Study of the use of subtitling of media fictions in language learning related to international communication and character identification

Jia Lin and Lifen Cheng
Study of the use of subtitling of media fictions in language learning related to international communication and character identification

Jia Lin
Campus Miguel de Unamuno
Edificio FES, 37007
Salamanca-Spain
id00694984@usal.es

Lifen Cheng
Campus Miguel de Unamuno
Edificio FES, 37007
Salamanca-Spain
lfcheng@usal.es

ABSTRACT
This research project, which consists of three studies, is related to the Spanish/Chinese subtitled media consumption and the Spanish/Chinese learning for Spanish/Chinese speaking students. It focuses particularly on analyzing the uses of the subtitled audiovisual products. For this purpose, in the first study, a survey was developed with 207 university students from 42 Chinese and Spanish universities who voluntarily responded to a questionnaire. A pilot study was performed in order to test the correspondence validity between the Chinese and Spanish versions of the same questionnaire. The results show that watching subtitled Spanish films and series has been preferred by the respondents, and they do it frequently. In addition, they take it as an effective way to learn Spanish. Likewise, the results indicate that the respondents are not satisfied with the current situation of the film and television market with subtitling neither in China nor in Spain.

Consequently, two more further experimental studies are being developed on course. They are designed with the purpose of testing the effects of exposure to audiovisual products with different subtitling characteristics and the identification with characters in the films and TV series on the learning of the above-mentioned languages.

CCS CONCEPTS
- Applied computing~E-learning

KEYWORDS
ELE, language learning, Chinese, multimedia resources, films and series, subtitling, international communication, character identification.

1 INTRODUCTION
During the last decade, China and Spain have sensed an increasing population that has become interested in learning Spanish and Chinese.

With the globalization of technological advance of information in communication, the necessity of the cinematographic market is clearer day by day. Nowadays, there are more and more films and series exported overseas, through which students can obtain more knowledge, more experience and better education. Due to the phenomenon and the tendency of the learning fever of both languages, more ways to improve both teaching and learning are searched. Therefore, it is considered that a very relevant way would be applying the use of audiovisual resources in the language teaching class, which could be a method based on the innovative ideas from edu-entertainment.

In this study, it would be pertinent to focus on analyzing the students’ perceptions from both languages about the relevance of using subtitling in films and series, specially using double subtitle, in their learning process.

The global project is focused beyond the learning of both languages, it also investigates the impacts of identification with characters (liking) in the audiovisual productions (used as teaching-learning material) on the Chinese learning. These results will provide the understanding about what sort of audiovisual resources may help teaching-learning process in order to find out the best teaching option, which is the key concept of edu-entertainment that both educators and students now look upon to, as entertaining and fun are the essential parts for effective learning.

2 STATE OF THE ART
As mentioned previously, audiovisual format, cinema and television, has doubtlessly become new technologies for teaching and learning support. This is also brought forward in ELE (Spanish as a Foreign Language, this shortening will be used from now on) class as confirmed by Brandimonte (2003) [1] and Lopes (2008) [2]. Both authors have stated that the roles of technological means are included in Spanish teaching by using films as methodologies and strategies in ELE classrooms. They come to the conclusion that the most relevant competence of applying audiovisual means in lessons is improving students’ audiovisual comprehension.

To choose among the cinematographic products for teaching and learning foreign languages, there is a debate of opinions from researchers of the University College of London (Díaz Cintas, 2014) [3] about the roles of subtitling and the reasons for choosing subtitling over dubbing in the learning of foreign languages. Some teachers from ELE (Cortés Moreno, 2002; Xiaojing, 2008; Sanches, Blanco, Arriaga, Chen, Deza y Vázquez, 2011) [4-6] who have analyzed the difference between Chinese students and others from different countries in the class; all of them agree with using different ways of teaching for the Chinese ones. Zanón (2013) [2] also intercedes in the roles of the subtitling support in cinema and
television when learning Spanish. However, there are still not enough published works regarding the relation between subtitling in cinema and series and the learning of Spanish and Chinese. Therefore, with the current project, the authors are motivated to fill out this shortage.

