

EXPLORING THE POTENTIALS OF INTRALINGUAL SUBTITLING IN SECOND LANGUAGE LEARNING: AN EXPERIMENTAL STUDY WITH EFL UNIVERSITY STUDENTS

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ABSTRACT

In the last two decades, Audiovisual Translation (AVT) studies have become of interest for Second Language Acquisition (SLA) researchers, particularly regarding the use of subtitles in language learning activities. This paper will present an experiment aimed at investigating the role of subtitled 'input enhancement' in SLA. The study involved a group of Italian native students of English as a Foreign Language (EFL) from Milan University. They were exposed to a video with three different subtitling techniques (interlingual subtitles, intralingual subtitles, and enhanced intralingual subtitles), and they were asked to perform a proficiency test immediately after the exposure to the video. The study showed that visual enhancements in the subtitled input improve learners' noticing process of language features, thus facilitating short-term vocabulary acquisition. The results proved that future SLA and AVT cross-studies should focus on input enhancement in the subtitles to improve learners' noticing process of language features in the input.

KEYWORDS

Second Language Acquisition, Audiovisual Translation, Subtitles, Language Teaching, Vocabulary Acquisition, Short-term Memory.

1. INTRODUCTION

Among internal and external factors which influence second language acquisition, the language input that learners receive is one of the fundamental and most studied external factors affecting SLA. Ellis (1994, 2008) acknowledges that the majority of theories in Second Language Acquisition (or SLA) – either being behaviorist, mentalist or interactionist theories – consider input as an essential ingredient for language learning [1].

Behaviourists believed that learners could learn language through exposition to input in their environment, in the form of a stimulus and positive feedback (i.e., positive reinforcement) which foster correct repetition and imitation: Input and output – the learners' oral and written production in an L2 are directly and strictly related. Developed as a reaction against the behaviourist model, the mentalist (or rationalist) theory claims that human beings are equipped with a language acquisition device (LAD), an innate faculty which is responsible for the language acquisition process. The LAD provides a set of principles that children are born with, and accounts for the order of acquisition of language structures and learning patterns. While behaviourists view input as crucial in the process of learning, mentalists claim that linguistic competence cannot be

acquired from social interaction or from imitation of the sentences alone: input is needed for SLA, but only as a ‘trigger’ that activates the already possessed internal mechanisms (Ellis 2008:3) [2].

The most influential theoretical framework for the role of input in SLA drawing from the innatist perspective is Krashen’s Theory Model (1981) [3], which was either supported or criticised by subsequent research. Krashen proposed five language learning hypotheses: the acquisition-learning hypothesis, the natural order hypothesis, the input hypothesis, the monitor hypothesis, and the affective filter hypothesis. Language input is considered as a highly essential factor in the SLA process. The Input hypothesis is Krashen’s attempt to explain how the learner acquires a second language. According to this hypothesis, the learner progresses along the ‘natural order’ of acquisition – namely, the ‘fixed’ order in which learners acquire new language forms – when he or she receives second language ‘input’ (an amount of linguistic data) that is one step beyond his or her current stage of linguistic competence. For example, if a learner is at a stage ‘i’, then acquisition takes place when the learner is exposed to ‘Comprehensible Input’ (CI) that belongs to level ‘i + 1’ (Liu 2015:18) [4]. The term ‘Comprehensible Input’ refers to language that is intelligible by learners, but not already acquired. If it is true that not all learners in a language class are at the same level, Krashen suggests that ‘natural communicative input is the key for designing a syllabus’, ensuring in this way that ‘each learner will receive some ‘i + 1’ input that is appropriate for the current stage of linguistic competence which they can comprehend’ (Krashen 1981:80) [5].

The Interactionist model moves on from both the behaviourist and mentalist approaches, focusing on the importance of social interaction in SLA. Drawing from Krashen’s study, Long (1982, 1985) suggested that input should be modified by providing linguistic or extralinguistic context, simplifying the language and/or modifying the interactional structure of the conversation to make linguistic input more comprehensible (Long 1985:23) [6]. Interactionists highlight the importance of both input and internal language learning processing. They view language acquisition as the outcome of an interaction at the discourse level between the learners’ mental abilities and the linguistic environment and input has the role of affecting or being affected by the nature of internal mechanisms (Ellis 2008) [7]. Within this interactional approach, Gass (1988:60) proposed the input-interaction model. According to this model, the language input a learner receives is strengthened by the manipulation of the input itself through interaction; the interaction between speakers – and the resulting modified input – is the basis for language acquisition [8].

2. LITERATURE REVIEW

Language learners have become accustomed to the presence of interlingual subtitles (i.e., subtitles that are written in the learners’ native language, also known as translated subtitles) in foreign language videos, and they are used particularly by lower or intermediate language proficiency level students: ‘translated’ subtitles can be easily founded, for the massive presence of this type of subtitles in the content of DVDs and streaming platforms. It has been showed that interlingual subtitles do play an actual role in language acquisition: in fact, it is possible for students who do not have a higher proficiency in a foreign language to understand words or sentences that are not comprehensible, or to associate words to their translation. There have been some critics to the fact that subtitles are condensed for their nature, frustrating viewers that cannot have a perfect translation for the speech (Kabara 2015:219) [9]. However, researchers believe that character constraints of subtitles are a benefit in language classes (Talaván Zanón 2006:144-165) [10], motivating students to notice differences between audiovisual and textual input.

