KARAMANOĞLU MEHMETBEY ÜNİVERSİTESİ

ULUSLARARASI
FİLOLOJİ ve ÇEVİRİBİLİM DERGİSİ

INTERNATIONAL JOURNAL OF
PHILOLOGY and TRANSLATION STUDIES

MAKALE BİLGİLERİ
ARTICLE INFO

Geliş Tarihi / Submission Date
02.12.2021

Rapor tarihleri / Report Dates
Hakem/Reviewer 1 - 03.12.2021
Hakem/Reviewer 2 - 13.12.2021

Kabul Tarihi / Admission Date
16.12.2021

e-ISSN
2687-5586

Cilt:3 Sayı:2, (2021): 249-278

Künye: (Araştırma makalesi) Gürkan, Ali (2021). "Comparison of Subtitling for the Deaf and Hard-of-Hearing Guidelines Implemented Across Countries" *Karamanoğlu Mehmetbey Üniversitesi Uluslararası Filoloji ve Çeviribilim Dergisi*, C.3/2, s.249-278. (ID:1031773).

COMPARISON OF SUBTITLING FOR THE DEAF AND HARD-OF-HEARING GUIDELINES IMPLEMENTED ACROSS COUNTRIES*

FARKLI ÜLKELERDE UYGULANAN İŞİTME ENGELLİLER VE DUYMA GÜÇLÜĞÜ ÇEKENLER İÇİN ALTYAZI KILAVUZLARININ KARŞILAŞTIRILMASI

Ali GÜRKAN
Lecturer Dr., Karamanoglu Mehmetbey University, School of Foreign Languages, Department of English Translation and Interpreting, Karaman-TURKEY, aligurkan@kmu.edu.tr, Orcid:0000-0002-2856-2131.

Abstract

Subtitling for the Deaf and Hard-of-Hearing (SDH) guidelines assume a prominent role in providing access to audiovisual materials by setting standards that enable the service providers to offer subtitles specifically tailored to cater for the needs and preference of the hearing-impaired viewers. In the absence of guidelines that do not take the viewers' needs into account, the subtitles run the risk of adversely affecting the viewing experience of the deaf since it would vary from one supplier to the other. This article offers a descriptive analysis of the guidelines implemented in countries with ample experience in the production and broadcast of SDH, such as Canada, the UK and the USA, with the aim of discovering the prevailing norms in these varied socio-cultural contexts. The norms and conventions that regulate the provision of SDH services in these countries are compared to reveal not only their commonalities but also the issues that cause controversy and tend to vary across the different guidelines. The key parameters are grouped and discussed under four broad categories, namely, the layout and presentation of subtitles on screen, the temporal dimension, linguistic issues and non-linguistic information. The results of the analysis and comparison of the guidelines form a strong starting point for the development of guidelines which specifically cater for the needs and preferences of the Turkish deaf viewers.

Keywords: Accessibility, Audiovisual Translation, Guidelines, Subtitling for the Deaf and Hard-of-Hearing (SDH), Standards.

Öz

İşitme engelliler ve duyma güçlüğü çekenler için ayrıntılı altyazı kılavuzları, servis sağlayıcıların özel olarak işitme engelli izleyicilerin ihtiyaç ve tercihlerine cevap verecek nitelikte tasarlanmış altyazılar sunmasına olanak sağlayan standartları belirleyerek görsel işitsel materyallere erişim konusunda önemli bir role sahiptir. İzleyicilerin ihtiyaçlarını dikkate alan kılavuzların yokluğunda altyazılar, bir sağlayıcıdan diğerine farklılık göstereceği için işitme engellilerin izleme deneyimlerini olumsuz etkileme riski taşımaktadır. Bu makale, Kanada, Birleşik Krallık ve ABD gibi ayrıntılı altyazıların oluşturulması ve yayınlanmasında yüksek tecrübe sahibi ülkelerde uygulanan kılavuzların, bu çeşitli sosyokültürel bağlamlardaki yaygın olan normları belirleme amacıyla betimleyici bir analizini sunmaktadır. Bu ülkelerdeki ayrıntılı altyazı sunumunu düzenleyen normlar ve teamüller sadece ortak noktaları değil aynı zamanda farklı kılavuzlarda ayrılıklara sebep olan ve çeşitlilik gösterme eğiliminde olan konuları ortaya koymak amacıyla kıyaslanmışlardır. Önemli parametreler; altyazıların ekranda sunumu ve düzenlenmesi, zamansal boyut, dilsel ögeler ve dil dışı bilgiler olmak üzere dört başlıkta gruplanmış ve tartışılmıştır. Yapılan analizlerin ve kılavuzların karşılaştırılmasının sonuçları, özel olarak Türk işitme engelli izleyicilerin ihtiyaç ve tercihlerine cevap verecek nitelikte kılavuzların geliştirilmesi için önemli bir başlangıç noktası oluşturmaktadır.

Anahtar Kelimeler: Ayrıntılı Altyazı, Erişilebilirlik, Görsel-İşitsel Çeviri, Kılavuz, Standartlar.

*This article is derived and adapted from a chapter of the author's unpublished PhD thesis entitled "Subtitling for the deaf and the hard-of-hearing: A reception study in the Turkish context".

INTRODUCTION

The prevalence of audiovisual productions (AVPs) in daily communication, together with the variety and importance of the information that they provide, makes them an indispensable part of people's lives and individuals who lack complete access to these materials run the risk of lagging behind the whole society. Hearing-impaired people are not exempt from this risk and they require accessibility measures which are produced in a way to cater specifically for their needs and preferences to access to the information provided by the AVPs and enjoy them as much as their hearing counterparts do. Guidelines provide standards on the provision of SDH in order to achieve readable, accurate, clear and consistent subtitles. If implemented consistently, guidelines can help people with hearing impairments since, in the absence of recommendations on how to reach a certain standard, the subtitles would vary from one supplier to another, and the viewers would have difficulty watching and comprehending audiovisual materials (AVMs).

