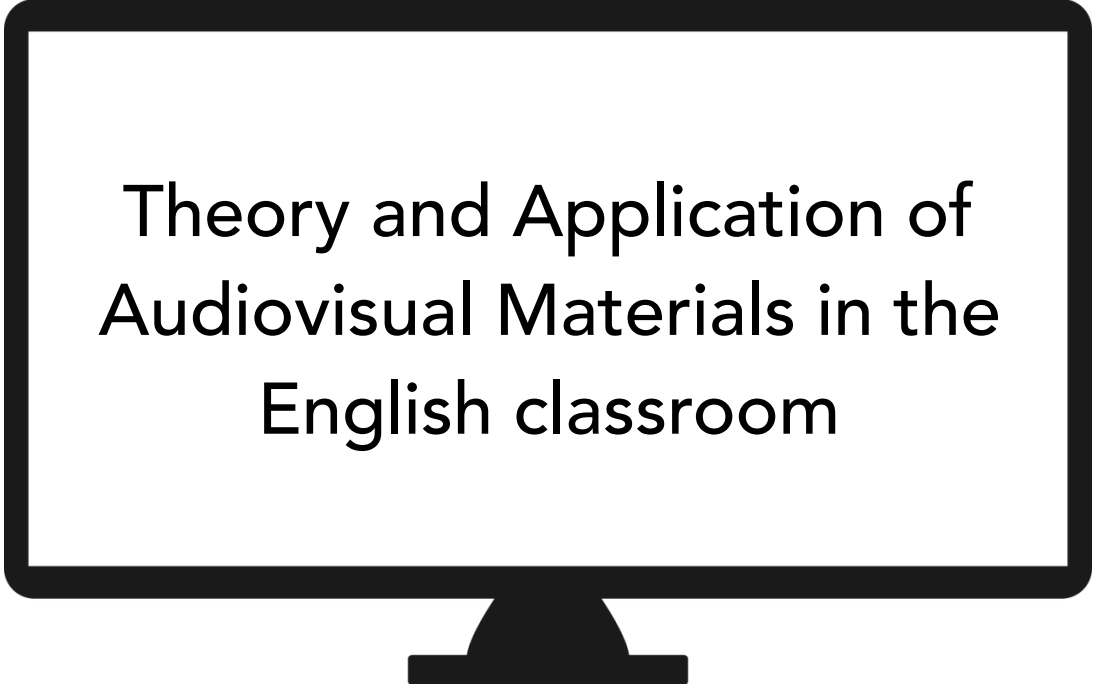




UNIVERSITAT DE
BARCELONA

Facultat de Filologia
Grau d'Estudis Anglesos



The title of the paper is displayed inside a black-outlined computer monitor graphic. The text is centered and reads: "Theory and Application of Audiovisual Materials in the English classroom".

Theory and Application of Audiovisual Materials in the English classroom

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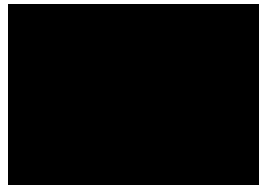


Table of contents

Abstract	1
Keywords	1
Resum	1
Paraules clau	1
1. Introduction	2
2. Cognitive Theory of Multimedia Learning (CTML)	4
2.1. The Dual Channel Assumption	5
2.2. Redundancy Principle	7
3. CTML and Second Language Acquisition	9
4. The Importance of Visuals in the EFL classroom	12
4.1. Multimedia materials and their practical use in the classroom	12
4.1.1. Multimedia as input enhancer	14
4.1.2. Audiovisual materials	16
5. Subtitling and Foreign Language Learning	19
5.1. Benefits of subtitling on SLA	19
6. Conclusion	24
7. References	26

ABSTRACT

In the information era, the media have become a central focus in people's lives. We are surrounded by the visual, and TV series and other online videos are very popular entertainment systems, specially among teenagers and young adults. Introducing audiovisual materials in the English classroom offers an unlimited number of possibilities for teachers and students, since videos are both authentic and motivating materials. The premise behind this paper is Mayer's Cognitive Theory of Multimedia Learning, which believes that information is better learned if presented with words and pictures at the same time. This paper gathers the most important findings regarding multimedia and the use of audiovisual materials in the fields of SLA and TEFL, as well as the use of subtitles and captions to promote language learning.

Keywords: multimedia, audiovisuals, TEFL, SLA, subtitles

RESUM

A l'era de la informació, els mitjans de comunicació s'han convertit en un dels principals interessos en les nostres vides. En un món ple d'imatges, les sèries de televisió i els vídeos a Internet són un dels sistemes d'entreteniment més populars entre els joves, i la possibilitat d'introduir materials audiovisuals a la classe d'anglès suposa un ampli ventall de possibilitats tant pels professors com pels alumnes, ja que els vídeos són materials autèntics i motivants. La premissa en la qual es basa aquest treball és la teoria cognitiva de l'aprenentatge multimèdia (Cognitive Theory of Multimedia Learning) de Mayer, que creu que s'aprèn millor si la informació es presenta en forma de text i imatges. Aquest treball recull les troballes de l'estudi de l'aprenentatge amb multimèdia i l'ús de materials audiovisuals en els camps de l'Adquisició d'una segona llengua i de l'Ensenyament l'anglès com a llengua estrangera, així com la utilització de subtítols per promoure l'aprenentatge lingüístic.

