從語境觀點探討字幕翻譯的理解：
以連接詞的縮減為例

高煥麗

　　受到時間和空間的限制，字幕翻譯的譯文時常有所縮減，從而影響其訊息的完整傳達和理解，但有關縮減是否會影響字幕理解的研究付之闕如，因此本研究旨在探討字幕縮減，尤其是英文連接詞（例如：moreover, but, because, at first）的省略，對字幕的理解是否有影響及其程度。本研究採取問卷調查法，以四段 Discovery 頻道英語發音配以中文字幕的影片（兩段紀錄片和兩段旅遊節目），測試 158 名受測者對中文字幕中連接詞增減的看法。本研究根據原文的英文連接詞，將這四段影片的中文連接詞增加或減少至極限。研究結果顯示，連接詞的省略不會影響受測者對中文字幕的理解，而此結果可以字幕翻譯的語境因素加以解釋，這些因素包括：語域（語場、語旨、語式）、語用原則（例如：格萊斯關聯準則）、字幕翻譯的多重符號特色（例如：字幕、聲音和影像共存）。換言之，本研究主張從翻譯語境的觀點解釋字幕翻譯的縮減現象。本研究的發現可應用於字幕翻譯的教學和評估。

關鍵詞：字幕翻譯、連接詞、字幕縮減、語境、語域、語用學、符號學

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An Exploration of the Role of Context in the Understanding of Subtitles: Connectives and the Use of Reduction

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   Due to time and space constraints, film subtitles are often subject to reduction, which in turn may lead to information loss and hamper comprehension. However, little research has been done on this issue. Therefore, this study aims to find out whether and to what extent the reduction of subtitles may affect readers' comprehension, with particular reference to connectives (e.g. *moreover*, *but*, *because*, and *at first*). The present study used a questionnaire survey concerned with four English-language film clips (two documentaries and two travel programs from the Discovery Channel) to test the response of 158 participants to the reduction or elimination of connectives in Chinese subtitles. The connectives of the Chinese subtitles in the four clips had been either increased or reduced to a maximum degree in order to enhance or reduce the cohesion level of Chinese subtitles without impairing their original meaning and syntax.

   The results of the survey show that the participants seemed to have no difficulty comprehending Chinese subtitles when most English connectives were intentionally not translated. That is, the omission of connectives did not seem to affect the comprehension of subtitles, which may be explained by contextual factors such as register (field, tenor, and mode), pragmatic principles (e.g. the Gricean maxim of relevance), and the multi-semiotic features of subtitling (e.g. the co-presence of subtitles, image, and sound). In other words, the present study shows that the use of reduction in subtitling could be justified from the perspective of context. These findings have implications for the teaching and assessment of English to Chinese subtitling.

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Background

Over the past decade, the study of audiovisual translation has received considerable attention. In particular, a growing number of research studies are now available to shed some light on subtitling, which is the most common type of audiovisual translation in Taiwan. In addition, all subtitles shown in TV programmes in Taiwan are open subtitles, rather than closed subtitles. That is, the viewers cannot turn off the subtitles even if they do not need them. The omnipresence of subtitles on the screen makes Taiwan a land of subtitles, and its people are very much used to watching TV and reading subtitles at the same time.

Díaz Cintas and Remael (2007, p. 8) define subtitling as "a translation practice that consists of presenting a written text, generally on the lower part of the screen, that endeavours to recount the original dialogue of the speakers, as well as the discursive elements that appear in the image (letters, inserts, graffiti, inscriptions, placards, and the like), and the information that is contained on the soundtrack (songs, voices off)". Thus, subtitling does not only involve translating film dialogue and narrative. The image and soundtrack must also be taken into consideration in the translating process.

Moreover, there are two types of subtitling: intralingual and interlingual, and in Taiwan both are prevalent. Intralingual subtitling refers to subtitles in the same language as the programmes and is usually made for the deaf and the hard-of-hearing, but in Taiwan it is mainly for the ease of comprehension. There are more than eighty TV channels in Taiwan, and most Chinese programmes are subtitled except live programmes such as news reports. By contrast, interlingual subtitling involves the change of languages. Most Chinese subtitles of foreign programmes, such as dramas and movies, are translated from English in Taiwan, and it is the interlingual subtitling that is the focus of the present study.

According to Gambier (2003), audiovisual translation had not been taken seriously until 1995. In 2002 Chaume Varela (p. 4) argued that the reasons for this neglect were: Communication, Media and Translation Studies are still relatively new disciplines; the insignificance that the subtitler's task had in academic settings because audiovisual translation was not considered as literary translation; audiovisual translation had not been paid much attention within its own professional setting, in which the speed of the process, the tight timescales

and financial pressures, and the number of people who had direct access to the translation had made audiovisual translation a mass production process, instead of an artistic and professional activity.

However, according to Gambier (2003), this situation has changed for a number of reasons. These reasons include annual conferences on audiovisual communication, a rising number of publications, the booming new technology, language policy, and language awareness. Another important reason is that translation practice changes rapidly. In the digital age, the audiovisual equipment is faster, flexible, and less cumbersome. In addition, subtitling deserves to be researched because it is a kind of special translation. All the potential translation problems caused by cultural differences and linguistic problems which transla-tors may come across can all happen to subtitlers.

Moreover, Díaz Cintas and Remael (2007) suggest that audiovisual transla-tion has gained visibility due to the proliferation and distribution of audiovisual materials in our society. They claim that we spend many hours everyday watch-ing screens on television sets, cinemas, computers and mobile phones to carry out our work, to develop and enhance our professional and academic careers, to enjoy ourselves, and to obtain information. Consequently, the image is ubiqui-tous in our time and age, and the need for translating audiovisual materials has been increasing. However, Díaz Cintas (2004, p. 50) argues that "A clear paradox exists which emphasises the surprising imbalance between the little research on audiovisual translation and its enormous impact on society". In particular, there has still been little research on how reduction in subtitling affects comprehen-sion of subtitles. As a result, the present study aims to investigate how the addition and omission of connectives contribute (or not) to the comprehension of subtitles.

Literature Review

According to Díaz Cintas and Remael (2007, p. 9), subtitling is character-ised by the interaction of sound, image and subtitles, the viewer's ability to read both the image and the written text at a particular speed, the actual size of the screen, the synchrony of subtitles, image and dialogue, a semantically adequate account of the SL dialogue, and sufficient display time of subtitles on screen. These features may constrain the translator in the subtitling process. As de Linde (1995, pp.11-12) suggests, the translator may be textually constrained by the

presence of the additional visual component (image) and the switch from oral to written discourse. Consequently, subtitling typically involves reduction.

Subtitling and Reduction

According to Assis Rosa (2001, p. 218), reductions in subtitling are caused by several reasons. First, reductions may result from the change of medium, channel, and code, such as the change from spoken register to written register. As a result, spoken features of the source text are often omitted. According to Brown and Yule (1983, p. 15), spoken language contains many incomplete sentences and little subordination, and hence is much less structured than written language. Moreover, in written language, relationships between clauses are often marked by *that* complementisers, *when/while* temporal markers, logical connectives like *besides*, *moreover*, *however*, etc., while in spoken language, relation-ships between clauses are often not marked by connectives (ibid, p.16). In other words, the speaker is typically less explicit than the writer, e.g. *I'm so tired, (because) I had to walk all the way home* (*because* is often omitted), while the writer uses more rhetorical organisers like *firstly* and *in conclusion* (ibid). In addition, the speaker uses a large number of fillers like *well*, *I think*, *you know*, etc. that are not used in writing (ibid. p. 17). Typical features of spoken and written discourse are illustrated in Table 1.

Table 1:

Spoken vs. written discourse

Spoken Discourse	Written Discourse
➢ Paralinguistic effects: intonation, accent, gesture	➢ Graphic effects only
➢ Immediate, transitory	➢ Permanent
➢ Spontaneous, unplanned	➢ Edited, planned
➢ Interactive, face-to-face	➢ Non-interactive
➢ Less structured:	➢ More structured:
-Fragments	-Full sentences
-Simple, active, declarative	-Complex sentences
-More fillers: well, you know, by the way	-More structural markers: firstly, more importantly,　in conclu-sion
-Non-fluency: false starts, backtracking, repetitions	-Fluency

Second, reductions may be due to the selection criteria characteristic of subtitling, such as the need for text compression due to time and space constraints. Subtitles are limited to a maximum of two lines. Thus, the target text needs to be reduced depends on the time available, the reading speed of the audience, and the speed of the source text. Third, reductions may be associated with translators working only with scripts and without watching the film. Consequently, when the source soundtrack contains extra spoken-language features (e.g. pauses and hesitations) not present in the script, they may be lost in the subtitles. For example, a speaker may use a pause to create suspense. However, if the translator is not aware of the pause, he or she may destroy the suspense. Fourth, reductions may be a consequence of the secondary or marginal function of the subtitles, which should not draw the attention of the audience away from the image. The audience should be given sufficient time to read, watch, and listen at the same time. Fifth, reductions may be the result of "socially and politically significant choices influenced by value systems". For example, swear words may be toned down or even deleted in subtitles either based on the decision of the subtitler or the policy of the TV stations and cinema companies.