The reality in Turkey is that SDH has only been provided on one private channel, FOX TV (on repeat episodes of its main series) since 2018, on some channels of public service provider, TRT (TRT Kid, TRT Documentary) since February 2021 on Turkish TV. Besides these services SDH and other accessibility services are provided on the websites of three private channels (ATV – only on three series, TRT – on selected programmes and Kanal D – nearly on all of the broadcast series) and on three digital platforms (Digiturk, Tivibu and Netflix). This lack of provision of accessibility services means that a set of appropriate guidelines has not yet been developed and employed by the regulator authority. Most of the aforementioned accessibility services provided by the public/private TV broadcasters, digital platforms and on accessible film festivals are created in cooperation with SEBEDER (Audio Description Association), which can be argued to be the leading accessibility association in Turkey. SEBEDER therefore assumes a leading role in a way by setting the trend for accessibility services in Turkey. The association provides a set of guidelines to be used by its subtitlers and describers, which will also be discussed here through the analysis of the practices implemented by Netflix and FOX TV. These guidelines were last updated in February 2019 in a project which includes researchers from the accessibility field, educators and translators. However important and necessary the project is for the provision of high-quality accessibility services, it lacks the most important stakeholder of accessibility process, namely the viewers with sensory impairments. Inclusion of sensory impaired viewers in the process of developing and improving these guidelines would enable the service providers to detect and cater for the needs and preferences of this special group of viewers more precisely.

Having a set of guidelines that would help SDH providers offer subtitles, which are properly tailored to the needs of the target audience, is one of the most crucial steps to ensuring that a good level of quality is achieved consistently by setting clear standards. Even pioneering countries in this field, like the UK or the USA, realised at an early stage the need for a set of standards that would help guarantee the presentation on screen of consistent and accurate subtitles. In order to propose a set of professional SDH guidelines that would work in Turkey, it would be beneficial for us to examine the standards implemented in more SDH aware countries, where a large number of the audiovisual programmes broadcast on TV have, for some time now, been provided with SDH. This paper aims to analyse some of the most common guidelines implemented in the UK, the USA and Canada – pioneering countries in the production of SDH –, with the objective of identifying similarities and differences that could help in the design of guidelines for the Turkish market by adopting a product-oriented descriptive approach. Proper SDH guidelines will be mainly used for the analysis. In this research, only block, pre-prepared subtitles will be considered with the belief that this study will awake the interest of other scholars and professionals and lead to further studies on other types of SDH, like live subtitling. Some parameters like numbers, punctuation, etc. will not be included in the comparison due to the limited scope of the present article. The parameters to be investigated are grouped under the following four categories:

- layout and presentation on screen,
- temporal dimension,
- linguistic issues,
- non-linguistic information.

For the analysis, the following five sets of SDH guidelines have been used as primary sources:

- The Independent Television Commission (ITC), which since 2003 has been known as the Office of Communications (Ofcom), based in the UK. The guidelines are from 1999 (hereafter referred to as ITC guidelines).
- The Canadian Association of Broadcasters (CAB) Closed Captioning Standards and Protocol for Canadian English Language Broadcasters from 2012 (hereafter referred to as CAB guidelines).
- The British Broadcasting Corporation Guidelines, from 2019 (hereafter referred as BBC guidelines).

- Described and Captioned Media Program (DCMP) Captioning Key, from 2019 and with application in the USA (hereafter referred to as DCMP Captioning Key).
- Netflix Guidelines from 2019 which was last edited in 2021 (hereafter referred to as Netflix guidelines)

Turkish SDH broadcast by FOX TV on repeats of series' episodes after its main broadcast will be analysed and the conventions employed will be detailed in the relevant sections. Five subtitled episodes from different series (e.g. Kadın) have been used to analyse these conventions.

1. LAYOUT AND PRESENTATION ON SCREEN

The presentation of the text is a very important factor in the provision of SDH, as it has a substantial impact on the readability and legibility of the subtitles. Subtitles that take into account all other technical dimensions, for instance reading pace and synchronisation between sound and images, may nevertheless fail to reach their accessibility aims if they are not presented in a way that enables viewers to read them on screen with the least effort possible. The type and size of font, the positioning on the screen, the number of lines and line breaks, and the use of colours are the four main dimensions included in the analysis of the on-screen presentation of SDH.

1.1. Font

The type and size of the font is a parameter that is very much influenced by available technology. In all guidelines sans serif fonts (AaBbCc), which eliminate all flourishes and decorative elements attached to the characters, are recommended in order to ensure the legibility of the subtitles. Similarly, a sans serif font without embellishment is adopted on the subtitles broadcast on FOX TV. Ivarsson and Carroll (1998, p. 42) indicate that "embellishments like serifs might make the type more attractive and legible on paper, but tend to impair legibility on screen". DCMP (2019) guidelines suggest that characters are shadowed to contrast better with the images and, thus, increase legibility, even on bright backgrounds.

Letter spacing and the size of the font are two dimensions that also need to be considered carefully. Using a larger font for the sake of legibility may require more editing, as there will be less space to provide verbatim subtitles. Conversely, using a font type with narrower interspacing may allow the subtitler to write more characters, though this may lead to an increase in the reading

speed and the amount of information to be processed by the audience, which may in turn complicate the reading.

Different font types are recommended in the various guidelines examined, though most of these (ITC, DCMP and CAB) do not specify a font to be used on analogue television. As for digital broadcast, Ofcom recommends the Tiresias (AaBbCc) font, which was specifically created by a team led by John Gill to meet the requirements of visually impaired people (Tiresias, 2007; Matamala & Orero, 2010). In the BBC (2019, Fonts section) guidelines, Verdana is also recommended in addition to Tiresias to "minimise the risk of unwanted line wrapping" since most subtitle processors use a narrower font type like Arial. Although the DCMP Captioning Key (2019, Font section) does not specify a font type, it does indicate some of the features to be considered when selecting a font and advises that "the font must have a drop or rim shadow" and "must include upper- and lowercase letters with descenders that drop the baseline". The Netflix guidelines (2019, Font Information section) propose "Arial as a generic placeholder for proportional SansSerif".