What has not been addressed is the importance of intralingual subtitles (or, same-language subtitles, i.e., captions written in the source language of the video) for language learners,

particularly when they have already reached higher levels of instruction. Intralingual subtitles can help learners to develop discourse skills, to understand appropriateness of use of particular expressions according to the context, to use various types of registers, to increase speed of processing when they face long and complex sentences, to enrich their vocabulary, and so forth. It is believed that learners who could have access to videos with intralingual subtitles may also ‘prevent or at least slow the process of fossilisation’ (Foley 2018:15) [11] – that is, the inevitable stage where a learner cannot process further in his or her language proficiency – by forcing the processing of new vocabulary or expressions with the double stimuli of speech and textual channels. If it is true that authentic materials such as videos may help learners for second language acquisition, can subtitles facilitate or hinder the process of language acquisition?

We can consider subtitles as a third channel of communication (Chapman, 2017) [12] – along with visual and auditory channels – as subtitles add textual material on videos. However, adding captions has sometimes been seen causing an ‘informational overload’. However, various factors have encouraged the ever-increasing use of subtitles as a learning and teaching tool, especially in secondary schools (Talavan, 2007) [13], but also – to a lesser degree – in universities.

Even though some researchers are not completely convinced of the potentials of subtitles in SLA, several studies highlighted that there are some valid reasons for introducing subtitles and subtitling activities into many different language classrooms. For example, the fact that subtitles can offer the already mentioned third channel of communication can be considered beneficial for teachers to provide greater amount of information that can be made fully comprehensible. Gardner’s research on multiple intelligences (Gardner, 1993) and cognitive theories concerning language learning has shown that teachers often ask for more than one medium of communication to interact with learners [14]; this is due to the fact that every student has particular strengths and weaknesses, and the differences between two learners may result also in different needs. Subtitles can help learners who rely more on textual materials to carry out listening comprehension tasks, and this can also increase the potentials for improving listening skills, ‘forcing’ the vocal-non vocal associations of oral and written forms of vocabulary terms (Talavan, 2007:8) [15]. It has also been showed that the presence of subtitles can lower learners’ affective filter: students may feel ‘safer’ when they know they can rely on written texts that appear in real-time together with oral messages conveyed by a video (Gilmore, 2007) [16]. For a non-transparent language such as English, subtitles ‘offer the very real advantage of constant, direct speech-to-written comparison giving teachers and students the opportunity to analyse phonological elements in detail’ (Chapman, 2017:28) [17], thus helping students recognise the orthographic conventions of the language for sounds in English. However, intralingual subtitles do not always report perfectly the speech on the video: there are, of course, many discrepancies between the oral and the written texts for timing or spacing reasons. However, this is not an obstacle, but it may represent an opportunity to arise students’ awareness of the differences between the two channels of communication, or to carry out a contrastive analysis. Lastly, many studies have shown that subtitles can help students in vocabulary acquisition more than being exposed to videos without any caption (Sadiku, 2018) [18].

2.1. What Type of Subtitles?

Does any type of subtitles indiscriminately foster learning a language? The answer is no: different types of subtitles have a different impact on the learners’ approach to a video and, consequently a different effect on their language acquisition.

Comparative analyses of the effects of the use of intralingual and interlingual subtitles on language acquisition have been carried out in AVT research. Bravo (2005) believes that both interlingual and intralingual subtitles may result in effective language learning [19]. Lower

proficiency learners may find interlingual subtitles more useful as a mediation tool between their native language and their interlanguage systems, while advanced learners benefit from intralingual subtitles to develop pronunciation and their knowledge of words and idioms.

Caimi (2006:7-8) carried out important research on the effects of intralingual subtitling for language learners. Caimi finds out that the use of same language subtitles 'affects students' memories, develops their listening and reading comprehension, enhances their self-confidence, and replaces learning with entertainment' [20]. Among the different types of intralingual subtitles, those for deaf or hearing-impaired viewers have the peculiarity that dialogues as well as every other sound or noise are subtitled on the screen. Intralingual subtitles can also be written with the specific target audience of foreign viewers in mind, who are not native speakers of the language of the video, that is as 'subtitles for didactic aid'. This type of intralingual subtitles is believed to help learners in the development of listening comprehension skills, thanks to the reproduction of the oral text in a written form.

Bird and Williams (2002) and Schmidt (2010) confirm that one of the best ways of language learning is watching videos with intralingual subtitles. They state that 'because word boundaries are clear and there are no accent variations, language learners comprehend and learn language to a greater extent' [21] [22].

2.2. Enhancing Subtitles

The role of teachers in the writing process of subtitles has recently attracted the interest of scholars. One of the first studies in the field was carried out by Pavesi and Perego (2008), who described the benefits of 'tailor-made subtitles' for didactic purposes [26]. Saliency – which has been defined as 'the property of a stimulus to stand out from the rest' (Valentin, Ellis 2016) [27] – is one of the features that directly affects language acquisition, and it may help viewers in their parsing processes of the input. Any given input segments can be made salient (meaning that it is more likely to be perceived by students) to catch learners' attention and help them identify what can be called a 'starting point'. This will provide them with clues to identify a potential order for the analysis of the sentence.

