Target Language Subtitles for Comprehensible Film Language Input

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Several studies concerning film subtitles have demonstrated support to the use of subtitles; however, whether to apply the first (L1) or the target language (L2) subtitles as a better option remains unclear. Some studies suggested the presence of L1 subtitles assisted learners' understanding of the target language films while others found the L2 subtitles more beneficial (Baltova, 1994 & 1999; Guichon & McLornan, 2008; Markham et al., 2001; Stewart & Pertusa, 2004). In addition, previous studies tended to focus more on learners' comprehension of film stories rather than the aural language itself. With the attempt to uncover which subtitled language might lead to better comprehensible film language input, this study compared the effectiveness of watching films without subtitles, with the L1 subtitles (Chinese), and with the L2 subtitles (English) in regard to learners' understanding of the words and phrases presented in a film extract. One hundred and twenty-eight Chinese EFL learners were divided into three groups with homogeneous listening proficiency (F = 0.011, P = 0.989). Each group respectively watched the film extract under the no-subtitle, the L1 subtitle or the L2 subtitle conditions. Then two learners from each group engaged in a retrospective report of their film watching process for more in-depth observations. The ANOVA results showed a significant difference among the groups (F = 3.417, P < 0.05). Post hoc analysis further revealed that the L2 subtitle group significantly outperformed the no-subtitle group (P < 0.05). Furthermore, the retrospective reports indicated the interference of the L1 subtitles during the aural language comprehension process. This study suggests that L2 subtitles are more effective in assisting learners' comprehension of the aural language presented in films.

Results of second language studies have shown that films are valuable sources and motivating media of language from which students can acquire a target language. Films encompass various important listening situations and demonstrate paralinguistic features which contextualize the spoken discourse so as to facilitate comprehension

(Bowen, 1982; Lonergan, 1984; Markham et al, 2001, Tomalin, 1986). Films, on the other hand, weave ample authentic use of language (Grellet, 1981; Rixon, 1986). When learners are exposed to films, they could learn some words as well as phrases used in the films and ultimately improve their target language. Besides being sound sources of languages, with the audio and visual stimuli, researchers found films motivating. Various types of films, such as fiction, science-fiction, romance, horror and historical movies, catch individuals' interests and arouse learners' motivation (Lonergan, 1984). Watching films is among learners' favorite activities (Chen, 2003). As learners who lack interest in learning a second language can often fail to make progress, films of various types that arouse different individual's interests can be adopted as language learning materials.

Several studies have investigated the application of films in classroom in the past decade. Some researchers focused on pre-listening supports and found pre-teaching vocabulary and previewing questions which were provided by teachers helpful in fostering learners' listening comprehension of L2 videotapes (eg. Chung, 2002). Some researchers compared the presence and absence of subtitles. One study revealed that the learners interacted more frequently when the subtitles were provided in the multimedia listening class (Grgurovic & Hegelheimer, 2007). However, one other study demonstrated that learners found the subtitles distracting (Taylor, 2005).

In addition to these studies, other researchers further compared the absence of subtitles along with the use of L1 and L2 subtitles. The results tended to be inconclusive due to the fact that some studies suggested the presence of L1 subtitles assist learners' understanding of the target language films while others found the L2 subtitles more beneficial (Baltova, 1994 & 1999; Guichon & McLornan, 2008; Markham et al., 2001; Stewart & Pertusa, 2004).

Watching films without subtitles

Watching films without supplementing subtitles is both advantageous and disadvantageous. The most significant advantage is that learners are exposed to real spoken discourse with both linguistic and paralinguistic features – the sounds and the images. Without the written texts, which may cause distractions, learners are required to listen for the gist (general information) and specific information conveyed by the characters. The learners need to draw inferences from the images and sounds they have paid attention to. According to researchers, making inferences is among the components of successful listening (eg. Rixon, 1986). Apart from recognition, inference is a process of listening comprehension as listening requires learners to use strategies of recognizing heard elements and inferring meanings (Cook, 2001; Nunan, 1998; Rost, 1990). Making inference is also proved to be a high-level strategy in

assisting listening comprehension (Vandergrift, 2003). Theoretically, without the distraction of the reading texts (the target language subtitles or the subtitles of the students' first language), learners could concentrate more on the sounds and the visual clues, and make efforts to infer the meaning of what they hear (Baltova, 1999).