On analogue TV, the size of the characters should be determined bearing in mind the recommended maximum number of characters per line, which, in the case of the CAB guidelines, for instance, is 32 characters. The ITC (1999) and the BBC (2019) guidelines advise that the characters be displayed on screen in double height for legibility reasons. This requires six or eight control characters (a special character that is used to change the colour of the text, graphics or background, etc.) in a-character PAL teletext line, meaning that the maximum space available for the subtitles will include 32 or 34 characters per line. The BBC (2019, Processor Requirements section) guidelines also suggest that the font size should be arranged to "fit within a line height of 8% of the active video height". On platforms in which proportional fonts are used, 68% of the width of a 16:9 video and 90% of the width of a 4:3 video are suggested proportions. The Netflix guidelines allow 42 characters per line and propose a font size depending on the video resolution that can fit 42 characters across the screen.

Punctuation is another dimension that affects comprehension and can be used as an important linguistic device to clarify meaning; it should therefore be used and displayed clearly. Guidelines warn against the overuse of punctuation marks so as not to complicate the reading process. Contrary to standard practice in English, the ITC (1999, p. 6) guidelines propose using a single space before some punctuation marks, like '?' and '!', in order to enhance their effectiveness. The DCMP Captioning Key and BBC guidelines, on the other hand, do not recommend using spaces before and after punctuation marks. When it comes to the use of capital letters, all the analysed

guidelines propose the use of mixed case rather than upper case, which is also used for emphasis, loud voice, stress, screaming, and the like.

1.2. Positioning of Subtitles

Positioning refers to the horizontal and vertical placement of the subtitles on screen as well as their alignment. Subtitles tend to be centre-justified at the bottom of the screen so as to reduce the amount of vertical distance that the eye needs to travel in order to read the text because most of the action tends to take place around the centre of the screen. Furthermore, the eye usually travels less from the end of the top line to the start of the bottom line when reading centre-justified subtitles. The viewers' preference for bottom-placed subtitles was ascertained in a survey conducted by Bartoll and Tejerina (2010), in which prelingually and post lingually deaf subjects opted for mixed (dialogue at the bottom – contextual information at the top) or bottom subtitles for better legibility, comprehension and distinction between sounds and dialogue.

This is one of the most universally accepted recommendations, and almost all guidelines follow the same conventions in this respect. The ITC (1990, p. 10) guidelines, for example, state that "the normally accepted position for subtitles is towards the bottom of the screen". Armstrong and Brooks (2014, Dynamic Subtitle section) adopt an innovative approach to the position of the subtitles and propose placing them "relative to the primary area of interest in the image, in order to minimise both the eye travel distance from the area of interest to the subtitle and the number of repeat visits to it". The problem the researchers experienced with this approach is that, although subtitles positioned in this manner may reduce the reading time and improve the viewing experience, they do not have spatial coherence, and this spatial unpredictability might be detrimental to the audience's overall experience.

Despite some very minor differences, all guidelines emphasise that the subtitles must not interfere with the visual, textual information that appears on screen such as names, graphics and the mouths of the speakers. The BBC, for instance, suggest moving the subtitles to the top of the screen on programmes which involve lots of information in the lower part of the screen. Respecting the latter is particularly important in the case of deaf viewers, as they may lip-read in order to supplement their understanding of the subtitles and mouth movement can also provide them with clues about when the utterances begin or end. The CAB (2012, p. 12) guidelines suggest that subtitles should be removed from the screen before changing their position and they also propose that all of the captions within a particular segment, scene or sports play should be moved together

rather than changing their position within that segment, scene or play, which would make subtitles difficult or impossible to read.

SDH tends to maximise the placement of the subtitles in an attempt to help hearing-impaired viewers identify the source of the sound by placing the subtitles in the direction of the sound. This practice is followed by nearly all the guidelines analysed and, for instance, the DCMP Captioning Key (2019) proposes that when people on screen speak simultaneously, the captions should be placed underneath the respective speakers to aid recognition of who is saying what. CAB guidelines warn the subtitlers that very quick consecutive subtitles should be placed in the same area since moving them in a very short time might cause the viewers to miss the subtitles or the video action.

Finally, the ITC and the CAB guidelines recommend avoiding – as far as is possible – consecutive subtitles that have the same shape and size and propose resorting to a slightly different layout on these occasions so that the viewers clearly realise that a new subtitle has been projected on screen. The subtitles provided by FOX TV are placed at the bottom of the screen, horizontally and centre aligned. Displacing subtitles is not a strategy to identify speakers or sound sources in FOX TV subtitles.

1.3. Number of Lines and Line Breaks

Whilst most subtitling guidelines for hearing viewers recommend two-line subtitles, those for hearing-impaired viewers occasionally permit using three- and even four–line subtitles. The reasoning behind this is that SDH might need to include some paralinguistic features which are not necessary for the hearing viewer, such as labels for speaker identification, sound effects and the like. For instance, in the CAB (2012) guidelines, BBC guidelines and the DCMP Captioning Key (2019), the use of three-line subtitles is permitted on a slightly smaller, different part of the screen from their usual place (bottom of the screen) when one or two liners presented at the bottom of the screen interfere with pre-existing graphics such as maps, job titles, illustrations etc., or they can create confusion in terms of speaker identification.

Concerning preference for one or two-line subtitles, there is no clear consensus in the guidelines in cases in which there are no temporal or spatial restrictions. The ITC (1999, p. 10) guidelines give priority to single long, thin subtitles over two-line captions by claiming that one-liners are easier to read than two-liners and less disruptive to the image, though the guidelines indicate that “the decision should be made on the basis of the background picture”. Similarly, the BBC (2019, Avoid 3 lines section) guidelines propose considering “line breaks, number of words,

pace of speech and the image" when deciding on a one long or two short subtitles. The CAB (2012), on the other hand, prefers the use of two-line subtitles over long one-liners. For Praet et al. (1990, p. 205), the dilemma of whether to present the information in one or two lines stems from the fact that, comparatively speaking, "more time is spent reading a one-line text than a two-line text", but then again, less time is spent "in following a one-line text than a two-line text".