Pavesi and Perego (2008) point out the role of the activity of 'reading' when learners encounter subtitled videos [28]. As already mentioned, textual enhancement is one of the principal strategies of input enhancement in SLA. What happens in a learner's mind when exposed to subtitles? First of all, Pavesi and Perego (2008:220) [29] state that 'the perceptual issue of subtitle decoding strategies – reading and viewing [...] is of paramount importance if effective subtitles and incidental SLA are at stake'. Understanding how a learner typically 'perceive' a subtitle (i.e., his or her reading behaviour, and the 'attentional switching' from video to text during the video) can possibly highlight some of the reasons why subtitling has proven to be a 'beneficial tool in acquisition' (Pavesi and Perego 2008:221) [30]. One of the reasons why subtitled videos can be effective in SLA is that, generally, '[t]he first incidental reading learned by many children results from their attention to television' (Robeck, Wilson and Michael 1974:7) [31], which represents a less demanding source for information rather than books and any other kind of print material.

In fact, it is true that, on one hand, learners can be exposed to audiovisual input since childhood, Pavesi and Perego (2008:222) observe that subtitle readers must face a different perceptual situation, 'find[ing] themselves in a [different] situation since they are simultaneously exposed to multiple and semiotically different stimuli [32]. These com-prise three independent systems of information channels – images, soundtrack in one language and written text in another – which need to be interconnected through triple associations'. That is the reason why, if the source

language is well known by viewers, ‘when focusing in subtitle reading, a considerable amount of the foreign language is most likely processed by the subjects’ (d’Ydewalle et al. 1985: 377) [33]. The same cannot be automatically true for acquisition to take place. For an ‘audiovisual viewer’ to become a potential incidental learner, some specific conditions need to happen: first and foremost, each information channel must provide comprehensible input. It is important, thus, that also written input (in this case in the form of subtitles) should be comprehensible to allow the learner to concentrate on the audiovisual stimulus, understand it and ‘parse it for acquisition’ (Pavesi and Perego 2008:223) [34]. This means that, as the ‘popping-out’ of subtitles on the screen triggers their automatic reading process (d’Ydewalle, Praet and Van Rensbergen 1989: 237–245) [35], it is crucial to structure them appropriately, having considerable time for effective processing.

Manipulating subtitles in order to make them more salient for a specific type of viewers may result in a great increase in their reception. Subtitle readers find themselves in situations where they are exposed to a number of stimuli. The information conveyed through different channels is linked with different types of encoding systems and involves different reception. Thus, if both languages are fairly well known to viewers, as d’Ydewalle observes, ‘when focusing the subtitle, a considerable amount of the foreign language is most likely processed by the subjects’ (d’Ydewalle et al. 1985:377) [36]. However, Pavesi and Perego state that a specific condition seems to be crucial for a viewer to become a learner: that is, information in the input should be comprehensible. In order to increase comprehension of a subtitled video, teachers may use different strategies: simplification, highlighting, compression, and so on. However, Pavesi and Perego conclude that it is important ‘to maintain a balance in text editing’, avoiding both an overload of information for learners and an excessive simplification (Pavesi and Perego 2008:225) [37].

A recent and important research by Armstrong and Brooks (2014) shows the effect of different positioning of subtitles to facilitate comprehension of dialogues: moving subtitled lines besides the speaker who pronounced the captioned sentence seem to help learners to follow the dialogues in a better way [38]. However, research in this field needs to be developed.

3. METHODOLOGY

The following experiment was carried out in the Department of Languages, Literatures, Cultures and Mediations at the University of Milan (Università degli Studi), and involved a group of EFL students both from Master’s degree and Bachelor’s degree programmes.

3.1. Aims of the Study and Research Questions

The study aimed to explore the following three hypotheses:

- intralingual subtitles are more effective than interlingual subtitles in helping learners notice and understand target language features in the input;
- enhanced intralingual subtitles are at least as effective as standard subtitles in ‘triggering’ the noticing of enhanced features in the target language;
- learners are led to pay more attention to lexical words in audiovisual input when these are enhanced in intralingual subtitles to make them more salient.

On account of the above hypotheses, the study addressed two main research questions:

1. To what extent can enhanced intralingual subtitles compared to standard intralingual and interlingual subtitles facilitate the 'noticing' and comprehension of language features in the input?
2. To what extent can enhanced intralingual subtitles affect the short-term acquisition of English vocabulary?

3.2. Research Methodology

The experiment investigated to what extent university EFL learners of different linguistic levels can benefit from the use of enhanced intralingual subtitles. The learners were asked to watch a short clip from a popular American sit-com in three different modes: with interlingual subtitles, with intralingual subtitles, and with enhanced intralingual subtitles. After watching the video, learners were asked to take a short vocabulary test based on a number of key words and expressions encountered in the clip. In the following subsections I will illustrate the research methodology of the study in terms of participants, tools, materials, and procedure.

3.2.1. Participants

To carry out the research, two groups of participants were involved. All of them come from both the bachelor's degree course in Foreign Languages and Literatures and the master's degree course in European and Extra-European Foreign Literatures. The larger group consists of 45 students coming from the bachelor's degree course, and 50 from the master's degree course; in particular, they all belong to the EFL curriculum, and they study English Language as part of their courses. The study was divided into two parts, and not all the students did participate in both of them, having the greater percentage of participants answered only to the informative survey.

In fact, only a selected smaller group, consisting of 12 students (10 females and 2 males) was involved in an experiment, following the survey. Their English level ranged from B2 to C2 according to the *Common European Framework of Reference for Languages* (2001). Their age ranged from 20 to 35 years old. The participants were randomly selected from a larger group of students who volunteered to take part in the experiment. They gave their consent to participate in the experiment.

