

# Syntactic Linearity as a Strategy in Simultaneous Interpreting: A Case Study on English-Chinese Interpretation

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*This study has assessed whether syntactic linearity can be used as one of SI strategies from a linguistic perspective. Using Systemic Functional Linguistics (SFL) as the linguistic framework, the study analyses the thematic choices of Obama's speech made in his visit to China and its simultaneous interpretation by three interpreters and focuses on the analytic unit of clause being grammatically correlated to the "unit of meaning" in the TL. The findings show that most of the Themes in English text are preserved in Chinese. Furthermore, the textual and topical elements of Theme in English are more influential than the interpersonal Theme for the interpreters to decide whether a Theme should be retained or changed in facilitating syntactic linearity in SI. The assessment result seems to support that syntactic linearity could be used as a strategy for SI training together with other coping strategies.*

**Keywords: Syntactic Linearity, Simultaneous Interpreting, Systemic Functional Linguistics (SFL), THEME**

## 1. Introduction

Simultaneous interpreting (SI) is “a complex type of bilingual meaning-oriented communicative verbal activity, performed under time constraints and with a strictly limited amount of information processed at an externally controlled pace” (Chernov 1994: 140). Apart from overcoming the unnatural acoustic challenge of listening and speaking simultaneously (Moser 1978; Gumul and Lyda 2007), interpreters often resort to coping strategies to alleviate the impact of memory overload and avoid failure sequences (Gile 1997, 2009).

Given differences between any two working languages in SI, words in the source language (SL) cannot be produced in exactly the same order in the target language (TL). Yet, despite the differences, SI is found to proceed generally in a linear sequence and pause only when input items must be retained in the memory system while subsequent ones are being processed (Shlesinger 2003: 37). The observation thus implies that source text (ST) comprehension is inevitably interlocked with target text (TT) reproduction in SI due to limited time and cognitive resources, and further that syntactic linearity is a natural way of processing information in SI, where incoming sentences are processed linearly till some units of information must be restored in the memory system. As such, it is often found in use, together with other tactics, as a SI strategy (Li 2009; Yang 2002; Wan and Yang 2005; Zhang 1999).

To understand syntactic linearity in use, our study is intended to assess the strategy from a linguistic perspective, namely the linguistic choices in the monologic discourse of SI.

Using Systemic Functional Linguistics (SFL) as the linguistic framework, the study uses the clause as the analytic unit as it is, a grammatical structure where different kinds of meanings are integrated as a complete whole (Halliday and Matthiessen 2014). Various studies in SI (e.g. Davidson 1992; Goldman-Eisler 1972) also show that interpreters tend to process clause by clause rather than sentence by sentence.

In SFL, the Theme is the first functional element in a clause which “serves as the point of departure of the message” (Halliday 2000: 37). The thematic organization of the clause is significant to the development of a text (Berry 1995; Ghaessy 1995; Halliday 2000; Whittaker 1995). Thus, an assessment of the thematic selection of clauses in SI practice, or a comparison of thematic progression between the source speech and its interpretation, could mirror how the themes syntactically progress in SI.

In this belief, with its comparative analysis into the thematic progression of source text (ST) and target text (TT) in relation to the strategic application of syntactic linearity in English-Chinese SI, the study aims to answer the following questions:

1. Is syntactic linearity generally applied as a strategy in English-Chinese SI? If it is, how effective is the strategy? In other words, how the Themes in English are preserved in Chinese interpretation?
2. What types of Themes are more likely to be preserved or changed in SI? Why are they preserved or changed? In other words, what could be the determinants in the strategy's application? How influential are these factors in the strategy's application? And why?

## 2. Syntactic Linearity & Simultaneous Interpreting (SI)

As a unique human activity, SI occurs on-line in limited time with limited cognitive resources (MacWhinney 1997). In terms of Gile's Effort Model for SI (1995), SI is undertaken with four concurrent operations competing for limited processing capacity resources: the listening and analysis effort (L), the production effort (P), the short memory effort (M) and the coordination effort that manages the L, P and M efforts. In the process, as explained by Liu et al (2004: 19-20), its multiple operations involve “expressing in TL the meaning of segment A, just heard from the SL speech; attending to and analyzing the incoming segment B in SL and temporarily holding it and/or its meaning in memory while continuing to translate segment A; and at the same time monitoring the TL output for accuracy and smoothness of delivery”. Due to extreme processing conditions and constraints on limited short-term memory capacity, SI interlocks ST comprehension with TT reproduction. In other words, “TL reproduction begins before SL perception has been completed” (Wilss 1978: 345).

To avoid failure sequences triggered by various conditions including information density or high input rate, various coping methods are recommended such as delay, reconstruction, regulation of the Ear-Voice Span, reformulation and anticipation. With all these tactics suggested, the shared aim is that SI be performed by the rule of maximizing TL reproduction with least time and processing capacity required (Gile 1995).

For the immediacy and simultaneity of delivery in SI, the decisive factor is the

moment when the interpreter actually sets his reproduction process going (Wilss 1978: 346), particularly for languages with huge structural asymmetries like German-English SI. To this end, Wilss (1978: 351) proposes syntactic anticipation to allow optimal synchronization, believing that the objective factors in SI, either inter- or intra-lingual, can be systematized to a certain extent. To further Wilss' study, Wan and Yang (2005) recommend using of syntactic linearity as a strategy for English-Chinese SI. According to them, it is the most effective time and effort saver, capable of timely storing up information from SL and of appropriately adjusting the TL word order.

As its name suggests, the strategy is defined as the way of translating SL sentences as linearly as possible till the word order disallows its progress. Once syntactically it becomes impassable or impossible, the SL sentence will be segmented to reproduce a new TL sentence (Yang 2002: 31). By this definition, this strategy in fact combines two approaches at a tactic level: tailing and segmentation or 'salami technique' (Jones 2002). Tailing means processing SL sentences as closely and as long as the reproduction allows, while segmentation is carried out largely when tailing is unable to work. It chops up complicated sentences into shorter ones and reproduces them based on their causal relations when the interpreter is "faced with potential overload of memory, as with a SL and a TL that are syntactically very different, with embedded structures in the source language, or with unclear sentence structures" (Gile 1995: 195-196).

Previous SI studies show both tailing and segmentation have been used as strategy in SI both by novice and professional interpreters, but they are often discussed as separate and opposing strategies. Some research has found that, unlike professional interpreters, student interpreters prefer tailing to segmentation as the coping strategy in SI (Liu et al 2004: 37-38), implying that tailing is something that should be avoided. In seeking evidence both for and against deverbalization by Seleskovitch, Isham (1994) did an experiment and discovered that both meaning-based and form-based methods were used to process the incoming SL in English-French interpretation. Interestingly, the so-called form-based method is defined as a way that "involves attempting to interpret word-for-word as much as the similarities between the source and target languages allow" (Isham 1994: 206). The experiment finds that, though different in strategies, the performances of two groups of professional interpreters are equally good and acceptable.

To further study how simultaneous interpreters use these two strategies, Meuleman and Besien (2009) used two passages with syntactically complex

sentences and had them delivered at high input rate in their experiment. Fifteen professional interpreters were asked to deliver the passages from French into Dutch. The results show that both strategies were applied and most of interpreters managed to produce an acceptable translation. One of their findings is:

*In the case of the complex passage, most interpreters opted for a segmentation strategy, while a few applied a tailing strategy. In the case of the high delivery speed, most opted for a tailing strategy, but a few applied segmentation* (Meuleman and Besien 2009: 20).

In other words, both tactics are aimed to unload information from memory faster by reducing the time-lag between ST decoding and TT encoding so as to guarantee a time continuum (Wilss 1978). In so doing, the interpreter not only has to focus on meaning-based "vertical" interpretation, but takes advantage of all availability of direct or "horizontal" correspondences between languages (MacWhinney 1997).

Although the practice of the syntactic linearity is observed and encouraged in English-Chinese SI (Zhang 1999), it is claimed that certain languages simply cannot work systematically with linear succession based on units of meaning due to the absence of Russian-doll structure in their grammatical and syntactical formation (Jones 2002: 73-96). That being said, the size of these self-contained and manageable information units is debatable and individual. The length of a unit can extend from "the shortest passage that may engender a clear cognitive representation" to any "oral passage that can remain present" (Jones 2002: 74), depending on the interpreter's linguistic ability or competence and consideration and cognitive capacity on information processing. Thus, a unit of meaning varies from a single word to a combination of several words in terms of lexical limits, but hardly exceeds the length of a sentence in grammatical form. In other words, it can be argued that this strategy is driven, to a no insignificant extent, by choices of "units of meaning" from SL and the syntactic positioning in TL. In order to systematically and empirically support the validity and efficiency of the strategy, it is necessary to apply a solid linguistic discourse analysis theory by focusing on analyzing units of information and the related linguistic choices in a SI discourse.

### 3. Theme in Systematic Functional Linguistics (SFL)

In SFL, language is viewed as resources for making different kinds of meanings in context, and the clause as the fundamental unit of analysis in grammar by which meaning is realized.

The clause has the character of a message and contributes to the flow of discourse. Grammatically, the Theme in a clause “serves as the point of departure of the message” and “orients the clause within its context” (Halliday 2014: 89). It is chosen by a speaker “to guide the addressee in developing an interpretation of the message” (Halliday 2014: 89). The remainder of the clause is termed as Rheme which has no thematic prominence of message but is what the Theme orients for. In other words, the concept of clause in SFL can be perceived as a unit of information in its grammatical perspective. In this regard, the Theme always highlights the prominence of the message in such an information unit.