When discussing subtitling from a syntactic perspective, Perego (2008, p. 214) argues that "subtitle reading may be particularly demanding when the line-break is arbitrary", i.e. "unpredictable, illogical, inaccurate or implausible". Considering that deaf and hard-of-hearing (HoH) viewers may not share the same level of reading ability as hearing viewers, inadequately divided subtitles risk spoiling their viewing experience to a great extent, hence the need for extra care on the part of the subtitlers. In this sense, nearly all the guidelines analysed put forward a similar approach for breaking the lines and recommend dividing them at logical points, making the breaks coincide with the natural ending of phrases and clauses.

When discussing interlingual subtitling, Karamitroglou (1998, Target text editing section) also points out that each subtitle should ideally comprise a sentence, but as this is not always possible due to temporal and spatial constraints, he suggests that "subtitled text should appear segmented at the highest syntactic nodes possible", both across lines and across subtitles. The BBC (2019), Netflix (2019) guidelines and the DCMP Captioning Key (2019) provide a list of rules aimed at properly dividing and grouping the textual information contained in the subtitles such as avoiding breaking a modifier from the word it modifies, avoiding splitting a conjunction and following phrase/clause.

1.4. Use of Colours

The use of colour is one of the main differences between SDH and subtitling for a hearing audience. Whilst colour in standard subtitling does not bear much weight beyond the aesthetic dimension, it can be a crucial factor in SDH, as different colours can be used to identify speakers and render sound effects, intonation, and music. The chromatic potential is also closely related to technological developments as, for instance, due to the limitations of analogue technology, SDH could only make use of five colours for the text: white, magenta, cyan, green and yellow. This tradition has been continued to some extent in the digital world, though now of course many more colours can be easily used.

White text on a black background seems to be recommended by all the guidelines analysed except for the Netflix guidelines in which the viewers are allowed to choose from different settings

including the colour of the subtitles and background, font type or text size. The font colour adopted in the FOX TV subtitles is white, and a colourful background is not used. The ITC (1999, p. 6) guidelines also point out that, besides white, yellow, cyan and green, in that order of importance, are the most legible colours over a black background, whilst at the same time discouraging the usage of other colours and stating that the "use of magenta, red and blue should be avoided". The BBC (2019) guidelines rule out the use of a coloured background other than black. The DCMP Captioning Key (2019) states that subtitles should be presented in a translucent box so as to increase legibility. However, no recommendation is given as to how to combine the different colours (text and background) or as to how to use them to signal speaker identification and to record acoustic effects. A rather unique case among those examined, the CAB (2012, p. 14) rules out the use of colour as the only strategy for speaker identification, stating that "colour captions can never be used as the sole indicator of who is speaking" and suggesting that "speaker identification [and] proper placement" are always resorted to in these cases.

2. TEMPORAL DIMENSION

AVPs are texts of great complexity in which different semiotic channels converge to render information and where, as a later addition to the finished film, subtitles need to "interact with and rely on all the film's different channels" (Díaz-Cintas & Remael, 2007, p. 45). In order to fulfil their communicative function as completely and clearly as possible, subtitles must synchronise with the other semiotic channels, which means that they are ultimately constrained by the rhythm and flow of the film. In addition, another time constraint with a direct impact on the rate at which subtitles are presented on screen is linked to the reading ability of the viewers. Thus, as Neves (2005) points out, whilst synchronisation is bound to the rhythm of the film, reading speed is more about the assumed viewers' reading ability and the actual duration of the subtitles on screen.

2.1. Synchronisation

Synchronisation, or synchrony, refers to the appearance of the subtitles with the onset of a speech or a sound effect and its disappearance at the end of the sound. Synchronisation is deemed to be one of the key factors which most affect the viewers' perception on the quality of the subtitles. Talking about interlingual subtitling, Díaz-Cintas and Remael (2007, p. 90) note that, "poor timing, with subtitles that come in too early or too late, or leave the screen without following the original soundtrack are confusing, detract from enjoying a programme, and have the potential of ruining…" the viewing experience. Synchronisation between soundtrack and subtitles is also crucial for the

deaf and HoH viewers because "impaired viewers make use of visual cues from the faces of television speakers" (BBC, 2019, Synchronisation section), even though they may not comprehend the acoustic cues completely. This is, of course, particularly relevant in the case of those viewers who can lip read.

All the analysed guidelines propose that subtitles should ideally appear with the onset of speech and disappear with the end. The absence of subtitles when the mouths of the speakers are moving frustrates viewers, as they feel they might be missing something. Similarly, if subtitles stay on screen too long, they may be re-read by viewers, which can also lead to frustration.

The BBC (2019) suggests that the same rules of synchronisation followed for on-screen dialogue exchanges should be applied to off-screen speakers or narrators since viewers with residual hearing may make use of the auditory cues to supplement the information contained in the subtitles. The guidelines are relatively flexible when it comes to asynchrony and, if there is a sequence of subtitles that belong to a single speaker, it is permissible to slip out of synchrony on the condition that "the subtitles are back in sync by the end of the sequence" (BBC, 2019, Keep lag behind section). Secondly, slipping out of synchrony is allowed if "the speech belongs to an out-of-shot speaker or is voice-over commentary" (BBC, 2019, Keep lag behind section).

2.2. Leading and Lagging Times

In addition to having to match the rhythm of the speech as closely as possible, subtitles should ideally respect scene changes, i.e. they should ideally leave the screen just before a shot change occurs, and a new subtitle should appear with the new scene. This is really important since, as explained in the CAB (2012, p. 18) guidelines, "this avoids the perceptual confusion that occurs when captions are out of sync with video editing". However, it is not always possible or practical to realise these aims thoroughly. Therefore, SDH guidelines tend to show a certain degree of flexibility in terms of achieving synchrony between the subtitles and the images on screen and/or the soundtrack.