Paraules clau: multimèdia, audiovisuals, *TEFL*, *SLA*, subtítols

1. INTRODUCTION

In the information era, the media have become a central focus in people's lives. From television to internet networks such as Facebook or Youtube, we are surrounded by the visual. As Biagi (2011, p. 63) suggests, the media "inform, amuse, startle, anger, entertain, thrill, but very seldom leave anyone untouched". With these features in mind, the field of Foreign Language Teaching has been trying to introduce multimedia in the classroom. However, bringing these into the classroom has always been challenging, how to actually use them has been even more challenging (Tafari, 2009). The goal of learning a Second Language is to be able to establish and maintain social relationships and communicate with others, and teachers must utilize any materials that will ensure that learners are able to achieve that. According to Brinton (1991, p. 461) multimedia provides authentic input, "by bringing a slice of real life into the classroom" and by offering meaningful and contextualized language.

Thus, the aim of this paper is to collect the findings on the benefits of the use of Multimedia in Teaching English as a Foreign Language (TEFL) to teenagers and adults. The focus will be on audiovisual materials such as online videos and TV series, considering they are very popular entertainment methods outside the classroom. Furthermore, this paper will delve into the field of subtitling as a means of video enhancement and as a way of facilitating language acquisition.

Broadly speaking, lecturers have focused on the verbal to teach any type of information. The theoretical framework for this paper is Mayer's Cognitive Theory of Multimedia Learning (2009), which offers a path "beyond the purely verbal" (p. ix). The premise for this hypothesis is that information is better learned if presented with words and pictures at the same time (Mayer, 2009). Therefore, multimedia combines visual images and verbal information — either aural or written. Sherman (2003, p. 16) once said that "the eye is

more powerful than the ear”. Nonetheless, we can make use of both the eye and the ear and exponentially increase our effectiveness in teaching.

Yet multimedia is often mistaken for technology, although both words do not necessarily refer to the same thing. Multimedia covers a much wider range of materials than technology. A puppet show or flashcards (Brinton, 1991) can also be considered multimedia, since they include both verbal and visual aids. However, according to Tafani (2009, p. 82) “technology in education has become the ‘buzz’ word in every educational environment”, since it is a big part of society. Moreover, Mitchell et al. (1995) state that nowadays, the fact that students are surrounded by visuals might drive them to be they more interested in a movie than a book. Although this statement is more than twenty years old, Mitchell’s assertion is still true, not only with movies, but with any audiovisual material. Given that the vast majority of Spanish high schools offer English as a foreign language, there is a large percentage of students of English who are teenagers. Audiovisual materials are specially relevant to this demographic, and they will attract the learner’s attention more than other traditional classroom materials such as the classic black or whiteboard.

The information collected in this paper will be divided into four main chapters. Chapter 2 will serve as the theoretical framework for this essay, dealing with Mayer’s Cognitive Theory of Multimedia Learning. Then, chapter 3 will focus on Mayer’s theory regarding Second Language Acquisition. Chapter 4 will describe the importance of using (audio)visual materials in the English classroom and how these can be applied to a lesson plan. Finally, chapter 5 will examine the use of subtitling as an aid to foreign language learning.

2. COGNITIVE THEORY OF MULTIMEDIA LEARNING (CTML)

In order to comprehend the importance of audiovisual materials in the English classroom, this chapter will first establish a theoretical framework for the study of multimedia in learning. Mayer has conducted an extensive study on the cognitive processes of learning with multimedia (2005, 2009). Given the universality of his principles, his research can be applied to all educational fields. However, first we must clarify three relatively similar terms that are recurrent in the study. A *multimedia message* is any presentation containing words, such as printed text or spoken text, and pictures such as illustrations, photos, animation or video; *multimedia learning* is the process of building mental representations from words and pictures; and *multimedia instruction* is the technique of using both words and pictures with the finality of promoting learning.

As Mayer (2009, p. 6) puts it: “verbal modes of presentation have dominated the way we convey explanations to one another, and verbal learning has dominated education”. The premise behind Mayer’s theory is that the brain is able to build deeper mental representations from words and pictures together rather than just one method, and thus the design of instructional messages should consider how the human mind works. Mayer (2009) argues that if we only present verbally, we are ignoring the fact that humans have the potential to process visual materials as well. In order to illustrate this hypothesis, he explains how a tire pump works. Figure 1 shows a traditional textbook written explanation. Then, he claims that figure 2, which contains both written and pictorial

Bicycle tire pumps vary in the number and location of the valves they have and in the way air enters the cylinder. Some simple bicycle tire pumps have the inlet valve on the piston and the outlet valve at the closed end of the cylinder. A bicycle tire pump has a piston that moves up and down. Air enters the pump near the point where the connecting rod passes through the cylinder. As the rod is pulled out, air passes through the piston and fills the areas between the piston and the outlet valve. As the rod is pushed in, the inlet valve closes and the piston forces air through the outlet valve.

Figure 1. Excerpt describing how an air pump works. (Mayer, 2009, p. 45)