Moreover, reduction in subtitling may lead to information loss and poorer quality of subtitles, which is a risk that subtitlers try to avoid by cutting out non-important items. Consequently, words and phrases that carry little or no meaning are often omitted in subtitling, for example, repetitions, modals (e.g. *may* and *would*), tag questions (e.g. …*aren't you?* and …*did you?*), and filler words (e.g. *well* and *you know*). However, the question of whether connectives are important items or not in subtitling still remains unanswered.

In recent years, several studies in this respect have focused on quantitative reduction in subtitling. For example, Georgakopoulou (2003) systematically analysed the percentages of reduction in different film genres and found that the degree of reduction was determined by genre, context, and speed of delivery. Nonetheless, it may be argued that quantitative reduction may not necessarily lead to qualitative reduction. Gottlieb (1998, p. 247) argues that "a full transcription/translation of the spoken discourse in films and television is seldom desirable", because there are some semiotic redundancies in films and television. In his view, even deliberate speech, including script-based narration, may contain so much redundancy that a slight condensation will enhance rather than impair the effectiveness of the intended message. While this claim is plausibly argued, little empirical evidence has been found to support it.

More specifically, few empirical studies have focused on whether and how reduction in subtitling, particularly the reduction of connectives, may affect comprehension of subtitles. It may be argued that connectives are an important aspect of textual quality, but their role in text comprehension is not clear, which will be discussed next.

Connectives and Comprehension

Pander Maat and Sanders (2006) define connectives as one-word items or fixed word combination that express the relation between clauses, sentences, or utterances, and "a connective indicates how its host utterance is relevant to the context" (ibid, p. 33). According to the classification of Halliday and Hasan (1976), there are four types of connectives: additive (adding information, e.g. *and* and *furthermore*), adversative (comparing and contrasting events and things, e.g. *but* and *in contrast*), causal (explaining why and how events happen, e.g. *because* and *therefore*), and temporal (ordering events in time, e.g. *next* and *finally*).

Spooren and Sanders (2006, p. 4) suggest that connectives play an important role in guiding the hearer or reader in constructing a coherent representation of the discourse by signalling the semantic relation between two discourse segments. However, by revisiting the related literature of studies on reading comprehension, it appears that so far there is no consensus on the actual effect of the explicit presence of connectives on text comprehension. Although many reading experiments based on English have confirmed that connectives facilitate reading comprehension, a number of studies have found that connectives have a negative impact on comprehension because they make the sentences longer and increase working memory load (Millis et al., 1993). The reason for the contradictory findings may have to do with the fact that they used different text types (narratives and expositories) and types of connectives (additives, causals, temporals, and adversatives). As a result, the present study investigated all the four types of connective in the informative texts so as to shed some light on these apparently contradictory research findings.

Moreover, to the best of my knowledge, no researchers have conducted reading experiments on Chinese connectives except Wu and Liu (1986) and Chan (2005). Their studies showed that connectives facilitate reading comprehension. Chan (2005) found that the absence of adversative and causal connectives (e.g. "但是" and "因此") makes a sentence the least readable or the most difficult to understand. Both studies focused on the reading of individual sentences, rather than a text. However, it may be argued that the role of connectives in

reading comprehension should be examined in a text since we usually read a text, not a sentence. In addition, both studies examined only a small number of connectives such as " 而且 ", " 但是 ", " 或者 ", " 所以 ", " 因為 ", and " 以後 ".

Furthermore, a Chinese connective and its English dictionary equivalent may not perform exactly the same function, because of differences in lexical coverage and preferred rhetorical structure between the two languages. Chinese is a language characterised by highly paratactic constructions, i.e. the tendency to use fewer connectives, while English is characterised by hypotactic structure and tends to use more connectives (Chen, 1997, pp. 112-113).

Chen (2006) investigated the explicitation (i.e. addition) of connectives in Chinese translations of popular science texts compared to non-translated Chinese popular science texts. It was found that around 75% of the occurrences of all TT connectives are carried over from the source texts, while the remaining 25% are added in the translation process, which shows that addition of connectives is likely to be typical of Chinese translations of popular science texts in general, despite the fact that Chinese is a language characterised by highly paratactic constructions (ibid, p. 14). Chen suggests that the 25% explicitation of may result from translators' preference for certain connectives, commissioner's requirements of explicit translation, and pedagogical emphasis on explicitation (ibid, pp. 364-373). However, it should be noted that Chen's study did not investigate how ST connectives were translated into TT connectives, nor did it address the issue of the link between connectives and text comprehension.

House (2004) claims that explicitation may make translations more informative and comprehensible. Nevertheless, it may be argued that the explicitation of connectives in translating does not necessarily lead to more readable or natural translations. As the study of Chen (2006) shows, explicitation may be typical of Chinese translations of popular science texts, but Chinese is a language characterised by paratactic constructions and less use of connectives (Chen, 1997). Consequently, while it is possible that the readers will find it easier to read such texts, the unnatural higher level of explicitness may contribute to "translationese", which refers to linguistic features that occur with a significantly higher or lower frequency in translations than in target-language originals (Puurtinen, 2003, p. 389). Hence, a more comprehensive study of Chinese connectives is needed to understand their role in text comprehension.

Contextual Factors in Subtitling

Also, there have been few studies linking comprehension of subtitles to context in subtitling. Reiss (2000, p. 69) suggests that contextual factors may allow an author to reduce the linguistic form of the message to be conveyed to a minimum, because the hearer or reader will be able to fill in the result of the situation in his/her own language. Hence, this study tries to draw on the notion of context in translating proposed by Hatim and Mason (1990) to explore whether, and if so, how the audience may fill in a missing link when subtitles are less cohesive. They suggest that context in translating consists of three dimensions: communicative transaction, pragmatic action, and semiotic interaction.

First, communicative transaction involves register analysis, which consists of three main types of register variation: field, tenor, and mode. According to Halliday (1978, pp. 31-32), register refers to "the fact that the language we speak or write varies according to the type of situation….What the theory of register does is to attempt to uncover the general principles which govern this variation, so that we can begin to understand *what* situational factors determines *what* linguistic features" (original emphasis). In Halliday's terms, the situation is the environment in which the text comes to life. Moreover, field refers to subject matter, e.g. political discourse. Tenor means the relationship between the addresser and the addressee, e.g. formal and informal. Mode is the medium of the language activity, e.g. speech and writing. In short, register is the study of the relation between language and its context, and it is determined by what is taking place (field), who is taking part (tenor), and what part the language is playing (mode) (ibid, p. 31).

Second, pragmatic action mainly involves the cooperative principle and Gricean maxims. In a broader sense, cognitive-pragmatic theories such as Relevance Theory are also involved (cognitive pragmatics is defined as the study of language use within the framework of cognitive science). Grice proposes the cooperative principle and a set of maxims to account for how knowledge is conveyed when people imply, suggest or mean something distinct from what they literally say (Hatim, 1998, p, 77). The cooperative principle is defined as "Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged" (Grice, 1975, p. 45). The Gricean maxims consist of:

    a. Quantity: Make your contribution as informative as required;

    b. Quality: Do not say what you believe to be false;

    c. Relation: Say only those things that are relevant to the situation;

d. Manner: Avoid obscurity of expression.

Among them, relation or relevance is considered the most important factor in achieving successful communication. Sperber and Wilson (1995, p. 158) define the principle of relevance as "every act of ostensive communication communicates a presumption of its own optimal relevance". That is, when a person sets out to communicate something, he/she automatically communicates the presumption that what he/she is going to say is optimally relevant to the audience. An utterance is optimally relevant when it enables the audience to find the intended meaning without unnecessary processing effort and when that intended meaning provides adequate contextual effects (Gutt, 1998, p. 43).

Tirkkonen-Condit (1992, p. 238) succinctly points out the essence of Relevance Theory by suggesting that it explains success in human communication in terms of two assumptions:
    a. human beings are able to infer what is meant by combining the information they derive from an ostensive stimulus such as an utterance, and the information they derive from their own cognitive context.
    b. human beings observe the relevance principle.

Relevance means the aim to achieve maximum benefit at minimum processing cost, which explains the economy of communication: "people say only what they judge relevant for the hearer at each point of communication" (ibid).

Third, semiotic interaction involves in subtitling involves picture and sound as signs, which make subtitling a special type of translating. Semiotics is the study of signs and symbols as elements of communicative behaviour such as language, gestures, or clothing. Subtitling involves more than one semiotic system, and the total message of polysemiotic texts like subtitled films is conveyed through at least two parallel channels, such as visual and auditory channels. According to Gottlieb (1994, p. 265), the subtitler has to consider four simultaneous channels when translating films and TV programmes:
    a. the verbal auditory channel: dialogue, background voices, and sometimes lyrics;
    b. the non-verbal auditory channel: music, natural sound, and sound effects;
    c. the verbal visual channel: captions, superimposed titles, and written signs on the screen;
    d. the non-verbal visual channel: gestures, facial expressions, and picture composition and flow.