The Theme extends from the beginning of the clause up to the first single experiential element, a topical Theme, with every other thematic element, namely textual and interpersonal Themes before it. In other words, the sequence of thematic composition may vary, but the topical element is always fixed to end the Theme.

In English, the topical, also known as experiential Theme, is the first referential unit of Theme in clause. It is the representation of experience or meaning, taking the role of “Participant” (who/what is involved), “Circumstance” (when, where, how, why, etc.) and occasionally “Process” (what is going on).

The interpersonal elements of Theme indicate a role of move in exchange. It often includes the Finite (normally an auxiliary verb signaling the request for a response), a Wh-element (indicating the expectation for an answer), a Vocative (addressing whom the information is intended to) and an Adjunct (mostly an adverb, signaling the assessment of what is being exchanged).

The textual Theme, often constructing the first stage of Theme, includes all the textual elements with a linking function as structural conjunctions (linking clauses in coordinative or dependent relation), relatives (introducing a dependent clause), conjunctives and continuatives (providing cohesive links to previous discourse) (Martin et al. 2010).

As for Chinese, it is broadly agreed that the Chinese clause contains the element of Theme (Halliday and McDonald 2004: 311-325), and that the ordering of textual elements in Chinese is similar to that in English with the Theme preceding the Rheme at the beginning of a clause (Halliday and

McDonald 2004: 313).

In short, the thematic composition may vary with different functional elements, but the topical element is obligatory. In the simplest case, the typical sequence of Theme as it proceeds is Textual ^ Interpersonal ^ Topical or Ideational (Halliday 2000: 53; Halliday and McDonald 2004: 319; Martin et al. 2010: 23). Thus, the configuration in the linear arrangement of Theme of a clause in English/Chinese can be jointly presented in the following diagram, which makes it possible to conduct a comparative analysis of the thematic progression between the English source speech and its Chinese interpretation.

Clause			
Theme			Rheme
Textual	Interpersonal	Topical/Ideational	

### 4. The Research Design

The notion of Theme is a great source of inspiration for us to examine the practice of syntactic linearity in SI from a linguistic perspective. It not only provides a general framework for the processing of information in language, but also sheds light on the various syntactic choices that an interpreter may face in organizing the information structure of interpretation.

This research aims to investigate the validity of using syntactic linearity as a strategy in real SI events by comparing the thematic progression of English ST and Chinese TT. The data used for this purpose is the English-Chinese interpretation of the Q&A session from US President Barack Obama’s Town-hall-style meeting with Chinese students during his official visit to China in 2009. The recording of the meeting is retrievable at <http://www.youtube.com/watch?v=YIBB4Dp0P8o>. For such a diplomatically important occasion, it is the Chinese government protocol to use highly competent official interpreters, who are well trained and have many years of experience in interpreting practice (International Herald Leader 2014). At this meeting, three veteran interpreters were assigned for the SI service: one female (F1) and two male (M1 & M2).

The data is transcribed and divided into eight parallel texts (T) with

approximately 5,400 English words and 7,000 Chinese characters, which is sufficient to capture the pattern of the application of the syntactic linearity strategy in SI in relation to the thematic progression.

The parallel texts are divided into individual clauses in English and Chinese, together with the back translation for the ease of reading. The thematic analysis of all the clauses is done manually. The mapping between English and Chinese uses the coding specification listed in Table 1, which is to identify five types of Theme interpretation (see samples in 5.4) and to differentiate the thematic preservation (P) and the thematic alternation (C) in SI.

Table 1. Specification on Theme Preservation Coding

Level of Preservation	Code	Identification
Full Preservation: all thematic elements preserved	≡	Preserved (P)
Contextual Preservation: Semantic equivalence in translation	=	Preserved (P)
Topical Preservation: semantic equivalence of the topical Theme	≈	Preserved (P)
Topical Alternation: changed semantic meaning in topical Theme	~	Changed (C)
Full Alternation: changed thematic elements	≠	Changed (C)

## 5. Results & Discussion

### 5.1. The Thematic Preservation & the Syntactic Linearity Strategy

There are a total of 676 clauses in the data, of which 473 clauses are found with preserved Themes, accounting for approximately 70%.

As is shown in Table 2, although three interpreters' workload varies greatly in terms of the number of interpreted clauses, the retaining of Themes of ST in

Table 2. Interpreters' Management of Themes

Interpreters	Clause No.	Preserve (No./%)	Change (No./%)
M1 (T1&3; A5&7)	300	190 / 63%	110 / 37%
M2 (T2&6; A4&8)	313	235 / 75%	78 / 25%
F1 (Q4, 5, 7, 8)	63	48 / 76%	15 / 24%

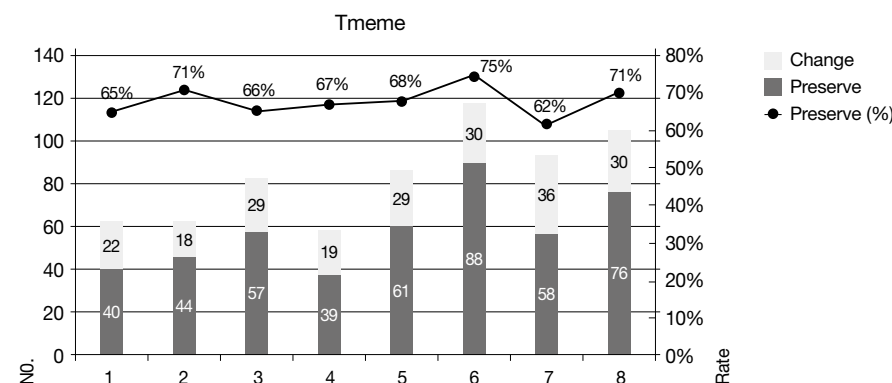
SI is generally high among all interpreters, suggesting a preference of Theme preservation in SI process. In other words, keeping the initially-positioned element of an English clause in Chinese interpretation seems to be a general approach in SI.

However, despite the high thematic preservation in interpretation, 13% of the difference between F1 and M1 in Theme preservation may also indicate that the thematic preservation in SI could correlate to the change of content, or even the context of the text, since two interpreters (F1 & M1) worked on different Q&A topics. In light of this, detailed analyses of thematic preservation are conducted to investigate how and why selection of Themes varies in relation to different textual or event contextual constraints.

Figure 1 presents the preservation of Themes in English ST (both in number and in percentage) in SI. The line above the histogram in Figure 1 indicates the change of the preserved rate of Theme in different texts.

As is presented, approximately 70% of Themes in ST are preserved, ranging

Figure 1. Theme Preservation



from the lowest 62% in Text 7 to the highest 75% in Text 6. That is, Themes of English clauses generally tend to be preserved rather than changed in this English-Chinese SI event, regardless of the Q&A topic difference. In this regard, the rate of Theme preservation in eight STs indicates that the strategy of syntactic linearity is also a general practice in this English-Chinese SI on individual texts, despite foreseeable variation in text difficulty and interpreting skills.

According to Gile's SI Effort Model (1995), the greatest challenge in SI is that the concurrent listening and speaking on different messages requires shared attention. Under the constant time pressure of an information flow, interpreter needs to ensure that an optimized output can be achieved with least effort. In this regard, proving the common practice of the thematic preservation in SI texts (see Figure 1) and by the three different interpreters (see Table 1) suggests that the syntactic linearity strategy is an economic and accessible approach applicable to English-Chinese SI.

## 5.2. The Non-Deterministic Factors of Theme Preservation

This section is organized according to the types of Theme, namely textual Themes, interpersonal Themes and topical Themes.

### 5.2.1. Textual Themes

Textual Themes are generally the first constituent of Theme, bearing text-repeating meanings, and often constructed with continuatives, structural conjunctions and relatives (Martin et al. 2010: 26). Table 3 summarizes the distribution of textual Theme in ST.

As is displayed in Table 3, an average of 67% clauses in STs have textual Themes. The high distribution of Textual Theme in STs shows that the speaker is generally cautious in constructing the logic connection of messages in discourse.

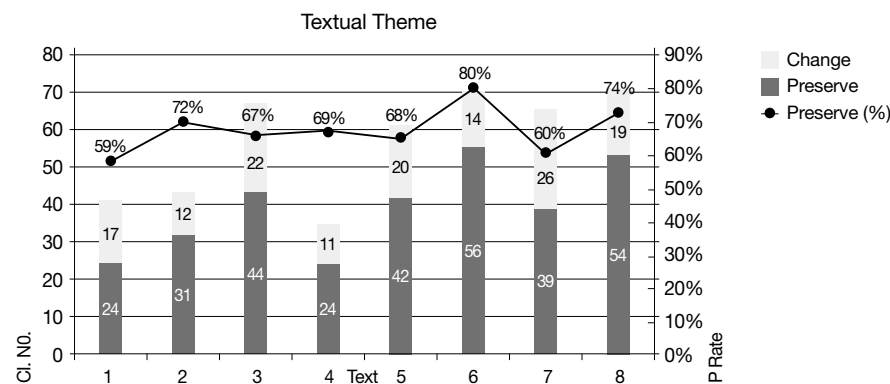
Figure 2 demonstrates how the textual Themes in ST are reproduced in Chinese. As is illustrated in Figure 2, despite of the quantity difference of textual Themes in STs, the preservation rate remains at approximately 70% on average, ranging from 80% in Text 6 to 59% in Text 1. That is, textual elements of Theme are largely preserved in SI.

