



UNIVERSITAT DE  
BARCELONA

---

**Grau d'Estudis Anglesos**

**Treball de Fi de Grau**

**Academic Year: 2019-2020**

**Coordinator: Elsa Tragant (G4)**

**CAPTIONED AND SUBTITLED L2 MEDIA IN EFL CONTEXT**

**STUDENT'S NAME: Maria Sergeeva**

**TUTOR'S NAME: Roger Gilabert Guerrero**

Barcelona, 11 June 2020



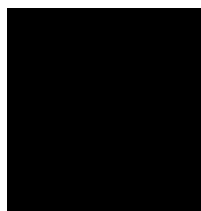


### Declaració d'autoria

Amb aquest escrit declaro que sóc l'autor/autora original d'aquest treball i que no he emprat per a la seva elaboració cap altra font, incloses fonts d'Internet i altres mitjans electrònics, a part de les indicades. En el treball he assenyalat com a tals totes les citacions, literals o de contingut, que procedeixen d'altres obres. Tinc coneixement que d'altra manera, i segons el que s'indica a l'article 18, del capítol 5 de les Normes reguladores de l'avaluació i de la qualificació dels aprenentatges de la UB, l'avaluació comporta la qualificació de "Suspens".

Barcelona, a 11 de Juny del 2020

Signatura:



*I would like to express my gratitude and appreciation to Roger Gilabert Guerrero for his advice and support throughout this study. Without his guidance, this paper would not have reached its present form.*

## **ABSTRACT**

Watching television programs has become a part of our daily lives. Easily accessible online streaming media services provide viewers with a grand variety of materials supported with captions and subtitles presenting foreign language learners and teachers with an unlimited number of possibilities to benefit from those authentic materials inside and outside the classroom. Recent SLA studies have shown that the inclusion of TV series into the traditional formal teaching programs can aid learner's listening skills and enlarge vocabulary size. Besides, learners from the studies on extensive TV viewing report to be motivated by this type of input and show shifts in viewing habits outside the classroom which is particularly important in the EFL context where exposure to the English language is very limited as it can satisfy the need for a large amount of L2 input. This paper gathers the major SLA findings on the benefits of audiovisual materials and on-screen texts for foreign language learning.

**Keywords:** language learning, subtitles, audiovisual materials, comprehension

## **RESUMEN**

Ver programas de televisión se ha convertido en parte de nuestra vida diaria. Los servicios de *streaming* en línea brindan a los espectadores una gran variedad de materiales respaldados con subtítulos que presentan a los estudiantes y profesores de idiomas extranjeros un número ilimitado de posibilidades para beneficiarse de esos materiales auténticos dentro y fuera del aula. Estudios recientes de SLA han demostrado que la inclusión de series de televisión en los programas tradicionales de enseñanza formal puede ayudar a las habilidades de escucha del alumno y ampliar el tamaño del vocabulario. Además, los estudiantes de los estudios sobre la visión extensiva de la televisión informan estar motivados por este tipo de entrada y muestran cambios en los hábitos de visión fuera del aula, lo cual es particularmente importante en el contexto del EFL donde la exposición al idioma inglés es muy limitada ya que puede satisfacer la necesidad de una gran cantidad de entrada de L2. Este estudio recoge los principales hallazgos de SLA sobre los beneficios de los materiales audiovisuales y los textos en pantalla para el aprendizaje de idiomas extranjeros.

**Palabras clave:** aprendizaje lingüístico, subtítulos, materiales audiovisuales, comprensión

## Table of Contents

<b>1. Introduction.....</b>	<b>1</b>
<b>2. Benefits and limitations of audio-visual materials.....</b>	<b>3</b>
<b>3. Captions and subtitles.....</b>	<b>5</b>
3.1 The impact of captions on comprehension.....	6
3.2 The impact of subtitles on comprehension.....	10
3.3 The impact of captions on vocabulary acquisition.....	12
3.4 The impact of subtitles on vocabulary acquisition.....	15
<b>4. Extensive and narrow TV viewing.....</b>	<b>17</b>
<b>5. Classroom context and pedagogical implications.....</b>	<b>23</b>
<b>6. Conclusion.....</b>	<b>29</b>
<b>7. References.....</b>	<b>31</b>

## I. INTRODUCTION

Globalization made the English language the major window into the world. Yet, learning it is an obstacle for many people from EFL (English as a Foreign Language) countries where traditional classroom setting does not provide learners with sufficient exposure. One of the possible solutions would be to look at English-language television industries as their development and widespread popularity are undeniable. According to *statista.com* (2019), online streaming services such as Netflix, Amazon Prime Video, and Hulu have become the most favored platforms in the world with an estimated 151.6, 75, and 28 million subscribers watching videos approximately two hours per day. Moreover, most online services are easily accessible, supported with subtitles (on-screen text in the audience L1) and captions (on-screen text in the audience L2), and provide their users with a wide variety of materials in the English language satisfying any taste, and creating favorable conditions for foreign language learning. Besides, The European Survey on Language Competences (European Commission, 2012) reported a positive relationship between English language proficiency and learners' exposure to L2 television. And, as EF English Proficiency Index (2019) recently illustrated, EFL learners from countries where subtitling is predominant language transfer, have a higher level of English language proficiency than those from traditional dubbing (re-voicing in another language) countries.

Thus, the usefulness of the movies and TV series as a tool for learning languages has become of ever-growing interest to SLA (Second Language Acquisition) researchers as they have a potential to provide EFL learners with large quantities of authentic and meaning-focused input (e.g. Gilmore, 2007; Rodgers & Webb, 2017). However, EFL learners are not likely to understand nor learn from them if the materials do not match learners' proficiency levels. Thus, the materials should be studied and carefully selected being slightly beyond learners' linguistic competence and supported with captions or subtitles which will facilitate content comprehension, enhance receptive skills, and aid vocabulary learning (e.g. Danan, 2004). So far researchers have proven that EFL learners of different ages and proficiency levels who were regularly watching TV series with on-screen text during an academic year had high vocabulary gains (e.g. Gesa, 2019; Pujadas, 2019). Besides, learners report being motivated to learn through TV viewing— inside and outside the formal setting and show shifts in L2 viewing habits in their spare time (e.g. Pujadas, 2019). Thus, an extensive TV viewing

approach might promote L2 television watching out of class satisfying EFL learners' need for a large amount of input.

Since the presence of on-screen text was found to be an important condition for successful L2 video viewing, recent SLA studies have been focusing on what effects captions and subtitles have on language learning at different ages and levels of linguistic proficiency. The general consensus is that subtitles in the viewer's L1 are more beneficial for young and low-level viewers whereas captions in the viewer's L2 are more preferable for higher-level learners. Besides, researchers also investigate multiple factors involved in language learning through TV viewing. Learners' vocabulary size, speed of reading, background knowledge, and video's lexical coverage were found to be strong predictors of comprehension and vocabulary gains among many other influencing factors. Therefore, the aim of this end-of-degree paper is to gather major findings related to the use of audiovisual materials in foreign language learning and teaching in order to provide a broad overview. The focus will be on the use of L2 television with captions and subtitles as a source of authentic, comprehensible, and meaning-focused input. Learners of different age groups and proficiency levels will be taken into account in order to reach conclusions on what conditions will make this type of input adequate in terms of comprehension and how this can contribute to the development of receptive skills and vocabulary learning.

The present research paper is divided into four main sections. First, the benefits of audiovisual materials as a combination of aural, visual, and written information will be analyzed. The following section will deal with captioning, subtitling, and different factors that can make authentic L2 videos comprehensible, aid the development of receptive skills, and contribute to vocabulary learning. The next section will be focused on the demands of TV series and address the benefits of using this type of input as an additional tool to learn a foreign language which in long term can make a significant difference for the development of multiple linguistic abilities as the studies on extensive TV viewing claim. The last section will discuss the pedagogical implications of this type of input inside and outside the classroom setting.



## II. BENEFITS AND LIMITATIONS OF AUDIO-VISUAL MATERIALS

Before delving into the differential effects of subtitles and captions and analysis of multiple factors influencing FLL (Foreign Language Learning), the importance of imagery, and on-screen text that accompanies the aural input from the L2 television programs should be analyzed. In this section, it will be argued that the use of sound, video, and on screen-text can be beneficial for overall comprehension and vocabulary learning. This assumption will reside on Paivio's (1986) Dual Coding Principle and Mayer's (2001, 2014) Cognitive Theory of Multimedia Learning which aims to give an answer on how the human mind processes information and learns. Several SLA researchers have taken these theories into consideration in order to investigate learning gains from audiovisual materials.

Paivio's Dual Coding Principle (1986) suggests that the incoming knowledge is received through visual and auditory information which are processed differently and through two different information-processing channels creating separate representations in the human mind. Moreover, if activated together, they will interact with each other and the associative connections will be built. This principle goes in tune with Mayer's Cognitive Theory of Multimedia Learning (2001, 2014) which postulates that, if the information is presented simultaneously with both verbal and visual aids, the connections between these two types of information will complement each other which, consequently, will lead to better and more effective learning and to the deeper formation of new mental representations or strengthening of existing ones. In the case of the SLA field, it has been proven that videos are more beneficial for comprehension than audio or audio with pictures (Hanley, Herron & Cole, 1995) and that the information processed through two channels results in a greater depth of spoken-word processing (e.g. Bird & Williams, 2002). Therefore, the simultaneous combination of visual and aural input can explain the enhance effect of multimedia on foreign language learning.