The four channels work together to form a complete semiotic context for subtitling, but they present a challenge to the subtitler: How to accommodate these channels in limited time and space? It is impossible for the subtitler to subtitle everything in films and television, and inevitably some elements need to be eliminated, which in turn may lead to loss of meaning. However, the audience is not only reading subtitles in the viewing process. They are, at the same time, taking information from other audiovisual channels such as image and sound, which enable them to supplement the content of the subtitles. Consequently, the subtitler is both constrained and supported by the presence of these audiovisual channels.

To sum up, it may be said that communicative transaction, pragmatic action, and semiotic interaction form a complete context of subtitling, and thus it may be hypothesised that reduction in subtitling may not hamper comprehension of subtitles when the contextual factors discussed above are taken into consideration.

In order to examine the hypothesis that reduction in subtitling may not adversely affect audience comprehension, the present study was designed to answer the following research questions:

➢ Does the addition/omission of connectives in the subtitles of documentaries and travel programmes affect audience comprehension? If yes, in which way, and to what extent?

➢ Does the audience find subtitles explicitly marked with connectives easier to understand than those without connectives? If yes/no, why?

Methodology

In order to examine the hypothesis and answer the research questions proposed by the present research, an audience reception study was conducted to investigate whether and how the addition and omission of connectives affect the comprehension of subtitles from the perspective of the audience.

Materials

In order to answer the research questions of this study, two types of TV programmes were analysed: scripted documentaries (*Who Killed Julius Caesar* and

Building the Ultimate: Stadium) and an unscripted travel series called *Globe Trekker* (*Vienna City Guide* and *Portugal and the Azores*) from Discovery Channel (see Tables 2 and 3 for sample transcription). The reason why this study chose to examine the two programmes with relatively few differences between them— as opposed to two very different types of programmes (e.g. documentaries vs. sitcoms)—is that it focused on a set of manageable differences (e.g. scripted vs. non-scripted) as well as similarities (e.g. both documentaries and travel programmes can be classified as informative programmes).

Table 2:

Documentary: Who Killed Julius Caesar

Rome, superpower of its day, whose all-conquering legions subdued vast new lands, and where one man had triumphed to gain ultimate control, a man who's death could change history. Julius Caesar, genius and, perhaps, greatest general of all time, was murdered openly in the Roman senate. For centuries, no one questioned the facts of his death. But now, 2,000 years later, a top Italian investigator has returned to the earliest historical accounts and reopened the case. Using 21st century forensic techniques he revisits the key locations. With computer-generated models, he recreates the crime scene. Blow by blow, he stages a simulation of the murder itself. And the most startling revelation of all, the truth emerges, not from the assassins, but deep inside the mind of Julius Caesar himself.

Rome on the Ides, the 15th of March, 44 BC. Senators await the head of state. Julius Caesar, dictator of Rome, conqueror of Europe. First item on the agenda, murder. The nation's shrewdest and greatest general arrives at the Senate unguarded and dismissed all warnings. As bystanders look on in horror he is cut down. The deed is quick, bloody, and public. The identity of the culprits beyond doubt. But did the famous conspirators, Brutus and Cassius, really mastermind Caesar's murder? Or were they just the pawns of an unseen hand? For over two millennia, the case gathered dust, the preserve of historians and dramatists. But one man isn't happy that the received version of the events is the whole truth.

Table 3:

Travel programme: Globe Trekker: Vienna City Guide

A: When Vienna was surrounded by a city wall the only way to expand was by digging down.

A: Barbara showed me around the cellars beneath the palace.

B: All around the cities.

A: How deep was it then?

B: Maximum of five stories.

A: What you're saying, there's like an underground city?

B: It was a city underneath a city.

A: Wow, there's, like, statues, huh?

B: Well, these aren't actually statues. These are the positives.

A: All right, all right. So the artists would make these first...

B: Yes.

A: ...take them to the emperor, and if he liked it then they'd make the big statue.

B: Make the real monument out of metal, ceramic...

A: This is...who's this?

B: That's Mozart.

A: That's Mozart? Is it?

B: Amadeus Mozart.

A: Wow. So the artist would go "Look, this is what...this is the bust of you which I made. Do you want a big one done?"

B: Yeah, there's a big one with legs...

A: Yeah.

B: ...and a huge monument in the imperial gardens.

A: Oh, I see. I like it, but I want it with legs and hands. So what are they all doing down here, then? It's just storage?

B: It's storage. Whatever the city of Vienna, or in the old days the imperial family, didn't need, they put down here in their wide cellars.

A: Barbara, I think I've done all my sightseeing in here.

　　The study used four English clips (two documentaries and two travel programmes) to test the response of the audience on the reduction of connectives in Chinese subtitles. Each clip was about eight-minute long with 800 to 1,000 words. The connectives in the four clips were either increased or decreased to a maximum or minimum amount to enhance or reduce the cohesion level of Chinese subtitles, and to make the logical relations between sentences either explicit or implicit without impairing their original meaning and grammar. To illustrate, consider the following example taken from *Building the Ultimate: Stadium* (the symbol "//" in the subtitles means the breaking of subtitles into two lines on the screen):

　　　　a. Original clip:

　　　　Source text: Technology has enabled us to design things, analyze them, make sure they're strong enough, but also make sure they actually work.

　　　　Subtitles: 科技使我們得以設計和分析建築 // 確保它們夠堅固

　　　　　　　　但也確保它們真的能使用

　　　　b. Max clip:

　　　　　　　　科技使我們得以設計和分析建築 // 並確保它們夠堅固

　　　　　　　　但也確保它們真的能使用

　　　　c. Min clip:

　　　　　　　　科技使我們得以設計和分析建築 // 確保它們夠堅固

　　　　　　　　確保它們真的能使用

In the original subtitles, there is one additive connective "但也". In the max clip, thee additive connective "並" was added to make the subtitles more cohesive, whereas in the min clip, both were omitted to lower the cohesion level.

Consider another example taken from *Globe Trekker: Portugal and the Azores*:

　　　　a. Original clip:

　　　　Source text: This hike that Pedro's been leading me on has us almost reaching the tops of these mountains, but what's really neat is that there are all these little villages kind of dotting the hillside and he says they're all ghost towns.

　　Subtitles: 培卓幾乎帶領我們走到山頂

　　　　　　　但最棒的是 // 山坡上不時可見這些小村落

　　　　　　　他說這些村落都是鬼城

　b. Max clip:

　　　　　　　培卓幾乎帶領我們走到山頂

　　　　　　　但最棒的是 // 山坡上不時可見這些小村落

　　　　　　　而且他說這些村落都是鬼城

　c. Min clip:

　　　　　　　培卓幾乎帶領我們走到山頂

　　　　　　　最棒的是 // 山坡上不時可見這些小村落

　　　　　　　他說這些村落是鬼城

In the original subtitles, there is one adversative connective " 但 ". In the max clip, the additive connective " 而且 " was added, whereas in the min clip, both " 但 " and " 而且 " were omitted.

The third example is taken from *Globe Trekker: Vienna City Guide*:

　a. Original clip:
　　Source text: The imperial Hapsburgs, they were like an eccentric bunch. Like, normal people when you die you get buried, but what they used to do is cut parts of their body up and embalm them.

　　Subtitles: 他們是一群很奇怪的人

　　　　　　　一般人在死後入土為安

　　　　　　　但這些皇族的屍體會被肢解 // 並防腐保存

　b. Max clip:

　　　　　　　他們是一群很奇怪的人

　　　　　　　因為一般人在死後入土為安

　　　　　　　但這些皇族的屍體會被肢解 // 並防腐保存

c. Min clip:

<div align="center">

他們是一群很奇怪的人

一般人在死後入土為安

這些皇族的屍體會被肢解 // 防腐保存

</div>

In the original subtitles, there are one adversative connective " 但 " and one additive connective " 並 ". In the max clip, the causal connective " 因為 " was added, whereas in the min clip, all of the connectives were omitted.

The last example is taken from *Who Killed Julius Caesar*:

a. Original clip:

　　Source text: Garofeno starts his investigation with a detailed re-examination of the earliest accounts of Caesar's life.

　　Subtitles: 蓋若法諾首先審視 // 凱撒大帝生平的最早記載

b. Max clip:

<div align="center">

蓋若法諾首先審視 // 凱撒大帝生平的最早記載

</div>

c. Min clip:

<div align="center">

蓋若法諾審視 // 凱撒大帝生平的最早記載

</div>

In the original subtitles and the max clip, there is one temporal connective " 首先 ", but in the min clip, it was omitted.

