33**	**333**	**138**	**44**	**21**	**7**	**210**	**33**
Conditional: positive: only if **(hypotactic) [*CoOIH*]**											
只有 zhiyou[only if]						0	7	1	0	8	3
Total						**0**	**7**	**1**	**0**	**8**	**3**
Conditional: positive: whatever **(hypotactic) [*CoPWH*]**											
无论 wulun[whether]						0	0	59	13	72	20

不论 bulun[no matter]						0	0	50	6	56	49
不管 buguan[regardless of]						0	0	2	0	2	0
Total						**0**	**0**	**111**	**19**	**130**	**69**
Conditional: negative **(paratactic) [*CoNP*]**											
否则 fouze[otherwise]						2	0	0	35	37	12
otherwise	2	0	0	0	2						
Total	**2**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**35**	**37**	**12**
Conditional: negative **(hypotactic) [*CoNH*]**											
除非 chufei[unless]						219	4	55	1	279	137
若非 ruofei[were it not for]						0	0	0	0	0	2
unless	219	11	17	2	249						
Total	**219**	**11**	**17**	**2**	**249**	**219**	**4**	**55**	**1**	**279**	**139**
Conditional: concessive/adversative **(paratactic) [*CoCAP*]**											
但 dan[but]						216	82	0	200	498	780
但是 danshi[but]						135	52	0	51	238	31
(然而 raner[even so])						5	0	0	0	5	9
尽管如此 jinguanruci[despite this]						4	0	0	0	4	0
而 er[and]						25	0	0	0	25	0
but	188	1	5	9	203						

however	185	1	5	6	197						
except that	0	15	0	0	15						
nevertheless	12	1	12	2	27						
Total	**385**	**18**	**22**	**17**	**442**	**385**	**134**	**0**	**251**	**770**	**820**
Conditional: concessive/adversative **(hypotactic) [*CoCAH*]**											
尽管 jinguan[although]						4	1	63	1	69	3
即使 jishi[even if]						30	1	11	0	42	13
虽然 suiran[although]						6	2	2	1	11	0
虽 sui[though]						9	2	6	10	27	20
纵 zong[even if]						2	0	1	0	3	1
即令 jiling[even though]						2	0	0	0	2	1
纵使 zongshi[even though]						0	0	0	0	0	1
即便 jibian[even if]						0	0	0	0	0	1
即或 jihuo [even though]						0	0	2	0	2	0
though	1	2	0	0	3						
although	12	0	0	0	12						
even though	10	0	0	0	10						
even when	4	0	0	0	4						
even if	26	0	0	0	26						
Total	**53**	**2**	**0**	**0**	**55**	**53**	**6**	**85**	**12**	**156**	**40**

Manner (paratactic) [*MP*]												
similarly	0	0	1	0	1							
likewise	0	0	6	0	6							
and thus	0	2	0	0	2							
Total	**0**	**2**	**7**	**0**	**9**							
Manner (hypotactic) [*MH*]												
as if	0	0	12	3	15							
Total	**0**	**0**	**12**	**3**	**15**							

Semantic Categories	Source texts					Translated texts					Non-translated texts
	Translated into formal correspondences	Shifted into other conjunctions	Shifted into others non-conjunctions	Implicitation by translators	Total	Translated from formal correspondence	Shifted from other conjunctions	Shifted from other non-conjunctions	Explicitation by translators	Total	
Elaboration (textual) [*ET*]	2	2	1	1	6	2	2	28	0	32	0
Addition (paratactic) [*AP*]	1,715	29	61	562	2,367	1,715	22	163	1,046	2,946	2,228
Temporal: same time (paratactic) [*TSP*]	6	6	45	8	65	6	15	9	69	99	34
Temporal: same time (hypotactic) [*TSH*]	23	154	322	23	522	23	8	3	2	36	10
Temporal: different time (paratactic) [*TDP*]	6	5	2	1	14	6	1	24	2	33	31
Temporal: different time (hypotactic) [*TDH*]	0	0	312	5	317	0	0	0	0	0	0
Spatial/situation: point (hypotactic) [*SPH*]	0	269	154	56	479	0	0	0	0	0	0