Three main studies are included in the current project: Study 1) Subtitling audiovisual products in the Spanish learning; Study 2) Subtitling audiovisual products in the Chinese learning; Study 3) The relation between the identification effects with characters in the Chinese learning. So, in this project, the identification effects with the characters about the social cognition of the audiences found in many works made by Igartua (1998; 2006; 2008; 2009) [8-11] are taken as methodological references. The integration of the third study in the current project might help to put up a more complete spectrum of the complex cognitive processes of the language students during their linguistic acquisition of knowledge.

3 STUDY 1: SUBTITLING AUDIOVISUAL PRODUCTS IN THE SPANISH LEARNING CONTEXT

3.1 OBJECTIVE.
Our main study is aimed to investigate the relations among the Spanish subtitled audiovisual media, specially films and television series, and the Spanish learning for the Chinese people. With this general purpose on mind, the first study of this research project is centered on analyzing the habits of use and opinions of Chinese students on audiovisual products for Spanish learning.

3.2 HYPOTHESIS.
H1. Chinese students watch subtitled films and series with more frequency than dubbed because of their interest in learning Spanish.
H2. Among the three modalities of audiovisual products (interlinguistic subtitled; intralinguistic subtitled; double subtitled), double subtitled is the preferred one by the students with the purpose of achieving a better comprehension.
H3. Chinese students who use subtitling in Spanish audiovisual products think it is a useful way to learn Spanish.
H4. The frequency of using subtitles in audiovisual media and the level of Spanish acquired has a positive relation.
H5. There are not enough resources of subtitled audiovisual products compared to the demand of the students for the language learning.

3.3 METHODOLOGY.
3.3.1. Instrument design: Questionnaire.
A survey using a two-version questionnaire (in Chinese and Spanish) was developed with 51 items that enquired respondents’ habits, likes, opinions, satisfaction degree and attitudes toward the use of subtitling in audiovisual products for Spanish learning. The Likert scale was applied for the items measuring.

3.3.2. Pretest: Correspondence validation of meaning in both languages
Before applying the designed questionnaire, a pretest was cautiously carried out with the purpose to check if the meaning of the questionnaire in the two versions, Chinese and Spanish, has reached a satisfactory level of correspondence (95.3%) in the meaning that has been translated. A measuring scale with five degrees is established.

3.3.3. Participants
In this study 207 students of Spanish from China took part as volunteers from 42 universities, among them, 29 universities were Chinese, and the other 13 were from Spain. The subjects were informed that they could be part of this study. The age of the participants varied between 18 and 27 years old (M=22.8, DT=1.972) 82% were female and 18% were male. However, 24 participants (11.6%) did not fill the answers in an appropriate way, and as a result, they were excluded from this analysis. This way, the definitive number remained N=183.

3.4 RESULTS
3.4.1 Habits of subtitled and dubbed films and TV series consumed
The analyzed results show that the Chinese students of Spanish language watch subtitled films and series (M=3.42, DT=0.98) with more frequency than dubbed versions (M=2.74, DT=0.96) Regarding the subtitled version, the majority of the survey respondents watch “sometimes” (39.3%), “often” (29.5%) and “always” (15.3%) the subtitled version. This makes a total of 84.1%. Unlike this version, Chinese students watch Spanish dubbed films and series with less frequency; it is mostly “sometimes” (41%) or “few times” (30.6%), that makes a total of 71.6%. The distribution of the uses of the two versions is presented in an unequal way with a statistical significance: subtitled version ($\chi^2(4)=77.246$, p=.000) and dubbed version ($\chi^2(4)=87.027$, p=.000) (Table 1).