In the following discussion, the eight clips used in the present study will be referred to as Doc1 (max), Doc1 (min), Doc2 (max), Doc2 (min), Travel1 (max), Tavel1 (min), Travel2 (max), and Travel2 (min), respectively. Moreover, it should be noted that the present study did not focus on the addition/omission of each connective type as defined by Halliday and Hasan (1976) mentioned in Section 2.2, but on their overall addition/omission in the subtitles. Table 4 shows the amount of connectives in each clip. Take Clip Travel1 for example, its original amount of connectives in subtitles was 34, but the present study increased its amount to the maximum 54 and decreased it to the minimum 16. The difference between the maximum clip and the minimum clip was 38.

Table 4:

Amount of connectives in each clip

	Original subtitles	Manipulated subtitles		Difference between
		max	min	max & min
Travel1 (Vienna City Guide)	34	**54**	**16**	38
Travel2 (Portugal & the Azores)	32	**45**	**13**	32
Doc1 (Who Killed Julius Caesar)	33	**39**	**4**	35
Doc2 (Building the Ultimate: Stadium)	53	**64**	**15**	49

Questionnaire Design

In order to answer the research questions above, a questionnaire survey was conducted. The questionnaire was divided into two parts (see Appendix A for the Chinese questionnaire). The first part aimed to elicit general information about the respondents, e.g. their English listening comprehension ability, the importance of subtitles to their comprehension of English TV programmes, and their general view on the subtitling quality of English TV programmes. The second part of the questionnaire consisted of Likert-scale items and open-ended questions. The Likert-scale checklist was designed around variables concerning the perception of the audience on the subtitles they had just viewed, e.g. coherence, conciseness, completeness, and information loss, and consisted of 12 items using a 5-point scale ("Strongly Agree"=5, "Agree"=4, "So-so"=3, "Disagree"=2, "Strongly Disagree"=1) (see Table 5).

Table 5:

Likert scale for the reception study

	Strongly Agree	Agree	So-so	Disagree	Strongly Disagree
1. The subtitles are concise.	□	□	□	□	□
2. The subtitles are difficult to understand.	□	□	□	□	□
3. The subtitles are too succinct to convey the meaning completely.	□	□	□	□	□
4. I can understand the subtitles immediately without much thinking.	□	□	□	□	□
5. The subtitles do not omit any essential information.	□	□	□	□	□
6. The subtitles do not omit any finer shades of meaning.	□	□	□	□	□
7. The subtitles cannot reflect the style of the clip.	□	□	□	□	□
8. The subtitles are too fast to follow.	□	□	□	□	□
9. The subtitles are too long to be understood at a glance.	□	□	□	□	□
10. The connection between the subtitles is not obvious.	□	□	□	□	□
11. The subtitles are fluent and smooth.	□	□	□	□	□
12. The overall quality of the subtitles is good.	□	□	□	□	□

Among the 12 items, a half of them were expressed positively (Items 1, 4, 5, 6, 11, 12), and the other half, negatively (Items 2, 3, 7, 8, 9, 10), to avoid a response set where the respondents mark only one side of a rating scale and thus to reduce any harmful effects of acquiescence bias. That is, the respondents were encouraged to think about every item carefully, rather than to respond automatically.

Participants

The participants of the main study were 158 students (30 males and 128 females) from Chang Jung University in Taiwan. They were selected partly because they were translation majors, who might pay more attention to the quality of translated subtitles than those non-translation majors. Another reason was that it was easier to obtain a large sample size if the survey was conducted in groups at a school with sufficient space, computing facilities, and audiovisual equipment.

Procedures

The 158 respondents were divided into Group A and Group B randomly by classes (see Table 6). Group A was composed of classes of Sophomore A, Junior (Economic and Trade Programme), and first-year graduate students, while Group B, Sophomore B, Junior (Journalism Programme), and Senior (Economic and Trade Programme). Thus, there were 75 respondents in Group A (18 males and 57 females), and 83 in Group B (12 males and 71 females).

Table 6:

Groups A & B

Groups A	No. of respondents	Group B	No. of respondents
Sophomore A	31	Sophomore B	38
Junior (Economic and Trade Programme)	22	Junior (Journalism Programme)	23
First-year graduate students	22	Senior (Economic and Trade Programme)	22
Total	75	Total	83

There were eight clips in this study, and each group watched four of them. As Table 7 shows, Group A watched Clips 1 to 4 and Group B, 5 to 8. Both groups watched Travel1, Travel2, Doc 1, and Doc2, but the amount of connectives in the clips was either maximum or minimum. For example, Group A watched Travel1 (max), while Group B watched Travel1 (min). The respondents

were asked to complete the first part of the questionnaire concerning their general information first. Then they answered questions in the second-part questionnaire immediately after watching each clip.

Table 7:

Max and min clips

Group A	Group B
1. Travel1 (max)	5. Travel1 (min)
2. Travel2 (min)	6. Travel2 (max)
3. Doc1 (min)	7. Doc1 (max)
4. Doc2 (max)	8. Doc2 (min)

Results

The first-part questionnaire was analysed to provide summary background information about the respondents. The 158 respondents were composed of 68 sophomores, 45 juniors, 23 seniors, and 22 first-year graduate students, and they were all translation majors except one. In addition, 52 of the respondents had taken a subtitling course, while 106 had not. Moreover, only 16 respondents rated their English listening comprehension ability as "Good", while 94 rated "So-so", 41 "Poor", and 7 "Very poor".

As to the importance of subtitles to their comprehension of English TV programmes, 26 respondents thought they were "Very important", 96 "Important", 35 "So-so", and only one "Not important", suggesting that most respondents considered subtitles were important. As for the question of the subtitling quality of English TV programmes in general, 4 respondents answered "Very good", 78 "Good", 73 "So-so", and only one "Poor".

Furthermore, in order to find out the relationship between the respondents' English listening comprehension ability (Item 8) and their view on the importance of subtitles (Item 9), correlation analysis was conducted. The results show that any correlation between the two variables, although statistically significant, was negligible in strength: $r = -0.197$, $p < 0.05$. Therefore, whether the respondents' English listening comprehension ability was good or not was

not connected to their view on the importance of the subtitles.

In order to understand what kind of criteria was considered important to the respondents when they watched subtitled foreign TV programmes, responses to the Likert items listed in Table 1 above were analysed. Each response option was assigned a number for scoring purposes ("Very important"= 5, "Important"=4, "So-so"=3, "Not important"=2, "Not at all important"=1), and all respondents' scores for each item were summed up and averaged. The results show that the average scores of "Clarity", "Coherence" and "Readability" were the three highest, while "Concision", "Faithfulness" and "Completeness" were the three lowest (see Table 8). However, there was relatively little difference between highest and lowest, with the scores ranging from 3.9 to 4.5.

Table 8:

Average score of each item

	Average score
a. Clarity	4.5
b. Accuracy	4.4
c. Concision	3.9
d. Fluency	4.4
e. Faithfulness	4.0
f. Coherence	4.5
g. Completeness	4.1
h. Readability	4.5
i. Diction & register	4.3
j. Speed of subtitles	4.3

Furthermore, the results of the second-part questionnaire were analysed statistically by conducting paired-samples t-tests using SPSS. Each response option in the Likert scale was assigned a number for scoring purposes ("Strongly Agree"= 5, "Agree"=4, "So-so"=3, "Disagree"=2, "Strongly Disagree"=1). With negatively worded items (Items 2, 3, 7, 8, 9, 10), the scores were reversed and recoded before analysis.

In order to ensure the internal consistency of the scales used in the questionnaire survey, reliability analysis was conducted based on the scores derived from each clip and four clips combined. The variables analysed were the 12 items in the Likert scale, and the data were the average scores of the 12 item from each respondent. The total sample size was 158. Internal consistency is used to judge the consistency of results across items on the same test. The smaller this variability (or stronger the correlation), the greater the internal consistency reliability of this survey instrument. One of the most commonly used indicators of internal consistency is the Cronbach alpha coefficient. Ideally, the Cronbach alpha coefficient should be above 0.7. The results show that the Cronbach alpha coefficient of the Clip 1 scale was 0.90, the Clip 2 scale, 0.89 , the Clip 3 scale, 0.90, the Clip 4 scale, 0.90, and the scale of four clips combined, 0.94, suggesting very good internal consistency reliability for the scales used in the survey.

Quantitative Analysis of Likert-scale Items

The scores of each item in the Likert scale were summed up and averaged for the analysis of the eight clips the respondents watched. Four sets of scores were from Group A, and four from Group B (see Appendix B). The Likert scores were rounded up to one decimal place, because this combines statistical sensitivity (hence at least one decimal place) with the fact that Likert numbers actually represent roughly-defined categories (hence finer distinctions than one decimal place have no real-world meaning). The average scores of the eight clips on all 12 items combined were very similar, ranging from the lowest 3.8 (Travel1 (min) and Travel2 (max)) to the highest 4.0 (Doc2 (max) and Doc2 (min)). Hence, their difference was merely 0.2. This seems to suggest that the addition/omission of connectives did not affect how the respondents scored the four clips they watched. Moreover, the difference between the highest and lowest scores of each questionnaire item was mostly not significant, and the consensus was so big that the maximum difference on any question within a group was 0.5 (see Table 9).