Nevertheless, without these texts, learners may not be able to recognize all the words that they are actually familiar with or to accurately understand the words or phrases used by the actors while watching films. Also, although learners are exposed to visual clues, they might still misinterpret the meaning, especially when the images presented do not clearly indicate the meaning of what the speakers intend to convey (Guichon & McLornan, 2008; Harley et al., 1996). Kaivananah and Alavi (2008), in their empirical study, found that deriving unknown word meaning from context was unreliable.

Watching films with the target language subtitles

Target language subtitles have been proved to be useful for not only L1 but also L2 learning (Vanderplank, 1991). When learners are exposed to images, sounds and L2 texts, this multimodality can foster learners' comprehension (Guichon & McLornan, 2008; Kon, 2002). The images help interpret meaning (Baltova, 1999) and the L2 texts assist learners to identify the words that the learners are familiar with although

they may not able to recognize these words while watching the images simultaneously with the sounds.

Unfortunately, as mentioned earlier, learners may not always accurately interpret the meaning from the visual clues even if they have access to the texts of the target language (Harley et al., 1996). Added to this, learners may be distracted by the written text of the target language as reading is often easier and faster than listening; thus it turns out that the learners pay less attention to the images and the sounds presented in films (Markham et al., 2001; Tardieu & Gyselinck, 2003).

Watching films with the subtitles of the learners' first language

With the aid of the first language subtitles, learners can understand, possibly with relative ease, the listening input and the visual clues through the translation. The L1 subtitles have been considered to make films intelligible by many instructors (Stewart & Pertusa, 2004). Most importantly, when their attention is drawn not only to the translated texts but also to the sounds, learners may confirm their understanding of what they hear with the translation. Learners may also simultaneously try to recognize as well as to examine the target language they are exposed to.

Given the benefits discussed, however, certain research demonstrated disadvantages of learning in context over translation in the meanwhile (Qian, 1996).

Learners may merely watch the visual clues and read the first language texts since they have stronger reading skills of their native language, compared with their target language reading and listening skills (Markham et al., 2001; Tardieu & Gyselinck, 2003). Learners may not pay attention to what they actually hear but the written text, which minimizes the target language exposure (Stewart & Pertusa, 2004).

The inconclusiveness revealed from subtitle-related studies

Subtitle-related studies tended to support watching films with the use of subtitles regarding listening comprehension (Baltova, 1999; Grgurovic & Hegelheimer, 2007, Guichon & McLornan, 2008; Markham, 2001; Taylor, 2005), but which subtitled language is more beneficial for learners to acquire the target language remains unclear. In Baltova's study (1999), the researcher conducted an experiment with 93 lower-intermediate native French speakers to examine the effectiveness of different modes of subtitles. The learners' performances were operationally defined as their scores in the comprehension questions and the gap-fill test. The findings indicated that L2 subtitles were the most beneficial for the recall of L2 vocabulary and of content. On the other hand, Guichon and McLornan (2008) studied 40 intermediate native French speakers. They examined the effectiveness of being exposed to four different conditions - the sound only; the sound and images; the sound, images, and

the texts of the L2 subtitles; the sound, images and the texts of the L1 subtitles. The learners watched a BBC news recording and completed a detailed written summary in English with the assistance of their notes. The results also revealed the superiority of L2 subtitles.

In contrast to the studies mentioned above, Markham et al. (2001) discovered that the L1 subtitles were more beneficial. The researchers studied 169 intermediate native English learners of Spanish. The learners wrote a summary in their L1 and completed an L1 multiple-choice test. The results indicated that the L1 subtitle group outperformed the other two groups.

Apart from the inconclusive results revealed from these studies, the choices of measurement in these studies may evoke reconsideration. In both Baltova's (1999) and Guichon and McLornan's (2008) studies, the target language was applied as the means of testing the learners' comprehension of the films. This might have favored the group who had been exposed to the target language subtitles since the questions were written in the target language which the learners might have perceived in the films. Taking Guichon and McLornan's study (2008) for example, the learners who watched the L2 subtitled movie during their study might find writing a summary easier due to the fact that the summary was to be written in their L2. These learners might have copied from their notes taken during the film viewing.