The lead time refers to the moment at which the subtitle appears on screen, and most guidelines allow the entrance of the subtitles before the actual onset of speech. For instance, the DCMP Captioning Key (2019, Guidelines section) suggests that "borrowing 15 frames before and after the audio occurs… is hardly noticeable to the viewer" and advises the use of these times so as to slow the reading speed and provide easily readable subtitles. The other guidelines generally allow the subtitles to stay on screen for a certain amount of time after the speech has finished. In

the case of the BBC (2019) guidelines, slipping out of synchrony before or after the speech for more than 1.5 seconds is not recommended.

Although slipping out of synchrony is a strategy that can be implemented for the sake of readability, it should be used with extreme caution, as synchrony between subtitles and soundtrack is very important for those who lip-read or use residual hearing to assist their reading. As reported in the ITC (1999, p. 12) guidelines, "it should still be recognised, however, that some viewers use subtitles to support heard speech and will require synchronisation. Therefore, the technique should not be over used".

2.3. Shot Changes

Another issue to be taken into consideration in order to achieve good synchronisation with the other semiotic channels of the AVP is to respect shot changes as far as possible. The AVMs consist of small, single units (shots), which come one after another in a specially designed order to create a continuous narrative. Thus, subtitles should follow the shot changes to harmonise with the rhythm and narrative of the AVM. Indeed, guidelines like those proposed by the BBC (2019) explain that it is likely to be easier for viewers to read subtitles when they are synchronised with the shot changes, and the ITC (1999, p. 12) indicates that "subtitles that are allowed to over-run shot changes can cause considerable perceptual confusion and should be avoided".

For this reason, most guidelines advise that subtitles should preferably appear on the first new frame after a shot change and disappear with the last frame of the relative shot. A certain degree of asynchrony is permitted by some providers. Thus, the CAB guidelines advise subtitlers to use the lag and lead time to accommodate an even pace when the dialogue is particularly fast. The ITC (1999) suggests that there should be a gap of one second between the occurrence of the shot change and the appearance of the subtitle so that the viewers can adjust themselves to the new images. Similarly, the BBC (2019) guidelines state that when a subtitler has to allow a subtitle to hang over a shot change, it should not be removed quickly after the cut and a minimum gap of one second, or ideally one and a half seconds, should be maintained. Thus, some of the guidelines propose a number of solutions for the temporal problems that subtitlers may encounter. In the case of long sentences that run over various shot changes, the ITC (1999) guidelines allow a single sentence segmented into more than one subtitle to be placed around a camera-cut, depending on whether the sentence can be divided up naturally and whether enough presentation time can be allocated to each of the various subtitles that make up the long sentence.

In the case of several consecutive soft shot changes, the main recommendation is to avoid presenting the subtitle over them though, if necessary, the subtitle can cross over shot changes under certain conditions. The CAB (2012) guidelines permit the subtitle to stay on screen over several shot changes on the condition that the appearance and disappearance of the subtitle coincide with the first and the last frame of the first and last shot change respectively. The BBC (2019, Avoid straddling shot section) guidelines suggest splitting "a sentence at an appropriate point" or delaying "the start of a sentence to coincide with the shot change", and they also propose that if a shot is too short for a subtitle, the subtitler can then combine the speech to appear over two shots as long as the subtitle ends at the second shot and does not reveal anything before it is presented on screen.

When dealing with hard changes, the BBC (2019, End subtitle section) guidelines rule out carrying "a subtitle over into the next shot if this means crossing into another scene or if it is obvious that the speaker is no longer around". The CAB (2012, p.18) guidelines, on the other hand, allow for several shot changes to occur while one subtitle is on display, on the condition that "in-point and out-point of that caption coincide with the first frame of a shot change" for the sake of correct subtitle structure and segmentation if there is no other way of offering a subtitle that adheres to the appropriate presentation rate.

2.4. Presentation Rate

The presentation rate refers to the number of words (or characters) that are shown on screen per minute (or per second) (wpm – cps). When subtitling, it is crucial to allow viewers adequate time to read the subtitles, look at the image and cognitively integrate these two if they are to comprehend the message and enjoy the programme. Hearing-impaired viewers generally ask for verbatim subtitles which render everything uttered in the AVP (Neves, 2008) since they want to have access to all the information open to hearing viewers. As indicated in the CAB (2012, p. 18) guidelines, "when speaking, a person can put out 250 or more words per minute". Presenting this output verbatim on screen, though technically possible in subtitles of three or four lines, makes them nearly impossible for viewers to read in a comfortable manner and in conjunction with the images. Subtitles that disappear before viewers can read and fully understand them risk frustrating and stressing the audience, as they feel they are forced to read at a very high rate and have little spare time, if any, to enjoy the images.

In this respect, all guidelines propose presentation rates that depend on the research they have done and the experience they have accumulated over the years. Neves (2005, p. 183) argues

that, although most guidelines suggest some sort of reading speed, they can only be hypothetical formulations since there are too many variables involved in the creation of subtitles, for instance "the context (circumstances in which viewing is taking place), the media (image quality and subtitle legibility)" and the audience's level of literacy among others.

The DCMP Captioning Key (2019, Specifications section) proposes different limits for presentation rates depending on the type of the programme. The proposal is that the presentation rate for lower-level educational videos should not exceed 130 wpm and slightly above this limit for middle-level educational videos, i.e. 140 wpm. This is so because much of the content presented in the latter is considered to be new to viewers. It proposes a maximum presentation rate of 160 wpm for upper-level educational videos.

As for the Netflix guidelines, 20 characters per second for adult programmes and 17 cps for children's programmes are the recommended presentation rates. The ITC and BBC guidelines also provide details on this issue and although they set the same upper limit of 180 wpm under necessary conditions, they differ in the recommended presentation rate they propose. In the ITC guidelines, it is suggested that the presentation rate should not exceed 140 wpm under normal conditions, while the BBC recommends a higher range for the presentation rate, between 160 and 180 wpm. The ITC guidelines are rather elusive, as they do not explain what 'normal' or 'exceptional' conditions might be. They indicate that presentation rates depend on the content of the programmes, as chat shows have higher text density than dramas. Although they provide a set of recommended timings to guide the subtitlers, the BBC (2019) guidelines emphasise the fact that these figures should be taken with a pinch of salt, and the subtitler should be aware of the other semiotic dimensions. The BBC guidelines (2019, Keep words section) also detailed six conditions such as avoiding clipping a shot or crossing into an empty shot, avoiding editing out words that can be clearly lip-red, etc. under which giving less reading time is considered acceptable. On the other hand, the guidelines also recommend giving extra reading time when the subtitles contain unfamiliar words, several speakers, labels, long figures or shot changes and when the scene involves visuals and graphics.