Table 9:

Lowest-highest score difference by groups

Item	Group A	Group B
1. Concise	0.3	0.2
2. Understandable	0.1	0.2
3. Complete	0.0	0.1
4. Processing effort	0.2	0.2
5. Major info	0.1	0.1
6. Subtle meaning	0.1	0.5
7. Style	0.1	0.3
8. Speed	0.1	0.3
9. Length	0.1	0.3
10. Connection	0.1	0.2
11. Fluency	0.1	0.3
12. Overall quality	0.1	0.1
Average	0.1	0.2

Furthermore, in order to further investigate and answer the research questions of the reception study, these findings were tested statistically. The results of the tests will be discussed next.

T-tests

In order to answer the research question of whether and how the addition/omission of connectives in subtitles affects audience comprehension, one first needs to check whether inter-group differences might have disrupted the findings. Hence, all the scores of Group A and Group B were combined respectively. In order to find out whether there is a significant difference between the mean scores of Group A and Group B, an independent-samples t-test was conducted. The results show that there was no significant difference between the mean scores of Group A ($M = 3.92$) and Group B ($M = 3.87$): t (156) = 0.78, $p = 0.44$ (see Table 10). That is, Group A and Group B did not differ significantly in terms of how they scored the clips they watched.

Table 10:

Independent samples statistics

	Mean	Std. Deviation	N
Group A	3.92	0.42	75
Group B	3.87	0.39	83

Then, in order to find out whether the addition/omission of connectives affects audience comprehension, the scores of max and min clips of documentaries and travel programmes were combined. Travels (max) and Docs (max) were combined to become a new variable "Max" to represent the average score of all clips with a maximum amount of connectives, and Travels (min) and Docs (min) were combined to become "Min" to represent the average score of all clips with a minimum amount of connectives. With the two new variables, a paired-samples t-test was conducted to evaluate whether there was a statistically significant difference between their mean scores. Table 11 shows the means and standard deviations of the variables in the test.

Table 11:

Paired samples statistics

		Mean	Std. Deviation	N
Pair	Max	3.90	0.43	158
	Min	3.90	0.44	158

There was no significant difference between the scores of the Max clips (M = 3.90) and the Min clips (M = 3.90): t (157) = 0.19, p = 0.85. Thus, it may be concluded that the addition/omission of connectives does not seem to affect the comprehension of subtitles.

Despite the lack of overall significant difference between the Max clips and the Min clips, it is worth investigating individual items to shed light on whether

there was significant difference on important items such as understandability and overall quality between the max and min clips. Thus, the average item-by-item scores and score differences between the max and min clips for each questionnaire item are shown in Table 12.

Table 12:

Max vs. Min, by item

Item	Max	Min	Max-Min Score
1. Concise	3.9	3.9	0
2. Understandable	3.9	3.9	0
3. Complete	4.0	3.9	0.1
4. Processing effort	4.0	4.0	0
5. Major info	4.0	4.0	0
6. Subtle meaning	3.8	3.8	0
7. Style	3.8	3.7	0.1
8. Speed	3.8	3.8	0
9. Length	3.8	3.9	-0.1
10. Connection	3.7	3.7	0
11. Fluency	3.9	4.0	-0.1
12. Overall quality	4.1	4.1	0
Average	3.9	3.9	0

As Table 12 shows, all score differences between the max and min clips are less than 0.1; none were statistically significant. This seems to suggest that there was no difference on various quality indicators, including comprehensibility.

Discussion

The results of the present study show that the respondents seemed to have no particular preference between the max clips and the min clips. In other words, the addition/omission of connectives did not make the clips watched by the respondents easier or more difficult to comprehend. But why didn't the addition/omission of connectives seem to have effect on the respondents' perception of the subtitles? This may be explained by several contextual factors mentioned in Section 2.3, and they will be further discussed in the following section.

Communicative Context

First, the present study tries to explain how the respondents made sense of what they read when most connectives were absent from the perspective of the communicative context formed by three register variables: field, tenor and mode.

The first element in the communicative context is field. At its simplest, field refers to subject matter or content of the specific language event. Broadly speaking, it involves physical circumstances surrounding a speech event, such as time and place. In terms of language function, the ideational elements represented by field are usually encoded in language used to convey information, ideas or experience, e.g. nouns and verbs. In the context of subtitling, the elements included in field are mostly translated word by word. In the present study, the ideational elements in the source text were mostly translated without undergoing additions or omissions in the target texts. Consequently, the ideation or content of the source text was not lost in the subtitling process. This may explain why the respondents were able to make sense of what they read when connectives were absent. Thus, it may be initially concluded that field forms the most important part of context in subtitling, and as long as it is not lost in subtitling, the audience may make sense of what they read even if there are some omissions in the subtitles relating to other elements of the context.

The second element of the communicative context is tenor. To put it simply, tenor refers to the relationship between the speaker and the hearer, which in turn determines the degree of formality (formal or informal). In terms of language function, the interpersonal elements represented by tenor are usually expressed in language to establish relationship, which include phatic expression (e.g. *You are welcome* and *How are you?*), terms of address (e.g. s*ir* and *madam*),

emotional exclamations (e.g. *ah* and *wow*), and modality (e.g. *may* and *should*). The results of the reception study show that, although the interpersonal elements like *oh* and *yeah* in the source text were mostly omitted in the target texts, the respondents' comprehension of subtitles was not affected, because they could hear the speaker's voice and see his/her facial expression. Thus, it may be initially concluded that tenor or the interpersonal elements form a less important part of context in subtitling, and the audience may make sense of what they read even if the interpersonal elements are lost in subtitling. Nonetheless, because of the loss of the interpersonal elements, the subtitles appeared to be more formal in style than the source text, which in turn results in shift in tenor from informal to formal. However, this shift may not hinder audience comprehension since the semiotic factors (e.g. picture and sound) may compensate for what was lost in the subtitles.

Finally, mode refers to the symbolic organisation of the situation, which includes the channel/medium used to convey the message (Halliday and Hasan, 1985, p. 12). The discourse of subtitling is characterised by a crossover between speech and writing, and some spoken features such as fragments and repetitions tend to be omitted in the subtitling process. In terms of language function, mode is related to the textual function of language that is partly realised through cohesion (the way the text hangs together lexically, including the use of anaphoric reference and connectives). In the present research, the subtitles appeared to be more "written" than the source text due to the omission of some spoken features, which in turn leads to shift in mode from spoken to written. Nevertheless, as the results of the reception study show, the addition/omission of connectives did not affect the respondents' comprehension of subtitles. Thus, it may be concluded that mode and tenor form a less important part of context in subtitling than field.

To sum up, field, tenor, and mode form the communicative context in subtitling, but their importance varies. As discussed above, it seems that if field is preserved in the subtitling process, the audience may make sense of the subtitles with some omissions. As a result, it may be concluded that from the perspective of the audience, field is more important than tenor and mode in subtitling, because the latter two may be supported by semiotic features such as picture and sound.

Pragmatic Context

The results of the audience reception study show that the respondents seemed to be able to make sense of the subtitles with most connectives omitted. The results may be explained by the Gricean maxim of relevance as discussed in Section 2.3. Relevance is the most important feature of successful communication. In a broader sense, relevance means that each sentence must be relevant to an underlying topic and to the context, which in turn leads to coherence in the mind of the receiver and successful comprehension. Thus, from the perspective of the subtitlers, the principle of relevance may be used as a guideline to decide what is not relevant or redundant to the audience, and hence can be omitted without affecting the audience's comprehension process.

Furthermore, relevance refers to the aim to achieve maximum benefit at minimum processing cost as asserted by Sperber and Wilson (1986) in Relevance Theory. As they suggest, the degree of relevance is determined by contextual effects and processing effort. The greater the contextual effects, the greater the relevance; the smaller the effort needed to achieve those effects, the greater the relevance. In order to achieve optimal relevance in subtitling, the subtitler must omit or reduce a word or information in the original if the word or the information does not increase benefit but incurs processing costs. As the audience is reading, viewing, and listening at the same time, reducing these costs is crucial. According to the results of the reception study, connectives did not seem to increase benefit to the audience, and their omission did not seem to affect the comprehension process. In other words, omitting them means reducing processing cost without detracting from benefit. Consider the following example taken form *Globe Trekker: Vienna City Guide*:

a. Original clip:
Source text:
> What it is, they scattered the rest of the body parts around the city, so the Hapsburg's worshippers could go to different parts of the city, because if they all came here it would get really crowded. So, if you're, like, a bowel worshipper, obviously you come here. If you're into the hearts, you go about five minutes that way.