In the study of Markham et al. (2001), the comprehension test might have been easier for the L1 subtitle group. This group of learners had watched the film with the L1 subtitles so that gaining comprehension of the film was not supposed to be a difficult task for them. The multiple-choice questions were written in their L1; thus the learners seemed to have no need to be capable of recognizing the target language. With their understanding of the L1 texts, they could possibly answer the questions even if they did not know any of the language used in the film. Also, the learners had to write the summary in their L1; consequently, not only could they write the summary with ease but they could also use the L1 sentences they remembered "reading" while watching the film.

Apart from the measurement choices that might have provoked potentially dubious results in the previous studies, these studies were centered on more top-down examination of the learners' general comprehension of films rather than the comprehension of the actual language presented in the films. Therefore, from a more bottom-up perspective, this study intended to uncover which mode (watching films without any subtitles, with the L2 subtitles or with the L1 subtitles) was more beneficial for understanding the actual language presented in films. The results of this study may be regarded as reference for teachers and learners to decide their film viewing condition and as pedagogical assistance for successful use of up-dated

technologies, such as multimedia integrated CALL system (Guichon & McLornan, 2008).

Purpose of this study

The purpose of this study was to investigate whether a group of Chinese EFL learners' listening comprehension of the words and phrases presented in films significantly differed among three groups of learners who had watched the film without any subtitles, with the L2 subtitles (English) or with the L1 subtitles (Chinese). The learners' comprehension of the actual language presented in films was operationally defined as their scores obtained in the listening comprehension test administered after they had watched the film under the assigned conditions. This study addressed the following research questions:

- What are the performances of the no-subtitle group, the L2 subtitle group and the
 L1 subtitle group in the comprehension test?
- 2. Do the performances of learners who watch the film without subtitles, with the L2 subtitles or with the L1 subtitles differ significantly?

Method

There were two phases of data collection in this study. In the first phase, the

quantitative study aimed at yielding general phenomenon of whether watching films without any subtitles, with the English subtitles or with the Chinese subtitles was better in terms of understanding the aural language used in films. The qualitative study was endeavored in the second phase to discover the learners' watching process, which might help strengthen and explain the results observed from Phase 1.

Phase 1

Participants

One hundred and seventy-three lower-intermediate to intermediate learners from four intact English Listening and Conversation classes were involved in this study. These learners were freshmen and sophomores from a university in central Taiwan. According to Chang (2006), background knowledge plays a vital role in listening comprehension. In order to ensure that all the learners had at least similar background knowledge of the film, forty-five learners who had previously watched the film used in this study were excluded from the original 173 learners; hence, a total of 128 learners participated in the first phase. These 128 learners took a listening proficiency test, intermediate GEPT listening practice test. Only the listening part of the test was administered to the learners due to the fact that watching films essentially demands listening abilities. The test results were used as the basis to determine the learners'

current listening proficiency and to group the learners. After the scores were obtained from the proficiency test, the learners were divided into the three groups for this study according to the scores they obtained in the listening proficiency test. The learner who scored on the top of the list was assigned to Group 1 (no-subtitle group); the learner who gained the second highest score was allotted to Group 2 (L2 – English subtitle group); the learner who obtained the third highest score was allocated to Group 3 (L1 – Chinese subtitle group), the learner who gained the forth highest score was allocated to Group 1, and so forth. There were 43 learners in both Group 1 and Group 2, and 42 learners in Group 3.

Instruments

GEPT practice test: General English Proficiency Test (GEPT) is a nationwide used assessment tool for measuring a learner's English proficiency in Taiwan. The test is developed by The Language Training and Testing Center (LTTC). The listening test consists of 45 questions which include 15 questions about picture description, 15 Q & A questions and 15 comprehension questions preceded by conversations. For the picture description questions, learners have to choose statements they hear that accurately described the corresponding pictures; the choices are not printed on the test sheet. The Q & A questions require learners to choose the best responses to the

questions that they hear from the listening. For the comprehension questions preceded by conversations, learners are required to listen to each of the conversations and answered two to three questions that follow it. Learners can read the choices on the test sheet and choose the answer to the question they hear.