Spatial/situation: extend (hypotactic) [*SEH*]	1	0	41	2	44	1	3	1	7	12	1
Causal: reason (paratactic) [*CaRP*]	2	0	0	0	2	2	2	9	5	18	4
Causal: reason (hypotactic) [*CaRH*]	27	1	23	1	52	27	4	46	14	91	76
Causal: reason (textual) [*CaRT*]	46	2	3	1	52	46	0	11	4	61	8
Causal: purpose (paratactic) [*CaPP*]	2	0	0	0	2	2	14	12	19	47	4
Causal: purpose (hypotactic) [*CaPH*]	110	26	318	120	574	110	1	443	48	602	246
Conditional: positive: if…then (paratactic) [*CoPITP*]	10	0	1	0	11	10	0	1	1,053	1,064	225
Conditional: positive: if…then (hypotactic) [*CoPITH*]	997	20	51	80	1,148	997	405	145	204	1,751	1,209
Conditional: positive: as long as (hypotactic) [*CoPALAH*]	138	122	40	33	333	138	44	21	7	210	33
Conditional: positive: only if (hypotactic) [*CoOIH*]	0	0	0	0	0	0	7	1	0	8	3
Conditional: positive: whatever (hypotactic) [*CoPWH*]	0	0	0	0	0	0	0	111	19	130	69
Conditional: negative (paratactic) [*CoNP*]	2	0	0	0	2	2	0	0	35	37	12
Conditional: negative (hypotactic) [*CoNH*]	219	11	17	2	249	219	4	55	1	279	139
Conditional: concessive/adversative (paratactic) [*CoCAP*]	385	18	22	17	442	385	134	0	251	770	820
Conditional: concessive/adversative (hypotactic) [*CoCAH*]	53	2	0	0	55	53	6	85	12	156	40
Manner (paratactic) [*MP*]	0	2	7	0	9	0	0	0	0	0	0
Manner (hypotactic) [*MH*]	0	0	12	3	15	0	0	0	0	0	0
Total	**3,744**	**669**	**1,432**	**915**	**6,760**	**3,744**	**672**	**1,168**	**2,798**	**8,382**	**5,192**

Bibliography

Abdul-Fattah, Ashraf (2010) *A corpus-based study of conjunctive explicitation in Arabic translated and non-translated texts written by the same translators/authors*, University of Manchester: Unpublished PhD thesis.

A comprehensive Chinese-English dictionary [electronic dictionary] (2004) Dalian: Dalian University of Technology Press.

Alcaraz, Enrique and Brain Hughes (2002) *Legal translation explained*, Manchester: St. Jerome.

Altenberg, Bengt (1986) 'Contrastive linking in spoken and written English', in Gunnel Tottie and Ingegerd Bäcklund (eds) *English in speech and writing. A symposium,* Uppsala Universitet, pp. 13-40.

------ (1995) Presentation given at *Languages in Contrast*, the University of Oslo, 21 April 1995.

Baker, Mona (1992) *In other words: A coursebook on translation*, London and New York: Routledge.

------ (1993) 'Corpus linguistics and translation studies: Implications and applications', in Mona Baker, Gill Francis and Elena Tognini-Bonelli (eds) *Text and technology: In honour of John Sinclair*, Philadelphia: John Benjamins, pp. 233-250.

------ (1995) 'Corpora in translation studies: An overview and some suggestions for future research', *Target* 7 (2): 223-243.

------ (1996) 'Corpus-based translation studies: The challenges that lie ahead', in Harold Somers (ed.) *Terminology, LSP and translation: Studies in language engineering, in honour of Juan C. Sager*, Amsterdam and Philadelphia: John Benjamins, pp. 175-186.

------ (2000) 'Towards a methodology for investigating the style of a literary translator', *Target* 12(2): 241-266.

------ (2004) 'A Corpus-based view of similarity and difference in translation' *International journal of corpus linguistics,* 9(2): 167-193.

Bakker, Matthijs, Cees Koster and Kitty van Leuven-Zwart (1998) 'Shifts of translation', in Mona Baker (ed.) *Routledge encyclopedia of translation studies*, London and New York: Routledge, pp. 226-231.

Baleghizadeh, Sasan and Ahmad Sharifi (2010) *Explicitation of implicit logical links in Persian-English translation*. Available at:
 http://trans-int.org/index.php/transint/article/viewFile/89/73 (Accessed: 26 July 2011)

Barlow, Michael (1995) 'ParaConc: A concordancer for Parallel Texts', *Computers and texts* (10).

Becher, Viktor (2011a) *Explicitation and implicitation in translation: A corpus-based study of English-German and German-English translation of business texts*, University of Hamburg: Unpublished PhD thesis.