Indeed, videos can be regarded as the best combination of aural and visual input because they facilitate mental processing, help in building mental connections, and enhance foreign language learning. Rogers (2018) goes further by claiming that visuals in the L2 television programs provide additional semantic information that has the potential to aid comprehension and to support vocabulary learning. In the study of Peters (2019), learning was the highest when supporting imagery occurred concurrently with the aural form helping

learners to infer the meaning of the words. However, both studies point that the role of imagery in TV programs remains unexplored and the amount of visual support might vary depending on the TV genre. Danan (2004, p. 68) argues that “audiovisual media are closer to real-life because visual clues and context make it possible to “view” the message as much as listen to it.” However, he also problematizes the use of L2 television which is far more complicated than short, adapted videos. He says that, although visual information can make general ideas understandable, “beyond global understanding, visual clues do not necessarily assist with the comprehension of the actual spoken text”.

Pujadas (2019) also points out that despite being highly motivational, this type of authentic, unadapted L2 input can be overwhelming. “The fast speech rate, unfamiliar accents and the amount of unknown vocabulary” can discourage learners from viewing and hinder language acquisition (2019, p. 2). Indeed, comprehension is at the core of learning. Learners will neither want to watch TV programs that they do not understand nor benefit from them. According to Krashen’s (1985, p. 2) Input Hypothesis, learners acquire language “by understanding messages or by receiving ‘comprehensible input’”. This is especially problematic with authentic and unadapted L2 television which can be far more difficult than the learner’s current stage of linguistic competence. This perspective turns L2 media into a double-edged sword and draws the interest of SLA researchers into additional tools that can facilitate overall comprehension and aid learning gains.

One way of turning authentic media into a suitable input is to enhance it with on-screen text. It can be argued that multimedia that combines three information systems: visual, oral, and written (image, sound, and text in L1 or L2) can be more beneficial for foreign language learners. The simultaneous use of three modalities of information can reduce cognitive load and increase the comprehensibility of the input. Moreover, despite the fact that some studies claim that such redundant materials can slow down information processing, and learning by distracting the learner from processing the audio and video (e.g. Borrás & Lafayette, 1994; Mayer, 2014), the majority of experiments has proven otherwise. There is a shred of evidence from the eye-tracking studies that reading of the on-screen text is automatic and does not prevent viewers from processing the audio and image under the condition that videos are adequately matched with learner’s linguistic proficiency (Gass, Winke, Isbell, & Ahn, 2019; Muñoz, 2017). Sydorenko (2010) also found that, despite being

cognitively demanding, multiple channels can be more beneficial for comprehension, reinforcement of learned vocabulary, and learning of the new one, especially for learners who are not accustomed to authentic input.

Moreover, as Pujadas (2019, p.22) adds, “The availability of video, audio, and text allows learners to decide where to direct their attention to and process information from, according to their own preferences (e.g., visual or verbal information) and their language skills.” Besides, scholars mostly agree that subtitles and captions may reduce anxiety and build confidence by facilitating comprehension. Learners in the studies of Rodgers (2013) and Pujadas (2019) reported the presence of on-screen text to be helpful for comprehension and vocabulary learning. Borrás and Lafayette (1994, p. 70) also point to the ability of captions to increase learner’s “Perceived Self-Efficacy” and motivation and to promote better attitudes towards language learning. Therefore, the capacity of on-screen text to reduce learner’s anxiety and increase learners’ confidence is a step forward in acquiring language more efficiently.

In summary, aural input enhanced with video and on-screen text has proven to be more potent than other types of input for comprehension and vocabulary learning as the information is processed and enhanced through the three different channels. Nevertheless, the findings discussed so far are the tip of the iceberg and many factors on behalf of the input and learner should be taken into account before reaching a conclusion on how L2 media can be used for learning purposes. Further sections will provide detailed information on the distinctive benefits of captions and subtitles in the SLA field.

### **III. CAPTIONS AND SUBTITLES**

Recent studies have been focusing on how to use videos with on-screen text for foreign language learning in an efficient way. One of the main objectives is to find the distinctive benefits of L2 videos supported either with captions (L2 audio and L2 text) or subtitles (L2 audio and L1 text) since it is the most accessible format. Other options such as keyword captioning (L2 audio and L2 key-words), highlighted captioning (L2 audio and L2 full-captioning with highlighted words) and dual subtitling (L2 audio and L1 and L2 text simultaneously) were also observed. This section aims to gather and compare major findings on captions and subtitles related to content comprehension which is precisely what is

necessary for effective language acquisition (Krashen, 1985); and to develop listening and reading comprehension skills which can be a passageway to successful viewing of authentic L2 programs in the long term. The influence of captions and subtitles on incidental vocabulary learning will also be analyzed in order to provide an overview and reach conclusions.

The results reveal generally positive effects of any type of on-screen text on viewing comprehension and vocabulary learning in comparison to no on-screen text. In terms of viewing comprehension, the overall conclusion is that subtitles are better for beginners and young learners whereas captions benefit higher-level learners. As for vocabulary learning, most of the studies discovered the power of captions to trigger word-form recognition and recall whereas subtitles have been found to be beneficial for word-meaning learning. However, a number of factors must be taken into account in order to determine the overall effectiveness of captioning and subtitling. Namely, factors related to the viewer such as age, proficiency, speed of reading, size of vocabulary, and ability to recognize words and recall their meaning; and factors of the input such as type of video, its lexical coverage, and word related variables. Although viewers' typical experience is to watch videos with subtitles and then move to captions as their proficiency level increases, in the subsections they will be presented in the opposite order. The reason behind this is that captions have received wider attention than subtitles.

### *3.1 The impact of captions on comprehension*

The extensive studies on captioned TV media began in the 80s of the past century. Price (1983) suggested that an increase in comprehensibility facilitates language acquisition. She was the first to conduct a large-scale study to investigate “whether exposure to captioned videos significantly improves or impairs viewing comprehension” (p. 8). Approximately 500 ESL learners from 20 different language backgrounds watched videos in English with or without captions. Results revealed that independently of educational and language backgrounds captioned videos improved participants' comprehension significantly. Price also recommended using TV programming as a source of authentic context and language both inside and outside the classroom. Although her suggestion concerned only ESL (English as a second language) learners, the new age of media opened a large variety of possibilities to use captions as a pedagogical tool in the context of EFL (English as a foreign

language) as well. Her findings encouraged researchers to investigate the benefits of captioned media for L2 listening and reading comprehension skills.

As Vandergrift (2007, p. 191) pointed out, “listening comprehension is at the heart of L2 learning; and the development of L2 listening skills has demonstrated a beneficial impact on the development of other skills (e.g., Dunkel, 1991; Rost, 2002).” In fact, it has also been claimed that attending to captioned videos can open the possibility for training more than one skill at the same time. By attending to multiple modalities, learners not just practice their listening skills but also use their reading skills to strengthen and develop the aural comprehension. The experiment conducted by Garza (1991) included adult learners of English with an upper-intermediate level of proficiency who had to watch segments selected from American films of different genres. The results revealed the potential of captions to enhance foreign language learning by allowing students “to bridge the often sizable gap between the development of skills in reading comprehension and listening comprehension, the latter usually lagging significantly behind the former” (p. 246). In sum, he suggested that captions benefit learning by: 1) allowing the students to transfer their already developed reading skills to strengthen and develop aural comprehension in order to cope with authentic materials; 2) increasing the accessibility of the salient language and giving the opportunity to understand and enjoy same input understood by a native speaker; 3) allowing the use of multiple language processing strategies to accommodate the multiple modalities of input; 4) increasing the memorability of essential language and thus, 5) promoting the use of new vocabulary in the appropriate context (Garza, 1991, p. 245-246).

Overall, “Captioning facilitates language learning by helping students visualize what they hear, especially if the input is not too far beyond their linguistic ability” (Danan, 2004, p. 67). Yet, if the input is too far beyond the linguistic competency which can often be the case of television, captioning cannot be sufficient to close the wide gap between learners’ proficiency level and the complexity of the input (Montero-Perez, Peters & Desmet, 2014). Therefore, as has been previously mentioned, the relationship of the factors on behalf of the learner and video should be analyzed with caution. First, the usefulness of captions seems to depend on learners’ age and proficiency level which are both interrelated with learners’ vocabulary knowledge, reading ability, and aural decoding skills (Vanderplank, 2016a). Studies with eye-tracking methodology shed light on how learners divide their attention

between the multiple modalities and process captions. The results reveal that independently of proficiency level or age, viewers generally attend first to the text and then to video and audio which supports the assumption that reading comprehension skill is usually higher than the one of listening (Gass et al., 2019; Muñoz, 2017). Moreover, the experiment conducted by Muñoz (2017) has shown that children, adolescents, and adults with lower proficiency levels spend more time focusing on captions than the participants with higher levels whose text processing is already automatized. This can indicate that for overall comprehension, lower-level viewers rely more on captions than on audio and video, and that reading L2 text results in more cognitive effort or processing difficulty. The reason for this could be limited L2 reading skills and small vocabulary size. Other individual differences such as short term memory, background knowledge, familiarity with this type of input, and ability to concentrate should also be taken into account (Rodgers, 2013). Besides, Vanderplank (2016a) warns that adults whose L1 language has a writing system different from the Roman script or whose English reading level is not very high can have difficulties with captions. As for the children, he strongly advocates for the use of subtitles given the fact that their linguistic proficiency tends to be low and cognitive abilities not fully developed. Yet, he also warns that children can fail to follow the L1 text on general broadcast programs until they are about ten years old or above.