The total score of an intermediate GEPT listening test is 120. In order to pass the GEPT intermediate listening test, learners have to obtain a score above 80. In other words, learners who answer at least 30 questions correctly can pass the test. In this study, the learners gained one point per one correct response; thus the total score was 45 and the pass mark was 30.

Film: As the learners in this study were young adults at lower-intermediate to intermediate level, a cartoon film was considered appropriate. On one hand, the target audience of a cartoon film is children as well as young adults. On the other, the information presented in a cartoon film could not be too dense, and the language was more accessible to the learners. The animated cartoon film *Over the Hedge* produced by Dreamworks in 2006 was selected. This film presents a story about a raccoon who stole a bear's food. The bear found it and warned the raccoon to return all his food in a week. While the raccoon was worried about how he could get so much food during such a short period of time, he met a group of animals. He used them to forage food

from humans over the hedge.

Although there is no conclusive opinion about the length of a film that should be shown to learners in class, five to ten minute extracts of films are found to be preferable for most researchers (John, 1995). The film extract for this study encompassed the first three chapters of the animated film, which lasted for about 15 minutes. This extract presents a raccoon who was looking for food. He went into a bear's cave and found much food. The raccoon stole all the food but he was caught by the bear before he could escape. Unfortunately, the food was incidentally destroyed by a container car. The bear warned the raccoon to return all his food in a week. The scene was then switched to a group of animals who were hibernating. These animals woke up and found most of the forest they used to live in was gone. Their place was surrounded by the hedge and newly-built houses. The first chapter set the scenes and prepared the subjects for the film because there were only three sentences presented in about five minutes. The other two chapters exposed the subjects to more language input. An example of the English and Chinese subtitles taken from the extract is shown in the appendix.

Comprehension test: As this study aimed to know whether the learners understood what the actors actually said rather than their comprehension of the story, the listening

comprehension test did not include multiple-choice questions or require the learners to write a summary in the learners' L1 or L2 as in previous research. Instead, the learners were required to listen to 20 phrases spoken by the actors from the extract of the film and write down what the phrases meant in their L1 in the listening comprehension test. Only sound was played during the test. The rationale for this design was that the test was to examine whether the learners really understood what they had heard while watching the film extract under the three conditions. The adoption of sound only ensured the learners to write down what they really heard as they had no images to interpret the meaning during the test. This design of listening test prevented the learners from Group 2 and Group 3 to switch their attention to the images while the distraction or the assistance of the subtitles disappeared. In addition, this design precluded the L1 subtitle group to write down the Chinese text that appeared simultaneously with the images that they could still remember during the film extract viewing. The test was hence kept valid for testing the learners listening comprehension.

The listening comprehension test, which was pilot-tested by six learners from a similar background to that of the learners studied, consisted of 20 long and short phrases spoken by the actors in the film extract. The longest sentence was composed of 17 words, which were "This year, we need to make sure we fill the log all the way

to the top." The shortest sentence was in three words, which were "Oh! Look! Food."

This study adapted the marking criteria which were originally designed for the sentence writing task of the GEPT test. Two points were awarded when the learners wrote down the correct Chinese meaning of the target phrase they heard; one point was given when the learners wrote down only the correct Chinese meaning of the key words; zero point was given to incorrect responses or when the learners left the space for writing their answers empty. The total score for the comprehension test was 40 (20×2=40). The researcher and a rater from the same field graded the learners' performances independently and the Cronbach's Alpha indicated the inter-rater reliability of 0.995.

Procedure and data analysis

The learners firstly watched the extract of the film in the language laboratories which were equipped with good quality audio and visual systems. Group 1 watched the extract without any subtitles. Group 2 watched the extract with the English subtitles. Group 3 watched the extract with the Chinese subtitles. The learners were not allowed to take notes during the film viewing. Immediately after the learners watched the film extract, they were given the listening comprehension test. The learners listened to each of the sentences in the listening test only once. The learners were given 30

seconds to write the meaning of each sentence they heard in their L1. Then their test sheets were collected and marked by the two raters. After the scores were gathered, one-way ANOVA was conducted to examine if a significant difference in scores was detected among the three groups.