3.2.2. Tools and Procedure

Two types of tools were used in the study: a questionnaire for a survey that preceded the main experiment and a test for the experiment itself. Each tool will be described below.

The questionnaire was designed to conduct a preliminary survey to collect general information about the learners, how they watch videos, if they are accustomed to the use of subtitles, and whether and how subtitles can help them in acquiring English. The questionnaire for the survey was advertised online on the web pages of two courses English Language 1 for BA students and Teaching English Language for MA students. A total number of 95 students took part to in the survey (50 MA students, 45 BA students). 91.8% of them were female students (87) and 8.2% male students (8); 50 students came from Foreign Languages master's degree, and 45 from Foreign Languages bachelor's degree. 97% of the students involved had Italian as their native language, and only 2.11% of them (2 students) had different native languages: one student was bilingual Italian and Spanish, and the other was Serbian; English was their first foreign language in order of proficiency; the other languages were Spanish (23 students), French (19 students), German (9 students), Russian (6 students), Romanian (2 students), Danish (1 student), Portuguese (1 student), Swedish (1 student) and Italian as a second language (1 student).

Questions have been designed to try to explore learners' general beliefs and attitudes towards the use of subtitles when they watch videos in a foreign language: personal responses were useful to find out about their thoughts and practice.

As regards the experiment, it required the preparation of the following materials: a video, three types of subtitles and a vocabulary test. After identifying the sample of 12 learners who were eligible to participate to the test, I sent each group a folder containing the video clip with one of the three types of subtitles, and an instruction file. The type of subtitles for each participant was randomly selected in order to have a group of 4 students for each type of subtitled video. Learners first watched the video and then were asked to wait two minutes before doing the test. During the test they were not allowed to go back to the video, or to use a dictionary.

One of the first questions addressed concerned what type of video the students would be asked to watch during the experiment. Several studies tackled the issue of the characteristics an audiovisual product should have to help learners' language acquisition. Some researchers studied the positive impact of documentaries for learning specific vocabulary, particularly related to scientific and historical subjects (Diaz-Ducca 2015:7-8) [39]. However, most of the scholars agree that sitcoms are the most useful audiovisual genre for learners for their easy plot storylines and for the variety of idioms and puns that can provide opportunities to improve spoken language skills (Hložková 2013:69) [40]. The video selected was a short six-minute clip from the popular sit-com *The Big Bang Theory*, taken from the third episode of the second season, called *The Barbarian Sublimation*. This particular extract was also selected because of the use of specific vocabulary and expressions students would have to attend to.

After selecting the video, three types of subtitles were written: standard interlingual subtitles (translated subtitles from English into Italian); intralingual subtitles in English; and English subtitles with target words highlighted in green.



Figure 1. Enhanced subtitles for the video experiment



Figure 2. Interlingual subtitles for the video experiment



Figure 3. Intralingual subtitles for the video experiment.

During the experiment the participants were asked to take a test based on the content of the short video clip. The test is divided into two parts: the first part is a comprehension test with questions on the meaning of selected single vocabulary and collocations. The second part is a cloze test, in which the participants were asked to complete sentences from selected dialogues in the video-clip. Examples from the test are shown below.

Finally, after the test three master's degree students were selected for an interview in which they were asked about their experience in the test, and in particular whether the type of subtitles they received with the video (interlingual, intralingual, or enhanced subtitles) were helpful for comprehension and acquisition of new words.

4. RESULTS AND FINDINGS

The survey was divided in two different Google Forms, having the same structure and questions: one for BA students, and one for MA students, for convenience of extracting more efficiently data from students' answers. General information and learners' beliefs about videos with subtitles will be briefly showed.

The 95 students rated their overall English proficiency level as follows:

Table 2. English language proficiency of the participants to the survey.

C2 level	15 students (15.11%)
C1 level	54 students (56.4%)
B2 level	24 students (25.26%)
B1 level	2 students (2.11%)

Among them, 52.63% (50 students) claimed to have a language certificate:

- 44% of the them (22) had a C1 level proficiency certificate;
- 23% of them (14) had a B2 certificate;
- 12% of them (6) had a C2 certificate;
- 8% of them (4) had a B1 certificate.

Their self-assessment of listening and speaking skills is summarised as follows:

Table 3. English language listening and speaking skills self-assessment of the participants to the survey.

	B1	B2	C1	C2
<i>Listening</i>	3.16%	24.21%	49.47%	23.16%
<i>Speaking</i>	2.11%	37.89%	50.53%	9.74%

The first set of questions (2.1, 2.2, 2.3) asked students about their experience in watching videos in English. The majority of the students claimed that they prefer films and TV series, with 85.26% of the participants who typically watched movies (81 students), and even more participants answered that they typically watch TV series, with a percentage of 95.79% (91 students). Other common answers were documentaries with 38.95% of participants who claimed to watch them (37 students), 16.84% educational videos (16 students) and 8.42% typically watch videos on social media pages like YouTube (8 students).

Results of question 2.2 showed that students claimed to watch ‘often’ videos in a foreign language (i.e., at least 2-3 times a week), with a 41.05% of the students (39) and ‘sometimes’ (i.e., at least once a week), with 30.53% of the students (29); less popular answers were that they watched ‘always’ videos in a foreign language (i.e., every day in the week) with 23.16% of answers (22 students) and ‘never’ with only the 5.26% of answers (5 students). These results show that the genre selected for the test (a TV series) was also one of the most favourite one by the students involved in the study.