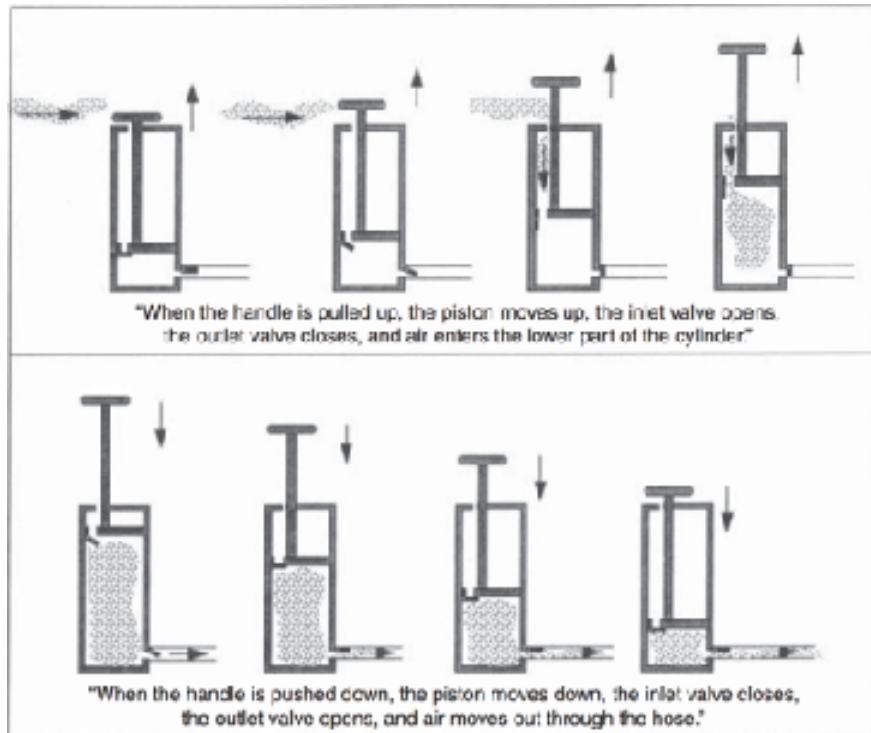


Figure 2. Frames from a narrated animation for a computer-based lesson on how a tire pump works (Mayer, 2009, p. 47)

descriptions, makes it easier for students to internalize such information.

There are several cognitive principles that account for the efficacy of using words and pictures in education, and in this chapter I will cover the two main theories that are significant for further study of multimedia in Second Language Acquisition: the dual channel assumption and the redundancy principle.

2.1. The Dual Channel Assumption

In the light of Mayer's Multimedia Theory (2005, 2009), Paivio asserts that nonverbal and verbal systems respectively specialize in pictorial and linguistic elements (Clark & Paivio, 1991). Mayer's (2005) Dual Channel Assumption, also known as Dual Coding Theory, follows Paivio's concept of separate information processing channels, and creates a connection with his own Multimedia Theory. Mayer's premise is that there are two different modes for processing different information, the visual and the auditory. In other words,

humans process qualitatively different information through two different channels. The channel that processes pictures and animation is called visual/pictorial channel, whilst sounds and narration are processed through the auditory/verbal channel. Nonetheless, there is no general agreement regarding which channel manages written text. Given its linguistic characteristics, it could be said to be processed by the verbal channel. For the purpose of this paper, though, I will consider written text as part of the information to be processed by the visual/pictorial channel¹.

However, these channels are not completely independent. Even if information can be processed by only one of the two channels, learners may be able to represent the same message through a different channel. For instance, an animation may be processed through the visual channel by the learner, who might then be able to convert it into an explanation of the event shown (Mayer, 2005). These are what Clark and Paivio (1991, p. 153) refer to as “referential connections”.

Mayer (2005) also provides two possible explanations for the positive effects of two processing channels: the quantitative rationale and the qualitative rationale. In his view, the quantitative rationale is the theory that “more material can be presented on two channels than on one channel” (p. 4). On the one hand, a multimedia explanation reduces the cognitive load of the presented data, and on the other hand, it can also be seen as a way of presenting the material twice, therefore making it easier for learners to make connections and create mental representations of the information presented. The qualitative rationale claims that verbal and pictorial elements are qualitatively different, but “can complement one another” (p. 5). While words are useful for more abstract representations, pictures illustrate more concrete concepts.

¹ See Chapter 2.2

2.2. Redundancy Principle

Another theory that must be taken into account is the Limited Capacity Assumption, which suggests that our ability to simultaneously process information in each channel is restricted (Mayer, 2005). Our working memory is limited and therefore we can not overload it with information. Novel information should then be presented in a way that lessens the working memory load (Sweller, 2005). The Redundancy Principle derives from this assumption. As Sweller (2005, p. 159) describes it, the redundancy effect “occurs when additional information presented to the learners results in learning decrements compared to the presentation of less information”. That is, if identical information is added either through different channels or simply to enhance the presentation, it might impede learning rather than foster it.

This principle, therefore, might create some confusion as it is not clear what is the line that separates non-redundant from redundant information. As Sweller, Ayres, Kalyuga and Chandler mention (2003, p. 24) “if a learner has to expend limited resources on activities not directly related to schema construction and automation, learning may be inhibited”. Thus, the first thing that should be borne in mind is what is the main learning goal. Miller (1937) was the first to prove this theory by studying young children learning to read. She divided participants in two conditions: redundant and non-redundant. For the redundant condition, she used a picture of a cow and the word *cow*, that is, the same information, only in different forms; and for the non-redundant condition she just used the word *cow*, without any pictorial information. The results showed that the learners in the condition without the pictures performed better in the post-test. However, the main goal in her study was to learn how to read. Novice readers need to employ all their resources to the act of reading, and therefore pictures might hinder learning. Kalyuga, Chandler and Sweller (2003) also provided evidence of the redundancy effect with written/spoken text. They showed that having a diagram and

written text resulted in poorer learning than a diagram and spoken text, since in the first condition both pieces of information had to be processed through the same channel whereas in the second condition they were processed through two different channels. Moreover, in Mayer (2009), we find seven different studies on the redundancy principle² as regards the addition of on-screen text to narrated animations. In all studies gathered by Mayer, the non-redundant group outperformed the redundant group, with the exception of highly experienced learners who “may have so much free processing capacity that they did not suffer any ill effects from processing redundant materials” (2009, p. 128). This is in concurrence with Chi and Glaser (1985) when they claim that “a learner’s level of expertise is a critical factor in determining what information is relevant for the learner and what information is attended to” (op. cit. Kalyuga, Chandler and Sweller, 2003, p. 24).