On the other hand, studies generally reveal greater benefits of captioned media for adolescent and adult learners with intermediate and advanced levels who usually report the usefulness of captions for overall comprehension (e.g. Gass et al., 2019; Muñoz, 2017; Winke, Gass & Sydorenko, 2010). These results are directly related to the ability to process written and spoken text at a reasonable speed which depends on the size of the vocabulary (Miralpeix & Muñoz, 2018). The corpus-driven study conducted by Webb and Rodgers (2009a,b) aimed to measure the amount of known vocabulary necessary for successful comprehension and accidental vocabulary learning. They analyzed the wide range of scripts of British and American TV programs and movies and concluded that the knowledge of the most frequent 3,000 word families plus proper nouns and marginal words is enough to gain 95% of lexical coverage (the percentage of known words in the input) which was suggested to be the minimal coverage point for comprehension and incidental vocabulary learning. According to them, intermediate and advanced learners will benefit the most from TV viewing as they already reached the minimal vocabulary size. However, they noticed that

full comprehension might not be achieved even when the coverage is close to 100% if the learners are not accustomed to the speed and pronunciation of authentic programs. Besides, the difficulty of the TV program directly depends on its length, amount of imagery-supported words, and the coverage of high and low-frequency words as well as the accent and pronunciation of the speaker, prosody, and speed of the speech (e.g. Vanderplank, 2016a). Therefore, TV programs should be carefully selected in order to facilitate comprehension. These issues will be discussed in the following sections.

Moreover, Birulés-Muntané & Soto-Faraco (2016) found that captions help developing listening comprehension skills by aiding spoken word recognition and speech perception since in captions “lexical information would allow the listener to link sounds with known word spellings, thus promoting the formation and/or retuning of perceptual categories for better decoding of the speech input” (p.2). They conducted an experiment showing an episode of TV series with captions, subtitles, and without on-screen text to intermediate learners of English. The results showed that their captioned group significantly improved in the post-listening test. More moderate improvements were found in the no-text group and the subtitled group got the lowest post-test listening scores. Thus, researchers concluded that subtitles can block the improvement of listening comprehension skills while captions can help to segment words and unify accent variations which will result in better perception of accented speech among intermediate learners. Similar results were found in the study of Mitterer and McQueen (2009) with advanced participants. This can indicate that captions indeed aid speech perception which leads to better listening comprehension. However, both studies also reported results on behalf of plot comprehension. The subtitled group outperformed the captioned group, and non-caption group showed the lowest results in terms of overall comprehension. But, some studies reveal positive results of both types of on-screen text (e.g. Vulchanova et al., 2015). Therefore, it can be concluded that both on-screen texts contribute to better plot comprehension than no-text. Yet, while captions aid listening skills, they may not be as effective as subtitles in terms of overall comprehension even when the level of proficiency is high.

Finally, Gass et al. (2019, p. 87) state that, “there may be a zone within which captions are most useful, perhaps centered where the content difficulty level is not too far above or below a learner’s ability level. But this zone may be larger or smaller, contingent

on learning goals, individual goals, and linguistic factors relative to the text, the learner, or both.” Overall, studies indicate the most positive effects of captions for learners of intermediate and advanced levels. At this stage, L2 text can be most helpful in developing reading and listening comprehension skills (e.g. Vanderplank, 2016a; Winke, Gass & Sydorenko, 2010). However, despite the usefulness of captions for higher-level learners, there might be a point at which they are ready to test their listening skills without on screen-text. In this case, captions can become an unnecessary distraction (Gass et al., 2019). Therefore, despite the fact that captions make the content of the authentic videos more accessible, this type of input might not be the best choice for every type of learner. On the subject of beginner students, a possible solution would be to watch captioned videos twice (Winke et al., 2010); or introduce them to adapted videos slightly beyond learner’s actual level of proficiency gradually moving to authentic materials; or to use a highlighted captioning which focuses the viewer’s attention on the words essential for comprehension (Guillory, 1998). Yet, some studies reported no increase in the comprehensibility with this type of captioning (Perez, Kulak, Peters, Clarebout & Desmet, 2014). Another option would be the use of dual subtitling which will give the viewer a choice on which text to focus on. Finally, with children and beginner adults whose vocabulary knowledge is limited and reading speed is usually slow, the use of subtitles might be more appropriate (Vanderplank, 2016a).

### *3.2 The impact of subtitles on comprehension*

Subtitles represent a translation of L2 spoken text and, thus, contribute to the better comprehension of videos, especially for low-level young and adult viewers. However, teachers usually exclude subtitles from the classroom setting as it is believed that learners will focus only on their native language and ignore L1 audio which will hinder the development of listening comprehension skills (e.g. Danan, 2004). SLA and cognitive studies, on the other hand, point to the capacity of viewers to process subtitles and audio simultaneously and claim that subtitled videos trigger greater depth of processing. Yet, some studies reported negative effects of subtitles on listening comprehension skills (e.g. Birulés-Muntané & Soto-Faraco, 2016). The overall scope of research reveals the positive effects of subtitles on overall comprehension explaining this by Pavio’s (1986) Dual Coding Theory. For example, Dannan (2004) states that subtitles ease comprehension and aid learning



“through triple associations between image, sound in one language, and text in another, which may lead to better processing and recall because of the additive effects of both image and translation” (p. 72).

Despite the fact that subtitles can guarantee comprehension of the input regardless of the viewers’ proficiency level or difficulty of the TV program, this might not be the case with very young learners because by assuming that the input is comprehensible, it has to be also assumed that the learner is able to follow the subtitles at an adequate speed (Vanderplank, 2016a). In many countries, learners start reading at age 5/6 and they start mastering reading skills by age 7/8. Yet, studies with primary school children show that young viewers find it difficult to follow subtitles and might ignore L2 audio (Koostra & Beentjes, 1999; Muñoz, 2017). And according to Vanderplank (2016a), it would be reasonable to introduce subtitled materials at age 10 when they have probably sharpened their L1 reading skills. This is a crucial question that would need further investigation. As for the adolescent and adult low-level learners, subtitles indeed facilitate content comprehension better than the captions and help them to identify the meaning of unknown words. Studies with eye-tracking methodology reveal that learners with low proficiency levels spend more time reading subtitles than high-level viewers and report it to be more helpful than captions for overall comprehension. On the other hand, intermediate and advanced learners tend to skip subtitles more than captions finding them redundant (Gass et al., 2019; Muñoz, 2017). Vanderplank (2016a) also observes that advanced learners might find subtitles distracting and that this, in fact, can hinder the adaptation to the L2 sound.

Finally, it is important to understand what processes make the comprehension of TV programs to occur (Vandergrift 2004, 2007). The knowledge comes from both linguistic and non-linguistic sources through top-down and bottom-up processing. As Rodgers (2013, p.6) puts it, “Bottom-up processing begins with decoding phonemes to identify individual words and construct a literal understanding of the text. Top-down processing is dependent on the background knowledge the listener brings to the text.” Comprehension occurs through a complex, simultaneous interaction of these processes creating a mental representation of the input in the viewer’s mind. The way the information is processed can vary within different parts of the video partially depending on the complexity of the spoken text and apparentness of the video, and mostly depending on the learner’s level of proficiency. High-level language

learners tend to rely more on the top-down processes as they are able to predict the context. Low-level learners, on the other hand, rely more on bottom-up processes. This happens because low-level learners cannot process L2 input automatically and cannot predict the spoken text and are forced to consciously concentrate on distinguishing words and decoding their meaning, thus, “a large proportion of what they hear may be lost, given the speed of speech and the inability of working memory to process all the information within the time limitations” (Vandergrift, 2007, p. 193). This, however, can be compensated not only by visual input but by captions and subtitles. Subtitles can aid plot comprehension which will allow the learners to focus on aural input and on top-down processes whereas captions can help them to segment the text, and thus, facilitate written and aural form recognition and form-meaning connection. But, captions can also have a negative effect on low-level learners whose vocabulary and speed of reading are limited and who have to consciously decode the written text which might impact the overall comprehension (Vandergrift, 2007).

### *3.3 The impact of captions on vocabulary acquisition*

The general consensus is that learners can pick up new words incidentally when watching short videos or TV programs in the foreign language (e.g. Montero Perez et al., 2014; Peters & Webb, 2018). While it has been proven that vocabulary learning takes place even when the video has no-text support, the presence of captions significantly improves aural and written receptive skills. Captions can allow learners to visualize the speech stream which eases the decoding and segmentation of the spoken text into meaningful components and enhances the recognition of written and aural word forms. Experiments conducted by Markham (1999), Sydorenko (2010), Winke et al. (2010, 2013), and Montero Perez et al. (2014) compared captioning with non-captioning and found that captions have greater potential at improving written and aural form recognition skills. Yet, Sydorenko (2010, p. 64) pointed out that non-captioned group performed better in aural form recognition and suggested that, “different types of video input seem to provide different benefits” and, thus, if the goal is listening or learning the aural forms, it might be better to use non-captioned videos. However, the majority of studies prove that captioning benefits both types of word recognition. Moreover, Bird & Williams (2002) claimed that captions affected aural form recognition regardless of the semantic information, and that written L2 text facilitates speech perception by helping the viewer to create phonological visualizations of the spoken words

in the mind which results in listening-based recognition of those words the next time they are encountered.

Indeed, there is a shred of empirical evidence that the presence of written L2 text facilitates comprehension and consequently improves processing, reinforces prior vocabulary knowledge, and stimulates incidental vocabulary learning. Captions serve as an attention-driving device by making the unknown words more silent and consequently more noticeable for the learners. Thus, by comparing their L2 knowledge with the input learners will be able to notice a gap and take out the language. Also, learners can make form-meaning mappings in the mental lexicon through inferring processes which result in further meaning recall (Vanderplank, 1990; Winke et al., 2013; Gass et al., 2019). Similarly, Garza (1991) reported positive effects of captions on productive skills such as recall, retention, and reuse of vocabulary in the long-term. In the study of Montero Perez et al. (2014), captioning groups outperformed the non-captioning group on form and meaning recognition and clip association. However, they found no difference between captioning and no-captioning groups for meaning recall of the target words. They suggested that one possible explanation would be that captions do not provide the concrete meaning of the word and learners are forced to construct meaning based on inferring processes, but the real-time nature of the video might give the learner little time to do so especially with low-frequency words. Besides, vocabulary acquisition is a lengthy process and it is not possible to predict what words will be noticed by learners (Vanderplank, 1990). Thus, they concluded that although captions help to make initial form-meaning connections, it does not necessarily lead to learning. Interestingly, they found that keyword and highlighted captioning group didn't significantly outperform the full captioning group in target word recognition and learning. It was assumed that making words more silent through keyword and highlighted captions does not enhance their noticing and does not lead to better recognition and learning of those words, and that it is rather the L2 text itself that allows it. However, it must be pointed out that there is also evidence of the contrary. Several recent studies have shown that highlighting works in the context of captions (e.g. Lee & Révész, 2020).