Students think that the task of watching a video in a foreign language with intralingual subtitles is not difficult: their answers (in a scale from 1 to 7) show that 57.89% of them considered the activity of watching a video with intralingual subtitles at only a level 1 of difficulty (55 students), 25.26% answered with a level 2 of difficulty (24 students), 10.53% a level 3 of difficulty (10 students), and only a small portion of them felt the activity quite difficult, with 3.16% at a level 4 (3 students), 2.11% at a level 5 (2 students), and 1.05% at a level 6 of difficulty (1 student).

In the following section, the students were asked to provide their beliefs about how could subtitles help them in understanding better a foreign language. The first question showed that the majority of the participants believed that subtitles are a valid tool to improve the vocabulary of a student, with 84.21% of them who answered that subtitles could help them learning new words (80 students), and 82.11% of them thought that subtitles were a valid tool to improve general vocabulary knowledge (78 students). Many students also thought that subtitles can be helpful in improving listening skills (64.21% of students with 61 answers), their cultural knowledge of the language (43.16%, 41 answers), and their understanding of long stretches of sentences (34.74%, 33 answers). Less popular answers regarded (surprisingly) the possibility that subtitles are valid tools to learn better grammatical structures (only 16.84%, with 16 answers); other alternatives with a lower percentage were that subtitles could help reading skills (9.47%, 9 students), different or difficult accents (2.11%, 2 students), and only 1.05% (1 student) did not recognise any of these helping possibilities valid, indicating 'other...' as the answer.

The question, then, switched to intralingual, same language subtitles, and the students were asked how they thought same language subtitles could be more helpful than other types of subtitles in learning a foreign language. The answers show, again, that participants thought that vocabulary is the targeted feature that subtitles can help, with 82.11% of participants (78 students) who answered that subtitles could help learners to notice (here used with the definition mentioned in 2.1.4) specific expressions in the input, and 76.84% of participants (73 students) who answered that subtitles could help learners to learn new words. 64.21% of participants (61 students) also mentioned the importance of subtitles to learn the pronunciation of difficult words, and 58.95% (56 students) indicated that subtitles could offer help in learning new expressions; less popular answers regarded the particular accents (43.16% with 41 answers), the spelling of difficult words (37.89% with 36 answers), and, again, only 1.05% of 'other...' answer (1 student).

In the next question students were asked to imagine how subtitles should be 'enhanced' to help language acquisition. Although for this question the answers were more divisive, generally speaking the majority of the answers thought that 'highlighting' subtitles was the correct way to enhance them, with 38.95% of participants who thought that highlighting collocations in a foreign language should be helpful for a learner (37 answers); another important issue for participants was that, most of the times, subtitles are not written for learning purposes and for that reason the captions seen in the screen include information not important or interesting for learners who want to acquire language structures: in fact, 37.89% of participants answered that subtitles should only include information strictly necessary for language learning (36 answers); other popular answers were that subtitles should highlight specific idiomatic expressions (36.84% with 35 answers), or simply idioms and uncommon words (35.79% with 34 answers). 33.68% of participants (32 answers) also believed that additional and contextual information should be helpful for students; other answers were that subtitles should highlight any type of language features (for example, syntactic patterns) with only the 3.16% of answers (3 students). It is interesting noticing that 2.11% of the participants (2 students) did not think that enhancing subtitles would be useful for learning purposes, because they thought that highlighting in any way could be distracting for learners who want to pay attention to a video in a foreign language.

The final question of the survey regarded what type of linguistic feature should enhanced subtitles target. There was general agreement for this question that two linguistic features that participants thought to be important to highlight for helping acquisition were slang expressions (69.47% with 66 answers) and idioms (67.37%, 64 answers). 35.79% of the participants also indicated collocations as important features that should be highlighted (35.79% with 34 answers); less popular answers regarded general expressions as the target for highlighting (25.26%, 24 answers); 21.05% of participants thought that grammatical expressions should be a target language feature for input enhancing (20 answers), 12.63% thought that subtitles should be highlighted for isolated

single words, and, finally, 2.11% thought that highlighted subtitles are not effective at all, or not effective for the linguistic features mentioned.

4.1.1. Proficiency test results

The results from first part of the test showed that only 2 participants made a 100% score, coming from the intralingual and the enhanced subtitles groups; the majority of right answers came from both the intralingual subtitles group and enhanced subtitles group (14 total correct responses out of 20, marking a 70% for their group), with interlingual subtitles group that scored 9/20, with 45% of correct answers.

Table 4. General scores in the first part of the test for the three groups (total score: 20).

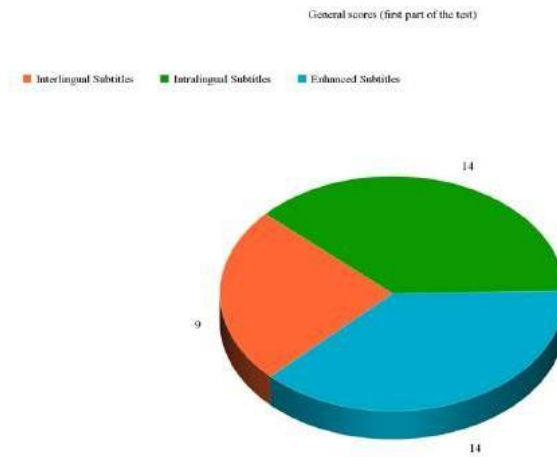


Table 5. Number of errors in the first part of the test for the three groups (out of 20).