These research studies form a solid basis for the theory of redundancy in multimedia learning. However, none of them are carried in the field of second language acquisition. The studies mentioned in Mayer (2009) were conducted in fields such as mathematics, engineering and science, fields of study whose aim is not the same as in SLA. The main goal of Second Language Learning is to be able to comprehend and produce language in order to communicate in a meaningful way. A study by Samur (2012) was conducted with learners with low levels of Turkish. Some participants received either animation with concurrent narration and text or only animation and narration. Results showed that “adding on-screen text to a multimedia presentation with animation and narration helped students learning new vocabulary in a previously unfamiliar foreign language” (p. 169). Those participants who only received animation with narration claimed that “[the words] all sounded the same” (p.

² Mousavi, Low, & Sweller (1995, Expt. 1); Mousavi, Low, & Sweller (1995, Expt. 2) Kalyuga, Chandler, & Sweller (1999, Expt. 1); Kalyuga, Chandler, & Sweller (2000, Expt. 1); Craig, Gholson, & Driscoll (2002, Expt. 2); Leahy, Chandler, & Sweller (2003, Expt. 2); Jamet & Bohec (2007)

169). This contradicts the redundancy principle, which defends that identical information is detrimental in learning. Furthermore, it also disproves Chi and Glaser's (1985) assertion, considering that the participants in the study were not proficient speakers of Turkish, yet they still benefitted from "redundant" information.

This evidence, however, is not sufficient and more research must be conducted in order to establish a clear distinction between Mayer and Sweller's redundancy effect in multimedia learning in general and in the field of SLA. In chapter 5, this argument will be further developed with reference to subtitles in audiovisual materials for Foreign Language Teaching.

3. CTML AND SECOND LANGUAGE ACQUISITION

Mayer's Cognitive Theory of Multimedia Learning is a universal approach to learning, yet what is at the center of this paper is its relation with Second Language Acquisition and, more specifically, its practical integration in the language classroom. According to Plass and Jones (2005), the goal of learning a second language is to learn how to communicate ideas, maintain social roles and create discourse, and in order for this to happen, several core competencies must be developed. These include listening and reading, which are considered input competencies, and speaking and writing, considered output competencies. Besides these, Plass and Jones (2005) also suggest that there are additional abilities that we need, such as the reception of information (input), the attention to meaning (interaction) and its assignment to verbal and/or visual stimuli. Furthermore, some knowledge of the socio-cultural context of the communicative situation needs to be acquired as well. This chapter will examine the description of the process by which a second language is acquired according to CTML.

The interactionist perspective of language acquisition describes three crucial functions to language acquisition: comprehensible input (Krashen, 1982), interaction (Long, 1985) and meaningful output (Swain 1985; Swain & Lapkin 1995) (op.cit. Plass & Jones, 2005, p. 469). As far as this approach is concerned, second language acquisition with multimedia is the use of both verbal and pictorial materials to reinforce the comprehensible input to which the learner is exposed, and to elicit and negotiate comprehensible output.

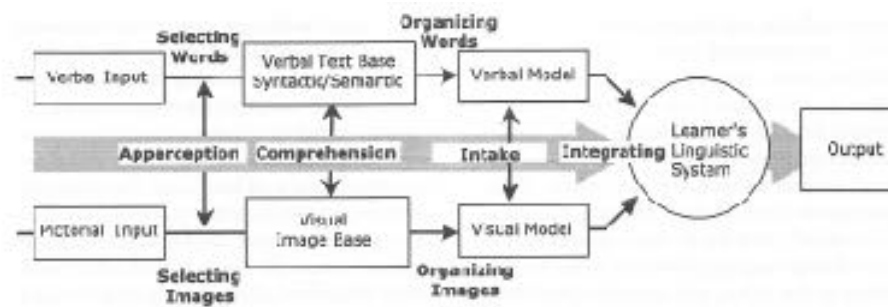


Figure 3. Integrated model of second-language acquisition (Mayer, 2005, p. 471)

Figure 3 shows the process of acquiring a language with multimedia materials. Verbal and pictorial input are what the learner is exposed to through any multimedia presentation. However, as Chapelle (1998, p. 22) states “only that [input] which is *appereceived* has the potential to be acquired”. In her view, apperception is the learner’s action of noticing characteristics of the input. In order to facilitate apperception, Krashen (1982) claimed that learners needed to be exposed to *comprehensible input*, one that is only a little more difficult than what they would completely understand. According to his view, rather than providing very difficult input, which learners would be overwhelmed by, we should present materials which are only slightly above the learner’s level.

In the case of multimedia, the input is apperceived through both the verbal and the visual channels, and therefore both words and images are selected in order to start to create models of language. Pictures are connected so as to build a pictorial model, and words are also connected in order to build a verbal model, which includes not only semantic content,

but also syntactic information. Providing input that is comprehensible is also crucial in this stage, in that if it is too demanding, words might be learned incorrectly by accident (Hulstijn, 1992; Yoshii & Flaitz, 2002). This organization of pictures and of words has the potential to become intake, which Chapelle (1998, p. 22) describes as “comprehended language that holds the potential for developing the learners' linguistic system”. Once a linguistic message has been organized into both visual and verbal models, the verbal and pictorial mental representations need to be integrated in the learner’s linguistic system. As Plass and Jones (2005) explain, this process is the most challenging from the model, because it requires retrieving and processing prior information with which the new information is organized. In the case of multimedia learning, the resulting linguistic system is formed by both verbal and pictorial elements.