Table 1: Frequency of the use of two versions

<table>
<thead>
<tr>
<th>Version</th>
<th>Media</th>
<th>5 levels of frequency %</th>
<th>Square Chi</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>DT</td>
<td>1</td>
</tr>
<tr>
<td>Subtitling</td>
<td>3.42</td>
<td>.98</td>
<td>2.2</td>
</tr>
<tr>
<td>Dubbing</td>
<td>2.74</td>
<td>.96</td>
<td>9.3</td>
</tr>
<tr>
<td>N=183</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.4.2 The preference of watching Spanish films and series among three subtitled modalities
The survey respondents prefer as a priority watching Spanish films and series with “double subtitle” (M=3.84, DT=1.21) and only with “Spanish subtitle” (M=3.25, DT=1.09) compared to watching them only with “Chinese subtitle” (M=2.63, DT=1.23). This result shows that a majority of 37.2% “totally agree” and other 32.2% “agree” with the use of double subtitle to watch Spanish series and films.

Table 2: The preference of three modalities

<table>
<thead>
<tr>
<th>Version</th>
<th>Media</th>
<th>5 degrees of agreement</th>
<th>Square Chi</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>DT</td>
<td>1</td>
</tr>
<tr>
<td>Double S</td>
<td>3.84</td>
<td>1.21</td>
<td>6.0</td>
</tr>
<tr>
<td>S Spanish</td>
<td>3.25</td>
<td>1.09</td>
<td>4.9</td>
</tr>
<tr>
<td>S Chinese</td>
<td>2.63</td>
<td>1.23</td>
<td>22.4</td>
</tr>
<tr>
<td>N=183</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the preference of an only Spanish subtitled version, the use is indifferent for the majority, a 30.6%. About subtitling only in Chinese, a majority of 27.3% of the survey respondents disagree with this use. The distribution of each of the three modalities is presented in an unequal way with a statistic significance: double subtitle ($\chi^2(4)=70.087$, p=.000); Spanish subtitle ($\chi^2(4)=42.437$, p=.000); Chinese subtitle ($\chi^2(4)=22.601$, p=.000) (Table2).

3.4.3 The opinion about the efficacy of double subtitle for Spanish learning
The results of the correlational analysis from Pearson show that the preference of double subtitle in the answers of the survey respondents correlates positively and significantly both the
subjective perception that watching the double subtitle has helped greatly in Spanish learning ($r=,533$, $p<,001$), and the objective opinion ($r=,688$, $p<,001$) (Table 3).

Table 3: Correlation of “double subtitle”, “help” and “better”

<table>
<thead>
<tr>
<th>Help</th>
<th>Better</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Correlation of the frequency of the use of two versions and the Spanish level

<table>
<thead>
<tr>
<th>Acquired Spanish level</th>
<th>Subtitled</th>
<th>Double S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$r$</td>
<td>Sig. ($p$)</td>
</tr>
<tr>
<td>In Spain</td>
<td>$0.694$</td>
<td>$0.000$</td>
</tr>
<tr>
<td>In China</td>
<td>$0.755$</td>
<td>$0.000$</td>
</tr>
</tbody>
</table>

N=183, ***$p<,001$; **$p<,001$; *$p<,050$; +$p<0,1$

3.4.4 The relation between the frequency of watching subtitled versions and the Spanish level

The results of the analysis carried out by the Pearson correlation test show that the frequency of watching double subtitled version correlates positively with the Spanish level acquired both in Spain ($r=,094$, $p=,204$ and $r=,092$, $p=,215$) and in China ($r=,075$, $p=,311$ and $r=,045$, $p=,543$), though the correlation has a low intensity level and does not reach the established significance level (Table 4).

3.4.5 Attitude of the survey respondents about the present situation of the Spanish audiovisual products in China

The results of the analysis carried out by the Pearson correlation test show that the ‘bother’ about the shortage of Spanish audiovisual resources in China from the survey respondents correlates positively and significantly both with the ‘complains’ that in China there is not much access to watch them in subtitled version, and the ‘desire’ of having more ease to watch them in China, presenting the two of them $r=,312$, $p<,001$ and $r=,447$, $p<,001$ respectively (Table 5).