The textual Theme indicates the direction of the meaning development, as

Table 3. Textual Themes in Source Language Texts

Text	Clause (No.)	Textual Theme (No./%)
1	62	41 / 66%
2	62	43 / 69%
3	86	66 / 77%
4	58	35 / 60%
5	90	62 / 69%
6	118	70 / 59%
7	94	65 / 69%
8	106	73 / 68%
Total	676	455 / 67%

Figure 2. Preservation of Textual Themes



is demonstrated in the following clauses selected from Text 6, with all textual Themes underlined.

Well, first of all, let me say that I have never used Tweeter. But I am a big believer in technology, and I'm a big believer in openness, when it comes to the flow of information. I think that the more freely information flows,

[...] *because then* citizens of countries around the world can hold their own governments accountable [...] *And so* I've always been a strong supporter of open Internet use.

As shown above, the textual Themes perform different relational functions and direct clauses into various logical pathways. Among them, there are two relatives (*that, that*), one continuative (*well*) and six conjunctions (*first of all, but, and, when, because then, and so*). The relatives of “*that*” bring two clauses together whereas the continuative of “*well*” indicates a new move to previous discourse. Six conjunctions contribute greatly to the rhetorical-semantic development of the text. That is: 1) “*first of all*” kicks off the beginning of the speech; 2) “*but*” and “*and*” mark the meaning transition between two paratactically related clauses; 3) “*when*” sets up the condition for the previous message, 4) while “*because then*” and “*and so*” lead to the logical relationship of causes and results.

Unlike English having large varieties of realizational choices in continuatives, conjunctions and conjunctive Adjuncts which are adverbial groups or prepositional phrases (Halliday and Matthiessen 2008: 81), textual Themes in Chinese are only constructed with the conjunction and the continuative (Li 2003: Chapter 4). That is, conjunctions link clauses by “indicating the logico-semantic relationship between the connected clauses”, while continuatives are typical in dialogues to indicate continuity with previous discourse (Li 2003: Chapter 4). In addition, although conjunctions in Chinese are usually placed after the Subject, they can be placed first in a clause simply to mark thematic prominence. Thus, as most of the textual elements in sample English clauses are continuatives and conjunctions, it is naturally sensible for SI interpreters to realize the similar functions of English textual Themes in Chinese if they intend to create similar logico-semantic pathways in SI. As is found in the interpretation of selected clauses, the meaning of the six conjunctions in the English ST are almost entirely preserved in SI. The only exception is the textual element of “*and*”. However, the forward parallel meaning of “*and*” is actually implied in the semantic context, thus not being totally discarded or alternated in SI.

Clearly, as the textual Theme maps the structure of the text and signposts logical pathways for its audience, it is not surprising to see that the English ST is heavily-loaded with textual Themes while these textual elements are also highly preserved in Chinese TT. The high preservation rate of textual Themes in SI actually helps the audience to track the original logical pathways and follow each logical turn intended by the speaker. In all, it appears that textual Themes create

the structure of discourse and are very likely to be preserved as a purposeful act in SI.

However, we also notice 21% of preservation difference in textual Themes between Text 6 (80%) and Text 1 (59%). Given that the two texts are interpreted by different interpreters (see Table 2), it is possible to assume that there is a personal preference in re-producing the original textual structure in interpretation among 3 interpreters despite of the common recognition on the importance of textual elements for a clear logical pathway of the SL speech.

### 5.2.2. Interpersonal Themes

The interpersonal Theme is the second thematic element and represents “the interaction between speakers or the positions speakers take” (Butt et al. 2000: 138). They can be the Finite in interrogative clauses, Vocatives, Adjuncts, and some interpersonal metaphors of modality which are often looked at as Adjuncts (Butt et al. 2001; Martin et al. 2010).

Table 4. Interpersonal Themes in ST

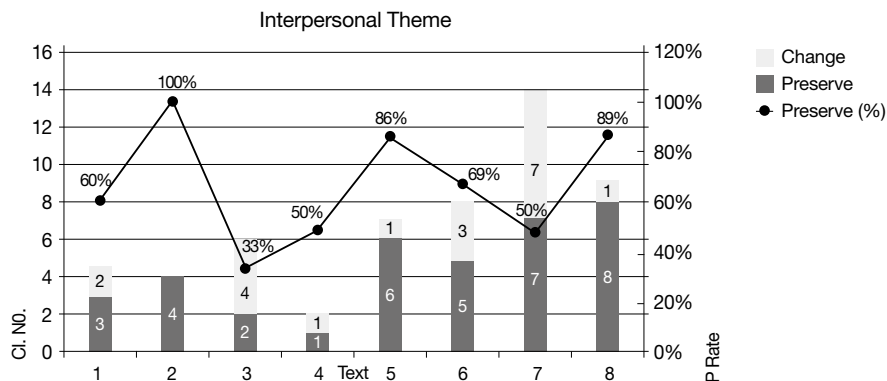
Text	Clause (No.)	Interpersonal Theme (No./%)
1	62	5 / 8%
2	62	4 / 6%
3	86	6 / 7%
4	58	2 / 3%
5	90	7 / 8%
6	118	8 / 7%
7	94	14 / 15%
8	106	9 / 8%
Total	676	55 / 8%

Table 4 shows that there are only 55 clauses in STs having interpersonal Themes, accounting for 8% of the total.

Focusing on these 55 interpersonal Themes in ST, the zigzag preservation line in Figure 3 indicates that there is little consistency in the rendering of

interpersonal Themes of ST in SI. For example, the interpersonal Theme preservation rates drop from 100% in Text 2 to only 33% in Text 3. Such a drastic difference can only suggest that there is actually no common practice concerning the rendition of interpersonal Themes in English-Chinese SI.

Figure 3. The Interpersonal Theme Preservation

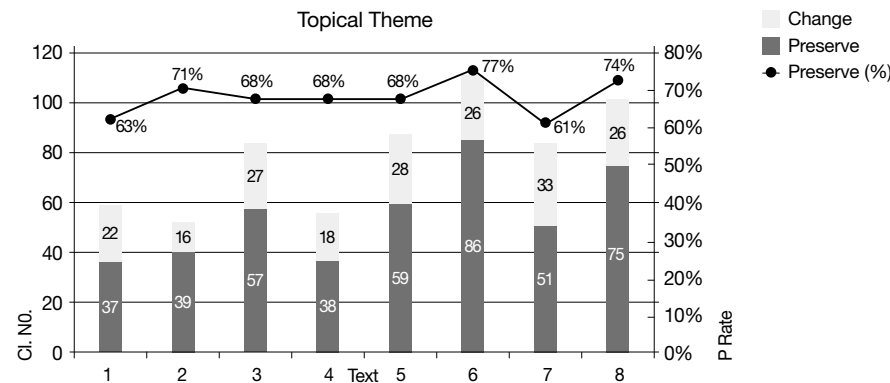


A cross examination of preservation rates and SI workloads (in Table 2) shows that the high interpersonal Theme preservation rates (100% in Text 2 & 89% in Text 8) are largely contributed by the interpreter M2 whereas the low rates (33% in Text 1 & 50% in Text 7) are from interpreter M1. Such a difference seems to suggest that the choice of retaining interpersonal Themes in English-Chinese SI is mostly arbitrary and only responsive to individual preference. However, due to the limited number of interpersonal elements in this study, it is hard to make any assumption at this stage on the correlation between the interpersonal Theme and the application of syntactic linearity strategy in English-Chinese SI, and more extensive research is warranted in the future.

### 5.2.3. Topical Themes

The topical Theme, the obligatory element of Theme, expresses the representational meaning of a clause. Figure 4 shows how topical Themes in English ST are processed in E-C SI practice. As is presented, despite the quantity difference of topical Themes in STs, the preservation rates of topical Themes in

Figure 4. The Topical Theme Preservation



texts are similar. That is, the general rate is approximately 68%, ranging from 61% in Text 7 to 77% in Text 6. These rates suggest that topical Themes in English ST are largely preserved in Chinese SI and thus might be highly applicable to implementing syntactic linearity strategy in SI.

### 5.2.4. Textual Themes VS Interpersonal Themes VS Topical Themes

To investigate the interrelations of all thematic elements in the SI decision-making of preservation or alternation, Figure 5 summarizes the preservation of three thematic elements in comparison to the Theme preservation as a whole.