Finally, all the information that has been integrated needs to be put into practice. So far, the process has been merely of understanding, but language needs to be used in meaningful contexts so as to acquire communicative competence. This is what Merrill Swain (1985) described as *comprehensible output*. If meaningful use of the language is provided, learners can test out their hypotheses about the language and move from solely understanding the semantic features of the language to an analysis of its syntactic structure. By putting language to use in a communicative context, learners might produce errors, and so as to not break communication they will receive feedback by the interlocutor. These comments will make them aware of any gaps in their language, which they will modify in order to provide easy to understand, *comprehensible* input (Swain, 1985, my emphasis). These modifications, which constitute novel knowledge, will therefore be integrated into their prior knowledge (Plass & Jones, 2005).

The entire process shown in Figure 3 describes the steps in the acquisition of SLA in a multimedia environment. If we compare Figure 3 with Figure 4, the model that includes

multimedia provides firm scaffolding to the process, by digging deeper into the understanding of language acquisition, and building a more detailed model on which instructional design can base its work.



Figure 4. Interactionist model of the components in the SLA process adapted from Chapelle (1998)

4. THE IMPORTANCE OF VISUALS IN THE EFL CLASSROOM

4.1. Multimedia materials and their practical use in the classroom

Brinton (1991) divides multimedia materials into two categories: “small *m* media” and “large *M* media”. She defines “small *m* media” as any material that is nontechnical and can be used to provide pictorial support to an explanation. Some items that belong to this old school category are blackboards and whiteboards, magazines, puppets or flashcards. On the other hand, Brinton considers “large *M* media” those materials created with technological innovation that look very appealing to the eye and, although they are more expensive and might fail in case of a power failure, are much more attractive to the younger generations. Nowadays, the item that epitomizes the “large *M* media” is a computer, a tool that provides an infinite number of resources if connected to the internet, which can both serve to create multimedia materials and display them.

Using visuals in language teaching goes back to the beginning of the 20th century when slides and pictures were used in class environments to complement verbal explanations. Some of the methods that have considered multimedia in their designs are the Audio-lingual method, the Silent Way method and the Communicative Language Teaching approach. The Audio-lingual method, based on Skinner’s behaviorist theory, the understanding that we learn by means of imitation, used tape recordings so that learners could mimic native language and

pronunciation. However, materials were extremely manipulated, so the claim of authenticity of language by using native-like input is not entirely true. The Silent Way method, in which teachers remained silent for most of the lesson, emphasizes learner participation and visual aids are used so as to encourage and help learners produce output. This method prevents teachers from interfering with the learning process. Nevertheless, teacher interference might be good so that students can notice their errors and find ways to fill their knowledge gaps. On top of this, Silent Way students have little exposure to the language, and this input is often manipulated and non-contextualized. Figure 5 shows some of the pronunciation charts the method uses. Words are in isolation, which might make it difficult for the student to know when to use them correctly. Finally, the Communicative Approach uses multimedia materials to provide a real-life context to the communicative situation. Authenticity is key in the Communicative Approach, so materials are rarely or not at all modified. The Communicative Approach and other communicative approaches such as Task-Based Language Teaching



Figure 5. American English pronunciation chart used in the Silent Way method. (Pronunciation Science, Ltd. (n.d.) [Digital image])

(TBLT) already make use of multimedia materials, which might be one of the reasons why they are so popular among the teaching community.

Kemp and Dayton (1985) claim that multimedia materials motivate and maintain the attention of the students, and they also make classes more engaging for students (op. cit. Bradshaw, 2003). Students are surrounded by an infinite number of pictures, videos, films and TV shows, and classes should also include some of these elements. Also, according to research Watkins and Brubaker (2004) have carried out, visuals provide clarification and enhancement of the materials presented, which helps students recognize and remember that information for longer than verbal-only information. Furthermore, visual materials make clarification and correlation of concepts easier for teachers, who also benefit from the meaningful and vivid context visuals offer (Mannan, 2005, p. 108). In conclusion, visual materials are beneficial for teachers and learners, but they need to be designed properly in order to promote meaningful learning.

4.1.1. Multimedia as input enhancer

Extensive research has been done on the importance of input in SLA (Doughty & Long, 2003; Ellis, 1994; Ellis, 1997; Gass & Selinker, 1994; Gass, 1997), concluding that language acquisition cannot occur without exposure to the target language. Furthermore, input is also one of the three crucial functions for acquisition according to the interactionist perspective, as mentioned in chapter 3, and as to make said exposure more comprehensible and more effective for language acquisition, input enhancement can be used. Input enhancement has been described as 'the process by which language input becomes salient to learners' (Sharwood Smith, 1991, p. 118). By using special techniques such as bolding or underlining, learners might pay more attention to the target language. And particularly those items that have been enhanced will have a higher chance of being apperceived and thus

integrated in the long-term memory. It should be pointed out though, that input enhancement is not the same as input modification. Input enhancement only adds external aids for comprehension, whereas input modification alters the text to make it more appropriate to the learner's level. This alteration dismisses the claim of authenticity, which is one of the most important principles of the use of multimedia in SLA. Multimedia materials can be used as input enhancement techniques to promote noticing of vocabulary and grammatical constructions. Furthermore, both verbal and visual channels can be enhanced in order to facilitate apperception and intake.