------ (2011b) 'When and why do translators add connectives?', *Target* 23(1): 26-47.

Biber, Douglas, Stig Johansson, Geoffrey Leech, Susan Conrad and Edward Finegan (1999) *Longman grammar of spoken and written English*, London: Longman.

Blum-Kulka, Shoshana (1986) 'Shifts of cohesion and coherence in translation', in Juliane House & Shoshana Blum-Kulka (eds) *Interlingual and intercultural communication: Discourse and cognition in translation and second language acquisition studies*, Tübingen: Gunter Narr, pp. 17-35.

Bosseaux, Charlotte (2001) 'A study of the translator's voice and style in the French translation of Virginia Woolf's The Waves', *CTIS Occasional Papers* 1: 55-75.

British Standard (2006) *Translation services - Service requirements (BS EN 15038:2006).*

Bussmann, Hadumod (1996) *Routledge dictionary of language and linguistics* (translated and edited by Gregory P. Trauth and Kerstin Kazzazi), New York: Routledge.

Cao, Deborah (2007) *Translating law*, Clevedon, Buffalo, Toronto: Multilingual Matters LTD.

Carston, Robyn and Diane Blakemore (2005) 'Introduction to coordination: Syntax, semantics and pragmatics', *Lingua (editorial)* 115(4): 353-358.

Catford, John C. (1965) *A linguistic theory of translation: An essay on applied linguistics,* London: Oxford University Press.

Chen, Wallace (2006) *Explicitation through the use of connectives in translated Chinese: A corpus-based study*, University of Manchester: Unpublished PhD thesis.

Chesterman, Andrew (2000) 'A causal model for translation studies', in Maeve Olohan (ed.) *Intercultural faultlines. Research models in translation studies I: Textual and cognitive aspects*, Manchester: St. Jerome, pp. 15-28.

------ (2004a) 'Beyond the particular', in Anna Mauranen and Pekka Kujamäki (eds) *Translation universals: Do they exist?*, Amsterdam and Philadelphia: John Benjamins, pp.33-49.

------ (2004b) 'Hypotheses about translation universals', in Daniel Gile, Gyde Hansen, Kirsten Malmkjær (eds) *Claims, changes and challenges in translation studies: Selected contributions from the EST Congress, Copenhagen 2001*, <u>Amsterdam and Philadelphia: John Benjamins</u>, pp. 1-13.

------ (2007) 'Similarity analysis and the translation profile', in Willy Vandeweghe, Sonia Vandepitte and Marc Van de Velde (eds) *The study of language and translation. Belgian Journal of Linguistics*, pp. 53-66.

CKIP (1998) *Sinica Corpus: Technical Report* (no. 95-02/98-02), Taipei: Academia Sinica.

Crystal, David (1985) *A dictionary of linguistics and phonetics*, UK and USA: Basil Blackwell Ltd, 2nd edition.

Dayrell, Carmen (2005) *Investigating lexical patterning in a comparable corpus of Brazilian Portuguese,* University of Manchester: Unpublished PhD thesis.

Ding, Yan, Dirk Noël, Hans-George Wolf (2010) 'Patterns in metaphor translation: translating FEAR metaphors between English and Chinese', in Richard Xiao (ed.) *Using corpora in contrastive and translation studies*, United Kingdom: Cambridge Scholar Publishing, pp. 40-61.

Doherty, Monika (1987) 'Text connectors - A reading Aid', *Babel* 33: 212-217.
Egeberg, Erik (1996) 'Dostojevskij-oversettelser på norsk', *Aftenposten,* 10 (3).

Eggins, Suzanne (2004) *An introduction to systemic functional linguistics*, Continuum International Publishing Group: London and New York, 2nd edition.

Englund Dimitrova, Birgitta (2003) 'Explicitation in Russian-Swedish translation: pragmatic and sociolinguistic aspects', in Birgitta Englund Dimitrova and Alexander Pereswetoff-Morath (eds) *Swedish contributions to the 13th international congress of Slavists, Ljubljana,* Lund: Lund University, pp. 21-31.

 ------ (2005) *Expertise and explicitation in the translation process*, Amsterdam and Philadelphia: John Benjamins.

Espunya, Anna (2007) 'Is explicitation in translation cognitively related to linguistic explicitness? A study on interclausal relationships', in Willy Vandeweghe, Sonia Vandepitte and Marc Van de Velde (eds) *The study of language and translation. Belgian Journal of Linguistics*, pp. 67-86.