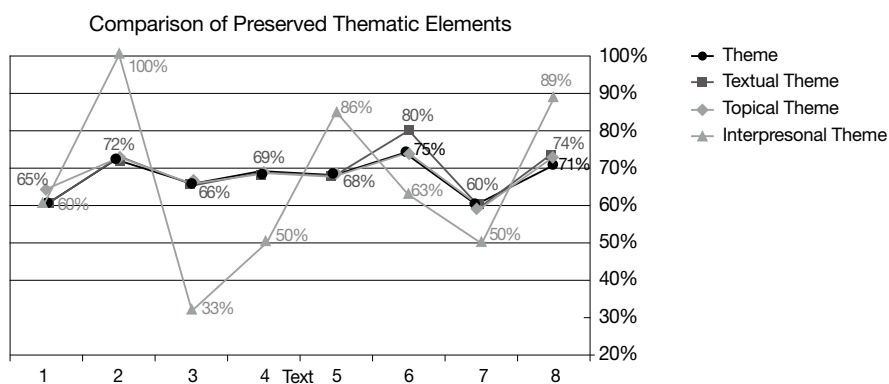
In Figure 5, the preservation lines of the textual Theme (in red) follow closely to the line of Theme (in orange), particularly the line of the topical Theme (in blue). For example, the preservation percentages on Theme, the textual Theme, and the topical Theme are respectively 65:59:63 in Text 1 and 75:80:77 in Text 6. That is, two groups of data are very close in their own. Since both topical and textual Themes are the constituents of Themes, it is clear that the topical and textual elements of Theme are deterministic to the choice of thematic preservation or alternation. In other words, *when the textual and/or topical elements of Theme in English clauses are given the similar thematic prominence in their Chinese rendition, the strategy of syntactic linearity is actually enforced.*

Meanwhile, as is shown in Figure 5, the interpersonal Theme is very detached to the Theme development. For example, when the preservation rates of Theme, topical and textual Themes are all above 66% in Text 3, the preservation



rate of interpersonal Themes is only 33%. In Text 5, when they are fixed at 68%, the retention rate of the interpersonal Theme goes up to 86%. The inconsistency or irregularity in preservation of the interpersonal elements points to the fact that the interpersonal elements of a Theme seem irrelevant to the thematic preservation choice as a whole. In this regard, Figure 5 re-presents the interpersonal Theme as a non-deterministic factor in the Theme preservation and the application of the syntactic linearity strategy in the English-Chinese SI.

Figure 5. Comparison of Preserved Thematic Elements



### 5.3. Topical Themes and Syntactic Linearity Strategy

A topical Theme can be constituted by the Participant, the Process and the Circumstance which are realized by the whole nominal group, verbal group, adverbial group and prepositional phrases (Butt et al. 2000: 136). Given to the thematic importance of topical elements, we make a further investigation on topic Themes.

#### 5.3.1. The Topical Theme Composition

Figure 6 demonstrates the composition of topical Themes in English ST. As is presented, topical Themes in STs are dominantly constituted by the Participant with very few cases of the Process and the Circumstance. Particularly, neither Process nor Circumstance is found as the constituent for topical Theme in Text 3 and 7. Thus, it appears that the Process and the Circumstance are not with

thematic prominence in English ST.

Figure 6. Topical Themes Composition in ST

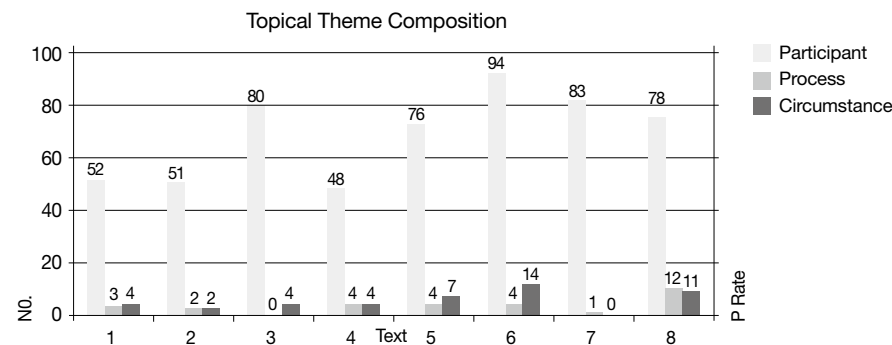


Table 5. The Distribution of Process and Circumstance in Interpretation

Text (Preserve %)	1(%)	2(%)	3(%)	4(%)	5(%)	6(%)	7(%)	8(%)
Process	67	100	Nil	50	50	50	0	75
Circumstance	0	50	75	75	57	71	Nil	73

Table 5 summarizes the management of the Process and the Circumstance in Chinese SI. For the absence of Process or Circumstance in STs, the preservation rate is marked as “Nil”.

As is shown, the preservation of Processes and Circumstances as topical Themes in SI appears inconsistent. Regarding the Process, its preservation rate varies from 100% in Text 2 to zero in Text 7. The rates of 50% in Text 4 to 6 give no meaningful indication on the overall management of the Process in the topical Theme in SI. Similarly, although the preservation of the Circumstance in Theme shows the conformity of 70% plus in Text 3, 4, 6 and 8, it is still difficult for us to make a strong claim on how the Circumstance in topical Themes is processed in SI with 0% and 50% of preservation rate in Text 1 and 2.

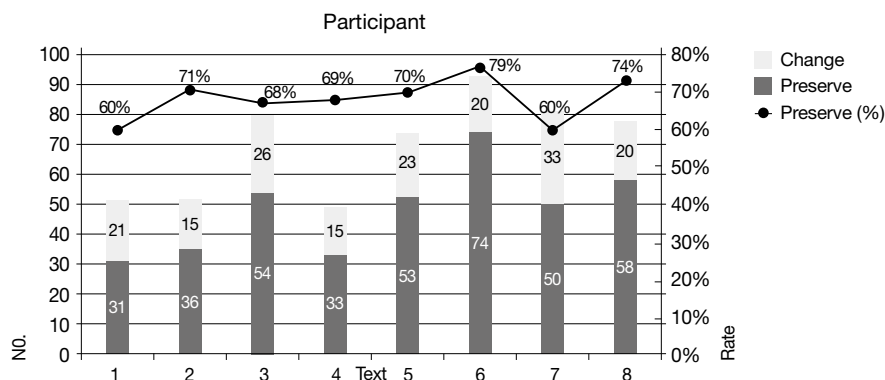
In summary, the data suggests that the Process and the Circumstance as constituents of topical Themes are not decisive to initiate the topical Theme

preservation due to their small shares in English ST and the inconsistent management in Chinese SI. Thus, the preservation of the topical Theme in relation to the application of syntactic linearity strategy in E-C SI becomes dependent on the Participant.

### 5.3.2. Participants

According to Halliday (2000: 144), the Participant, referring to who and what is involved in the process, is typically realized by the nominal group and grammatically related to the verb in English.

Figure 7. The Participant Preservation



As is shown in Figure 7 on Participant preservation in SI, the rate is generally 60% or above. In reference to Figure 4 on the topical Theme preservation rate and Figure 6 on the topical Theme composition, it seems safe to claim that the Participant is an influential factor to initiate the topical Theme preservation. In other words, the acknowledgment of the Participant in ST appears to assist the deployment of the syntactic linearity strategy in this English-Chinese SI. Yet, the question on how and why the Participant is meaningful in the strategy's operation is not explained here.

### 5.3.3. Participants and Syntactic Linearity Strategy in English-Chinese SI

Thematic studies (Berry 1995; Ghaessy 1995; Whittaker 1995) suggest that

different thematic elements are placed according to different varieties of the text type. In an interactional conversational speech, for example, the items such as "I" and "You" are frequently placed as Themes to address the function and the meaning of communication (Brown and Yule 1983). The selection of Theme also depends on the choice of Mood. In a declarative clause, the Theme is generally conflated with the Subject.

As is shown in Table 6 on clause types, the ST contains 637 declarative clauses in English, taking up nearly 95% of the clause totality. Since most of the topical Theme elements are the Participant in nominal groups, *the Subject and Theme are conflated most of the time in declarative clauses*. Thus, by being conscious of the close bond between Subject and Finite, and Subject-Finite placement in English, a SI interpreter may easily anticipate that the Participant, as the topical Theme, is followed closely by a Finite in a verb group. In other words, the presence of Participants as topical Themes in English signals the instant presentation of the Finite in a verbal group, which orients the event with tense or modality (Halliday and Matthiessen 2008: 336).

Table 6. Clause Type Composition in ST

Type	Clause	Imperative (%)	Interrogative (%)	Declarative (%)
No./%	676	16/2%	23/3%	637/95%

In SI, a verb or a verbal group is believed to have the greatest amount of information (Moser 1978). SI interpreters often commit to the interpretation of main verbs only after they hear the beginning of the verbal group (Seeber 2001). Such a SI process can actually be reconstructed in the recording of Clause 59 from Text 1.

Chicago	has had	two World Expos	in its history.	(Source Speech)
(Subject)	(Finite)			
芝加哥	已经举办过	两次	世博会。	(SI Transcript)
Zhījiāgē	yǐjīng jǔbànguò	liǎng cì	shìbóhuì.	(Pinyin)
Chicago	already held	two World Expos.		(Back Translation)

The Participant of *Chicago* is the first element of the clause. It orients the SI

interpreter M1 to the Subject-Finite pattern and signals the forthcoming of the verbal group of “has had”. With the appearance of “Chicago” in source speech, interpreter M1 is instantly informed for anticipation. After hearing the auxiliary of *has*, M1 starts interpreting “*Chicago*” as Theme conflated with Subject, which suggests, as Moser’s (1978) information processing model indicates, that the utterance is a Subject-Finite block.

In this declarative clause, the Participant, being conflated with the Subject, firstly prepares an interpreter with the foreknowledge of the upcoming syntactic structure. Meanwhile, the presence of Participant also gives the choice to the SI interpreter on preserving or changing the Subject/Theme in nominal groups. In other words, the topical Theme in a declarative clause invites an interpreter to make an instant decision as to whether the SI strategy of syntactic linearity shall be initiated. Obviously, when such a decision-making on the application of syntactic linearity strategy in English-Chinese SI concerns the Participant/Subject in declarative clauses, the choice is to preserve, because, as is suggested in the sample clause, the preservation accords with the Subject-Finite structure in English ST in the linguistic sense and avails anticipation.