Subtitles:

遺體其他部分存放在維也納各處

要祭拜哈布斯堡皇族的人 // 可到不同的地方

因為如果大家全來這裡那會太擁擠

因此要祭拜內臟就來這裡

要祭拜心臟就往那邊走 5 分鐘

b. Max clip:

而遺體其他部分存放在維也納各處

因此要祭拜哈布斯堡皇族的人 // 可到不同的地方

因為如果大家全來這裡的話會太擁擠

因此要祭拜內臟就來這裡

如果要祭拜心臟就往那邊走 5 分鐘

c. Min clip:

遺體其他部分存放在維也納各處

要祭拜哈布斯堡皇族的人 // 可到不同的地方

大家全來這裡會太擁擠

要祭拜內臟來這裡

祭拜心臟往那邊走 5 分鐘

In this example, there are three connectives (" 因 為 ", " 如 果 ", and " 因 此 ") in the original subtitles, while there are six in the max clip (" 而 ", " 因此 ", " 因 為 ", " 如 果 ", " 因 此 ", and " 如 果 ") and none in the min clip. Despite the difference in the amount of connectives and cohesiveness between the max clip and the min clip, the content and information contained in the original text remained intact in both clips. For example, all the content words (i.e. nouns and verbs), such as "body parts", "the city", "Hapsburg's worshippers", "come", and "go", were kept in both clips. Consequently, it may not be difficult for the respondents to figure out the general idea of these subtitles, even though the logical connection between the sentences in the min clip might not be as clear as that of the max clip. Furthermore, it may be argued that the respondents may not find subtitles explicitly marked with connectives easier to understand, because greater explicitness may be counterbalanced by greater cognitive effort needed to process them. That is, the addition of connectives in the max clip may distract the respondents from effective non-verbal information (i.e. picture and sound) characteristic of subtitling. Therefore, to achieve communication

in an economical way is important in subtitling, in which the subtitler should strive to achieve highest readability with the least words in subtitles. However, the subtitler must take a potentially variable audience into consideration upon deciding what and how much to reduce.

According to the cooperative principle proposed by Grice (1975), if the speaker's utterance seems irrelevant or redundant, the hearer will, based on the assumption of cooperation, seek to construct a sequence of inferences. As Brown and Yule (1983) point out, coherence of a text derives not so much from the presence or absence of formal linguistic links such as connectives, but from the interpretation of the reader, who readily fills in any missing links as required. As the results of the audience reception study show, the respondents seemed to follow the cooperative principle and make an effort to interpret the relationships between ideas and units of talk despite the fact that these ideas were not connected. However, the degree and success of cooperation may be determined by several factors concerning the audience.

First, background knowledge may also play an important role in the interpretation made by the audience. Inferences made by the reader are partly based on his/her knowledge of the world. As a result, whether the audience is familiar with the topic or subject matter of a film may partly determine whether they can make sense of what they read at the bottom of the screen. The participants in the audience reception study were undergraduate and postgraduate students who were taught the history of Rome and the life of Julius Caesar when they were in senior high school. Consequently, this kind of knowledge might help them understand the clips they watched even if there were some omissions in the subtitles.

Second, reading purposes will determine the depth of text processing since it is not the same to read for pleasure, for information, for an examination, etc. In the audience reception study, the participants were asked to answer the questions after watching the clips, so their reading purpose was more for information than for pleasure. As a result, they might make more efforts in processing the information they got from the clips and interpreting the relationships between ideas and units of talk even if these ideas were not connected.

Third, English proficiency may also play a role in the comprehension of subtitles, especially in Taiwan where many people learn English. As all participants of the reception study have studied English for many years, it is reasonable to assume that it may help them understand what they watched when

most of the connectives were omitted. Finally, reading speed, personal interests, and educational background may also determine the degree of cooperation from the audience and contribute to the outcome of the audience reception study. For example, if the viewers can read subtitles fast, they will have more time to process information coming from picture and sound.

In conclusion, as the results of the reception study show, successful comprehension of subtitles requires the interpretation of subtitles beyond the word and sentence level on the part of the audience. From a pragmatic perspective, subtitling is a type of sense-for-sense translating, which is in-between of literal and free translation, and the sense here may refer to the sense made by the audience based on their knowledge of the world.

Semiotic Context

In addition to linguistic and semantic factors, non-linguistic factors play an important role in subtitling. As the results of the audience reception study show, even if connectives in the source texts were mostly deleted in the target texts, which in turn led to a lower level of cohesion in the target texts, the respondents seemed to have no problems comprehending the subtitles they read. From the perspective of extralinguistic factors, image and sound may make up what is lost or remained untranslated in subtitles. In a broader sense, image in subtitling may include captions (e.g. title of a programme) and signs (e.g. a road sign) on screen as well as body language (e.g. gestures and posture) and facial expressions. For example, a smile on the face may suggest approval of something. In addition, a monument like Eiffel Tower reminds people of where things happened. Consequently, there is some truth to the notion that a picture is worth a thousand words in subtitling.

Furthermore, sound conveys a lot of information that cannot be conveyed by words. The scope of sound may include music (e.g. slow and fast), background noises (e.g. car horn), voice (e.g. loud and weak), vocal effects (e.g. giggling, coughing, and throat clearing), intonation, and voiceless hesitation and pauses. All the sound and noises are revealing and make up the semiotic context in subtitling. For example, by varying the intonation, speakers can convey different moods and attitudes of surprise and nervousness, which creates emotion and meaning where the image alone cannot and helps the audience interpret the meaning of the speakers' word.

Moreover, in terms of technical aspects in subtitling, one of the possible reasons for the results of the audience reception study may be that punctuation marks such as commas in the subtitles are sometimes used as a conjunctive device. For example, a connective may be omitted and replaced with a comma between sentences. To illustrate, consider the following examples:

Original: It seated 50,000 and was built from concrete.

Subtitles: 它有 5 萬個座位 , 以混凝土建造而成

The connective *and* between sentences in the original was replaced with a comma in the subtitles, but coherence was maintained from the perspective of the Chinese subtitles, because this is an effect of subtitling conventions per se allowing a more telegraphic style. Also, Chinese is more tolerant than English of parallel phrases joined by a comma.

Another possible explanation for the successful comprehension of subtitles without connectives is the format of the subtitles including the insertion of line breaks according to sense blocks. The example below illustrates how line breaks serve as a cohesive device like a connective:

Original: Careful not to repeat Houston's mistake, this roof would slide

back so that pitch would thrive, or so they thought.

Subtitles: 為了不重蹈休士頓的覆轍 // 其屋頂會滑開 , 好讓草地生長至

少他們是這麼認為

The original was separated into two lines, and the connective or was replaced by the line break between sentences. However, coherence was preserved between individual subtitles. In conclusion, subtitling is characterised by semiotic complexity in which different sign systems interact with each other to create a coherent story (Díaz Cintas and Remael, 2007, p. 45). Consequently, even if subtitles are reduced linguistically due to temporal and spatial constraints, what is lost may be compensated by the rich semiotic elements in subtitling.

Conclusion

In conclusion, the comprehension of subtitles may rely on the context consisting of communicative transaction, pragmatic action, and semiotic interaction.

Moreover, it may be argued that the semiotic interaction is the most important dimension of the three in subtitling, because it has richer semiotic elements (e.g. image and sound) than other translating activities. In addition, the semiotic factors that constrain the subtitlers in the translating process in the beginning help the audience with their comprehension of subtitles in the end. According to the results of the reception study that the respondents seemed to be able make sense themselves, it may be concluded that the rich contextual elements may make up what is lost in the subtitles, which in the present study refers to the omission of connectives.

Moreover, it may be concluded that reduction in subtitling is something of a necessary evil. One of the reasons for this is that viewers cannot read as quickly as they can listen, so they need sufficient time to read what is written on screen. In addition, the viewers need to watch the action on screen and listen to the soundtrack, so they need enough time to read, watch, and listen at the same time. Consequently, the subtitler needs to eliminate details and irrelevant information for readability at a glance.

In addition, the results of the present study seem to suggest that the addition of connectives had little effect on the readability of the subtitles. To be more specific, the use of more connectives did not positively or negatively affect audience comprehension. As a result, it may be argued that in the context of subtitling, which is constrained by time and space, the addition of connectives is redundant, and the omission of connectives may in turn help the viewers focus on important information and the interaction of image, sound and subtitles. Therefore, it may be further concluded that subtitling is in essence a type of gist translation in which what is lost may be complemented by semiotic interaction of image and sound.

Implications of the Study

The findings of this study have a number of implications for subtitling. To begin with, this study has thrown new light on reduction in subtitling and its effect on audience comprehension. The findings show that the addition and omission of connectives have no effect on the audience's comprehension of subtitles. This suggests that comprehension in subtitling takes place from the macro structure of the text, which includes extra-textual elements such as picture and sound, rather than from the micro level of the word and sentence.

Furthermore, the present study has tried to explain how audience com-

prehension is achieved in subtitling by adopting a contextual approach. First, register plays an important role in the communicative dimension of context, because subtitling may entail a shift of register variables: field, tenor and mode may be shifted due to some omissions. Second, in the pragmatic dimension of context, successful comprehension may be achieved by following the pragmatic principle of relevance on the part of the subtitler and the audience. Third, the semiotic dimension of context may account for audience comprehension in subtitling with its extralinguistic factors such as image and sound. It is hoped that this contextual framework will provide an impetus for further research in subtitling.