Besides, as in the case with comprehension, the acquisition of vocabulary is influenced by learners' proficiency level, working memory, vocabulary knowledge, and knowledge of the topic. In sum, studies prove that captioning aids incidental vocabulary

learning among all proficiency levels and different ages (e.g. Sydorenko, 2010; Winke et al., 2010; Montero Perez et al., 2014). Vanderplank (2016a, p. 188) states that learning gains are the highest when captioned videos match the viewer's "level of interest and their own level of proficiency in the foreign language." Similarly, Danan (2004) argues that captioning can guarantee language gains for all types of learners only if there is a minimum language competency and materials are slightly beyond the learner's proficiency level. In the case of beginners, he states that unadapted materials can be too demanding for vocabulary acquisition and that carefully selected and adapted videos might be a better choice. Yet, Peters, Heynen, and Puimege (2016) found that unadapted captioned videos also have positive effects on low-level viewers. Overall, captioned TV programs are considered to be beneficial for vocabulary learning among advanced and especially for intermediate level learners (Danan, 2004; Montero Perez, Noortgate & Desmetet, 2013). One of the crucial factors is the size of prior vocabulary knowledge. As it has been mentioned, the viewer has to know approximately 3,000 most frequent word families plus proper nouns and marginal words in order to understand L2 movies, and at this level, there is the potential for greater incidental vocabulary learning (Webb & Rodgers, 2009a, 2009b). Consequently, viewers with higher levels and larger vocabulary learn significantly more new words from captioned input in the level of meaning recall and recognition which can also be explained by lesser decoding load that allows learners to focus on inferring word meaning processes (Montero Perez et al., 2014; Peters et al., 2016; Peters & Webb, 2018). Moreover, Winke et al. (2010) advocate for watching videos with captions two times because when it comes to captions, viewers always prioritize meaning over form and may have fewer resources for processing language aspects. In the second viewing, however, when learners already understand the video, they can allot more attentional and memory resources to processing linguistic aspects. Winke et al. (2010) also found that learners whose L1 has similar writing systems to L2 can more easily extract new information from the written text than those whose L1 writing system differs from L2.

Peters and Webb (2018) explored incidental vocabulary learning through viewing a single full-length captioned TV program by examining word-related variables such as frequency of occurrence, cognateness, and word relevance. They conducted two experiments with EFL learners and positive results for meaning recognition and recall were correlated with the frequency of word occurrence. They suggest that "repeated encounters in L2 TV

programs with new words might facilitate vocabulary learning” (Peters & Webb, 2018, p. 570). This goes in line with previous findings of Peters et al., (2016). Another important variable is cognates (words that are formally and semantically related in two languages). Studies show that cognates play a significant facilitative role especially when the input is aural as they are more silent and learners are more likely to pay attention to the L2 words that are similar to their L1 (Vidal, 2011; Lindgren & Muñoz, 2013). Yet, a few research investigated the role of cognates in vocabulary acquisition through TV viewing (Peters & Webb, 2018; Peters, 2019), and given the significant positive results, further research is needed. Interestingly, there was no relationship found between the word relevance (words essential for understanding) and incidental vocabulary learning while watching captioned the TV program (Peters & Webb, 2018). On the other hand, the studies concerned with L2 reading and listening showed that relevant words were more likely to be learned (e.g. Vidal, 2011). Different results for different types of input might be attributed to the presence of imagery in the TV programs and to the different types of words that need further investigation (Peters & Webb, 2018). Taken together, the studies on captioned videos and vocabulary acquisition reveal positive effects of captioning on meaning recognition and recall with some learner and word variables as predictors of successful learning.

### *3.4 The impact of subtitles on vocabulary acquisition*

Most of the studies have been comparing captioning with non-captioning for vocabulary acquisition and lesser focus on the effects of subtitles. This is particularly surprising given the fact that there is evidence on the positive effects of subtitles on incidental vocabulary learning from the studies with children from countries where watching subtitled programs is the norm. Young viewers learn more words when watching subtitled videos compared to no on-screen text (Danan, 2004; Koostra & Beentjes, 1999). Although learning still happens in all three conditions, the majority of studies show that the presence of on-screen text results in greater vocabulary building and that captions have more positive effects on vocabulary acquisition than subtitles, but different types of on-screen text have differential effects at the level of word learning. Captions are more helpful for learning the form of new words whereas subtitles help to identify the meaning (Bianchi & Ciabattini, 2008; Frumuselu et al., 2015; Peters et al., 2016; Peters, 2019; Vanderplank, 2010, 2016a). Yet, there is an objection that the presence of subtitles can result in more passive viewing

and distract learners from processing the speech which, consequently, will hinder the adaptation of the L2 sound and affect the form-meaning connections of the spoken words (Peters et al., 2016; Vanderplank, 2010, 2016a).

Peters et al. (2016) conducted two studies with low-proficiency to intermediate EFL learners from different educational settings. Different types of short videos, tests, and test administrations were used in order to investigate the effect of captions and subtitles on different aspects of word knowledge. Both experiments showed the potential of L2 text to benefit initial word learning with captions being more effective than subtitles for form recognition and recall. Besides, subtitles were not found to be more effective than captions for learning the meaning of new words. They concluded that watching videos with on-screen text helps learners to move “from no knowledge of an item to recognition of the form or from form recognition to meaning recognition or recall” (p, 146). They also pointed out that frequency of word occurrence and learners’ vocabulary size was correlated with learning and that when there is a semantic match between imagery and its aural representation, viewers are more likely to create form-meaning connections. These findings are in line with the studies that take into account learner and word related variables (Bianchi & Ciabattini, 2008; Frumuselu et al., 2015; Peters & Webb, 2018). Finally, Peters’ (2019) study with intermediate EFL adolescents confirms that captions are more beneficial than subtitles as their presence results in better form recognition than meaning recall. As for the subtitles, lower results on form-meaning connections were explained by learners being more engaged in reading rather than in attending to aural forms. This experiment also confirmed that imagery-supported words are more likely to be picked and that cognateness, frequency of occurrence, corpus frequency, and learners’ prior vocabulary knowledge have an impact on vocabulary learning.

In sum, the overall consensus is that the presence of on-screen text has more positive effects than its absence. The use of subtitles may be more appropriate than captions with younger and lower-level viewers when their reading speed is slow and vocabulary is limited as it provides translation of the spoken text making the input more comprehensible and helping to identify the meaning of unknown words. Yet, several researchers criticized subtitles for hindering the adaptation of L2 sound, and sometimes they were found to be distracting because viewers focus on reading L1 text and ignore the sound which affects

word-meaning mapping. Captions also aid comprehensibility of the authentic L2 programs, and, furthermore, improve L2 listening and reading comprehension skills and help to create form-meaning mappings. They are considered to be more effective for adolescent and adult learners with intermediate and higher levels of proficiency. Moreover, the effects of captions and subtitles on comprehension and vocabulary acquisition depend on the materials used, word, and learners' related variables. The contradictory findings among the studies encountered in this section can be explained by differences in types and length of the input, different methodologies, and different types of participants. Besides, research has mostly focused on the effects of captions and on adults with an intermediate level of proficiency. Thus, future studies are needed to close the gaps. Overall, the findings on captions and subtitles mainly use short videos or fragments of movies which sheds light on how audiovisuals can be used inside the traditional formal classroom context. However, despite being useful, watching short videos will not satisfy the need for a large amount of input. Thus, there is a need to look at how watching full TV programs can benefit language learning. The next section will provide an overview of the longitudinal studies with L2 TV programs.

#### **IV. EXTENSIVE AND NARROW TV VIEWING**

Most of the studies mentioned in the previous section are short term and use short educational videos and fragments of movies which despite being useful, do not reflect a natural way of television watching. Besides, the input should be processed in large quantities (Nation, 2007) and longitudinal studies can shed light on the potential benefits of regular L2 TV watching. Webb and Rodgers (2009a, b) and Webb (2011) proposed an extensive viewing approach with silent and uninterrupted viewing of L2 television (e.g. movies and TV series) as a way to increase the amount of meaning-focused L2 input and improve vocabulary learning of EFL learners inside and outside of the classroom. This idea comes from studies on extensive reading which showed to be motivating and beneficial for the development of reading comprehension and vocabulary learning (Vandergrift, 2007). Besides, studies on children from traditionally subtitling countries, found that regular watching of L2 programs can aid incidental vocabulary learning (Koostra, Voort & Kamp, 1997; Koostra & Beentjes, 1999). It was also suggested that watching programs with the same topic, genre or subgenre is more beneficial than watching unrelated programs due to

the lower vocabulary load (Webb, 2011). Later, Rodgers and Webb (2011) claimed that watching successive L2 TV series has more advantages over movies and randomly chosen episodes because they tend to have shorter running time than the average movies, and due to their serial nature, allow learners to develop deeper background knowledge of characters and plot through the viewing of multiple episodes of the same series. Thus, they proposed a narrow viewing approach which can be defined as watching episodes of the same TV program extensively and successively. The aim of this section is to gather the major findings on extensive narrow TV viewing and factors influencing comprehension and incidental vocabulary learning.