Even-Zohar, Itamar (1978) 'The position of translated literature within the literary polysystem', in James S. Holmes, José Lambert and Raymond van den Broeck (eds) *Literature and translation: New perspectives in literary studies*, Leuven: Acco, pp.117-127.

Fang, Alex Chengyu (1996) 'AUTASYS: Automatic tagging and cross-tagset mapping', in Sidney Greenbaum (ed.) *Comparing English worldwide: The international corpus of English,* Oxford: Oxford University Press, pp. 110-124.

Frawley, William (1984) 'Prolegomenon to a theory of translation', in William Frawley (ed.) *Translation: Literary, linguistic and philosophical perspectives*, London and Toronto: Associated University Presses, pp. 159-175.

Gao, Ernest Wei (2010) 'Coherence in simultaneous interpreting: An idealized cognitive model perspective', in Richard Xiao (ed.) *Using Corpora in Contrastive and Translation Studies*, United Kingdom: Cambridge Scholar Publishing, pp. 109-143.

Gao, Mobo Chang Fan (2000) *Mandarin Chinese: An introduction,* Oxford: Oxford University Press.

Gellerstam, Martin (1986) 'Translationese in Swedish novels translated from English', in Lars Wollin and Hans Lindquist (eds) *Translation Studies in Scandinavia, Proceedings from the Scandinavian Symposium on Translation Theory*, pp.88-95.

Gerzymish-Arbogast, Heidrun (2007) 'Universal thought in translation', *Conference proceedings of LSP translation scenarios, MuTra 2007, EU-high-level scientific conference Series*.

Granger, Sylviane (2003) 'The corpus approach: A common way forward for contrastive linguistics and translation studies', in Sylviane Granger, Jacques Lerot and Stephanie Petch-Tyson (eds) *Corpus-based approaches to contrastive linguistics and translation studies*, Amsterdam and Atlanta: Rodopi, pp. 17-29.

Granger, Sylviane & Stephanie Tyson (1996) 'Connector usage in the English essay writing of native and non-native EFL speakers of English', *World Englishes* 15(1): 17-27.

Halliday, Michael Alexander Kirkwood (2005) 'Towards probabilistic interpretations' in Jonathan J. Webster (ed.) *Computational and quantitative studies (The collected Works of M.A.K. Halliday Vol.6)*, London: Continuum, pp. 43-62.

------ (2006) 'On the grammatical foundation of discourse (2001)', in Jonathan J. Webster (ed.) *Studies in Chinese Language (The collected Works of M.A.K. Halliday Vol.8)*, London: Continuum, pp. 346-363.

Halliday, Michael Alexander Kirkwood and Christian M. I. M. Matthiessen (2004) *An introduction to functional grammar*, London: Hodder Arnold, 3rd edition.

Halliday, Michael Alexander Kirkwood and Ruqaiya Hasan (1976) *Cohesion in English*, London: Longman.

Halverson, Sandra Louise (2004) 'Connectives as a translation problem', in Armin Paul Frank, Norbert Greiner, Theo Hermans, Harald Kittel, Werner Koller, José

Lambert, and Fritz Paul (eds) *Übersetzung − Translation − Traduction. Ein internationales Handbuch zur Übersetzungsforschung. An International Encyclopedia of Translation Studies, Encyclopedie internationale des sciences de traduction,,* Berlin and New York: Walter de Gruyter, pp. 562-572.

Hansen-Schirra, Silvia, Stella Neumann and Erich Steiner (2006) 'Cohesion and explicitation in an English-German translation corpus', *Proceedings of the SPRIK conference 2006, Explicit and implicit information in text - Information structure across languages*, University of Oslo, Norway, 8-11 June 2006.

Hasan, Ruqaiya (1984) 'The nursery tale as a genre'*, Nottingham Linguistic Circular* (13).

Hatim, Basil and Ian Mason (1997) *The translator as communicator*, London and New York: Routledge.

Hermans, Theo (1985) 'Introduction: Translation studies and a new paradigm', in Theo Hermans (ed.) *The manipulation of literature: Studies in literary translation*, London: Croom Helm, pp. 7-15.

------ (1999) *Translation in systems descriptive and systemic approaches explained*, Manchester: St Jerome.

Holmes, James S. (1988) 'The name and nature of translation studies', in James S. Holmes (ed.) *Translated: Papers on literary translation and translation studies*, Amsterdam and Atlanta: Rodopi, pp. 67-80.