Phase 2

Participants

This phase was intended to yield more in-depth data to examine the learners' film watching processes under three different conditions. Two learners from each of the three groups involved in the first phase volunteered for the investigation. This made a total number of six participants. Each of them retrospectively reflected upon their film watching processes.

Instruments

At this stage, the instruments included the participants' listening comprehension test sheets and the fourth chapter of the film *Over the Hedge*. The use of the participants' listening comprehension test sheets was to understand the learners' cognitive process of writing the answers to the comprehension test questions. They had to tell the researcher what helped them recognize/understand the phrases so as to write down the

meaning of the phrases on the test sheets. On the other hand, in order to gather more in-depth data, the six participants reflected on Chapter four of the movie. The participants had watched the first three chapters of the film in the first phase. To show them the following chapter could ensure a continuous rather than fragmented storyline. This chapter lasted for about five minutes.

Procedure

The participants firstly reflected upon their completion of the listening comprehension test with their own test sheet. Next, the participants watched the extract of Chapter 4 once and retrospectively reported what they had understood from the film extract and their watching process under the assigned conditions. The participants who had watched the film without any subtitles in Phase 1 still watched the extract of Chapter 4 without any subtitles; the participants who had watched the film with the English subtitles in Phase 1 watched the extract of Chapter 4 with the English subtitles; the participants who had watched the film with the Chinese subtitles in Phase 1 watched the extract with the Chinese subtitles during this phase. In order to be certain that the participants could remember what they were going to report, the participants retrospectively reported their watching process at approximately 1.5 minute-intervals.

participants' protocols were examined to uncover their watching process.

Results and Discussion

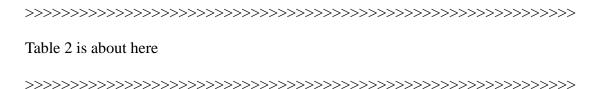
Quantitative Analysis

Since one learner from Group 3 unexpectedly dropped out, there were only 41 learners in the Chinese subtitle group. In the other two groups, there were 43 learners in each. Table 1 shows the results of the learners' listening proficiency. One-way ANOVA indicated no significant difference among these three groups in terms of listening proficiency (F = 0.011, p = 0.989). The means for the three groups were respectively 24.3, 24.4 and 24.2 whilst the standard deviations of the three groups were 6.5, 6.9 and 6.2. The results denoted the homogeneity of listening proficiency among the three groups.

Table 1 is about here

Table 2 presents the results of the learners' listening comprehension. The results of listening comprehension test disclosed by one-way ANOVA demonstrated a

significant difference among the three groups (F = 3.417, p < 0.05). The group means were 6.18 for the no-subtitle group, 8.69 for the English subtitle group and 8.31 for the Chinese subtitle group. *Post hoc* analysis was then conducted to further examine the differences. The analysis yielded a significant difference between the no-subtitle group and the English subtitle group (p = 0.030). The results showed that the English subtitle group outperformed the no-subtitle group. But when comparing the performances between the no-subtitle group and the Chinese subtitle group (p = 0.106), and between the English subtitle group and the Chinese subtitle group (p = 0.984), no significant difference was found. The findings suggest that watching films with the L2 subtitles is more effective than watching films without any subtitles although watching films without subtitles and with the L1 subtitles do not differ in their effects.



Possible explanations of these findings were discovered when the researcher further analyzed the learners' answers in the comprehension test. Firstly, the inferiority of watching films without any subtitles may be attributed to the learners' mistaken

inference of the language. For instance, the learners in the no-subtitle group seemed to mishear "I just tripped" as "I just traveled" since many of them wrote "我只是去旅行" on their listening comprehension test sheets. The image showed that the actor – a tortoise tripped right before he said "I just tripped". However, the learners seemed not to interpret the correct meaning from the images and the context. This finding supports Kaivanpanah and Alavi's (2008) suggestion that deriving the meanings of unknown words from context is not reliable even if the images clearly present what is said.

Another phenomenon, which may explain the indifferent effectiveness of watching movies without any subtitles and with the L1 subtitles, was observed during the analysis of the data. The learners' answers on the test sheets demonstrated that watching films with the Chinese subtitles was distracting and misleading. Some learners from the Chinese subtitle group thought "I think it came from the other side of Steve" as "I want to go to the other side" because they wrote "我要過去另一邊" on their test sheets. These learners might have remembered the text of another sentence spoken by the actor in the film extract. Their attention was drawn by the L1 text. This phenomenon indicates the influence of the L1 text as reported by Guichon and McLornan (2008) in their study.