In the first place, the simple addition of pictorial elements to an aural explanation is an enhancement technique, since it draws attention to the items that the presenter finds most important, as in a powerpoint presentation or using flashcards. On a different note, written input enhancement is very popular in the form of glosses, side annotations that clarify the meaning of the text, although research found that these alone do not always lead to language acquisition (De Ridder, 2002). However, better results are obtained when annotations include pictures. Words might be learned incorrectly if input is too challenging (Hulstijn, 1992; Yoshii & Flaitz, 2002). Thus, the use of multimedia glosses, which make vocabulary more tangible and easy to comprehend, has been said to promote better reading comprehension and more effective vocabulary acquisition (Chun & Plass, 1996a, 1996b; Laufer & Hill, 2000; Liu & Reed, 1995; Lyman-Hager, Davis, Burnett & Chennault, 1993; Omaggio, 1979; Plass et al, 1998). Aural input can also be enhanced. Moriarty (1994) believes that visual language skills are developed earlier than verbal language skills, and visuals form the basis on which verbal language is built.

In the technological era we live in, the best way of combining aural input and images is with the use of video. For instance, Hernandez (2004) studied three groups of students learning English who were presented scenes from a film in three groups: group 1 was only

offered narration, group 2 was offered video and audio, and group 3 received video, audio and captions. The results showed that groups 2 and 3 understood the scene better than those who only received narration. Such research corroborates the aim of this paper, which claims that video can be beneficial for students learning a foreign language. The use of captions will be further described in chapter 5.

4.1.2. Audiovisual materials

According to Brinton's (1991) categorization of media materials, audiovisual materials would be included in the "large *M* media" division. Audiovisuals are the focus of this paper, and although these are not the only way to teach using visual materials, they are the most innovative way of introducing the students' outside world into the classroom, thus providing a meaningful context in the English class. Bamford (2003) insists in making use of the increase of visual literacy in teaching, since they it makes collecting information easier and promotes more effective learning (op. cit Arif & Hashim 2009). Audiovisual materials gather aural, pictorial and sometimes even written information, hence making them the most useful materials to use in a multimedia lesson. Students of today have an extensive knowledge not only of technology, but also of mass media. Video-games, TV shows, films and social networks fill most of the students free time. The focus of this chapter is on audiovisuals such as short online videos or YouTube videos, TV shows and films. Bringing these into the classroom could be highly beneficial, as long as great care is taken in choosing the materials and designing the lesson.

Lakoff and Johnson's Experiential Realism is the idea that there is a reality "out there" and that our mechanisms of perception and cognition create a representation of this reality (op.cit. Evans and Green, 2006). One of the main points of using video in the classroom is the authenticity it brings to the lesson. Videos in English are usually made for

native speakers, and so they provide a meaningful context which will surround students with a sense of reality inside the classroom. Video facilitates mental processing and scaffolds the learning of a new language, because it provides an authentic environment, one that is lifelike and realistic, thus making it easier for learners to build mental connections, just as they do in their own lives. Moreover, Mukherjee and Roy (2003) claim that students are able to comprehend 30% more if they are offered spoken speech in context, and video is of great help for this, since speech is always contextualized. However, some scholars such as Fotos (2000) believe that the input should be manipulated in some cases to facilitate understanding, specially with beginner learners. This might disrupt the authenticity of the video, so an option would be using different videos for different levels instead of manipulating a clip to fit the needs of a group of learners. Nevertheless, adding subtitles is a modification that doesn't disrupt the original meaning of the video and might actually make a difficult clip more accessible. In sum, using video in the English classroom can be a motivational tool for young students. Videos catch the attention of learners and stimulate them to learn new words and phrases, whilst at the same time they receive input of the target language and culture (Tomalin, 1991).

But, how can videos be integrated in the classroom? The fact that audiovisual materials are attractive for students does not mean they have to be used for fun or as a break activity. On the contrary, they can be totally integrated in the lesson in order to promote learning. There are three main things that should be taken into account when choosing a clip for a lesson. Firstly, the students' sociodemographic characteristics should be considered. Berk (2009) maintains that age, level, ethnicity, gender and language spoken by students are important aspects when choosing audiovisual materials. What is also interesting is that many different learning intelligences can benefit from the use of videos. From Gardner's multiple intelligences (1983), verbal/linguistic, visual/spacial and musical/rhythmic students might

find improvement in their SLA when watching video clips (Berk, 2009). Secondly, the structure of the video is also a decisive element. Researchers agree that videos need to be short (around 5 minutes), to the point, encouraging and complete (they must tell an entire story, or a full scene from a story) (Tomalin, 1991; Berk, 2009). Moreover, the structure of the lesson around the video needs to be properly designed as well. Stoller (1993) says that in order for the video to be its most effective, pre-viewing, viewing and post-viewing activities need to be included so as to motivate students to use the language and to maximize the language intake. For instance, TBLT already uses such a structure in its lesson plans, dividing tasks in three parts. This might also help students comprehend a video better if it is challenging. Thirdly, the content of the video is also crucial when planning a lesson. It should be made clear that videos with disrespectful, violent or explicit sexual content should not be displayed unless there is a very clear goal, which in the case of language teaching is usually not the case. As Berk (2009) reiterates, such materials might upset or offend students, and this might impede learning, which is contradictory, since the goal of using it is to facilitate acquisition. Finally, although not essential, choosing videos that are familiar to students creates an interest in the activity and helps them identify with the content (Berk, 2009, p.8).