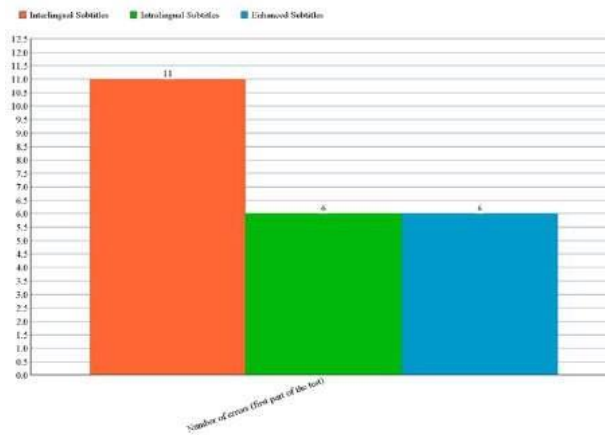
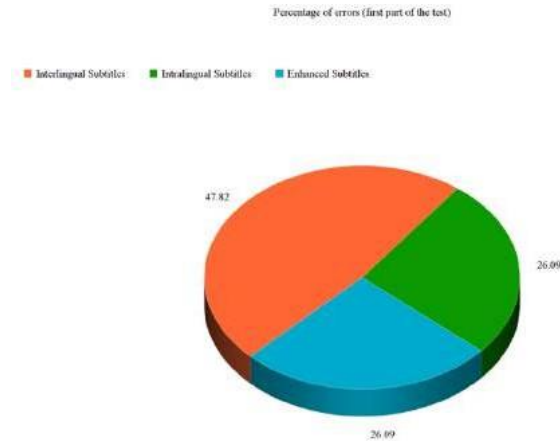


Table 6. Percentage of errors in the first part of the test for the three groups.



It appears from that charts that learners generally scored well in the first part of the test, with an average number and percentages of errors (out of the total of 20 possible answers, 5 answers for each one of the 4 members of a group) for the three groups (only slightly higher for students in the interlingual subtitles group); however, it is important showing that, while the results for the intralingual and the enhanced subtitles groups are the same, there is a considerable difference between the results of students who watched the video with English subtitles (either normal intralingual or enhanced) and participants who watched the video with Italian interlingual subtitles.

The second section of the test consists in a cloze test, where students were asked to provide the correct word (or words) pronounced by characters during the dialogues of the video; students were helped in remembering the part of the dialogues with screenshots taken from the video regarding the sentence they were asked to complete.

The following charts will show the general tendencies for the second part of the test.

Table 6. General scores in the second part of the test for the three groups (out of 20).

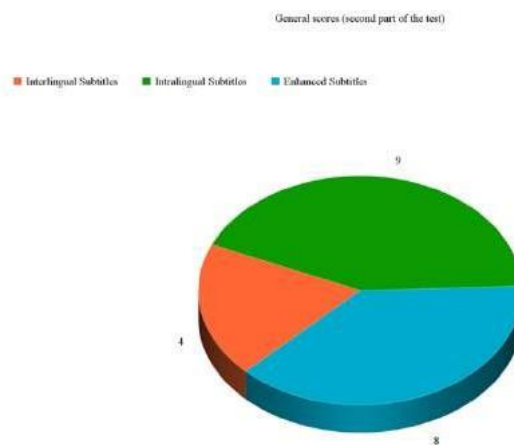


Table 7. Number of errors in the second part of the test for the three groups (out of 20).

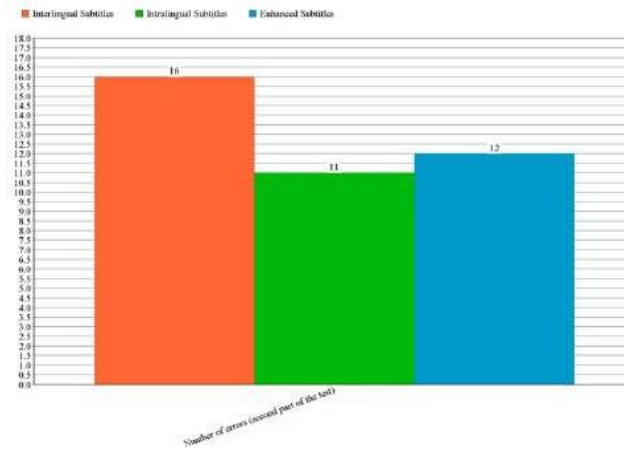
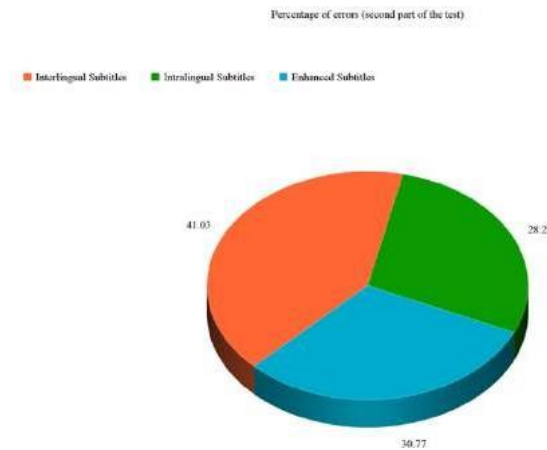


Table 8. Percentage of errors in the second part of the test for the three groups.