Secondly, the operation of syntactic linearity strategy in English-Chinese SI also fits into the grammatical structure of Chinese for linguistic output. Like in English, the clause-initial position in Chinese is also believed with prominence in terms of speech function, and thus is named as Theme as well (Fang, McDonald and Cheng 1995). In Chinese, the unmarked indicative clauses (particularly declarative clauses) are generally the most frequent type (Li 2003: Chapter 4). In these clauses, the thematic prominence is usually assigned for the Participant, and then conflated with the Subject in the clause, which is demonstrated by a high probabilistic tracking record of the Subject in clause-initial position of Chinese declarative clauses (Li 2003: Chapter 4). That is, the Theme/Subject realized by nominal groups in Chinese is a form of natural expression.

1. *We* don’t want to change that policy and that approach. (from Text 4)  
我们 (Subject/Theme) 不愿意改变这个政策和这个态度。 Interpretation  
*Wōmen* bù yuànyì gǎibiàn zhège zhèngcè hé zhège tàidù. Pinyin  
*We* are not willing change this policy and this attitude. Back Translation
2. *My thumbs* are too clumsy. (from Text 6)  
我的手指 (Subject/Theme) 很笨拙。 Interpretation  
*Wǒ de shǒuzhǐ* hěn bènzhuō. Pinyin  
*My thumbs* very clumsy. Back Translation

3. *Clearly, you*’ve been studying very hard. (from Text 8)  
很明显, 你们 (Subject/Theme) 是很用功地在学习。 Interpretation  
Hěn míngxiǎn, *nǐmen* shì hěn yònggōng de zài xuéxí. Pinyin  
Obviously, *you* are very hardworking in studies. Back Translation

To illustrate, three clauses are selected with their thematic elements underlined and the topical Themes highlighted in bold letters. As is seen, the topical Themes in English clauses are respectively “we”, “my thumbs” and “you”, which are Participants realized by nominal groups. Meanwhile, they are also Subjects, which are followed by the Finites of “don’t”, “are” and “have” in Mood blocks. In interpretation, 我们 (we), 我的手指 (my thumbs) and 你们 (you) are Themes conflated with Subjects. Thus, the meaning of the nominal group functioning as Theme/Subject is perfectly actualized at the same position within the clause of two languages as the natural expression. In other words, the application of syntactic linearity strategy in English-Chinese SI is also grammatically supported by the thematic structure of Chinese clauses.

Accordingly, retaining Themes of English clauses realized by Participant in Chinese SI appears to be a plausible option for interpreters as it satisfies the grammatical structures and natural delivery of both languages.

#### 5.4. The Syntactic Linearity Strategy in Practice

Linguistically, syntactic linearity as a strategy applied in SI has, to a large extent, been verified by the thematic preservation in this study.

As is reviewed, the syntactic linearity strategy is based on two micro-strategies of segmentation and tailing. According to Gile’s Effort Model of SI, the combination of these two micro-tactics can reduce the risk of memory over-load in both comprehension and production phases. Firstly, segmenting one message into several self-contained information units can speed up the information processing (Gile 1995: 196). Secondly, while preserving the original information prominence the sequencing of the syntactic structure of source speech minimizes the cognitive capacity, which can be spared for message re-formulation in target language (Jones 2002: 93). However, it must be noticed that the syntactic linearity strategy can also be difficult and problematic in real practice.

First, the segmented message as one information unit or a set of information units is rather a notion of choice than a prescribed definition. The boundary of

such a segment is placed with both the linguistic consideration and the cognitive requirement for sufficient information input in the interpretation (Jones 2002). As messages proceed successively in linear sequence in SI, interpreters may never foresee the upcoming information without uncertainty. Thus, under the excessive time pressure, interpreters may segment some information units improperly. If so, the improper practice of segmentation may violate the linguistic rules of TL, or incur additional processing capacity for production which is probably critical because SI is largely semantic-based.

“They are trying hard to realize the objective of modernization /and democratization.”  
(segmentation)

他们 正努力 实现 现代化 的 目标 [...] (Interpretation)  
Tāmen zhèng nǔlì shíxiàn xiàndàihuà de mùbiāo. [...] (Pinyin)  
They are trying to realize the modernization objective. [...] (Back Translation)  
(Zhang 1999: 57)

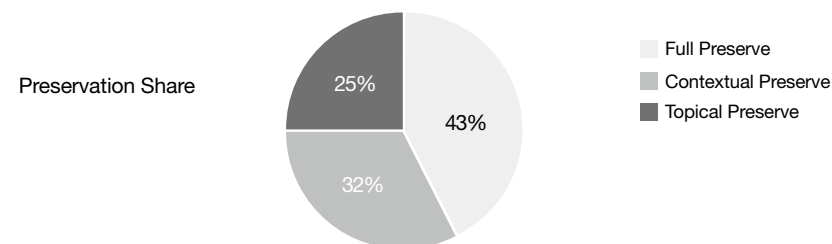
In the example clause, an interpreter may choose to segment the speech right after the utterance of the word “modernization” with the running of information input. The choice is highly possible because an interpreter’s memory capacity may reach its limit before “and democratization”, and the previous input sounds sufficient for a rational whole. Thus, when following closely to the speaker or to interpret with short Ear-Voice Span (EVS), an English-Chinese SI interpreter may have already or nearly finished the rendition of “现代化的目标 (modernization objective)” before receiving one more modifying element for the “目标 (objective)”. Then, it becomes hard to tail the rendered information with a simple addition of “and democratization”. That being the case, two possible speculations are: 1) the syntactic linearity strategy can be disrupted when the micro-strategy of segmentation is improperly executed; and 2) the effective performance of segmentation strategy may require interpreters’ ability to predicate rhetorical-semantic information in line with a larger context, or in other words, it may call for the cooperation with other interpreting strategies such as anticipation, control of EVS and etc.

Second, for idiomatic expressions in TL, the linearly linked information units may require linguistic reformulation.

Figure 8 on types of thematic preservation shows that the full preservation of Themes is 43% while the contextual and topical preservation adds up to 57%, meaning that most of expressive forms of the preserved Themes are linguistically

alternated in TL. In other words, as SI is basically a semantic-based practice, the lexical modification on Themes of ST clauses appears mostly necessary. Relevant examples can be found in Text 1.

Figure 8. Distribution of Thematic Preservation



1. **My name** is Chen Xi, (Contextual Preserve)

我 叫 陈曦。  
Wǒ jiào chénxī.  
I call Chen Xi.

2. **and I** am a student from Fudan University. (Topical Preserve)

我 是 复旦 大学 的 学生。  
Wǒ shì fúdàn dàxué de xuéshēng.  
I am Fudan University Student.

3. **Shanghai and Chicago** have been sister cities since 1985. (Full Preserve)

上海同芝加哥呢, 这个从85年来讲, 就是 姐妹 城市。  
Shànghǎi tóng zhījiāgē zhègè cóng 85 nián lái jiù shì jiěmèi chéngshì.  
ne, jǐǎng, Shanghai and Chicago, since 1985, have been sister cities.

In sample 1, the “my name” is alternated into “I” in interpretation for a more colloquial expression in Chinese with its meaning contextualized in Chinese “I call”. Thus, the Theme in sample 1 is marked as the contextual preservation. In sample 2, although the textual Theme “and” is omitted, the core message embedded in the topical Theme of “I” is preserved in interpretation and thus coded as the topical preservation. Thus, it seems that the syntactic linearity strategy in SI is also dependent on the implementation of other interpreting skills like compression, omission, addition and etc.

## 6. Conclusion

In this paper, we find that the high thematic preservation in this interpreting event as the linguistic evidence for a high applicability of the syntactic linearity strategy in English-Chinese SI, as suggested in the cognitive-oriented interpreting studies. In addition, since the textual and topical elements of Theme in ST are found to be more influential than the interpersonal Theme in deciding whether a Theme in general should be retained or changed in SI, these two thematic elements appear more essential to the operation of the syntactic linearity strategy. Meanwhile, the lexical modification in TT associated with the topical and contextual preservation also indicates that the SI practice requires multiple interpreting strategies for better communication. We believe these Findings are significant to SI training and practice. Firstly, as the strategy has demonstrated the high level of usability in English-Chinese SI, it enables SI to be undertaken with high efficiency. Secondly, SFL knowledge of Theme is helpful to interpreting practice. As the textual Theme orients the logical pathway of clause, the preservation of the source speech's textual elements in interpretation appears to be a plausible and efficient solution to a cohesive output under excessive time pressure in SI. The Participant of the topical Theme in English declarative clauses can be used as a message orienter or a verb indicator in SI to warn the interpreter to shorten his/her EVS and spare sufficient cognitive capacity for the upcoming verb group, which is often suggestive of high information density.

However, this study has its limitations, regarding the size and the representativeness of its data in SI practice. In addition, as a product-oriented observational project, the research does not involve any follow-up interviews on interpreters, which may, if possible, provide more significant support to testify the research findings.