Webb and Rodgers (2009a, b) analyzed corpus data of British and American TV programs and movies from different genres in order to find their average lexical coverage (the percentage of known words in the input) which would allow determining the vocabulary size necessary for learners to benefit from authentic L2 programs. They hypothesized that the receptive vocabulary size of 3,000 most frequent word families plus proper nouns and marginal words is a threshold for comprehension and incidental vocabulary learning which corresponds to approximately 95% of lexical coverage. Yet, it was suggested that 90% coverage can also be beneficial and 98% is an ideal coverage. Moreover, they noted that the coverage varies in TV programs from different genres and that episodes of TV programs from the same genre contain fewer word families and low-frequency words (4,000–14,000 level) reoccur more often than in randomly selected programs which can have a facilitative effect on vocabulary learning. Rodgers and Webb (2011) advocated for narrow TV viewing arguing that successive watching of episodes from the same TV series can be the most effective strategy since it will allow learners to gradually accumulate background knowledge and thus, increase comprehension. It will also reduce lexical demands, strengthen prior vocabulary knowledge and facilitate incidental vocabulary learning of low-frequency words through repeated encounters. As for the frequency of occurrence, it was hypothesized that 5-9 encounters with words might be enough for partial learning (Webb & Rodgers, 2009a). Further studies might test this hypothesis and investigate when a new item learned through a TV series becomes integrated into the viewer's interlanguage. Moreover, Webb (2011) found that three subgenres of American drama had fewer word families than random television programs and that low-frequency words occurred more often within subgenres. Thus, watching programs with the same genre, subgenre or topic can result in greater



comprehension and learning gains. Yet, it was also noted that even watching unrelated programs can lead to significant positive effects if it is done extensively and that although lexical coverage plays a significant role, there are other factors that should also be taken into account.

Rodgers (2013) conducted a study with pre-intermediate to intermediate EFL university students watching 10 full-length successive episodes of American drama. The participants were separated into captioned and non-captioned groups. Sessions were held approximately once a week. It was found that both groups had significant improvements in comprehension from the first to the last episode, but the results of the captioned group were not significantly higher than of the non-captioned group which does not go in line with the findings from the previous section. Rodgers (2013) attributes this contradiction to the nature of the input used. A full season of TV series has a story-arc with each episode furthering the storyline which allows learners to accumulate the knowledge of the plot and characters, get used to their accents and thus, improve comprehension towards the final episodes independently of captions. Interestingly, the captioned group performed better in initial episodes and in episodes where comprehension was difficult. This shows that when learners start watching TV series for the first time, captions can significantly aid comprehension. Moreover, in episodes where comprehension was difficult, the captioned group performed better indicating that “for certain episodes, regardless of the participants’ familiarity with a series, the presence of captions can significantly assist comprehension” (2013, p. 256). It was found that comprehension is correlated with learner’s vocabulary size and that the presence of captions can compensate for smaller vocabulary knowledge. Yet, the results on comprehension and vocabulary learning did not support the hypothesis of Webb and Rodgers (2009a, b). In this study, participants with the knowledge of 2,000-word families (lexical coverage of 94.3% across the episodes) were able to achieve adequate comprehension. However, the limitation is that there were a few participants with a vocabulary size of 3,000-word families or more. In terms, of incidental vocabulary learning, the captioned group slightly outperformed the non-captioned group “indicating that captions do not have as much effect on vocabulary learning through viewing full-length episodes of television dramas” (Rodgers, 2013, p. 259). The frequency of word occurrence was positively correlated with meaning recognition which was supported by the studies of Peters and Webb (2018) and Rodgers and Webb (2019) who also found its positive effect on meaning recognition and

recall. It was concluded, that watching TV programs extensively has a potential for learning and that more findings are needed in order to reach generalizable conclusions.

The doctoral dissertation of Pujadas (2019) aimed at investigating the effects of extensive viewing of 24 consecutive episodes of a sitcom over an academic year. The participants were beginner, adolescent EFL learners (13-14 years old) divided into captioned and subtitled groups in order to examine the differential effects of both types of on-screen text on comprehension and vocabulary learning. The vocabulary size of the learners was approximately 2,000 words (lexical coverage of 94% across the episodes). In this study, subtitles were found to be more beneficial than captions for overall comprehension. It was suggested that subtitled group might ignore processing L2 sound and that prior vocabulary knowledge might be a strong predictor of comprehension when captions are used. Yet, both groups had significantly high scores on comprehension which according to Pujadas indicates that despite higher demands, “learners at this age and proficiency could already benefit from captions” (2019, p.156). As in the study of Rodgers (2013), lexical coverage was a strong predictor of episodes’ comprehension, although comprehensibility did not improve towards the last episode. In terms of vocabulary learning, both groups had improvements in form recognition and slight improvements in meaning recognition with words retained in the long-term. The captioned group had slightly better scores which support findings that the use of captions can be better for vocabulary acquisition. It was also highlighted that vocabulary learning was influenced by learner’s proficiency and correlated with comprehension. Words that reoccurred more often were better learnt. These findings go in line with another longitudinal study on young learners (Bravo, 2008). Finally, learners in both studies (Pujadas, 2019; Rodgers, 2013) believed that L2 TV watching was helpful for language learning and that on-screen text was helpful for comprehension. Taking together the findings on learners’ age and proficiency, Pujadas concluded that “there might indeed be an age/proficiency threshold and that the older and more proficient you are, the higher you benefit from captioning rather than subtitling” (2019, p. 196).

In the doctoral dissertation of Gesa (2019), three different proficiency levels and ages were compared. Beginner primary school children watched subtitled sitcoms and intermediate high school and upper-intermediate university students watched captioned sitcoms around a year (university students one semester). Importantly, apart from watching

TV programs, participants received explicit instructions with focus-on-forms activities and controlled groups received instructions without TV watching. In terms of vocabulary acquisition, all the three groups benefited from sitcoms, although university participants slightly outperformed high school participants and the scores of children were significantly lower. This was attributed to the level of proficiency, prior vocabulary knowledge, and age. It was also suggested that the reason for children's lower learning gains is their limited vocabulary knowledge which did not match the lexical coverage of the programs which might lead to cognitive overload and discourage them from paying attention to vocabulary. Yet, Gesa notes that it can be improved through long-term exposure. It was also found that subtitles functioned as distractors and stated that "learners would need to have an intermediate level of the TL to profit from the additional exposure to video viewing. Below this level, benefits are not clear, at least in the short term, and they may only arise with sustained exposure to multimodal input" (Gesa, 2019, p. 312). As for upper-intermediate learners, the control group who only completed vocabulary based tasks in formal regular instruction without watching programs had similar results in vocabulary gains with those who were exposed to watching as well. Gesa suggested that learners with linguistic proficiency above intermediate level can equally benefit from formal teaching and viewing programs. Although longer exposure to TV programs might reveal different results. As in the study of Pujadas (2019), comprehension did not improve over time being episode dependent which might be influenced by content difficulty, amount of exposure, and learners' skills among other factors. Conversely, vocabulary gains were not retained in the long term.

As it has been discussed in the previous sections, imagery is considered to play a facilitative role not only in comprehension but in incidental vocabulary learning by providing semantic support (Rodgers, 2018). This assumption comes from Mayer's Theory of Multimedia Learning (2014). Yet, no one explicitly studied to which extent imagery plays a role in full-length L2 TV programs. Only in two studies on a single full-length documentary (Peters & Webb, 2018) and on 10 episodes of drama (Rodgers & Webb, 2019) it was hypothesized that words well-supported by imagery are more likely to be learnt. Thus, Rodgers (2018) conducted a study in order to examine the relationship between imagery and its aural representation. He analyzed one season of narrative and documentary television programs. Findings revealed that both types of programs can support learning since image

occurred congruently with aural representations of target words. Later, the supportive role of imagery was confirmed in the study of Pujadas (2019) where simultaneous co-occurrence of images and aural forms showed to be a strong predictor of word-meaning learning. Yet, Rodgers found that target words were better supported by occurring congruently imagery in documentary television than in narrative. He attributes this fact to the educational nature of the documentary genre and states that they are “designed to inform and this is often done by describing the imagery presented in the video” (p. 203). Moreover, the frequency of occurrence in documentaries is higher than in narrative programs which “may be due to the nature of the genre, where viewers are educated in-depth on a topic which potentially leads to multiple occurrences of the related vocabulary” (p. 204).

Indeed, factors that affect language learning might vary within TV programs from different genres. Webb and Rodgers (2009a) and Webb (2011) found that lexical coverage varies between programs from different genres and that low-frequency words reoccur more often within programs from the same genre and subgenre. It was found that children’s programs are the least demanding genre followed by drama, older programs, and situation comedies. Genres with the highest cognitive load are news stories and science fiction programs. Moreover, genres are ‘multidimensional phenomenon’ (Neale, 2002) as they generate certain expectations and differ in how image, text, and audio interact which can affect learners’ motivation, comprehension, and learning. As Vanderplank (2016b, p.151) observed, “it is too limiting to talk about the effects of captions on watching audiovisual material when what we should be thinking about are the ways in which the effects with captions may be different not only according to our purposes but also according to the genre of TV programs and films.” The study of Gilabert et al. (unpublished) aimed at investigating how different genres can influence initial word learning. Participants watched documentary, comedy, procedural drama, and edutainment videos with captions. Learning gains varied depending on the genre with the greatest scores under documentary video followed by comedy. Besides, learners showed different eye-behavior under the four conditions which might indicate that generic characteristics of videos have an impact on what visual, aural or textual cues learners attend to. Interestingly, participants showed different degrees of motivation favoring comedy and documentary which correlated with vocabulary gains. Vanderplank (2016a,b) also reported that motivation and attitude vary between different genres and that learners report certain genres difficult to engage with. However, little studies

have looked at this area and future research can reveal what outcomes TV programs of different genres can bring.