Qualitative Analysis

The six participants' retrospective reports revealed significant phenomenon that supported the findings uncovered in Phase 1. Without the assistance of the subtitles, word recognition could be a difficult task for the learners. For example, one of the participants from the no-subtitle group reported to hear "foot" for "food", "examinator" for "exterminator", and she could only recognize simple words like "early" and "It's beginning", etc.

As for the participants from the Chinese subtitle group, they reported a tendency to focus their attention on the images and the Chinese subtitles. One of the participants said to read the Chinese subtitles only without listening to the synchronic English sound. Moreover, it was noticed that Chinese subtitles interfered the participants' video watching process. A participant read the Chinese subtitled sentence "我要去小便 [I want to go wee-wee]" and thought the actor said "pee-pee" although the actor actually said "wee-wee". The participant appeared to monitor her recognition and understanding of the English stimuli on the basis of the Chinese text she read. The participant simply did not recognize the correct word owing to the interference of the Chinese text.

While the participants in both the no-subtitle group and the Chinese subtitle group appeared to struggle to understand the language used in the film extract, the

participants from the English subtitle group might suffer less. This may justify the superiority of the L2 subtitles. One of the participants reported paying more attention to the language spoken in the film which includes both the visual and audio input. Another participant reported that she used the English text to double check the information she obtained from the audio input.

Both the quantitative and the qualitative results tend to support the findings of Baltova's (1999) and Guichon & McLornan's (2008) studies that the L2 subtitles are more beneficial to learners in terms of general comprehension of the films. The results of this study further demonstrate that the L2 subtitles foster learners' comprehension of the aural language used in the films. However, the findings observed from this study are not congruent with the ones uncovered from Markham et al.'s (2001) study where L1 subtitles were realized to be more beneficial.

This incongruity may lie in the following reasons. First, this study centered on learners' actual understanding of the language presented in films while Markham et al.'s study focused on general comprehension of the content. As suggested by Stewart and Pertusa (2004), the L1 subtitles may maximize learners' comprehension of the film but do not enhance language learning. It is therefore worth considering the possible drawbacks of measuring learners' general comprehension of content when understanding of the target language is not required. Secondly, the measurement tools

used in both studies differed in their forms. This study had the learners listen to phrases in the target language and required them to write down the meaning of the sentences they heard in their L1. In Markham et al.'s study, learners had to write a summary in their L1 and to answer multiple-choice questions which were written in their L1. It seems that the L1 group could write the summary without understanding the English audio input but reading the Chinese text. On the other hand, this summary writing appears to be more demanding to the L2 group since this group of participants were required to translate the English audio input besides understanding the English audio and/or text. This may suggest that studies dealing with a comparison of L1 and L2 influences are in need of being more cautious about the use of learners' first or second language in designing tasks.

Conclusion

This study attempted to assess the effectiveness of watching film without subtitles, with the L1 subtitles or with the L2 subtitles with regards to their understanding of the language presented. Both quantitative and qualitative findings demonstrated that for lower intermediate to intermediate Chinese native speakers, playing films with the L2 subtitles was likely to be a more effective mode for gains in listening comprehension

of aural language used in films. As Chang and Read (2007) suggested, multiple supports facilitated learners' listening comprehension. The no-subtitle group had only the animation as a support while the L2 subtitle group not only obtained the support of animation but also the English text. Moreover, according to Stewart and Pertusa (2004), L2 subtitles provide visual reinforcement of what learners are hearing. The findings of this study generally appear to be in agreement with Baltova's (1999) and Guichon and McLornan's (2008) studies that L2 subtitles are more supportive than L1 subtitles in assisting learners' comprehension of the aural language.