The second part of the test shows interesting results. It is evident that the cloze test had been more difficult for students, having higher number and percentages of errors for the total of 20 answers; in that case, there is a slight difference between intralingual and enhanced subtitles groups, where the first group outscored the second one for only one right answer. That difference was not important (there were variables that need to be considered, and that will be explored in section 3.4.), and the groups had similar scores for both of the sections of the test; the interlingual subtitles group, on the other hand, had many difficulties in that part of the test, having completed correctly only the 20% of the sentences presented.

The results of the second part confirmed that only two students completed the test with a 100% score, having not made any mistake in both parts of it. One student belonged to the intralingual subtitles group, and one to the enhanced subtitles group. One student made only a mistake (in the second part of the test), coming from the intralingual subtitles group; the best student from the interlingual subtitles group obtained a 60% score (4 errors).

5. DISCUSSION

One of the most interesting findings emerging from the initial informative survey is that students were convinced that subtitles do play a role in language acquisition, having the 98.95% of the

participants of the survey (94 students out of 95) who had chosen at least one language feature that subtitles can target to help a better language acquisition. This is in line with previous research in the field (see for example Kvitnes, 2013), who had always indicated captioning as a key tool for learning (and teaching) a language, not only in an incidental way, but also as a conscious instrument through which students can develop both formal and communicative skills (Birulés-Muntané, Soto-Faraco, 2016) [41] [42]. It is also in line with the research in audiovisual teaching the fact that the majority of the participants (78.95%) stated in the survey that vocabulary should be the principal target of subtitles teaching of a foreign language, with a little, but consistent 21.05% who advocated for the importance of grammar teaching through the use of subtitles. That answers may be driven by the general belief that had always been addressed by teachers and scholars that subtitles are very helpful to learn new vocabulary or particular expressions (see Kovacs, Miller, 2014) [43], while a shorter number of studies highlighted how subtitles could be helpful to learn grammar (the only relevant study had been carried on by Mohammed in 2013) [44]. One of the first future developments of audiovisual teaching studies should concentrate on the potential of subtitles as a tool for grammar teaching. Students were always driven to the belief that subtitles can help them learning new vocabulary, and that could be the explanation for participants' answers.

The last question of the survey which would be investigated before discussing the results of the test regards what linguistic features the students believed should be the target of enhanced subtitles. While there is a general belief that enhanced subtitles should be helpful to learn a language (97.89% of the answers with 93 out of 95 participants), there was general agreement that vocabulary should be the preferred target feature (78.95%), and, more precisely, students thought that idioms, slang words and particular collocations (87.37% of the answers) would be more useful than isolated single words as the target for enhanced subtitles (12.63%). Previous studies in the field (see Jahanyfard, 2015) [45], show that subtitles had always been one of the preferred methods used by learners to learn slang and idiomatic expressions, as well as difficult collocations.

The first research question regards whether and how enhanced intralingual subtitles could facilitate noticing function in the input and comprehension of language features. It appeared from the results that enhanced intralingual subtitles helped learners in recognizing better target vocabulary when they were asked to provide the meaning of a particular word they encountered in the video, or to recalling a particular expression/provide synonym, resulting in a good noticing process and a better comprehension of the meaning of the sentences they heard in the video for the learners who watched the video with enhanced subtitles, than the students who watched the interlingual subtitles.

In fact, while the enhanced subtitles group scored 14 out of 20 of the total answers in the first part, interlingual subtitles group scored 9 out of 20 total answers. There were no differences, in that part of test, between the scores of enhanced subtitles group, and the scores of intralingual subtitles group. It is possible, then, that simply having subtitles written in the same language of the audiovisual input could help better learners to understand the meaning in context, and to notice better chunks of words and expressions in the source language.

As regards the second part of the test, what emerged by the analysis of data collected is that the sample of students selected experienced many issues in the cloze test when they were exposed to interlingual subtitles, having scored in the second part only 4 out of 20 total answers, with particular problems in remembering the precise word that has been used.

Answering to the second research question ('to what extent can enhanced intralingual subtitles affect the short-term acquisition of English vocabulary?') is more difficult and it requires some

specification. While it is not possible to verify if the learners did effectively acquire in their short-term memory the vocabulary that they were exposed to, the results showed that intralingual subtitles were more effective in both recalling and comprehend the meaning of the sentences the learners heard in the video, and also in the second section, although the results were not particularly good for all the students (with any possible explanation in the nature of the test), enhanced subtitles and intralingual subtitles proved to help the students more than interlingual subtitles. These results seem to be in contrast with most of the research made in the field, where interlingual subtitles were believed to contribute to learn expressions, syntax, vocabulary and connotations (Koolstra and Beentjes, 1999) [46]. Results of the test also contrasted with Markham, Peter and McCarthy's (2001) widely recognised study, which addressed interlingual subtitles as the most effective tool to learn vocabulary, more than captioning, or intralingual subtitles [47].

A question that may arise could be: why the results of the test were in contrast with the majority of the AVT research made during the last years? The answer is not easy, and it might require more studies in the future, but a first attempt to address the question would be made.