All in all, consecutive watching of TV series on a regular basis can have significant positive effects on comprehension as it allows viewers to gradually accumulate background knowledge. Repeated encounters with low-frequency words within the same TV series as well as within the same genre and subgenre can aid incidental vocabulary learning. Lexical coverage was found to be one of the most important factors which is not surprising given the fact that it aims to provide a minimum threshold of learner's vocabulary knowledge necessary for comprehension and learning through watching TV series. Imagery also plays a facilitative role in comprehension and learning. In terms of the effects of captions and subtitles, learners with intermediate and upper-intermediate levels seem to benefit from captions. As for beginner young learners, studies leave inconclusive results. Yet, Pujadas (2019) suggests that introducing materials with subtitles is better at this stage. Indeed, it is important to note that the area of extensive viewing approach is new and largely unexplored since only a few studies conducted experiments with participants providing a shred of evidence on the benefits of extensive TV viewing (Gesa, 2019; Pujadas, 2019; Rodgers, 2013). Taking into account that present findings show that factors influencing learning are multiple and complex, further studies in this area should not only examine the effects of different on-screen texts on learners' age and linguistic proficiency but also focus on other factors influencing language learning such as imagery, frequency of occurrence, genres, learners' motivation and attitude (Vanderplank, 2016a,b). Finally, the primary aim of extensive viewing is educational. Thus, researchers have focused on how it can be implemented into teaching programs and how TV watching in the L2 can be promoted beyond the classroom (e.g. Webb, 2015). Thus, the next section will summarize pedagogical implications, analyze the benefits that inclusion of extensive TV viewing programs into teaching courses can bring and discuss learner's attitudes towards TV viewing offered by the studies discussed so far.

## **V. CLASSROOM CONTEXT AND PEDAGOGICAL IMPLICATIONS**

It has been suggested that L2 input should be authentic (e.g. Gilmore, 2007; Nunan, 2002), meaningful and slightly beyond learners' linguistic competence (Krashen, 1985) for successful language learning. Moreover, Nation (2007) presents a meaning-focused input

standard that applies to any type of spoken or written input which aims at putting learner's focus and interest on "understanding and gaining knowledge or enjoyment or both from what they listen to and read" (p. 5). According to this hypothesis, five conditions should be fulfilled in order to consider this input suitable for inclusion in language courses: learners should be already familiar with the input, and only a small percentage of the vocabulary in the input is unknown to them. Learners also should be interested in the input, want to understand it, and be able to gain knowledge of vocabulary using context cues and background knowledge. Ultimately, input needs to be processed in large quantities. This section provides an overview of extensive TV viewing complying with all conditions and gathers the pedagogic implications from SLA studies.

The use of audiovisual materials prevents English teaching and learning from becoming monotonous. In the traditional classroom context, given the fact that little time can be given to TV viewing, teachers usually use short videos or random episodes of programs supported with activities which despite being useful, do not provide sufficient L2 input to develop listening skills and vocabulary knowledge. The inclusion of programs based on extensive TV watching into EFL courses can provide learners with a large amount of authentic meaningful input (Webb, 2015). As studies on extensive viewing have demonstrated, watching episodes of L2 TV series extensively and consecutively can allow learners to accumulate background knowledge of characters and plot, thus, increasing comprehension, develop listening skills, strengthen and enlarge vocabulary knowledge given the fact that it recycles vocabulary within a relatively small amount of time. Besides, the on-screen text supports comprehension and makes the unknown words more silent aiding vocabulary learning (Rodgers, 2013). The findings on lexical coverage of TV programs indicate that if materials are carefully selected, the knowledge of 2,000 words is a target vocabulary size necessary for learners to understand the input and benefit from it (e.g. Rodgers, 2013).

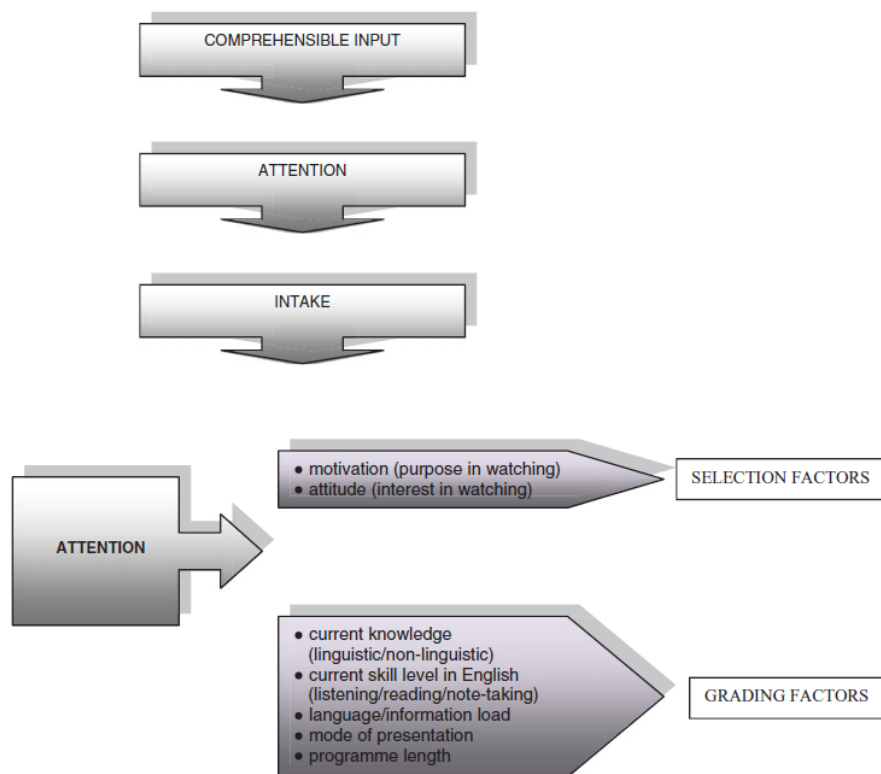
Given the fact that TV watching is one of the most popular leisure activities, its engaging and entertaining nature can drive learners' attention from focusing on language and result in passive viewing (Vanderplank, 2016a,b). As Vanderplank (2016a, p.238) puts it, "TV requires viewers to actively overcome their own expectations that little effort is required, if they are to benefit in educational terms. Educational benefits came only to those

who put in considerable mental effort”. In this sense, Webb (2015) states that the goals, benefits, and possible difficulties of extensive TV viewing must be clear to everyone. He suggests that extensive TV watching should be first introduced in the classroom setting where teachers can make learners aware of the seriousness of this activity, motivate them, support listening comprehension, and teach them viewing strategies. Teachers should know that “precise comprehension should be a goal rather than a requirement” (2015, p. 10). If learners are not used to watching programs in the L2, they should be informed of the possible difficulties in comprehension and that it will improve over time since comprehension as well as vocabulary learning are lengthy processes. If comprehension of certain episodes is difficult, learners should be encouraged to watch it twice (Webb, 2015).

Vanderplank notices that active viewing allows greater language gains. In his speculative model (1990, 2016a), the extensive and active viewing of captioned TV programs helps learners to adapt and develop strategies necessary for deeper understanding and learning. Moreover, Vanderplank states that “attention” is a crucial factor between “input” and “intake”. By input, he means “language produced in the presence of the learner” and by intake “language actually absorbed by the learner” (1990, p. 228). While learners are still able to learn accidentally or “take in” language without paying conscious attention to it, watching consciously, systematically, and reflectively through paying close attention to form and meaning has a greater benefit on vocabulary development. In other words, learners by “noting and gathering” information and “reflecting” on it by comparing their L2 knowledge with the captioned video input can notice a gap, adapt it (select language attended to for own purposes) and, thus, “take out” language which they might further adopt (produce correct and appropriate language) and possibly assimilate into their linguistic competence.

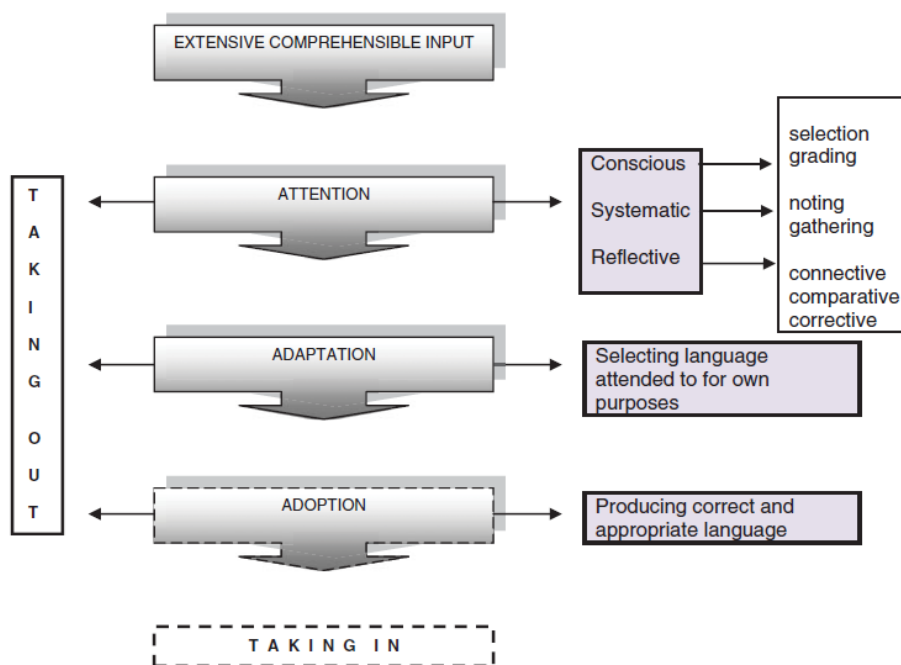
Besides, Vanderplank (1990, 2016a) by providing his model, illustrates the complexity and length of learning processes, and gaps in this area of SLA (Figure 1 and Figure 2). So far only two of the longitudinal studies have focused on how watching TV programs can contribute to the retention of learned words in the long-term revealing mixed results (Gesa, 2019; Pujadas, 2019). Further studies should investigate when a new item learned through a TV series becomes integrated into the viewer’s interlanguage. Moreover, some of the multiple factors involved in vocabulary acquisition remain largely unexplored. For instance, as has been seen, the frequency of word occurrence is positively correlated

with learning gains (e.g. Pujadas, 2019; Rodgers, 2013). Yet, it is still unclear how many encounters are needed for learners to “take out” the word. Another two influencing factors that researchers recently began to investigate are motivation and attitude towards watching programs in the L2. In the studies of Rodgers (2013), Pujadas (2019), and Vanderplank (2019) it was found that learners are motivated to learn through watching L2 programs and that attitudes improve over time. Moreover, Pujadas suggested that “there is a connection between comprehension, attention, enjoyment and motivation” (2019, p.266). She also noted that the viewers’ feeling of learning was connected to vocabulary learning and to the presence of on-screen text. Therefore, future studies on extensive TV viewing might look at these individual differences.