Bearing these “rules” in mind, longer videos such as TV shows or films wouldn’t be suitable for class environments. However, there are ways to use those materials in a lesson. First of all, trailers could be used, which are usually around 3 to 5 minutes and they tell a whole story. But what about TV series and films? The production of TV series has increased tremendously in the past few decades, and students spend many hours of their free time consuming these productions. Therefore, even if it meant breaking the 5-minute rule, the motivational factor would surely be advantageous to learning. Moreover, not all TV shows feature hour-long episodes. There is a large number of sitcoms that are 20 to 30 minutes long per episode, which teachers could fit in their lessons, especially if they have more than an

hour per class. On top of this, if teachers are concerned their students will be distracted after a few minutes watching, the video could be stopped at any time for check-ins. These are a great opportunity for students to tell their classmates what has happened in the story so far or speculate what might happen in the future. This way, students can put into practice the language they have been exposed to in the scene. In the case of films, the situation is more difficult, given that most films are longer than 90 minutes. Perhaps these multimedia materials would be useful for other contexts, but in an EFL classroom, TV shows are more suitable as far as longer videos go.

5. SUBTITLING AND FOREIGN LANGUAGE LEARNING

5.1. Benefits of subtitling for SLA

As mentioned before, learners should be exposed to input that is only slightly above the learner's current level, so that meaning can be processed correctly. By making use of the contextual information found in the input, language can be better understood. Videos already provide extra-linguistic information that helps scaffold the acquisition of the language. However, adding subtitles to a clip lightens the burden of trying to interpret the language one is exposed to. As Frumuselu (2015, p. 108) puts it: "Reading the dialogue in context while listening to the original language stimulates learners to consolidate what they are learning, enriching their vocabulary and making them familiar with the culture of the foreign language in an authentic setting". Moreover, according to Bravo (2008, p. 89) subtitles are also a source of authentic and contextualized language, not manipulated for teaching purposes. This way, learners are exposed to both language and culture in an authentic and meaningful way through three different channels: aural, visual and written — with subtitles. By using three modes of language simultaneously — audio, visual and written — information will be distributed and the cognitive load will be reduced. Sweller's (2005) Redundancy Principle

claims that the same information should not be processed through different channels because it may unnecessarily load the cognitive channel. Similarly, a study by Lavaur and Nava (2008) claimed that intra-language subtitles were detrimental because they hindered visual processing. However, it is important to mention that this research was carried with native speakers, who received both audio and subtitles in their mother tongue, making subtitles redundant for participants. Nevertheless, in the case of second language acquisition, the use of the same audio and written verbal content is not a burden, but a way to ease the load of understanding because, as Frumuselu (2015, p. 108) stated, they act as a support in a “meaningful, implicit and authentic context”. Subtitles reinforce any language that might not have been completely understood, and on top of that, they encourage the acquisition of new vocabulary (Perez, Van Den Noortgate & Desmet, 2013). On the other hand, subtitles are distracting when watching a video in one’s native language, since language is already understood without the help of captions. However, in the case of SLA, subtitles help language to be easily internalized and automatized, making it less difficult to put to use, ergo diminishing the working memory load (Mayer, Lee & Peebles, 2014; Sweller, 2005).

There are three types of subtitles that can be used in FLL: intralingual subtitles, also known as captions, which are subtitles in the same language as the video; interlingual subtitles, which are subtitles translated usually into the learner’s mother tongue; and dual-sub or translated subtitles, which simultaneously include both intralingual and interlingual subtitles — in some cases they appear one on top of the other and in others there is first the L2 subtitle and the L1 meaning in brackets. This chapter will collect some of the findings on the use of subtitles in learning a new language and draw a conclusion on which type of subtitling practice is the most effective in FLL.

Vanderplank (1988) was one of the first scholars to carry out research on the benefits of subtitles on second language acquisition, and found that these efficiently helped with

language development, and students developed techniques to use them to fit their needs. Moreover, a study by Borrás and Lafayette (1994) showed that captions were helpful for students because they helped them understand language that was beyond their proficiency level. Further research (Baltova, 1999; Bird & Williams, 2002; Bravo, 2008, 2010; Caimi, 2006; Garza, 1991; Lambert & Holobow, 1984; Neuman & Koskinen, 1992; Winke, Gass, & Sydorenko, 2010) has found that participants who were exposed to captioned video performed better in comprehension and vocabulary texts than those who were shown non-captioned video.

More recent research has been studying whether intralingual or interlingual subtitles have a more positive effect on language acquisition. Interlingual subtitles have been highly criticised because learners might avoid listening to the audio and just focus on the information in their native language. However, research on eye movement (D'Ydewalle & Gielen, 1992; Pavakanun & D'Ydewalle, 1992) shows that this is a highly automatized task and that it does not prevent the learner from paying attention to the aural information. Interlingual subtitles are believed to have more positive effects on beginner learners, and participants in a study by Taylor (2005) claimed that they were confused and distracted when offered video with captions. Given their low level, they had problems paying attention to both audio and text. If the aim of using subtitles is to reduce the cognitive load of watching a video with difficult language, then beginners would benefit from watching a video with interlingual subtitles, because intralingual subtitles are not so effective if students encounter a high number of unfamiliar words (Lunin & Minaeva, 2015, p. 269). L1 subtitles might not create the strongest connections between words and their meaning, but they will be building their listening skills and understanding the video clip, thus avoiding anxiety or frustration.