Finally, the findings of this study have important implications for the teaching and assessment of subtitling, because the importance of contextual features of subtitling is often ignored. Trainee subtitlers are usually taught the need for reduction in subtitling, but what is more important is that they need to learn what makes good-quality reduction. As a result, this study could be useful to the trainees and trainers by providing a better understanding of the contextual factors in subtitling mentioned above.

Limitations of the Study

There are some limitations on the methodology of the audience reception study. The use of negatively-worded items in the Likert scale questionnaire was intended to encourage the respondents to think about every item carefully, but it did not turn out as expected. It seemed that negatively worded items the Chinese questionnaire may not be understood by the respondents if they did not notice the nuance of the wording, because the negative words (e.g. "沒有" [mei-you]) in the Chinese questionnaire may not be as clear-cut and distinct as those (e.g. "not") in the English questionnaire. As the questionnaire survey of the study shows, several respondents in the study were not aware of the negative words and answered some of negatively-worded questionnaire items in the opposite way. Consequently, it is advised that when it comes to designing a Chinese questionnaire, the use of negatively-worded items should be avoided or at least highlighted.

Furthermore, a comprehension test may be needed to test whether the respondents truly understood what they watched. However, one of the concerns was that the test may turn out to be a test on the memory ability of the respondents instead of the readability of the subtitles if the test asks some details mentioned in the programmes, such as what event takes place in which year by

whom at which place under what kind of circumstances. Moreover, the audience reception study was mainly designed to investigate global but not detailed comprehension of the subtitles. As a result, it may be worthwhile investigating how detailed comprehension interacts with global comprehension in future studies to shed extra light on how comprehension is achieved in subtitling.

Finally, in terms of sampling, the respondents of the audience reception study were all university and postgraduate students. They were selected because they were translation majors, who might pay more attention to the quality of subtitles than those non-translation majors, and it was easier to obtain a large sample size at a school with audiovisual equipment. However, they may not be able to represent all of the audience who watch the Discovery Channel. Moreover, the respondents may prefer certain subject matter, so the results may not reflect the quality of the subtitles, but their own preference. Furthermore, expertise, educational background, reading speed, personal interests, and English proficiency may also lead to different results. For example, professional subtitlers and translation trainees may hold different views on the quality of subtitles. Thus, it is recommended that future research should encompass professional subtitlers and the audience who regularly watch the programmes that the research tries to study.

Recommendations for Future Research

The present study was designed to investigate reduction of subtitling from the perspective of context, and several issues were identified during the discussion of the results of the present study. Firstly, as the present study suggests, more larger-scale audience reception studies on other genres (e.g. drama, movies, and sitcoms) are needed to further investigate whether and how reduction in subtitling may affect overall comprehension of the audience. Moreover, in addition to connectives investigated in the present study, the role of cohesive devices such as reference, repetition, ellipsis, and lexical cohesion as well as paralanguage in subtitling may be worth investigating too.

Second, it was found that the reduction is inevitable and seemingly justified in subtitling. The tendency to omit and condense the source language is also found in interpreting activities such as consecutive and simultaneous interpreting as they are constrained by time. Thus, it may be worth investigating whether any of the methods and approaches used in this study might shed light on strategies and audience understanding in interpreting.

Lastly, in studying the complex process of translating, as suggested by Hatim and Mason (1990, p. 1), "we are in effect seeking insights which take us beyond translation itself towards the whole relationship between language activity and the social context in which it takes place". Hence, it may be worthwhile to further explore the notion of context proposed by them and its application in translating and interpreting in order to provide a more comprehensive theoretical framework for the teaching, assessment, and study of translating and interpreting as well as subtitling.

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Appendix A: Chinese Questionnaire

電視字幕翻譯品質
問卷調查

I. 基本資料 (請打勾或填寫答案)

1. 年級 :　☐ 大學一年級　　☐ 大學二年級　　☐ 大學三年級
　　　　　☐ 大學四年級　　☐ 研究生一年級　　☐ 研究生二年級

2. 就讀科系 :_____

3. 你是否上過影片翻譯的課程？
　☐ 是　　　　　　　　　　　☐ 否

4. 你是否做過影片翻譯的工作？(包括任何有關電影 , 電視 , 錄影帶的字幕翻譯)
　☐ 是 (請繼續回答下一題)　　☐ 否 (請跳至第 6 題作答)

5. 你做過幾小時或幾年的影片翻譯工作？是何種影片翻譯工作？
　_____

6. 你平常觀看何種有中文字幕的英文電視節目 ?(可複選)
　☐ 電影 (例如 :HBO,Cinemax)
　☐ 紀錄片 (例如 :Discovery 頻道 , 國家地理頻道)
　☐ 旅遊節目 (例如 : 旅遊生活頻道)
　☐ 野生動物節目 (例如 : 動物星球頻道)
　☐ 電視影集 (例如 :「六人行」,「CSI 犯罪現場」)
　☐ 我從不看有中文字幕的英文電視節目
　☐ 其他 (請說明): _____

7. 你每週平均觀看幾小時有字幕的英文電視節目？

　　□ 0 小時　　　　　□ 不到 1 小時　　　□ 1-2 小時

　　□ 3-4 小時　　　　□ 5-6 小時　　　　□ 7-8 小時

　　□ 8 小時以上 (請說明): _____

8. 你覺得自己的英文聽力如何？

　　□ 很好　　□ 好　　□ 普通　　□ 差　　□ 很差

9. 當你觀看英文電視節目時，中文字幕對你瞭解節目內容有多重要？

　　□非常重要　　□重要　　□普通　　□不重要　　□完全不重要

　　9a. 請說明選擇此答案的原因: _____

　　_____

10. 你認為一般而言英文電視節目的字幕翻譯品質如何？

　　□ 很好　　□ 好　　□ 普通　　□ 差　　□ 很差

11. 你看過 Discovery 頻道的節目嗎?(該頻道以播放紀錄片為主)

　　□ 是 (請繼續回答下一題)　　　□ 否 (請跳至第 15 題作答)

12. 你為何觀看該頻道節目 ?(可複選)

　　□ 獲取新知　　　　□ 學習語言　　　　□ 娛樂

　　□ 其他 (請說明):_____

13. 你會注意該頻道節目的字幕翻譯品質嗎？

　　□會 (請繼續回答下一題)　　　□不會 (請跳至第 15 題作答)

14. 你認為 Discovery 頻道節目的字幕翻譯品質如何？

　　□很好　　　□好　　　□普通　　　□差　　　□很差

15. 你看過旅遊生活頻道的節目嗎?(該頻道以播放旅遊美食節目為主)

　　□是 (請繼續回答下一題)　　　□否 (請跳至第 19 題作答)

16. 你為何觀看該頻道節目 ?(可複選)

　　□獲取新知　　　　　　□學習語言　　　　　□娛樂

　　□其他 (請說明)：_____

17. 你會注意該頻道節目的字幕翻譯品質嗎？

　　□會（請繼續回答下一題）　　　□不會（請跳至第 19 題作答）

18. 你認為旅遊生活頻道節目的字幕翻譯品質如何？

　　□很好　　□好　　□普通　　□差　　□很差

19. 在下列電視字幕翻譯標準中，你認為各項標準的重要程度為何？
　　（請勾選）

	非常重要	重要	普通	不重要	完全不重要
a. 文意清楚 Clarity	□	□	□	□	□
b. 辭意正確 Accuracy	□	□	□	□	□
c. 用字精簡 Concision	□	□	□	□	□
d. 文字流暢 Fluency	□	□	□	□	□
e. 忠於原文 Faithfulness	□	□	□	□	□
f. 邏輯連貫 Coherence	□	□	□	□	□
g. 原意完整 Completeness	□	□	□	□	□
h. 容易閱讀 Readability	□	□	□	□	□
i. 用詞恰當 Diction	□	□	□	□	□
j. 字幕速度適中 Speed	□	□	□	□	□

　　19a. 除了上列項目之外，若你認為還有其他標準也很重要，請說明：

　　　　_____

　　　　_____

II. 對第一段影片的看法 (請打勾或填寫答案)

請在第 1-12 題中勾選適當的答案	非常同意	同意	普通	不同意	非常不同意
1. 我認為字幕很簡潔。	☐	☐	☐	☐	☐
2. 我認為字幕很難看得懂。	☐	☐	☐	☐	☐
3. 我認為字幕太精簡 , 沒有完整傳達英文原意。	☐	☐	☐	☐	☐
4. 我可以馬上理解字幕的意思 , 而不需花太多時間思考。	☐	☐	☐	☐	☐
5. 我認為字幕沒有遺漏任何重要的訊息 (information)。	☐	☐	☐	☐	☐
6. 我認為字幕沒有遺漏任何細微的英文語意 (meaning)。	☐	☐	☐	☐	☐
7. 我認為字幕的措辭沒有貼切反映英文節目的型態和風格。	☐	☐	☐	☐	☐
8. 我認為字幕速度太快 , 來不及看。	☐	☐	☐	☐	☐
9. 我認為字幕太冗長 , 使我無法立刻瞭解字幕的意思。	☐	☐	☐	☐	☐
10. 我認為句子之間的連結 (connection) 不是很明顯。	☐	☐	☐	☐	☐
11. 我認為整體而言字幕十分流暢 , 沒有不連貫的感覺。	☐	☐	☐	☐	☐
12. 我認為整體而言字幕的品質很好。	☐	☐	☐	☐	☐