**Figure 1** The role of attention in captioned viewing (Vanderplank 1990, 2016a)





**Figure 2** Factors in attending to captioned language (Vanderplank 1990, 2016a)

As the European Commission (2012) has demonstrated, learners from EFL countries where subtitling is predominant language transfer have a higher level of language proficiency than those from dubbing countries. Moreover, in the case of Spain, where television is dubbed and EFL proficiency is relatively low, 88% of the population spend around 215 minutes on TV watching daily (European Commission, 2017). Thus, one of the major pedagogic implications of an extensive viewing approach is the promotion of out of class exposure given the fact that even watching TV extensively in class cannot provide learners with sufficient input (Gesa, 2019). Learners from dubbing countries should be encouraged to start watching television in the English language in their leisure time (Webb, 2015). Webb (2015) argues that it is the role of the teachers to give learners the confidence that they are able to understand L2 TV programs and encourage them to watch it in their free time as much as possible. Moreover, as the studies have demonstrated, learners not only believe that watching TV series with on-screen text helps them to understand and learn new words but also allows them to access the same type of input understood by a native speaker, be exposed to their culture and to enjoy the original voices of characters (Danan, 2004; Garza, 1991; Pujadas, 2019; Rodgers, 2013). Learners in the studies of Pujadas (2019) showed shifts in viewing habits by starting to watch television in the L2 in their spare time. Similarly, the study of Vanderplank (2019) with the focus on intermediate adult learners

watching L2 programs outside the formal setting showed that viewers not only believe it to be useful and motivating but also show changes in viewing behavior. Interestingly, a few learners also reported that at some point in time they were ignoring captions focusing on the dialogs of characters in interesting scenes.

One way to increase active viewing, support comprehension, and make learners focus on target words is the introduction of activities. Webb (2015) argues that teachers should provide support for the learners by including glossaries, exercises that pre-teach frequently occurring words, activities that help to gain background knowledge of the plot which will facilitate comprehension and meaning-focused post activates. Yet, he also points out that the use of activities should not be intense and that the meaning-focused orientation should be maintained. Recent studies have shown that extensive TV viewing supported with exercises helps viewers to learn more words than only watching or only completing vocabulary exercises (Gesa, 2019; Pujadas, 2019). Gesa (2019) found that beginner children and intermediate adults benefited from watching TV programs with explicit focus-on-forms activities. Pujadas (2019) also found that watching TV with exercises results in significantly higher vocabulary gains than only watching. However, she also found that driving attention to target words by pre-teaching them can slightly affect the comprehension of beginner adolescent learners as they might pay more attention to words than to the content. She states that “finding a balance between understanding the content and learning vocabulary seems especially relevant in the context of the EFL classroom, where both objectives are of equal importance” (p.24).

The decision to use either captions or subtitles should be made upon learners’ age, proficiency level, and vocabulary size. Adults with intermediate and higher levels of proficiency will benefit from captions while subtitles can be distracting for them. In terms of younger and low-level learners, the use of subtitles can be more appropriate (Pujadas, 2019), although in the study of Gesa (2019), beginner primary school children were distracted by their presence which can be explained by their unfamiliarity with this type of input. Thus, it can be improved through long-term exposure as learners get used to it and develop viewing strategies. Moreover, Danan (1992) and Pujadas (2019) advocate for the “staged approach” which consists of moving gradually from subtitles to captions as learners

get used to TV watching. Besides, learners who had reached advanced levels should be encouraged to try to watch TV programs without captions (Gass et al., 2019).

Finally, although this area has only begun to be investigated and future SLA studies are needed to shed more light on the extensive TV viewing, the results are promising. Recent studies have shown its potential to benefit EFL learners and it is possible to argue in favor of the implementation of an extensive TV viewing approach into the educational programs as a support for traditional formal classes. Importantly, it must be highlighted that extensive TV viewing has a complementary nature and cannot substitute for formal classes (Gesa, 2019). Overall, if the materials are carefully selected being slightly beyond learners' linguistic proficiency and supported with on-screen text, watching television can become an additional tool for language learning providing EFL viewers with rich, authentic, and meaningful input. Besides, since even extensive TV viewing programs cannot provide EFL learners with sufficient input, it is important to make learners aware of the benefits of L2 viewing and encourage them to watch television in the L2 in their leisure time.

## **VI. CONCLUSION**

This end-of-degree paper aimed at providing an overview of the major findings on authentic captioned and subtitled L2 audiovisual materials and their usage for EFL learning. Taken as a whole, SLA studies justify the use of L2 television for FLL inside the classroom if the materials are carefully selected by being slightly beyond learners' linguistic competence and pre and post activities introduced. TV programs can provide EFL learners with rich, authentic, and meaningful input and the support of caption and subtitles can increase comprehension and aid vocabulary learning. Besides, it is important to note that SLA studies have also begun to explore the benefits of this type of input for phonology and grammar moving away from exclusively vocabulary learning. Subtitles have been found to benefit young and low-level learners whereas captions are preferable for intermediate and higher-level learners. As has been seen, the major scope of research focuses on the effects captions and subtitles on learners of different ages and levels of proficiency using short videos or excerpts while the area of extensive narrow TV viewing approach which consists of watching episodes of the same TV program extensively and successively, and other factors influencing language learning and comprehension remain largely unexplored. This is not surprising for several reasons. First, traditional formal setting usually focuses on

grammar and gives teachers little time to spend on videos while alternative ways to increase the amount of input such as extensive TV viewing begun to be explored by SLA studies only recently (e.g. Webb, 2015). Second, the European Commission (2012) and other statistical resources provided evidence that viewers from subtitling countries have higher levels of English language than those from dubbing countries comparatively not long ago. Third, the TV industry used to be limited by movies available in DVDs or traditional television formats while internet platforms such as Netflix appeared and became easily accessible and supported with on-screen texts only in the 2010s. Also, massive annual production of TV series begun only recently as well as viewer's speedily growing interest in watching it making this phenomenon and the possibilities it can bring for EFL learning impossible to ignore. Thus, SLA studies are at the beginning of understanding how extensive TV viewing can benefit EFL learners. For now, it is clear that extensive regular TV viewing can satisfy EFL learners' need for a large amount of exposure to the L2 aiding receptive skills and vocabulary learning and that inclusion of programs based on extensive TV watching into EFL courses can encourage learners to start watching television in the English language in their leisure time (Pujadas, 2019). Future SLA studies will focus on multiple factors that affect language learning through extensive viewing and possibly provide more justification for the creation of extensive TV viewing programs as a way to promote out of class viewing.

## VII. REFERENCES

- Bianchi, F., & Ciabattini, T. (2008). Captions and subtitles in EFL learning: an investigative study in a comprehensive computer environment. In Baldry, A., Pavesi, M., & Taylor Torsello, C. (Eds.) *From didactas to ecolingua* (pp. 69-90). Trieste: Edizioni Università di Trieste.
- Bird, S. A., & Williams, J. N. (2002). The effect of bimodal input on implicit and explicit memory: An investigation into the benefits of within-language subtitling. *Applied Psycholinguistics*, 23(4), 509-533.
- Birulés-Muntané, J., & Soto-Faraco, S. (2016). Watching subtitled films can help learning foreign languages. *PLoS One*, 11, e0158409.
- Borrás, I., & Lafayette, R. C. (1994). Effects of multimedia courseware subtitling on the speaking performance of college students of French. *The Modern Language Journal*, 78(1), 61-75.
- Bravo, M.C.C. (2008). *Putting the reader in the picture. Screen translation and foreign language learning* (Unpublished doctoral dissertation). University Rovira i Virgili and University of Algarve.
- Danan, M. (1992). Reversed subtitling and dual coding theory: New directions for foreign language instruction. *Language learning*, 42(4), 497-527.
- Danan, M. (2004). Captioning and subtitling: Undervalued language learning strategies. *Meta: Journal Des Traducteurs*, 49, 67–77. doi:10.7202/009021ar.
- English Proficiency Index (2019). *EF*. Retrieved from <https://www.ef.com/wwen/epi/>
- European Commission (2012). *The European survey on language competences*.
- European Commission. (2017). *Media use in the European Union*.
- Frumuselu, A.D., De Maeyer, S., Donche, V., & Gutiérrez Colon-Plana, M.M. (2015). Television Series inside the EFL Classroom: Bridging the Gap between Teaching and Learning Informal Language through Subtitles. *Linguistics and Education* 32, 107-17. doi:10.1016/j.linged.2015.10.001.