House, Juliane (2008) 'Beyond intervention: Universals in translation?', *Transkom* 1(1): 6-19.

Jakobson, Arnt Lykke (1999) 'Logging target text production with *Translog'*, in Gyde Hansen (ed.) *Probing the process in translation: Methods and results*, Copenhagen: Samfundslitteratur, pp. 9-20.

Jin, Guangsa (2008) 'The comparable corpus-based Chinese-English translation - A case study of city introduction', *Translation Journal*, 12(4): October 2008. Available at:
http://www.accurapid.com/journal/46corpus.htm (Accessed: 9 January 2009)

Johansson, Stig (1995) 'Mens sana in corpore sano: On the Role of Corpora in Linguistic Research', *The European English messenger* 4(2): 19-25.

Kemppanen, Hannu (2004) 'Keywords and ideology in translated history texts: A corpus-based analysis", *Across languages and cultures* 5(1): 89-107.

Klaudy, Kinga (1996) 'Back-translation as a tool for detecting explicitation strategies in translation", in Kinga.Klaudy, José Lambert and Anikó Sohár (eds) *Translation studies in Hungary*, Budapest: Scholastica, pp. 99-114.

------ (1998) 'Explicitation', in Mona Baker (ed.) *Routledge encyclopedia of translation studies*, London and New York: Routledge, pp. 80-84.

Klaudy, Kinga and Krisztina Károly (2005) 'Implicitation in translation: Empirical evidence for operational asymmetry in translation', *Across languages and cultures* 6(1): 13-28.

Kortmann, Bernd (1991) *Free adjuncts and absolutes in English: Problems of control and interpretation*, London: Routledge.

Labov, William and Joshua Waletzky (1967) 'Narrative analysis: Oral versions of personal experience', in June Helm (ed.) *Essays on the verbal and visual arts*, Seattle: University of Washington Press, pp. 12-44.

Lamiroy, Beatrice (1994) 'Pragmatic connectives and L2 acquisition: The case of French and Dutch', *Pragmatics* 4(2), pp. 183-201.

Laviosa-Braithwaite, Sara (1996) *The English comparable corpus (ECC): A resource and a methodology for empirical study of translation*, University of Manchester Institute of Science and Technology: Unpublished PhD thesis.

------ (1998) 'Universals in translation', in Mona Baker (ed.) *Routledge encyclopedia of translation studies*, London and New York: Routledge, pp. 288-291.

Laviosa, Sara (1997) 'How comparable can 'comparable corpora' be?', *Target* 9(2): 289-319.

------ (1998) 'The corpus-based approach: A new paradigm in translation studies', *Meta* 43(4): 474-479.

------ (2002) 'Europe in the making in translational and non-translational English', in Keith Harvey (ed.) *CTIS occasional papers II*, Manchester: St. Jerome, pp. 85-95.

Lederer, Marianne (1994) La traduction aujourd'hui: Le modèle interprétatif, Paris: Hachette, translated by Ninon Larche (2003) as *Translation: Interpretive model*, Manchester: St. Jerome.

Levý, Jiří (1967/2000) 'Translation as a decision process', in Lawrence Venuti (ed.) *The translation studies reader*, London and New York: Routledge, pp. 148-159.

Li, Defeng and Chunling Zhang (2010) 'Sense-making in corpus-assisted translation research: A review of corpus-assisted translation research in China', in Richard Xiao (ed.) *Using corpora in contrastive and translation studies*, United Kingdom: Cambridge Scholar Publishing, pp. 235-256

Li, Eden Sum-hung (2007) *A systemic functional grammar of Chinese: A text based analysis*, London: Continuum.

Li, Kexing (2012) 'Demystification of legislative writing and some reflections on China's law translation', *The second international conference on law, translation and culture*, Hong Kong, 31 May-2 June 2012.

Malmkjær, Kirsten (2005) 'Norms and nature in translation studies', *Synaps* (16): 13-20.

Martin, James Robert (1992) *English text: System and structure,* Amsterdam: Benjamins.

Mason, Ian (2001) 'Translator behaviour and language use", *Hermes* 26: 65-80.

Mauranen, Anna (1993) *Cultural differences in academic rhetoric. A textlinguistic study*, Frankfurt: Peterlang.

------ (2000) 'Strange strings in translated language: A study on corpora', in Maeve Olohan (ed.) *Intercultural faultlines. Research models in translation studies I: Textual and cognitive aspects*, Manchester: St. Jerome, pp. 119-141.