The CAB (2012) suggest a maximum duration on screen of three seconds for every 32 characters of text and recommend verbatim subtitles as much as possible and editing down the content of the speech only as a last resort. A presentation rate of less than 200 wpm is considered as an acceptable reading pace for most adults in the guidelines. Even though for many providers it is always better to try to offer near verbatim subtitles for deaf and HoH viewers, subtitlers should

evaluate each scene individually and decide on a presentation rate carefully, considering the various parameters that may have an impact on the viewers' reading speed, such as education levels and the average age of the audience, verbal density and the semiotic complexity of the AVP.

As for the minimum time that a subtitle should remain on the screen, the CAB (2012, p. 18) guidelines recommend "a minimum of 1.5 seconds duration for up to 32 characters of text". They further detail that the last 32 characters of text should stay at least two seconds on the screen before moving or blanking subtitles. The DCMP Captioning Key (2019) indicates that no subtitles should stay on the screen for less than a second and 10 frames. The guidelines also set a maximum duration of six seconds for the subtitles, regardless of the type of programme. The BBC and ITC guidelines do not specify a minimum duration time for subtitles.

3. LINGUISTIC ISSUES

Subtitles are a written text added to a finished, complex semiotic system of light and sound. This new, textual communicative addition is supposed to become part of a whole and be integrated as much as possible with the other semiotic channels. Delabastita (1989) distinguishes four communication channels that constitute the filmic sign i.e. visually presented non/verbal signs and acoustically presented non/verbal signs. All of these sign systems coalesce in the original programme to generate a coherent audiovisual text. Given that deaf and HoH viewers have access to mostly visually presented signs, it is especially important that the written subtitles relay acoustically transmitted messages in order to complement the viewers' understanding of the whole audiovisual text.

Despite the growth in research in media accessibility over the past decade, the reality is that subtitling and other accessibility services are still an afterthought in the filmmaking process, prompting scholars like Romero-Fresco (2012) to call for a more proactive, accessible filmmaking. It should be borne in mind that some deaf viewers who use sign language (SiL) as their main means of communication consider subtitles as a second language instead of renderings of a spoken sentence in their mother tongue. These viewers may very possibly not possess or share some of the features specific to a spoken language; subtitles should therefore be localised to the "lingua-culture" of these viewers so that they can enjoy the AVM as much as others do (Neves 2005).

To a great extent, subtitling is a unique type of translation, not only because it is added to the ST and must accord with the original dialogue, but it also renders spoken utterances in writing, in what Gottlieb (1994) refers to as a case of 'diagonal translation'. Rosa (2001) states that this change of medium generally causes a loss of expressive and phatic functions ('ouch', 'ugh',

'mhm', 'uh-huh'), intonation, informative signals, overlaps, repetitions, hesitations and expressive illocutionary acts (thanks, apologies or greetings), amongst other things. Despite this loss of some of the typical features of spoken language, due to the transfer of the mode from spoken to written, many of these features – e.g. intonation and dialect – may still be transferred through the subtitles so as to convey some of the narrative features of the characters, providing that they do not hamper the readability of the subtitles. Special attention needs to be paid to the issues of implied meaning, non-standard language and paralinguistic codes when producing SDH since these dimensions are likely to cause trouble for hearing-impaired audiences. In addition to these three dimensions, the following sections will also focus on the role of editing in audiovisual texts.

3.1. Implied Meaning

As previously mentioned, in the case of interlingual subtitling, the transition from speech to writing causes the loss of certain features of the spoken language, which to a certain degree are supposed to be compensated for by the image and sound. In SDH there is also a difficulty in terms of transferring speech features to written subtitles; however, as hearing-impaired viewers cannot respond to the sound in the same manner as hearing viewers, and given that some belong to another language community, i.e. the Deaf community, special measures need to be taken so that they are able to comprehend the whole meaning.

In order to understand the implied meaning the interlocutors should ideally share the same ground and common knowledge which some hearing-impaired viewers lack since they are part of a different community, i.e. the Deaf community, whose mother tongue is SiL. Hence, problems are likely to occur in comprehending the full meaning when some of the hearing-impaired viewers lack the same ground and common knowledge, which should then be compensated for by the subtitlers as much as possible to help deaf viewers understand complex forms and implied meanings. When conducting her empirical experiments, Neves (2005) points out that many hearing-impaired participants in Portugal encountered problems with understanding implied meanings. She claims that metaphors especially create problems since "their inferential meaning is only achieved if the receivers are in possession of the notions that characterise the related topics" (2005, p. 209). The author goes on to propose the strategy that Baker et al. (1984, p. 31) had put forward, namely, that when dealing with metaphors, similes and idioms, subtitlers should aim to convey the essence of the meaning rather than a literal, verbatim translation by resorting to "a free translation of what is meant even if not the exact words" (Neves 2005, p. 209). Only the DCMP

Captioning Key (2019) recommends indicating puns or plays on words and suggests describing the puns on a separate line in square brackets.

3.2. Non-Standard Language

Another source of difficulty for deaf and HoH viewers is the use of non-standard language such as dialects, accents, unorthodox grammar and syntax, and specific lexical features, which rely heavily on the phonetic dimension and are difficult to represent in written form and which, apart from their denotative meaning, may also trigger a network of connotative readings. The socio-cultural role played by a dialect, with its accent, grammar and lexicon, should be carefully gauged in an audiovisual programme before attempting its subtitling. The translator should evaluate its importance in the diegesis of the production, consider whether its use by all the characters or just by one specific one is important to the plot or the characterisation of the protagonists, and decide what potential functions the specific dialect fulfils, if any.