Finally, we admit that the syntactic linearity strategy in SI is a research topic more complicated than it is presented here. The application of thematic analysis as a linguistic tool in SI studies is still a novel approach and naturally cannot avoid limitations in terms of the research scope and effectiveness. Thus, further research is needed to reveal the nature and features of operating mechanism of the syntactic linearity strategy in the area.

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# Appendix

No	English Text 1	SI Transcript	Back Translation
1	My name is Chen Xi	我叫陈曦。	I am Chenxi
2	and I am a student from Fudan University.	我是复旦大学的學生。	I am Fudan University student.
3	Shanghai and Chicago have been sister cities since 1985,	上海同芝加哥呢，这个从85年来讲，就是姐妹城市。	Shanghai and Chicago, since the year of 1985, have been sister cities.
4	and these two cities have conduct a wide range of economic, political, and cultural exchanges.	这两个城市呢，经过各种经贸、文化、政治交流。	these two cities went through all kinds of economic, cultural and political exchanges.
5	So what measures will you take	那么，你现在的采取什么样的措施	so, you now are taking what measures
6	to deepen this close relationship between cities of the United States and China?	来加深这个美国和中国城市之间的这种关系?	to deepen this US and China city ties?
7	And Shanghai will hold the World Exposition next year.	这个世博会明年将在上海举行。	this EXPO will next year in Shanghai be held
8	Will you bring your family	你是否准备(*)	You if are planning(*)
9	to visit the Expo?	参加世博会呢?	to participate the EXPO?
10	Thank you.	(*)	(*)
11	Well, thank you very much for the question.	非常感谢你的问题。	very much thank your question
12	I was just having lunch	刚才，我[在来之前，跟上海的市长在一起共]进午餐，	Just now, [I came here before, with Shanghai mayor] I am having lunch.
13	before I came here with the Mayor of Shanghai,	我在来之前，跟上海的市长在一起[共进午餐，]	I came here before, with Shanghai mayor [I am having lunch.]
14	and he told me[that he has had an excellent relationship with the city of Chicago -- <my home town> --   that he's visited there twice.]]	他跟我说，[  他跟芝加哥，也就是我的家乡，有着很好的关系。  他两度访问过芝加哥。]]	He to me said [[He and Chicago, that is my hometown, have very good relationship.   He twice visited Chicago.]]
15	[[that he has had an excellent relationship with the city of Chicago -- <my home town> --	他跟芝加哥，也就是我的家乡，有着很好的关系。	[[He and Chicago, that is my hometown, have very good relationship.

16	that he's visited there twice.]]	他两度访问过芝加哥。	He twice visited Chicago.]]
17	And I think it's wonderful to have these exchanges between cities.	我认为城市之间的这种交流非常的好。	I think the inter-city exchange is very good.
18	One of the things [[that I discussed with the Mayor]] is [[how both cities can learn from each other on strategies around clean energy]],	那[我刚才跟韩市长谈的]]问题之一就是。[[我们这些城市如何可以彼此来进行交流，比如就清洁能源的特点来进行交流。]]	so, [[I just now with Mayor Han talked]] question one is [[we these cities how to conduct exchanges, like on clean energy exchanges]]
19	[[that I discussed with the Mayor]]	我刚才跟韩市长谈的	[[I just now with Mayor Han talked]]
20	[[how both cities can learn from each other on strategies around clean energy]],	[[我们这两个城市如何可以彼此来进行交流，比如就清洁能源的特点来进行交流。]]	[[we these cities how to conduct exchanges, like on clean energy exchanges]],
21	because one of the issues [[that ties China and America together]] is [[how, <with an expanding population and a concern for climate change,> that we're able to reduce our carbon footprint.]]	因为[[美中两国共同面对的]]一个问题就是如何<在人口增长的过程中，又解决气候变化的问题，>同时减少我们的二氧化碳的排放。]]	because [[US and China two countries together]] face one problem [[is we how <in the population growth process, and solve climate change problem.> and reduce our CO2 emission.]]
22	[[that ties China and America together]]	[[美中两国共同面对的]]	[[US and China two countries together]]
23	[[how, with an expanding population and a concern for climate change, that we're able to reduce our carbon footprint.]]	[[就是我们如何在人口增长的过程中，又解决气候变化的问题，同时减少我们的二氧化碳的排放。]]	[[is we how in the population growth process, and solve climate change problem, and reduce our CO2 emission.]]
24	And obviously in the United States and many developed countries, <per capita, per individual> they are already using much more energy than each individual here in China.	很显然，在美国，以及在很多发达国家，<人均的>能耗量都比中国的人均能耗量大。	Apparently, in the US, and lots of developed countries, <per capita> energy consumption comparing to China's per capita energy consumption is larger.
25	But as China grows and expands,	不过，在中国成长的过程中，	however, with China's growth,
26	it's going to be using more energy as well.	能耗量会增加。	energy consumption will rise.



27	So both countries have a great interest in finding new strategies.	因此, 我们找到新的战略。这符合我们两国的利益。	so, we find new strategies. This agrees with our two countries' interest.
28	We talked about mass transit and the excellent rail lines [[that are being developed in Shanghai.]]	我们刚才谈了, 这个大众捷运, 我知道现在在上海和其他城市之间有这种快轨。]]	we just now talked, this mass transit, [[I know now in Shanghai and other cities have such cityrail connected.]]
29	[[that are being developed in Shanghai.]]	]]我知道现在在上海和其他城市之间有这种快轨。]]	[[I know now in Shanghai and other cities have such cityrail connected.]]
30	I think we can learn in Chicago and the United States some of the fine work [[that's being done on high-speed rail.]]	我相信美国以及芝加哥]]可以在快轨方面]]向中国学习。	I believe the US and Chicago [[can in the CityRail aspect]] from China learn.
31	[[that's being done on high-speed rail.]]	可以在快轨方面	[[can in CityRail aspect]]
32	In the United States, I think [[we are learning how to develop buildings [[that use much less energy.]]that are much more energy-efficient]]	而在美国, (我想*) 我们也在学习如何建造[[这种绿色]]建筑。	In the United States (*) we are also learning how to build [[such green ]] buildings.
33	[[we are learning how to develop buildings [[that use much less energy.]]that are much more nergy-efficient]]	我们也在学习如何建造[[这种绿色]]建筑。	we are also learning how to build [[such green ]] buildings.
34	[[that use much less energy,	]]这种绿色]]	[[such green]]
35	that are much more energy-efficient	]]这种绿色]]	[[such green]]
36	And I know that with Shanghai, <<as I traveled ]]and I saw all the cranes and all the new buildings [[that are going up]]>>, it's very important for us to start incorporating these new technologies,	(*) 当然在上海, <<(*)]]我看到有很多的吊车, 很多的建筑]]在盖起来]]>>。^那么因此^, 在这些新的技术上我们来进行合作, 这是非常重要的。	(*) Of course in Shanghai, <<(*)]]I saw lots of cranes, lots of buildings [[going up]]>>. ^Thus, ^ in terms of these new technology, we conduct cooperation. This is very important.
37	<<as I traveled	(*)	(*)
38	and I saw all the cranes and all the new buildings [[that are going up]]>>	我看到有很多的吊车的, 很多的建筑]]在盖起来]]。	<<I saw lots of cranes, lots of buildings [[going up]]>>

39	[[that are going up]]	在盖起来。	[[going up]]
40	so that each building is energy-efficient	使得我们每一个建筑]]在采光, 取暖等等方面]]都能减少他的能耗。	To make our each building, (in lighting, heating, etc. aspects) can reduce energy consumption.
41	when it comes to lighting,	在采光,	in lighting, (heating, etc. aspects can reduce energy consumption.)
42	when it comes to heating.	取暖等等方面]]都能减少他的能耗。}}	heating, etc. aspects {can reduce energy consumption. }
43	And so it's a terrific opportunity <<I think>> for us	^在这个方面^ (*) 我们两国	^In terms of this, ^(*) We two countries
44	<<I think>>	(*)	(*)
45	to learn from each other.	是可以相互学习的。	can from each other learn.
46	I know[[this is going to be a major focus of the Shanghai World Expo, ]](that) is the issue of clean energy]]	我知道	I know [[Shanghai EXPO, its focus one ]][is how to improve energy-efficiency problem]]
47	[[this is going to be a major focus of the Shanghai World Expo,	]]上海世博会, 他的焦点之一	[[Shanghai EXPO, its focus one
48	]](that) is the issue of clean energy]]	]]就是如何提高能效问题, ]]	is how to improve energy-efficiency problem]]
49	as I learned from the Mayor.	我(*) 刚才同韩市长市长也讲	I (*) just now with Mayor Han talked
50	And so I would love to attend.	我将非常乐于参加^上海世博会^,	I will be very happy to attend ^Shanghai Expo^.
51	I'm not sure yet [[what my schedule is going to be]],	当然我不清楚 [[我的时间安排怎样。]]	of course, I don't know [[my schedule is how]].
52	[[what my schedule is going to be,]]	]]我的时间安排怎样。]]	[[my schedule is how]]
53	but I'm very pleased [[that we're going to have an excellent U.S. pavilion at the Expo.]]	我非常高兴 ]]上海世博会将有我们的美国馆。]]	I am very happy [[Shanghai EXPO will have our US pavilion]]