------ (2004) 'Corpora, universals and interference', in Anna Mauranen and Pekka Kujamäki (eds) *Translation universals: Do they exist?*, Amsterdam and Philadelphia: John Benjamins, pp. 65-82.

McEnery, Tony and Richard Xiao (2002) 'Domains, text types, aspect marking and English-Chinese translation', *Languages in Contrast* 2(2): 211-229.

Millis, Keith K., Jonathon M. Golding, Gregory Barker (1995) 'Causal connectives increase inference generation', *Discourse Processes* 20: 29-49.

Munday, Jeremy (2012) *Introducing translation studies: Theories and applications*, London and New York: Routledge, 2nd edition.

Newmark, Peter (1991) *About translation*, Clevedon: Multilingual Matters Ltd.

Nida, Eugene A. (1964) *Towards a science of translating,* Leiden: E. J. Brill.

Nida, Eugene A. and Charles R. Taber (1969) *The theory and practice of translation,* Leiden: E. J. Brill.

Oakes, Michael P. (1998) *Statistics for corpus linguistics*, Edinburgh: Edinburgh University Press.

O'Brien, Sharon (2006) 'Eye tracking and translation memory matches', *Perspectives: Studies in translatology* 14(3): 185-205.

Och, Franz Josef and Hermann Ney (2003) 'A systemic comparison of various statistical alignment models', *Computational Linguistics* 9(1): 19-51.

Olohan, Maeve (2001) 'Spelling out the optionals in translation: A corpus study', *UCREL Technical Paper* 13: 423-432.

------ (2003) 'How frequent are the contractions? A study of contracted forms in the translational English corpus'*, Target* 15(1): 59-89.

------ (2004) *Introducing corpora in translation studies*, London and New York: Routledge.

Olohan, Maeve and Mona Baker (2000) 'Reporting *that* in translated English: Evidence for subconscious processes of explicitation?', *Across Languages and Cultures* 1(2): 141-158.

Oulu, Irma Sorvali (2004) 'The problem of the unit of translation: A linguistic perspective', in Armin Paul Frank, Norbert Greiner, Theo Hermans, Harald Kittel, Werner Koller, José Lambert, and Fritz Paul (eds) *Übersetzung − Translation − Traduction. Ein internationales Handbuch zur Übersetzungsforschung. An International Encyclopedia of Translation Studies, Encyclopedie internationale des sciences de traduction*, Berlin and New York: Walter de Gruyter, pp.354-362.

Øverås, Linn (1998) 'In search of the third code: An investigation of norms in literary translation', *Meta* 43(4): 517-588.

Pan, W. (2004) 'A hundred years of comparative study between English and Chinese', in Juquan Wang and Lixin Zheng (eds) *Language and culture: contrastive studies between English and Chinese 1995-2003*, Shanghai: Shanghai Foreign Language Education Press, pp. 102-140.

Pápai, Vilma (2004) 'Explicitation: A universal of translated text?', in Anna Mauranen and Pekka Kujamäki (eds) *Translation universals: Do they exist?*, Amsterdam and Philadelphia: John Benjamins, pp. 143-164.

Popovič, Anton (1970) 'The concept "shift of expression" in translation analysis', in James S. Holmes (ed) *The nature of translation: Essays on the theory and practice of literary translation*, The Hague and Paris: Mouton, pp. 78-87.

Puurtinen, Tiina (2004) 'Explicitation of clausal relations: A corpus-based analysis of clause connectives in translated and non-translated Finnish children's literature', in Anna Mauranen and Pekka Kujamäki (eds) *Translation universals: Do they exist?*, Amsterdam and Philadelphia: John Benjamins, pp.165-176.

Pym, Anthony (2005) 'Explaining Explicitation', in Krisztina Károly and Ágota F ó ris (eds) *New Trends in Translation Studies: In Honour of Kinga Klaudy,* Budapest: Akadémia Kiadó, pp. 29-34.

Pym, Anthony (2008) *'On Toury's laws of how translators translate',* in Gideon Toury, Anthony Pym, Miriam Shlesinger and Daniel Simeoni *Descriptive translation studies and beyond: Investigations in honour of Gideon Toury,* Amsterdam: *Benjamins,* pp. 311-328.

Rocha, Marco (2010) 'Translating anaphoric *this* into Portuguese', in Richard Xiao (ed.) *Using corpora in contrastive and translation studies*, United Kingdom: Cambridge Scholar Publishing, pp. 11-39.