Nearly all of the analysed guidelines permit the rendering of non-standard language as long as it is essential to the full understanding of the AVMs. The DCMP Captioning Key (2019) adopts a very positive approach and advises both the use of a label at the beginning of the subtitles to indicate the provenance of the regional dialect as well as keeping a hint of the dialect in the linguistic textuality of the subtitles. It also recommends keeping the flavour of the speaker's language by including profanity and slang in the subtitles on the condition that they are necessary to portray a character's personality. Unlike the DCMP Captioning Key, the CAB (2012) guidelines take a very cautious approach to rendering non-standard language. They foreground the need to communicate the meaning and intent of the original speech as clearly as possible in the subtitles and consider spelling and punctuation as essential factors in reaching this objective, which needs to be upheld regardless of any imperfections in people's speech.

The FOX TV conventions also give priority to well structured, standard language, regardless of the nature of the utterances. However, in the guidelines developed by SEBEDER (2019), it is proposed that the dialect used in a programme should be expressed explicitly at the beginning of the programme by using a star character (*) in front of an informative subtitle. In the programme, whenever a character speaks in the specific dialect mentioned at the beginning, a star character should be placed at the beginning of the relevant subtitle to indicate the non-standard language use.

The BBC (2019) guidelines take an intermediate approach to the recreation of non-standard language. They warn that where it is essential to convey non-standard language in the subtitles so

that viewers can fully enjoy the AVP, the subtitler should bear in mind that "a phonetic representation of a speaker's foreign or regional accent or dialect is likely to slow up the reading process and may ridicule the speaker" (BBC, 2019, Indicate accent section). Therefore, it is advised that the subtitler should aim to give a flavour of the accent or dialect of the speaker by rendering only a few words phonetically and by using key vocabulary or expressions that are specific to that dialect instead of representing all the utterances phonetically. If the text used in the subtitles is not enough on its own to convey and portray the origin of the speaker, subtitlers are encouraged to resort to labels that will spell it out. Another piece of advice is that the subtitler should respect the linguistic idiosyncrasy of the speech and refrain from correcting any improper grammar that may be an essential part of the dialect in question. The Netflix guidelines advise respect for the word choice and sentence structure of the spoken dialogue and to transcribe it without changing the slang words or the dialect. An explicative label in brackets should be employed to describe the accent of the speaker, e.g. [in Spanish accent].

3.3. Editing

The issue of verbatim versus edited subtitles is a controversial one in the field of SDH. According to Neves (2007) and Romero-Fresco (2009), three groups of stakeholders are involved in this debate. The first group of stakeholders is made up of the hearing-impaired viewers and the deaf organisations that tend to ask for verbatim subtitles and consider any kind of editing as potential censorship. In the second group are the broadcasters, who on occasions support verbatim subtitles for financial considerations, as they are relatively cheap to produce. The last group includes researchers and scholars who support edited subtitles since some of their studies on the presentation rates of verbatim subtitles suggest that they are too high for viewers to follow comfortably (Gregory & Sancho-Aldridge, 1996; Neves, 2008). It would be worth exploring the latter argument further, particularly in the case of Turkey. Although it seems that a substantial number of deaf and HoH viewers would prefer verbatim subtitles, especially in the UK where a long tradition of SDH already exists, more research is necessary to ascertain the impact that edited and verbatim subtitles can have in the overall comprehension and enjoyment of the AVP in countries where SDH is a novelty.

In stark contrast with the researchers, all the guidelines analysed are in favour of verbatim subtitles and they only allow editing as a last resort, clearly siding with the hearing-impaired viewers and some of the deaf organisations, which consider editing as an unwelcome manipulation of the original speech and a kind of censorship. For instance, the Netflix (2019, Subtitles for the

deaf section) guidelines recommend providing verbatim subtitles by instructing subtitlers to "include as much of the original content as possible" and "not simplify or water down the original dialogue". Editing is only permitted when sychronicity or reading speed is problematic.

The CAB (2012, p. 19) guidelines also state that "closed captions must, to the greatest extent possible, be verbatim representations of speech" and the dialogue can only be reduced when "technical limitations or limitations of duration and space will not accommodate all of the spoken words at an appropriate presentation rate". This is also the convention employed in the FOX TV subtitles, to achieve verbatim texts. Together with the DCMP Captioning Key (2019), the CAB guidelines do not permit editing text that comes from religious and published materials, direct quotes, the words of a well-known person talking on screen or the songs.

The DCMP Captioning Key (2019, A Definition of section), on the other hand, recommends editing the subtitles to ensure that viewers have ample time to "read the captions, integrate the captions and picture, and internalize and comprehend the message". Some of the most detailed information on editing subtitles can be found in the BBC (2019) guidelines, where subtitlers are advised to think carefully about the function of a word or phrase in the audiovisual text before editing it out of the subtitles. The guidelines recommend verbatim subtitles and providing as much access to the soundtrack as possible within the constraints of time, space, shot changes, visuals on screen, etc. The guidelines warn about editing out words like 'you know', 'well', 'but', 'so', etc. since they "are often essential for meaning" or "add flavour to the text" (BBC, 2019, Prefer verbatim section).

3.4. Paralinguistic and Kinetic Codes

Meaning in communication is not only determined by the verbal messages as there are other meta-communicative signals which indicate how the verbal messages will be interpreted by the listener. Kussmaul (1995, p. 61) notes that "tone of voice, facial expressions and gestures are important clues and we must rely on our interpretation of words within their contexts". Indeed, the same verbal message can mean something completely different depending on a speaker's intonation and the way in which it is uttered. Linguistic, paralinguistic and non-linguistic signs co-operate to create the meaning of an utterance and, therefore, it may be impossible to understand a message thoroughly if the receptor does not have access to one or more of these signs, which is the case for deaf and the HoH viewers watching a subtitled programme as they mostly rely on visual signs to interpret the meaning behind the verbal signs.