Whereas participants that were exposed to interlingual subtitles performed better in studies by Markham, Peter and McCarthy (2001) and Markham and Peter (2003), participants

exposed to intralingual subtitles showed better results in Steward and Pertusa (2004). Given these inconclusive results, when students were asked for their opinion, they said they believed they had learned more when they had heard and seen the word on screen at the same time. In contrast to Taylor's (2005) study, the participants were intermediate level university students, so their listening skills were better than beginners' and thus their cognitive load was smaller. Perhaps in the long term vocabulary acquisition would be higher with intralingual subtitles, since learners, given their intermediate level, would be able to process the audio and still pay more attention to new vocabulary in both the audio and the captions. Participants in the studies claimed that better connections were established between a word and its meaning when they saw it written on screen. The connectionist theory of language acquisition believes that language is built by mental connections, and words are integrated in the Long Term Memory (LTM) by repeated exposure to the language. Subtitles might help build these connections if students receive constant exposure to video with intralingual captions.

But, if there are no absolutely conclusive results on whether intralingual or interlingual subtitles are more effective for language learning, why not use both? This is the question Lunin and Minaeva (2015) posed before suggesting Translated Subtitles, which are the use of both L1 and L2 subtitles simultaneously, as if they were automatically translated. Their premise was that this way, students would be able to understand every single word. They claimed that since all information was shown on screen, they did not need to look up any words, and so words were better internalized. On top of that, they believed that since all information was available in the subtitles, students could just focus on the captions and it was less possible for them to become distracted. However, what Lunin and Minaeva did not mention was that by adding so much written information, students might ignore the visual information of the video that is shown, hence overlooking the potential of the learner to process images and connect them with words. Although Translated Subtitles might work for

some students, using either L1 or L2 subtitles gives learners the possibility to also pay attention to the scene while learning a language, which is the goal of using audiovisual materials in the English classroom.

In conclusion, the use of intralingual or interlingual subtitles greatly depends on the abilities of the learners, their level and the learning goal. Despite not having any definite results, studies show that while beginner learners might benefit more from interlingual subtitles, more advanced students may find intralingual subtitles more effective. Translated subtitles are not relevant for the study of audiovisual materials, although they might be beneficial for some students. In any case, the use of subtitles is advantageous in foreign language learning because it provides a way of scaffolding the acquisition of a language. Some European countries such as Portugal or the Netherlands are traditionally subtitling countries, meaning all foreign TV shows are shown in the language they were produced with interlingual subtitles, whereas Spain is a dubbing country. According to EF English proficiency rating³, Spain occupies the 25th position out of 72 countries, with a score of 56,66/100. On the other hand, Portugal and Netherlands, among other subtitling countries are in a higher position. Although many conditions influence these results, subtitling might be one of them. Nevertheless, this situation might start to change due to the popularity of online streaming networks such as Netflix, which always offer the original version with subtitles, and the increase of the “fansubbing” industry (Orrego-Carmona, 2015).

³ EF Education First (2017) data. Retrieved June 6, 2017, from: <http://www.ef.co.uk/epi/>

6. CONCLUSION

The aim of this paper was to collect the findings on the use of audiovisual materials in the EFL classroom. In order to argue in favor of the usage of such materials, Mayer's Cognitive Theory of Multimedia Learning, the belief that people learn better from materials containing both verbal and pictorial information, has served as the basis for this paper, as well as its subsequent research on the field of SLA. Thus, Mayer's publications *The Cambridge Handbook of Multimedia Learning* (2005) and *Multimedia Learning* (2009) have been crucial in the writing of this paper. The benefits of using video in language lessons have also been detailed, with the conclusion that such materials are highly advantageous for language acquisition if introduced appropriately in the lesson plan. As Talaván (2007, p. 5) puts it: "The undeniable value of video lies in its combination of image, sound and sometimes text [...], together with the socio-cultural information about habits, traditions, culture". Despite all of its benefits, audiovisual materials are not used as often as it would be expected. Some teachers claim using visuals in a lesson takes more time than making use of more traditional materials. However, traditional materials do not always lead to success in learning. Using video used to be very costly and time-consuming to prepare, but YouTube and other online videos such as Vimeo, as well as streaming networks such as HBO or Netflix offer an unlimited source of materials which are inexpensive or free and easy to use. (Snelsson and Perkins, 2009). Furthermore, audiovisuals are motivating for students, and adding them to a lesson is likely to make students more attentive and engaged in the learning activities.

Before starting to write this essay, the main goal was to deal with the potential use of films and TV series in the English classroom. However, there is barely any research on the potential of TV series to promote language teaching. Instead, the bulk of research on TV series and SLA is on the use of subtitles, which are also a highly beneficial way of stimulating language acquisition. The reasons behind this may be the fact that they take long

stretches of class time, and so their use has been limited to end-of-the-year rewards or breaks. However, as this paper discloses, with good design, they are likely to foster learning. Nevertheless, finding a way to easily implement these in the classroom could potentially be an interesting topic for research. Further research could also be conducted on the application of audiovisual materials on Task Based Language Teaching. The goal of Task Based Language Teaching is the use of authentic and meaningful materials so that students can practice different real-life activities. Audiovisuals would bring authenticity to the input offered to the students either in the pre-task, task or post-task.

Using audiovisual materials in the EFL classroom is not a new practice, although it could be further promoted and elaborated materials could be provided to teachers to make lesson design easier. Technology will continue to evolve, and the media will probably remain as one of the main focus in people's life. For that, research on the application of audiovisual materials in teaching, regardless of the field, ought to continue. The potential of video as a teaching tool is still to be fully explored, and teachers should not miss the opportunity to provide their students with inspiring worthwhile materials that will motivate students to get deeply involved in the learning process, while also fostering their critical thinking.

7. References

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