54	[[that we're going to have an excellent U.S. pavilion at the Expo.]]	[[上海世博会将有我们的美国馆。]]	[[Shanghai EXPO will have our US pavilion]]
55	and I understand [[that we expect as many as 70 million visitors here.]]	(*) [[参观世博会的将有7千万人。]]	(*) [[to visit EXPO there will be 70 million people.]]
56	[[that we expect as many as 70 million visitors here.]]	[[参观世博会的将有7千万人。]]	[[to visit EXPO there will be 70 million people.]]
57	So it's going to be very crowded	(*)	(*)
58	and it's going to be very exciting.	(*)	(*)
59	Chicago has had two world expos in its history,	芝加哥已经举办过两次世博会。	Chicago already held two EXPOs.
60	and both of those expos ended up being tremendous boosts for the city.	这两次世博会都给我们芝加哥带来了巨大的好处。	These two EXPOs to us Chicago brought huge benefits.
61	So I'm sure the same thing will happen here in Shanghai.	我希望上海情况也是如此。	I hope Shanghai case is the same.
62	Thank you.	谢谢。	thanks

No	English Text 6	SI Transcript	Back Translation
1	That's right.	(*)	(*)
2	And not surprisingly, "in a country with 350 million Internet users and 60 million bloggers, do you know of the firewall?"	(*) ^第一^, 有这么多(*) 互联网使用者的国家, 有6000万写博客的人, 你知道防火墙的事情吗?	(*) ^Firstly,^ with so many (*) internet users a country, there are 60 million bloggers, you know the firewall issue?
3	And second, [[“should we be able to use twitter freely”]] is the question.	第二, [[“我们是不是应该自由地使用Twitter”]] (*)	Secondly, [[“we whether or not should freely use Twitter?”]]
4	[[“should we be able to use twitter freely”]]	[[“我们是不是应该自由地使用Twitter”]]	[[“we whether or not should freely use Twitter?”]]

5	Well, first of all, let me say [[that I have never used Tweeter.]]	首先让我说, 请让我说 [[我从没用过Twitter.]]	First of all let me say, please let me say [[I have never used Twitter.]]
6	[[that I have never used Tweeter.]]	[[我从没用过Twitter.]]	[[I have never used Twitter.]]
7	I noticed [[that young people--they're very busy with all these electronics.]]	我注意到了 [[一些年轻人, 他们一直很忙, 有各种各样的电子器。]]	I noticed [[some young people, they are always very busy, having various electrical appliances.]]
8	[[that young people--they've very busy with all these electronics.]]	[[一些年轻人, 他们一直很忙, 有各种各样的电子器材。]]	[[some young people, they are always very busy, have various electronica equipments.]]
9	My thumbs are too clumsy	我的手指很笨重。	My fingers are very clumsy,
10	to type in things on the phone.	没有办法用这些东西, 小的电话输入。	cannot use these things, mini-phone type-in.
11	But I am a big believer in technology	但是我还是非常相信技术的作用。	But I still very much believe technology's application.
12	and I'm a big believer in openness,	(*) 非常重视开放性。	(*) very much value openness.
13	when it comes to the flow of information.	(*) 在信息流动方面,	(*) in information flow aspect,
14	I think [[that the more freely information flows,   the stronger the society becomes.]]	我认为[[越是能够自由地信息流通,   社会就会变得越强。]]	I think [[the more freely information flows, the society will become stronger.]]
15	[[ that the more freely information flows,	[[越是能够自由的信息流通,	[[the more freely information flows,
16	the stronger the society becomes,]]	社会就会变得越强。]]	the society will become stronger.]]
17	because then the citizens of countries around the world can hold their own governments accountable.	因为这样的话, 世界各地的公民能让自己的政府负责, ^有一个问责制度。^	Because in this way, worldwide citizens can make their government accountable, ^there is a responsibility system. ^
18	They can begin to think for themselves.	^而且, ^他们可以开始自己会思考。	^and, ^ they can start themselves think.
19	That generates new ideas.	这样会有新的想法。	This will create new ideas.

20	It encourages creativity.	(*) 鼓励创造性。	(*) encourage creativity.
21	And so I've always been a strong supporter of open internet use.	所以我一直是坚定地支持互联网的开放和使用。	so I always firmly support internet's openness and use.
22	I'm a big supporter of non-censorship.	我是非常支持就是不审查内容。	I am very supportive non-censorship on contents.
23	This is part of the tradition of the United States	在美国, {我过去谈过,} 这是我们的一个传统。	In America, {I used to say,} this is our one tradition.
24	that I discussed before,	我过去谈过, {这是我们的一个传统。}	I used to say, {this is our one tradition.}
25	and I recognize that	我也认识到{不同国家有不同的传统。}	I also realize that {different countries have different traditions.}
26	{different countries have different traditions.}	{不同国家有不同的传统。}	{different countries have different traditions.}
27	I can tell you that	但是, 我可以告诉各位。	But I can tell everyone.
28	{[in the United States, the fact	{[在美国, (*)} {[我们没有受限制的使	{[In America, (*)} { [we have non restricted usage of internet opportunity.]} this is our power's source. {(*) also should be encouraged.}}
29	{[that we have free internet- or unrestricted internet access]}	{[在美国, (*)} {[我们没有受限制的使互	{[In America, (*)} { [we have non restricted usage of internet opportunity.]} this is our power's source.
30	{[where I wish information didn't flow so freely]}	{[我们没有受限制的使互联网的机会。}	{[we have non restricted usage of internet opportunity.]}
31	Now, I should tell you, << I should be honest, >> [as President of the United States, there are times [where I wish information didn't flow so freely]]]	{[我也应该受到鼓励的。}]	{[(*) also should be encouraged.]}
		但是, 我也应该很<<诚实地>>告诉各位, { [作为美国总统, 有的时候, {我还	But, I also should << very honestly>> tell everyone, { [as American President, sometimes, { [I still hope information is not that free in flowing. ]}] }

32	<< I should be honest, >>	<<诚实地>>	<< very honestly>>
33	{[as President of the United States, there are times [where I wish information didn't flow so freely]]]	{ [作为美国总统, 有的时候, {我还是希	{ [as American President, sometimes, { [I still hope information is not that free in flowing. ]}] }
34	{[where I wish information didn't flow so freely]}	{ [我还是希望信息不是那么自由的流通。}]	{ [I still hope information is not that free in flowing. ]}]
35	because then I wouldn't have to listen to people criticizing me all the time.	因为这样我就不需要听到人们一直在批评我。	because this I will not have to hear people always criticizing me.
36	I think [people naturally are-<<when they're in position of power>> sometimes thinks, [oh, how could that person say that about me,  or that's irresponsible, or-]]]	我认为{(*)}很自然的。 <<在人们处于一个实力地位的时候>>就会想到, {你为什么这么这样说。 你这样说是很不负责任的。}] ]]	I think {(*)} very naturally, <<when people is in a powerful position then>>  will think, [you why this way talk about me.  you this way talking is very irresponsible. ]}] ]]
37	{[people naturally are --	{(*)}很自然的。	{(*)} very naturally.
38	<<when they're in position of power>>	<<在人们处于一个实力地位的时候>>	<<when people is in a powerful position then>>
39	sometimes thinks, [oh, how could that person say that about me, or that's irresponsible, or-]]]	就会想到, {你为什么这么这样说。 你这样说是很不负责任的。}] ]]	will think, { [you why this way talk about me.  you this way talking is very irresponsible. ]}] ]]
40	{[oh, how could that person say that about me,  or that's irresponsible, or-]]]	{你为什么这么这样说。	{ [you why this way talk about me.
41	But the truth is [that because in the United States information is free and I have a lot of critics in the United States [who can say all kinds of thing about me.]]]	{你这样说是很不负责任的。}]	{ [you this way talking is very irresponsible. ]}]
42	{[that because in the United States information is free,	可是真实的情况是这样。{ [因为在美国信息是自由的, {而且在美国有很多人{ [批评我说各种各样的事情。}] ]]	But the real case is this. { [Because in America information is free,  and in America lots of people { [criticizing me on many things. ]}] ]]
43	{[and I have a lot of critics in the United States [who can say all kinds of thing about me.]]]	{ [因为在美国信息是自由的,	{ [Because in America information is free,
44	{[who can say all kinds of thing about me.]]]	{而且在美国有很多人{ [批评我说各种各样的事情。}] ]]	{ [and in America lots of people { [criticizing me on many things. ]}] ]]
45	{[who can say all kinds of thing about me.]]]	{ [批评我说各种各样的事情。}]	{ [criticizing me on many things. ]}] ]]

46	I actually think [[that that makes our democracy stronger   and and it makes me a better leader]]	但是,我还是认为,[[这样才会使得我们的民主制度变得更强。  也会使我变成更好的领导人。]]	But, I still think, [[this will make our democracy become stronger.   also can make me become better leader.]]
47	[[that that makes our democracy stronger	[[这样才会使得我们的民主制度变得更强。	[[this will make our democracy become stronger
48	and and it makes me a better leader]]	也会使我变成更好的领导人。]]	also can make me become better leader.]]
49	because it forces me	因为它迫使我	Because it forces me
50	to bear opinions [[that I don't want to hear.]]	听到一些[[我不愿意听到的]]意见。	to hear some [[I don't want to listen to]] opinions.
51	[[that I don't want to hear.]]	[[我不愿意听到的]]	[[I don't want to listen to]]
52	It forces me	也迫使我	also force me
53	to examine [[what I'm doing on a day-to-day basis]],	审查[[我正在做的事情。每天]]^都要审查。^	to examine [[I-am-doing things. everyday]] ^needs examination. ^
54	[[what I'm doing on a day-to-day basis]]	[[我正在做的事情。每天]]	[[I-am-doing things. everyday]]
55	to see [[am I really doing the very best [[that I could be doing for the people of the United States?]]]]	要看 [[我是不是真的[[为美国人民做出我能做到的]]最好的事情。]]]]	to see [[I whether or not really [[for American people do I can do best things.]]]]
56	[[am I really doing the very best [[that I could be doing for the people of the United States?]]]]	[[我是不是真的[[为美国人民做出我能做到的]]最好的事情。]]]]	[[I whether or not really [[for American people do I can do best things.]]]]
57	[[that I could be doing for the people of the United States?]]	[[为美国人民做出我能做到的]]	[[for American people do I can do best things.]]
58	And I think the internet has become an even more powerful tool for that kind of citizen participation.	所以我认为互联网现在已经变成一个更强大的工具,可以让公民来参与。	So I think internet has become one stronger tool. can allow citizens to participate.