Richards, Jack C., John Talbot Platt and Heidi Platt (1992) *Dictionary of language teaching and applied linguistics*, Essex: Longman, 2nd edition.

Salhi, Hammouda (2010) 'Translating ambiguous lexical items using a parallel corpus: A case study of "good" in the EAPCOUNT', *Using corpora in contrastive and translation studies (UCCTS)*, Edge Hill University, 27-29 July 2010.

Schiffrin, Deborah (1987) *Discourse markers,* Cambridge; Cambridge University Press.

Scott, Mike (2009) *WordSmith tools version 5, handbook*, Liverpool: Lexical Analysis Software.

Séguinot, Candace (1988) 'Pragmatics and the explicitation hypothesis', *TTR: Traduction, Terminologie, Rédaction* 1(2): 106-114.

Shama'a, N. (1978). *A linguistic analysis of some problems of Arabic to English translation*, Oxford University: Unpublished PhD thesis.

Shih, Chung-ling (2008) 'Corpus-based study of differences in explicitation between literature translations for children and for adults', *Translation Journal.* Available at: http://www.bokorlang.com/journal/45explicit.htm (Accessed: 8 August 2012)

Shlesinger, Miriam (1995) 'Shifts in cohesion in simultaneous interpreting', *The Translator* 1(2): 193- 214.

------ (2005) 'Sentence Splitting as an Expression of Translationese', *Black Box Seminar*, Bar Ilan University, 21 Nov 2005.

Shuttleworth, Mark and Moira Cowie (2007) *Dictionary of translation studies*, Manchester & Kinderhook: St. Jerome Publishing.

Skrandies, Peter (2007) *Metadiscourse in German history writing and English translation: A study of interaction between writers and readers*, University of Manchester: Unpublished PhD thesis.

Teich, Elke (2003) *Cross-linguistic variation in system and text – A methodology for the investigation of translations and comparable texts*, Berlin and New York: Mouton De Gruyter.

Tengku Mahadi, Tengku Sepora, Helia Vaezian and Mahmoud Akbari (2010) 'Design and development procedure of an English-Malay parallel corpus', *Using corpora in contrastive and translation studies (UCCTS)*, Edge Hill University, 27-29 July 2010.

The contemporary Chinese dictionary (Chinese-English edition) [electronic dictionary] (2002) Beijing: Foreign Language Teaching and Research Press.

The Free Dictionary (2012) Pennsylvania: Farlex Inc. Available at: http://www.thefreedictionary.com/ (Accessed: 9 August 2012)

Tirkkonen-Condit, Sonja (2000) 'In search of translation universals: Non-equivalence or "unique" items in a corpus test', *the UMIST/UCL Research Models in Translation Studies Conference*, University of Manchester, 28-30 April 2000.

------ (2004) 'Unique items – over- or under-represented in translated language?', in Anna Mauranen and Pekka Kujamäki (eds) *Translation universals: Do they exist?*, Amsterdam and Philadelphia: John Benjamins, pp.177-186.

Toury, Gideon (1991) 'What are descriptive studies into translation likely to yield apart from isolated description?', in Kitty M. van Leuven-Zwart and Ton Naaijkens (eds) *Translation studies: The state of the art, proceedings of the first James S. Holmes symposium on translation studies*, Amsterdam and Atlanta: Rodopi, pp. 179-192.

------ (1995) *Descriptive translation studies and beyond*, Amsterdam and Philadelphia: John Benjamins.

------ (2004a) 'Probabilistic explanations in translation studies', in Anna Mauranen and Pekka Kujamäki (eds) *Translation universals: Do they exist?*, Amsterdam and Philadelphia: John Benjamins, pp.15-32.

------ (2004b) 'Probabilistic explanations in translation studies', in Daniel Gile, Gyde Hansen, Kirsten Malmkjær (eds) *Claims, changes and challenges in translation studies: Selected contributions from the EST Congress, Copenhagen 2001*, Amsterdam and Philadelphia: John Benjamins, pp. 15-25.

Tsai, Frederick (1995) 'Europeanized structure in English-Chinese translation', in Chan Sin-Wai and David E. Pollard (eds) *An encyclopaedia of translation: Chinese-English, English-Chinese*, Hong Kong: The Chinese University Press, pp. 242-248.