Table 5: Correlation of “bother”, “complains” and “desire”

<table>
<thead>
<tr>
<th>Complains</th>
<th>Desire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bother</td>
<td></td>
</tr>
<tr>
<td>$r$</td>
<td>$0.312$</td>
</tr>
<tr>
<td>Sig. ($p$)</td>
<td>$0.000$</td>
</tr>
</tbody>
</table>

N=183, $p<,001$

3.4.6 Attitude of Chinese students of Spanish facing the present situation of subtitled cinema and television market in Spain

The results of the analysis carried out using Pearson correlation test show that the bother about being able to access only to talking dubbing in Spain correlates positively and significantly with not being able to understand the series and films in Spain due to the shortage of subtitling, presents $r=,396$, $p<,001$ respectively (Table 6).

Table 6: Correlation of “bother about being able to access only to talking dubbing” and “not being able to understand the series and films”

<table>
<thead>
<tr>
<th>Not being able to understand the series and films</th>
<th>$r$</th>
<th>Sig. ($p$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bother about being able to access only to talking dubbing</td>
<td>$0.396$</td>
<td>$0.000$</td>
</tr>
</tbody>
</table>

N=183, $p<,001$

3.5 DISCUSSION ON SURVEY STUDY

(1)
The first study of this present work focuses on the research about the relation between the cinema and series with subtitling and Spanish learning for Chinese students of Spanish, using a quantitative way to conduct this investigation. The obtained results answer significantly to the hypothesis.

According to the H1, the result shows that Chinese students of Spanish language watch Spanish subtitled films and series more frequently than dubbed, therefore, the H1 has been confirmed. The reason could be that in China subtitling is always made ready, so this version is a common practice for the Chinese market.

The same is true with its preference over the other tree modalities. The result shows that the preference of an only Spanish subtitled version, the use is indifferent for the majority, a 30.6%. About subtitling only in Chinese, a majority of 27.3% of the survey respondents disagree with this use, but about the use of double subtitle, un majority, a 69.4% of the respondents agree with this use. In consequence, H2 has been affirmed.

The obtained results coincide with the opinions from experts and teachers afore mentioned, which seem to indicate that watching double subtitle version not only makes Chinese students of Spanish language think that it is effective for Spanish learning ($r=,688$, $p<,001$) but also their Spanish actually has improved through this ($r=,533$, $p<,001$), so the H3 has been verified.

Besides, the results show that the frequency of watching subtitled version and double subtitle version has a positive correlation both with the acquired level according to Spanish tests ($r=,094$, $p=,204$ and $r=,092$, $p=,215$) and in the Chinese ones ($r=,075$, $p=,311$ and $r=,045$, $p=,543$) However, it has a low intensity level and does not reach the statistical significance level established. For this reason, the H4 has been negated. The obtained data could indicate that even though the students think that watching subtitled series and films is an effective way to improve their Spanish, it does not have a direct and intensive relation between both of them. At last, unfortunately, Chinese students of Spanish are not satisfied with the present situation of the cinema market and television in China, and they desire to have more ease to watch them in China ($r=,312$, $p<,001$; $r=,447$, $p<,001$). Therefore, the H5 has been confirmed.

Final Note: As it has been mentioned at the beginning of this paper, this research project contains three related studies. We have so far discussed Study One of the general project, we are further presenting the remaining two studies as sub projects.

4 REMAINING STUDY 2

SUBTITLING AUDIOVISUAL PRODUCTS IN THE CHINESE LEARNING

4.1 OBJECTIVE.

Through this experiment, to know about the role of using subtitled audiovisual products in the Chinese class and the opinions from native Spanish-speaking students about their use in the class.

4.2 HYPOTHESIS.

H1. The native Spanish-speaking students from classes that use subtitled audiovisual resources learn better than those from classes that do not use audiovisual media with subtitles.

H2. The use of subtitled audiovisual resources in class helps improving hearing.

H3. The use of subtitled audiovisual resources in class helps improving vocabulary.
H4. The native Spanish-speaking students get used to learn Chinese by watching audiovisual products as an entertainment.
H5. The native Spanish-speaking students prefer a teaching way with audiovisual subtitled resources rather than the traditional one.