First of all, an explanation on the students' curricula should be made to interpret correctly the data emerged from the experiment: the participants were all EFL learners, ranging from the upper intermediate to the advanced level of proficiency, and they were all university students of English; although their experiences in learning the language were all different, it is possible to suppose that the participants were some way 'accustomed' to the oral-text association of English words and sentences as part of their educational background. Furthermore, another possibility might be that, simply, higher proficiency students relied less in the textual input whenever it sounded 'redundant' for them (that particularly should be the case for intralingual subtitles), being more distracted by the Italian version of the subtitles, which contrasted with what they heard in the video. However, the exact opposite should be true: when students have the possibility to look at the text and to rely on it to assist their foreign language comprehension, they might feel more comfortable with the textual vocabulary comprehension, at the cost of 'turning off' their oral comprehension channel. To investigate more the issue of 'double channel' when an input in a foreign language is provided, eye-tracking studies may be useful to solve any doubt.

It is clear, on one hand, that interlingual subtitles fell short in the vocabulary comprehension test of the other two types of subtitles, and the explanation might be that participants focused more on the general comprehension of the video (that is, 'what was that was going on' in the video clip), paying less attention to the words they heard. In this case, it may be interesting to investigate if learners can have more effective vocabulary acquisition when they are explicitly asked to pay attention to the word they heard and the meaning they associate to those words with the assist of Italian captioning. What emerged from the experiment presented above is that, generally, when students are exposed to interlingual subtitles, they tend to rely too much on the textual input, and significantly less on the audio input.

On the other hand, results of the students who watched the video with enhanced subtitles remained the most difficult to interpret. Whilst students who had the help of enhanced subtitles had scores which were significantly higher than students who watched the video with interlingual subtitles, they had similar results with participants who watched the video with classical intralingual subtitles, and indeed they had a score slightly inferior in general (25 total right answers for the intralingual subtitles group, with 24 right answers for the enhanced subtitles group). With the difference being of one point only, there are not significant proofs that intralingual subtitles are more effective than enhanced subtitles; the question, in this case, may be if enhanced subtitles are not more decisive than intralingual subtitles to assist vocabulary learning, at least as regards short-term memory. While the answer emerged from the experiment

data should be that enhanced subtitles were not more useful than intralingual subtitles, there are some considerations that need to be investigated to offer a complete overview on the issue. The first consideration needed to be looked at, is that if there was not any evident fact that intralingual subtitles were actually being used by learners to assist their comprehension, the same may be valid for enhanced subtitles; another possibility might be that, while learners relied very little on intralingual subtitles, participants who watched the enhanced captioning relied only on them to understand what characters said in the video.

To conclude, there was a significant difference between the usefulness of interlingual and intralingual (or enhanced) subtitles, in favour of the second and the third type of captioning. Same-language subtitles should be used in classroom activities because they might be helpful in vocabulary comprehension. A restricted number of studies already showed that same language subtitles were significantly more useful for students, and they are all quite recent (it can be cited, for example, the research made by Matielo De Oliveira and Baretta in 2018) [48]. Another important research was conducted by Chapman (2017), who stated that, although intralingual subtitles often show discrepancies with the actual oral text in the audiovisual input, they are effective sources to learn expressions and expand the learners' vocabulary (Chapman, 2017) [49]. However, there are several research lines that have been exposed in the section, and which are not yet investigated: bringing them the attention they need could help modern language classes in efficient learning through technological tools and resources.

6. CONCLUSIONS AND RECOMMENDATIONS

As emerged from the experiment results, a possible role of AVT in language acquisition is undeniable. Thus, despite some clarifications are needed for the limited nature of the experiment and the sample of students selected, it seems appropriate to indicate what could be further development on studies regarding subtitles and language learning and teaching, and how it would be possible to implement the use of audiovisual material in classroom activities.

As eye-tracking studies that investigate how learners' eyes move when they are exposed to subtitled input are emerging during the last few years (see, for example, Gass et al. 2019) [50], research findings might be complemented with the employment of enhanced subtitles - like the ones designed for the experiment conducted for this dissertation - to inquire how learners tend to watch subtitles when there is an evident input enhancement: do they focus more on the enhancement? Or it should also be interesting a comparison in how their eyes move when they read a subtitle line in their native language and how their eyes move when they read a subtitle line written in a foreign language. Finally, eye-tracking studies can provide interesting development in the writing of audiovisual materials designed specifically for students.

Another future development of audiovisual language learning research might be how subtitles actually help students in language acquisition. From the experiment conducted for this dissertation, particularly in the informative survey, it emerged that learners generally think that subtitles can effectively help students in vocabulary acquisition, and in the learning of particular expressions and idioms. But could they be more effective for other learning areas? For example, could subtitles help learners to learn better grammar? Or syntax? Or phonetics? There are various specific areas of language teaching through subtitles that have not been investigated and that could provide interesting findings. In recent years, to cite one of the future research lines, some subtitling companies are trying to implement phonetic transcriptions to their subtitles in order to help language students to develop their phonetics and phonology knowledge of the languages they study. A future research question could be: is it possible to use enhanced phonetical subtitles for university language students to develop their abilities in recognizing and using phonetical alphabet? Or to learn specific accents and language varieties?

In order to develop language activities and tasks based on audiovisuals, the role of translators and AVT professionals is crucial: develop materials that are designed for the purpose of learning a language could help students in being more interested in watching videos and in learning a language through audiovisual products; teachers could rely more on those materials and assist translators in designing specific materials and, finally, researchers could investigate further one of the most intriguing yet unexplored field of AVT.

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CONFLICT OF INTEREST

The author confirms there are no conflict of interest involve with any parties in this research study.

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