The other finding of this study is that there seems to exist the L1 interference as observed from the qualitative results although there showed no significant difference in quantitative results. Markham et al. (2001), Tardieu and Gyselinck (2003) and Stewart and Pertusa (2004) also mentioned that with the presence of learners' L1 language, learners may rely on it instead of paying their attention to the target language. Hence, learners' L1 dominate their cognitive processes and influenced their L2 acquisition. Owing to this effect, Markham et al. (2001) suggested in their conclusion that watching the same movie with the following procedure may yield better results. They recommended learners to watch a film first with the L1 subtitles, to watch the same film again with the L2 subtitles, and finally to watch it again without the subtitles. This sequence allows learners to use their stronger native

language reading skills first, followed by using their emerging but more or less weaker target-language reading skills. Finally, learners would be ready to rely totally on their much weaker target language listening skills.

In sum, the findings of this study imply that the use of L2 subtitles can be more effective in assisting learners' comprehension of the aural language presented in a film. It can be argued that, when learners watch films, to opt for the support of L2 subtitles is a better choice.

Suggestions for future research

Most of the related research centered their studies on lower-intermediate or intermediate learners, and this study is also limited in scope. As levels may affect the effectiveness of whether to use any subtitles or to use the L1 or L2 subtitles, further research is still in need to examine whether learners at more advanced level also benefit from watching films with the L2 subtitles.

Moreover, the comprehension test used in this study may suffer from a mismatching between film watching condition and the test condition. Some of the learners might understand the sentences used by the actors with the presence of both images and context. When the sentences were heard without the reminders of the images and the context during the comprehension test, the learners might have

forgotten what they had understood while completing the test. This may result in the poorer performance of test taking than film watching which may indirectly violate the reliability of this study. Hence, further research is required to consolidate the results revealed from this study.

Apart from the above issues, the participants involved in the qualitative phase of this study may not be representative enough of their own groups. The scores these six participants obtained were not considered and controlled as they were volunteers. As suggested by the quantitative results, in principle, the participants from the L2 group should have better performance than the no-subtitle group; nonetheless, one of the participants from the L2 subtitle group did not outperform the participants from the no-subtitle group. Therefore, their strategies used and watching processes during the film viewing may be different from their group peers. Further research may need to take this issue into account.

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Tables

Table 1
Summary of one-way ANOVA for Proficiency Test

Source	SS	df	MS	F	Sig.
Between Groups	.940	2	.470	.011	.989
Within Groups	5387.816	124	43.450		
Total	5388.756	6			

Table 2
Summary of one-way ANOVA for Listening Comprehension Test

Source	SS	df	MS	F	Sig.
Between Groups	156.895	2	78.447	3.417	.036
Within Groups	2846.459	124	22.955		
Total	3003.354	6			

Appendix A

An Example of the English and Chinese Subtitles Taken from the Extract

Bear: The moon's not full. You woke me up a week early? Oh, no. Don't tell me you're dumb enough to try and steal my stuff. RJ, I'm gonna have to kill you.

現在還沒滿月。你提早一個星期把我叫醒?喔,不。你竟然笨到想要偷我的食物。阿傑, 我要殺了你。

Raccoon: Please, I'm just a desperate guy trying to feed his family.

大熊饒命,我只想養家糊口。

Bear: You don't have a family.

你又沒有家。

Raccoon: I meant a family of one. Ok, wait, wait! Look it's still in the cave. So, technically, not stolen.

我一人吃全家飽。慢著!東西還在山洞。技術上來說,我並沒有偷。

(All the food packed in the wagon fell from the cliff.)

Bear: Oh, no. Slow.

喔,不。慢點。

(The wagon stopped on the road.)

Raccoon: That was close.

好險喔。

(A container car came and destroyed the food. The bear was with rage and wanted to eat the raccoon.)

Raccoon: Vincent, wait! I can get it all back! That's right. If you eat me, you'd have to do it. But I can get it. All of it!

文森,我可以拿回來!吃了我,你就要自己動手。我可以全部幫你拿回來。

Bear: My red wagon?

我的紅色手推車?

Raccoon: Redder!

更讚的!

Bear: The blue cooler?

藍色冰桶?

Raccoon: Blue cooler. On my list! Gotta be blue?

藍色冰桶。沒問題!一定要藍色的嗎?

Bear: Yes. And I want my Spuddies. I love those things. Cause with a Spuddie. Enough just isn't enough.

是。我也要波卡多洋芋片。我超愛吃洋芋片。最棒的波卡多,再多也不嫌多。