59	In fact, one of the reasons [[that I won the presidency]] was [[because we were able to mobilize young people like yourself]] to get involved through the internet.]]	实际上, [[我这次胜选,当了总统的]]一个原因之一就是[[我们能够动员很多年轻人就像你们一样,通过互联网来动员。]]	Actually, [[I this time succeed in election and become the president.]] one reason is [[we can mobilize many young people just like you, through internet to mobilize.]]
60	[[that I won the presidency]]	[[我这次胜选,当了总统的]]	[[I this time succeed in election and become the president.]]
61	[[because we were able to mobilize young people like yourself	[[我们能够动员很多年轻人,就像你们一样	[[we can mobilize many young people, just like you
62	to get involved through the internet.]]	通过互联网来动员。]]	through internet to mobilize.]]
63	Initially, nobody thought [[we could win]]	刚开始的时候,没有人想到[[我们会赢。]]	At the beginning, no one thought [[we can win.]]
64	[[we could win]]	[[我们会赢。]]	[[we can win.]]
65	because we didn't have necessarily the most wealthy supporters;	因为我们不是得到最富裕的支持者,	Because we did not get the richest supporters,
66	we didn't have the most powerful brokers.	政治上有最有权力的人支持我们。	politically most powerful person supported us.
67	But through the internet, people became excited about our campaign	可是人们通过互联网看到我们竞选,他们开始感到很高兴,	But people through internet saw us campaigning, they began to feel excited.
68	and they started to organize	他们就组织起来	they then organized
69	and meet	(*)	(*)
70	and set up campaign activities and events and rallies.	成立一些竞选的活动、事件和集会。	to establish some campaigning activities, events and allies.
71	And it really ended up creating the kind of bottom-up movement [[that allowed us to do very well.]]	结果就产生了这些从下往上的行动, [[使我们很成功。]]	The results produced these bottom-up movement. [[making us very successful.]]

72	[[that allowed us to do very well.]]	[[使我们很成功。]]	[[making us very successful.]]
73	Now, that's not just true in-for government and politics.	可是，这不仅在政府和政治，	But, this is not only in government and politics,
74	It's also true for business.	在企业界一样。	in business is the same.
75	You might think about a company like Google	(*) 像 google, 谷歌这种公司,	(*) like Google, this kind of company,
76	that only 20 years ago was:	(*)	(*)
77	less than 20 years ago was the idea of a couple of people not much older than you.	不到20年前，它只是两个年龄跟你们差不多一样的人的创意。	[[ less than 20 years ago, it was, only two person as old as you, ideas.]]
78	It was a science project.	(*) 本来是科学的实验。	(*) originally was scientific experiment.
79	And suddenly because of the internet, they were able to create an industry	后来因为互联网，他们能够创造一个产业。	later because of internet, they can create an industry.
80	that has revolutionized commerce all around the world.	这个产业使全世界各地的商业发生一场革命。	This industry make all the world everywhere commerce undergo a reform.
81	So if it had not been for the freedom and openness [[that the internet allows,]]	所以，要不是有很自由的开放性，[[就像互联网所提供的开放性，]]	So, if without very free openness, [[as internet offers openness,]]
82	[[that the internet allows,]]	[[就像互联网所提供的开放性，]]	[[as internet offers openness,]]
83	Google wouldn't exist.	那 google 就不会存在。	then google will not exist.
84	So, I am a big supporter of not restricting internet use, internet access, other information technologies like tweterc	所以，我很支持一个做法，就是不要限制互联网的使用、接触或者像 twitter 这种信息技术。	So, I very much support an approach, is not to restrict internet's usage, contact or like twitter this type of information technology.
85	The more open we are,	越开放	the more open,
86	the more we can communicate.	越能够沟通。	[[the more can communicate.
87	And it also helps to draw the world together.	而且会使全世界联系在一起。	also can make the whole world combined together.

88	Think about-	(*)	(*)
89	when we think about my daughters, Malia and Sasha--	(*) 像我的两个女儿玛利亚和娜塔莎，	(*) such as my two daughters Malia and Sasha,
90	one is 11,	一个是11岁，	one is 11 years old,
91	one is 8.	一个是8岁。	one is 8 years old.
92	From their own room, they can get on the internet	在他们的房间她们可以上网，	in their room they can get on the internet.
93	and they can travel to Shanghai.	也可以到上海	also can come to Shanghai.
94	They can go any place in the world	^通过互联网^ (*) 可以达到世界任何地方	^through internet^ (*) can reach the world anywhere.
95	and they can learn about anything [[they want to learn about.]]	(*) 可以学到 [[她们想学的内容。]]	(*) can learn [[they want to learn the content.]]
96	[[they want to learn about.]]	[[她们想学的内容。]]	[[they want to learn the content.]]
97	And that's just an enormous power [[that they have.]]	这是 [[她们]] 巨大的力量，	this is [[their]] huge power.
98	[[that they have.]]	[[她们]]	[[their]]
99	And that helps, <<I think,>> promote the kind of understanding [[that we talked about.]]	也有利于 (*) 促进相互理解 (*)。	also benefits (*) improving each other understanding. (*)
100	<<I think>>	(*)	(*)
101	[[that we talked about.]]	(*)	(*)
102	Now, <<as I said before,>> there's always a downside to technology.	<<就像我刚才所说的，>> 技术也有负面。	<<like I just now said,>> technology also has downside.
103	<<as I said before,>>	<<就像我刚才所说的，>>	<<like I just now said,>>
104	It also means [[that terrorists are able to organize on the internet in ways [[that they might not have been able to do before.]]]]	(*) [[恐怖分子可以通过互联网做一些 [[以前他们做不到的事情。]]]]	(*) [[terrorists can through internet do some [[before they can not do the thing.]]]]

105	[[that terrorists are able to organize on the internet in ways [[that they might not have been able to do before.]]]]	[[恐怖分子可以通过互联网做一些[[以前他们做不到的事情。]]]]	[[terrorists can through internet do some [[before they can not do the thing.]]]]
106	[[that they might not have been able to do before.]]	[[以前他们做不到的事情。]]	[[before they can not do the thing.]]
107	Extremists can mobilize.	有一些极端分子也可以动员。	there are some extremists also can mobilize.
108	And so there is some price [[you pay for openness,]]	当然,开放性肯定[[(*)要付出]]某种代价。	surely openness definitely [[(*) must pay]] some kind of price.
109	[[you pay for openness,]]	[[(*)要付出]]	[[(*) must pay]]
110	there's no denying that.	这是不能否认的。	This is not to be denied.
111	But I think [[that the good outweighs the bad so much [[that it's better to maintain that openness.]]]]	可是,我想[[好的远远多于坏的。[[^所以,^还是要保持开放是好的。]]]]	However, I think [[the good is far more than the bad. [[^so, ^ still should remain open is good.]]]]
112	[[that the good outweighs the bad so much [[that it's better to maintain that openness.]]]]	[[好的远远多于坏的。[[^所以,^还是要保持开放是好的。]]]]	[[the good is far more than the bad. [[^so, ^ still should remain open is good.]]]]
113	[[that it's better to maintain that openness.]]	[[^所以,^还是要保持开放是好的。]]	[[^so, ^ still should remain open is good.]]
114	And that's part of [[why I am so glad [[that internet was part of this forum.]]]]	所以,这是[[为什么我很高兴[[互联网业作为这个论坛的一部分。]]]]	So, this is [[why I am very pleased [[internet as this forum's one part.]]]]
115	[[why I am so glad [[that internet was part of this forum.]]]]	[[为什么我很高兴[[互联网业作为这个论坛的一部分。]]]]	[[why I am very pleased [[internet as this forum's one part.]]]]
116	[[that internet was part of this forum.]]	[[互联网业作为这个论坛的一部分。]]	[[internet as this forum's one part.]]
117	Okay?	(*)	(*)
118	I'm going to take two more questions.	(*) 最后两个问题。	(*) Last two questions.

## Notes:

(\*) : the information is omitted in SI;

^...^ : the information is added in SI;

{...} : the information is relocated in SI

The following symbols used in **SI Transcript** and **Back Translation** columns are for the ease of comparative reading and the message tracking only.

These symbols are **NOT** used in **SI Transcript** and **Back Translation** for marking grammatical ranks of the text.

|| : clause;

[[...]] : embedded clause;

<<...>> : interrupted clause