Tymoczko, Maria (1998) 'Computerized corpora and the future of translation studies', *Meta* 43(4): 652-659.

Tymoczko, Maria (2003) 'Enlarging western translation theory: integrating non-western thought about translation', London: University of London. Available at: http://www.soas.ac.uk/literatures/satranslations/tymoczko.pdf (Accessed: 10 June 2012)

Ulrych, Margherita and Amanda Murphy (2008) 'Descriptive translation studies and the use of corpora: Investigating mediation universals', in Carol Taylor Torsello, Katherine Ackerley and Erik Castello (eds) *Corpora for university language teachers*, Bern: Peter Lang, pp.141-166.

Vanderauwera, Ria (1985) *Dutch novels translated into English: The transformation of a 'minority' literature*, Amsterdam: Rodopi.

Van Leuven-Zwart, Kitty M. (1989) 'Translation and original: Similarities and dissimilarities, I', *Target*, 1(2): 151-181.

------ (1990) 'Translation and original: Similarities and dissimilarities, II', *Target*, 2(1): 69-95.

Vehmas-Lehto, Inkeri (1989) *Quasi-correctness: A critical study of Finnish translations of Russian journalistic texts*, Helsinki: Neuvostoliit-toinstituutti.

Vinay, Jean-Paul and Jean Darbelnet (1958/1995) Stylistique comparée du français et de l'anglais: Méthode de traduction, Paris: Didier, translated and edited by Juan C. Sager & Marie-Jo Hamel (1995) as *Comparative stylistics of French and English: A methodology for translation,* Amsterdam & Philadelphia: John Benjamins.

Wagner, Emma, Svend Bech and Jesús M. Martínez (2002) *Translating for the European Union institutions*, Manchester: St Jerome Publishing.

Wang, Jianxin (2010) 'Contrastive connectors in English and Chinese: A case study of *however* in two translation corpora', in Richard Xiao (ed.) *Using corpora in contrastive and translation studies*, United Kingdom: Cambridge Scholar Publishing, pp. 396-413.

Wang, Kefei and Qin, Hongwu (2010) 'A parallel corpus-based study of translational Chinese', in Richard Xiao (ed.) *Using corpora in contrastive and translation studies*, United Kingdom: Cambridge Scholar Publishing, pp. 164-181.

Weissbrod, Rachel (1992) 'Explicitation in translations of prose-fiction from English to Hebrew as a function of norms', *Multilingua*, 11(2), pp. 153-171.

Whittaker, Sunniva (2004) 'Étude contrastive des syntagmes nominaux démonstratifs dans des textes traduits du français en norvégien et des textes sources norvégiens: stratégie de traduction ou translationese?', *Forum,* 2(2): 221-240.

Xia, Yun and Defeng Li (2010) 'Specialized comparable corpora in translation evaluation: A case study of English translation of Chinese law firm adverts', in Richard Xiao (ed.) *Using corpora in contrastive and translation studies*, United Kingdom: Cambridge Scholar Publishing, pp. 40-61.

Xiao, Richard, Lianzhen He and Ming Yue (2010) 'In pursuit of the "third code": Using the ZJU corpus of translational Chinese in translation studies', in Richard Xiao (ed.) *Using corpora in contrastive and translation studies*, United Kingdom: Cambridge Scholar Publishing, pp. 182-214.

Xiao, Richard and Ming Yue (2009) 'Using corpora in translation studies: The state of the art", in Paul Baker (ed.) *Contemporary corpus linguistics*, London: Continuum, pp. 237-262.

Yu, Ning (1993) 'Chinese as a paratactic language', *L2talk: The SLAT working paper*, University of Arizona, pp. 1-15.

Zanettin, Federico (2000) 'Parallel corpora in translation studies issues in corpus design and analysis', in Maeve Olohan (ed.) *Intercultural faultlines. Research models in translation studies I: Textual and cognitive aspects*, Manchester: St. Jerome, pp. 105-119.

Zhang, Hua-Ping, Hong-Kui Yu, De-Yi Xiong and Qun Liu (2003) 'HHMM-based Chinese lexical analyzer ICTCLAS', *Second SIGHAN workshop affiliated with 41th ACL*, Sapporo Japan, July 2003, pp. 184-187.

Zhu, Yongshen, Lixin Zheng and Xingwei Miao (2001) *Ying han yu pian xian jie shou duan dui bi yan jiu* [A contrastive study of cohesion in English and Chinese], Shanghai: Shanghai Foreign Education Press.