4.3 METHODOLOGY.
4.3.1 Instrument design: Experiment
To divide the native Spanish-speaking students into two groups: one class would use subtitled audiovisual resources (double subtitle, Chinese and Spanish); the other class would use audiovisual products without subtitles. During the whole year, each class works on a different topic. For each topic, from 2 to 4 segments of audiovisual products related to the same topic are chosen. After every class, a test is done to check and compare the learning results from both groups.

4.3.2 Pretest: Questionnaire
The questionnaire has 35 items to know about habits, likes, attitude, opinions and satisfactions from the native Spanish-speaking students about the use of subtitled audiovisual products for the Chinese learning.

4.3.3 Participants
University Native Spanish-speaking students of Chinese, with the same Chinese level.

4.4 Preliminary results
To know about the habits, likes, opinions and attitudes from the native Spanish-speaking students of Chinese about the subtitled audiovisual products. Research about the role in audiovisual resources subtitling for the Chinese lessons compared to others without this media support.

5 REMAINING STUDY 3
THE RELATION BETWEEN THE EFFECTS OF CHARACTER IDENTIFICATION WITH CHINESE LEARNING

5.1 OBJECTIVE
Investigate how the character identification (liking and culture similarities) affects the Chinese learning, with the purpose of knowing the most useful audiovisual subtitled resources for the native Spanish-speaking students of Chinese language.

5.2 HYPOTHESIS
H1. The audiovisual resource that has a close cultural distance to the occidental one and attractive protagonists has a positive connection with the Chinese learning.
H2. The audiovisual resource that has a close cultural distance to the occidental one and tasteless protagonists has a negative connection with the Chinese learning.
H3. The audiovisual resource that has a close cultural distance to the oriental one and attractive protagonists has a positive connection with the Chinese learning.
H4. The audiovisual resource that has a close cultural distance to the oriental one and tasteless protagonists has a negative connection with the Chinese learning.

5.3 METHODOLOGY
5.3.1 Instrument design: Factor 2X2 experiment
Record 4 videos with the same content with double subtitle with only the protagonists change.
1. Cultural distance close to the western one + attractive protagonists
2. Cultural distance close to the western one + tasteless protagonists
3. Cultural distance close to the eastern one + attractive protagonists
4. Cultural distance close to the eastern one + tasteless protagonists

Figure 1. Relations between subtitled segments with Chinese learning

5.3.2 Pretest: Survey
With pictures of the 4 protagonists so that the students describe the beauty of the protagonists with Likert scale to ensure the definition of attractive and tasteless.

5.3.3 Participants
Native Spanish-speaking students of Chinese from the university in the same level.

5.4 Preliminary results
To carry out the experimental investigation in order to know the relation between character identification through watching audiovisual subtitled products and Chinese learning.

6 DISCUSSION
Study-1 survey is one of the three quantitative studies designed for this research project with related objectives. Due to the reduced number of Chinese students of Spanish language that participated in the survey and few studies are found in literature, the obtained results could only help to show the tendency of general opinions, attitudes, and preferences given by the survey respondents.
Apart from the relations between subtitling series and films with the Spanish learning, this study provides information about Chinese students’ preference when using double subtitled audiovisual productions for their language learning. Additionally, this study has revealed the consumers’ attitude towards the present situation of the subtitled cinema and television in China and Spain.
The obtained results might help as a base for the future research work applied to other languages. Besides, it has opened the door to investigate the relation between learning other languages by
watching subtitled audiovisual products and character identification.

Study-2 and Study-3 are based on Study-1 which will investigate the relations between subtitling series and films with the Chinese learning and the relations between the effects of character identification with Chinese learning. These two studies will be developed by using the methodology of the experiment. In conclusion, the objectives of Study-1 established in present study have been accomplished in general. This may contribute to improve the shortage of scientific references with updated information and lead to further research studies on related topics.

ACKNOWLEDGMENTS

This research work has been carried out with the University of Salamanca PhD Programme.

The authors wish to thank the Research Group Observatorio de los contenidos audiovisuales (OCA) of the University of Salamanca for their contributions and support.

REFERENCES