13. 在看這段影片前 , 你對「維也納」有任何瞭解嗎？如果有的話 , 這對你瞭解這段影片的內容有幫助嗎？

　　＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

　　＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

14. 你認為這些字幕有遺漏任何訊息嗎？如果有的話 , 請說明：

　　＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

　　＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

15. 你認為這些字幕是否流暢連貫？如果不是的話，請說明你注意到哪些問題：

_____

_____

16. 你認為這些字幕是否有任何其他需要改進的地方？如果有的話，請說明：

_____

_____

III. 對第二段影片的看法 (請打勾或填寫答案)

請在第 1-12 題中勾選適當的答案	非常同意	同意	普通	不同意	非常不同意
1. 我認為字幕很簡潔。	☐	☐	☐	☐	☐
2. 我認為字幕很難看得懂。	☐	☐	☐	☐	☐
3. 我認為字幕太精簡 , 沒有完整傳達英文原意。	☐	☐	☐	☐	☐
4. 我可以馬上理解字幕的意思 , 而不需花太多時間思考。	☐	☐	☐	☐	☐
5. 我認為字幕沒有遺漏任何重要的訊息 (information)。	☐	☐	☐	☐	☐
6. 我認為字幕沒有遺漏任何細微的英文語意 (meaning)。	☐	☐	☐	☐	☐
7. 我認為字幕的措辭沒有貼切反映英文節目的型態和風格。	☐	☐	☐	☐	☐
8. 我認為字幕速度太快 , 來不及看。	☐	☐	☐	☐	☐
9. 我認為字幕太冗長 , 使我無法立刻瞭解字幕的意思。	☐	☐	☐	☐	☐
10. 我認為句子之間的連結 (connection) 不是很明顯。	☐	☐	☐	☐	☐
11. 我認為整體而言字幕十分流暢 , 沒有不連貫的感覺。	☐	☐	☐	☐	☐
12. 我認為整體而言字幕的品質很好。	☐	☐	☐	☐	☐

13. 在看這段影片前,你對「葡萄牙」有任何瞭解嗎?如果有的話,這
對你瞭解這段影片的內容有幫助嗎?

_____

_____

14. 你認為這些字幕有遺漏任何訊息嗎？如果有的話，請說明：

_____
_____

15. 你認為這些字幕是否流暢連貫？如果不是的話，請說明你注意到哪些問題：

_____
_____

16. 你認為這些字幕是否有任何其他需要改進的地方？如果有的話，請說明：

_____
_____

17. 就整體字幕品質而言，你認為這段影片與前一段「維也納」影片何者比較好？為什麼？

_____
_____

IV. 對第三段影片的看法 (請打勾或填寫答案)

請在第 1-12 題中勾選適當的答案	非常同意	同意	普通	不同意	非常不同意
1. 我認為字幕很簡潔。	☐	☐	☐	☐	☐
2. 我認為字幕很難看得懂。	☐	☐	☐	☐	☐
3. 我認為字幕太精簡 , 沒有完整傳達英文原意。	☐	☐	☐	☐	☐
4. 我可以馬上理解字幕的意思 , 而不需花太多時間思考。	☐	☐	☐	☐	☐
5. 我認為字幕沒有遺漏任何重要的訊息 (information)。	☐	☐	☐	☐	☐
6. 我認為字幕沒有遺漏任何細微的英文語意 (meaning)。	☐	☐	☐	☐	☐
7. 我認為字幕的措辭沒有貼切反映英文節目的型態和風格。	☐	☐	☐	☐	☐
8. 我認為字幕速度太快 , 來不及看。	☐	☐	☐	☐	☐
9. 我認為字幕太冗長 , 使我無法立刻瞭解字幕的意思。	☐	☐	☐	☐	☐
10. 我認為句子之間的連結 (connection) 不是很明顯。	☐	☐	☐	☐	☐
11. 我認為整體而言字幕十分流暢 , 沒有不連貫的感覺。	☐	☐	☐	☐	☐
12. 我認為整體而言字幕的品質很好。	☐	☐	☐	☐	☐

13. 在看這段影片前，你對「凱撒大帝」有任何瞭解嗎？如果有的話，這對你瞭解這段影片的內容有幫助嗎？

_____

_____

14. 你認為這些字幕有遺漏任何訊息嗎？如果有的話，請說明：

_____

_____

15. 你認為這些字幕是否流暢連貫？如果不是的話，請說明你注意到哪些問題：

_____

_____

16. 你認為這些字幕是否有任何其他需要改進的地方？如果有的話，請說明：

_____

_____

V. 對第四段影片的看法 (請打勾或填寫答案)

請在第 1-12 題中勾選適當的答案	非常同意	同意	普通	不同意	非常不同意
1. 我認為字幕很簡潔。	☐	☐	☐	☐	☐
2. 我認為字幕很難看得懂。	☐	☐	☐	☐	☐
3. 我認為字幕太精簡 , 沒有完整傳達英文原意。	☐	☐	☐	☐	☐
4. 我可以馬上理解字幕的意思 , 而不需花太多時間思考。	☐	☐	☐	☐	☐
5. 我認為字幕沒有遺漏任何重要的訊息 (information)。	☐	☐	☐	☐	☐
6. 我認為字幕沒有遺漏任何細微的英文語意 (meaning)。	☐	☐	☐	☐	☐
7. 我認為字幕的措辭沒有貼切反映英文節目的型態和風格。	☐	☐	☐	☐	☐
8. 我認為字幕速度太快 , 來不及看。	☐	☐	☐	☐	☐
9. 我認為字幕太冗長 , 使我無法立刻瞭解字幕的意思。	☐	☐	☐	☐	☐
10. 我認為句子之間的連結 (connection) 不是很明顯。	☐	☐	☐	☐	☐
11. 我認為整體而言字幕十分流暢 , 沒有不連貫的感覺。	☐	☐	☐	☐	☐
12. 我認為整體而言字幕的品質很好。	☐	☐	☐	☐	☐

13. 在看這段影片前，你對「運動場」有任何瞭解嗎？如果有的話，這對你瞭解這段影片的內容有幫助嗎？

_____

_____

14. 你認為這些字幕有遺漏任何訊息嗎？如果有的話，請說明：

_____

_____

15. 你認為這些字幕是否流暢連貫？如果不是的話，請說明你注意到哪些問題：

_____

_____

16. 你認為這些字幕是否有任何其他需要改進的地方？如果有的話，請說明：

_____

_____

17. 就整體字幕品質而言，你認為這段影片與前一段「凱撒大帝」影片
何者比較好？為什麼？

_____

_____

18. 就這四段影片而言，你認為哪段影片的整體字幕品質比較好？為什
麼？

_____

_____

Appendix B:
Average scores of 8 clips for each item

		Group A (75)				Group B (83)		
No. Item		Travel1 (max)	Travel2 (min)	Doc1 (min)	Doc2 (max)	Travel1 (min)	Travel2 (max)	Doc1 (max)	Doc2 (min)
1.	Concise	4.1	3.8	3.9	4.0	3.9	3.8	3.8	4.0
2.	Understandable	4.0	3.9	4.0	4.0	3.9	4.0	3.8	3.9
3.	Complete	4.0	4.0	4.0	4.0	3.9	4.0	4.0	3.9
4.	Processing effort	4.1	3.9	4.0	4.0	3.9	3.9	3.9	4.1
5.	Major info	3.9	4.0	4.0	4.0	4.0	4.0	3.9	4.0
6.	Subtle meaning	3.7	3.8	3.8	3.8	3.5	3.9	3.8	4.0
7.	Style	3.9	3.8	3.8	3.8	3.7	3.7	3.9	3.6
8.	Speed	3.8	3.8	3.8	3.9	3.7	3.8	3.8	4.0
9.	Length	3.9	3.9	3.9	4.0	3.8	3.7	3.8	4.0
10.	Connection	3.7	3.7	3.7	3.8	3.6	3.7	3.7	3.8
11.	Fluency	3.9	4.0	4.0	4.0	3.8	3.8	3.9	4.1
12.	Overall quality	4.1	4.1	4.1	4.2	4.0	4.0	4.0	4.1
Average		**3.9**	**3.9**	**3.9**	**4.0**	**3.8**	**3.8**	**3.9**	**4.0**