- Garza, T. (1991). Evaluating the use of captioned video materials in advanced foreign language learning. *Foreign Language Annals*, 24(3), 239-58.
- Gass, S., Winke, P., Isbell, D., & Ahn, J. (2019). How captions help people learn languages: A working-memory, eye-tracking study. *Language Learning & Technology* 23(2), 84-104.
- Gilabert, R. (unpublished). The impact of genre on L2 vocabulary learning and eye behavior through captioned video.
- Gilmore, A. (2007). Authentic materials and authenticity in foreign language learning. *Language Teaching*, 40(2), 97-118. doi:10.1017/S0261444807004144
- Guillory, H. (1998). The effects of keyword captions to authentic French video on learner comprehension. *CALICO Journal*, 15(1-3), 89-108.
- Herron, C. A., Hanley, J. E. B., & Cole, S. P. (1995). A Comparison Study of Two Advance Organizers for Introducing Beginning Foreign Language Students to Video. *Modern Language Journal*, 79(3), 387–395. <https://doi-org.sire.ub.edu/10.2307/329353>
- Koolstra, C.M., & Beentjes, J.W.J.. (1999). Children's Vocabulary Acquisition in a Foreign Language through Watching Subtitled Television Programs at Home. *Educational Technology Research and Development* 47(1), 51-60. doi:10.1007/bf02299476.
- Koolstra, C. M., Van der Voort, T. H., & van der Kamp, L. J. T. (1997). Television's impact on children's reading comprehension and decoding skills: A 3-year panel study. *Reading Research Quarterly*, 32(2), 128-152.
- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Addison-Wesley Longman Ltd.
- Lee, M., & Révész, A. (2020). Promoting grammatical development through captions and textual enhancement in multimodal input-based tasks. *Studies in Second Language Acquisition*. <https://doi-org.sire.ub.edu/10.1017/S0272263120000108>
- Lindgren, E., & Muñoz, C. (2013). The Influence of Exposure, Parents, and Linguistic Distance on Young European Learners Foreign Language Comprehension. *International Journal of Multilingualism* 10(1), 105-29. doi:10.1080/14790718.2012.679275.

- Markham, P. (1999). Captioned videotapes and second-language listening word recognition. *Foreign Language Annals*, 32(3), 321-28.
- Mayer, R. (2001). *Multimedia learning*. Cambridge: Cambridge University Press.  
<https://doi.org/10.1017/CBO9781139164603>
- Mayer, R. (2014). *The Cambridge handbook of multimedia learning*. Cambridge: Cambridge University Press.
- Miralpeix, I., & Muñoz, C. (2018). Receptive Vocabulary Size and Its Relationship to EFL Language Skills. *International Review of Applied Linguistics in Language Teaching*, 56(1), 1–24. <https://doi-org.sire.ub.edu/10.1515/iral-2017-0016>
- Mitterer, H., & McQueen, J. (2009). Foreign subtitles help but native-language subtitles harm foreign speech perception. *PloS one*, 4(11): e7785.
- Montero Perez, M., Kulak, L., Peters, E., Clarebout, G., & Desmet, P. (2014). Effects of Captioning on Video Comprehension and Incidental Vocabulary Learning. *Language Learning & Technology: A Refereed Journal for Second and Foreign Language Educators*, 18(1), 118–141
- Montero-Perez, M., Peters, E., & Desmet, P. (2014). Is less more? Effectiveness and perceived usefulness of keyword and full captioned video for L2 listening comprehension. *ReCALL*, 26(1), 21-43.
- Muñoz, C. (2017). The role of age and proficiency in subtitle reading. An eye-tracking study. *System* 67, 77-86. DOI: 10.1016/j.system.2017.04.015
- Nation, P. (2007). The four strands. *International Journal of Innovation in Language Learning and Teaching*, 1(1), 2-13. doi: 10.2167/illt039.0
- Neale, S. (2002). *Genre and Contemporary Hollywood*. British Film Institute, 2002.
- Nunan, D. (2002). Listening in language learning. In J. C. Richards & W. A. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice* (pp. 238–241). Cambridge: Cambridge University Press.
- Paivio, A. (1986). *Mental representations: A dual coding approach*. Oxford: Oxford University Press.

- Perez, M.M., Noortgate, W.V., & Desmet, P. (2013). Captioned video for L2 listening and vocabulary learning: A meta-analysis. *System*, 41, 720-739.
- Peters, E. (2019). The effect of imagery and subtitles on L2 vocabulary learning from audio-visual input. In AAAL, Date: 2019/03/09-2019/03/12, Location: Atlanta.
- Peters, E., Heynen, E., & Puimège, E. (2016). Learning Vocabulary through Audiovisual Input: The Differential Effect of L1 Subtitles and Captions. *System* 63, 134-48. doi:10.1016/j.system.2016.10.002.
- Peters, E., & Webb, S. (2018). Incidental vocabulary acquisition through viewing L2 television and factors that affect learning. *Studies in Second Language Acquisition*, 40(3), 551-77. doi:10.1017/s0272263117000407.
- Price, K. (1983). Closed-captioned TV: An untapped resource. *Matsol Newsletter*, 12(2), 1-8.
- Pujadas, G. (2019) *Language learning through extensive TV viewing: A study with adolescent EFL learners* (Unpublished doctoral dissertation). University of Barcelona.
- Rodgers, M. (2013). *English language learning through viewing television: An investigation of comprehension, incidental vocabulary acquisition, lexical coverage, attitudes, and captions* (Unpublished doctoral dissertation). Victoria University of Wellington.
- Rodgers, M. (2018). The images in television programs and the potential for learning unknown words. *Approaches to Learning, Testing, and Researching L2 Vocabulary ITL - International Journal of Applied Linguistics* 169(1), 191-211. doi:10.1075/itl.00012.rod.
- Rodgers, M. (2018). The images in television programs and the potential for learning unknown words. *Approaches to Learning, Testing, and Researching L2 Vocabulary ITL—International Journal of Applied Linguistics*, 169, 191–211.
- Rodgers, M., & Webb, S. (2011). Narrow viewing: The vocabulary in related television programs. *TESOL Quarterly*, 45(4), 689-717. doi:10.5054/tq.2011.268062



- Rodgers, M. P. H., & Webb, S. (2017). The Effects of Captions on EFL Learners' Comprehension of English-Language Television Programs. *CALICO Journal*, 34(1), 20.
- Rodgers, M. P. H., & Webb, S. (2019). Incidental vocabulary learning from viewing television. *ITL - International Journal of Applied Linguistics*. <https://doi.org/10.1075/itl.18034.rod>
- Statista (2019). *statista.com*. Retrieved from <https://www.statista.com/chart/20701/video-streaming-services-with-most-subscribers-global-fipp/>
- Sydorenko, T. (2010). Modality of input and vocabulary acquisition. *Language Learning and Technology*, 14(2), 50-73. doi:10125/44214
- Vandergrift, L. (2007). Recent developments in second and foreign language listening comprehension research. *Language teaching*, 40(3), 191-210.
- Vandergrift, L. (2011). Second language listening: Presage, process, product, and pedagogy. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 455–471). New York, NY: Routledge.
- Vanderplank, R. (1988). The value of teletext sub-titles in language learning. *ELT Journal*, 42(4), 272–281.
- Vanderplank, R. (1990). Paying attention to the words: Practical and theoretical problems in watching television programmes with uni-lingual (CEEFAQ) subtitles. *System* 18.2, 221–234.
- Vanderplank, R. (2010). Déjà vu? A decade of research on language laboratories, television and video in language learning. *Language teaching* 43(1), 1-37. doi:10.1017/S0261444809990267
- Vanderplank, R. (2016a). 'Effects of' and 'effects with' captions: How exactly does watching a TV programme with same-language subtitles make a difference to language learners? *Language Teaching*, 49(2), 235-50. doi:10.1017/s0261444813000207.

- Vanderplank, R. (2016b). *Captioned media in foreign language learning and teaching: Subtitles for the deaf and hard-of-hearing as tools for language learning*. New York: Springer.
- Vanderplank, R. (2019). 'Gist Watching Can Only Take You So Far': Attitudes, Strategies and Changes in Behaviour in Watching Films with Captions. *Language Learning Journal: Journal of the Association for Language Learning*, 47(4), 407–423. <https://doi-org.sire.ub.edu/10.1080/09571736.2019.1610033>
- Vidal, K. (2011). A comparison of the effects of reading and listening on incidental vocabulary acquisition. *Language Learning*, 61(1), 219-258.
- Vulchanova, M., Aurstad, L. M., Kvitnes, I. E., & Eshuis, H. (2015). As naturalistic as it gets: subtitles in the English classroom in Norway. *Frontiers in Psychology*, 5, 1510.
- Webb, S. (2011). Selecting television programs for language learning: Investigating television programs from the same genre. *International Journal of English Studies*, 11(1), 117-35.
- Webb, S. (2015). Extensive viewing: Language learning through watching television. In Nunan, D., & Richards, J. (Eds.) *Language learning beyond the classroom* (pp. 175-184). Abingdon: Routledge.
- Webb, S., & Rodgers, M. (2009a). Vocabulary demands of television programs. *Language Learning*, 59(2), 335-66. doi:10.1111/j.1467-9922.2009.00509.x.
- Webb, S., & Rodgers, M. (2009b). The lexical coverage of movies. *Applied Linguistics*, 30(3), 407-27. doi:10.1093/applin/amp010.
- Winke, P., Gass, S., & Sydorenko, T. (2010). The effects of captioning videos used for foreign language listening activities. *Language Learning and Technology*, 14(1), 65-86. doi:10125/44203
- Winke, P., Gass, S., & Sydorenko, T. (2013). Factors influencing the use of captions by foreign language learners: An eye-tracking study. *Modern Language Journal*, 97(1), 254–275. <https://doi-org.sire.ub.edu/10.1111/j.1540-4781.2013.01432.x>