As Neves (2005, p. 221) also states, sound-based paralinguistic elements, such as variation in tone of voice, intonation, loudness, rhythm and speed, may change the meaning of an utterance entirely to such a degree that it may even mean the opposite. Therefore, subtitlers need to find a way to convey the paralinguistic features of spoken utterances to the deaf and the HoH viewers so that they can understand the meaning. However, conveying paralinguistic signs in written language can be challenging as written language is much more formal than speech, and it is difficult to represent some of the prosodic inflections characteristic of orality.

In all the guidelines analysed, paralinguistic signs are conveyed through punctuation, explicative labels or the use of upper case or italics. For instance, the BBC (2019) guidelines propose using an exclamation mark or a question mark in brackets at the end of the sentence without a space – i.e. (!) or (?) – to signpost a sarcastic statement or a sarcastic question respectively

Using caps is also suggested to indicate words that should receive special phonetic stress or when they are being shouted or screamed. Unlike the BBC guidelines, the DCMP Captioning Key (2019) proposes using italics to mark when a particular word is emphasised and all capital letters to indicate shouting or screaming. It also proposes using labels in brackets, in lower case and just above the subtitles, to indicate a speaker's emotions. The CAB and Netflix guidelines also endorse using italics to indicate emphasis, while the ITC (1999) guidelines suggest using upper case to indicate an increase in volume and changing the colour of an individual word for emphasis. In the BBC guidelines, the use of a question mark followed by an exclamation mark without a space is proposed to indicate an incredulous question. Conversely, in her study on the provision of SDH in the Portuguese context, Neves (2005, p. 226) proposes a novel approach that consists in the use of emoticons (☺, ☹) to convey "some of the most meaningful paralinguistic or emotional features that were not easily perceived through visual signs".

4. NON-LINGUISTIC INFORMATION

As mentioned before, the main role of SDH is to bridge the communicative gap which is caused by hearing-impaired viewers not being able to access the acoustic signs of the AVP in the same conditions as hearing viewers. SDH enables them to enjoy information which, otherwise, they would miss. Non-linguistic acoustic information forms part of a sign system independent of language and image, but with which it interacts to create a communicative context for the dialogue. Marshall (1988) divides the sound in AVPs into three main categories, which all come together to create the desired effect: human voice, sound effects and music. Whilst the human voice and lyrics

are linguistic elements of the acoustic sign, sound effects and instrumental music are non-linguistic elements. According to Kerner (1989), sound effects have three functions as they simulate reality, create illusion and suggest mood. Including sound effects in an AVP makes it more realistic for viewers, whilst illusion can be created by means of sound effects, even if nothing is being shown on the screen.

As it is indicated by these authors, sound is as invaluable as dialogue for the semiotic whole of an AVP. However, rendering sound in words is not a simple task. Although hearing people perceive sounds almost unconsciously, deaf and HoH viewers will need to read (about) them and process them in conjunction with the other semiotic channels in order to grasp the whole meaning, which obviously adds an extra cognitive burden to the reading effort.

4.1. Speaker Identification and Location of Sound

When subtitling for the hearing audience, various ways of indicating the change of speakers on screen exist, such as using dashes in both lines or only in the bottom one. This strategy could also be employed in SDH though it risks proving unsatisfactory as the target audience would not be able to make use of all the semiotic channels available to a hearing viewer, so that subtitlers need to intervene in a more visible manner to help the deaf and the HoH to identify the speakers appropriately. The various solutions proposed in the analysed guidelines include the use of certain punctuation marks, using different colours, displacing subtitles appropriately and including descriptive labels.

The DCMP Captioning Key (2019) and the CAB (2012) guidelines propose placing the subtitles under the relevant on-screen speakers to identify who is talking in the first place. Hence, a person on the left would have left-justified subtitles while the one on the right would have right justified subtitles. Both sets of guidelines suggest using a label when it is not possible to identify the speakers through the placement of subtitles. The CAB (2012, p. 20) guidelines propose using labels to identify speakers "when characters move around the screen, when faces are indistinct, when dialogue is very fast, or when the speaker is off screen or not visible" and volunteer advice on how speaker identification should be used, as follows:

- Editing speech should not be activated to make room for speaker identification.
- Wherever possible, the character should be identified on a separate line, ideally before the actual dialogue.
- Mixed case and a colon after the name should be used for speaker identification

- The identification label should be descriptive when the priority is to boost clarity.
- Italics are recommended for the content of all disembodied voices, whether indicating the name of the speaker, providing a description or using a hybrid approach with both types of information.

Similarly, the DCMP Captioning Key (2019) suggests using labels when identifying speakers when subtitle placement is not possible. It advises that, when a speaker's name is known, his/her name should be written in round brackets and it should always be presented on a separate line, above the dialogue. If the name of the character is not known, it then proposes that the speaker should be identified by using the same information that a hearing viewer has: male #1, female narrator, etc. Similarly, in FOX TV, if the name of the speaker is unknown, only the information available to the hearing audience is subtitled. DCMP guidelines propose that if the speaker is out-of-vision, the subtitler places the subtitles to the far right or left, as close as possible to the out-of-vision speaker.

Netflix guidelines suggest using a hyphen at the beginning of each subtitle (one speaker per line) without a space to indicate two speakers. When an extra identifier is necessary, such as the name of the character, if known to the audience, it should be inserted after the hyphen in square brackets, without a space. In FOX TV, the use of hyphens indicates that the speakers are both visible on screen. However, if they are not visible or cannot be identified clearly, then a descriptive label with the name of the speaker is inserted after the hyphen in round brackets, without a space, as proposed by SEBEDER.

The BBC (2019) guidelines are substantially different from the DCMP and CAB guidelines and propose using various colours to distinguish speakers in the first place, and only resorting to positioning or the use of dashes, arrows and labels when the use of colours is not possible; for instance, when there are too many characters in a specific scene and it becomes impossible to identify them clearly with different colours. On occasions like these, the BBC proposes putting each segment of speech on a separate subtitle line and placing them underneath the relevant speaker. The guidelines also advise that the two lines of the subtitle, placed right or left, are "joined at the hip" (BBC, 2019, Use horizontal positioning section) in order to facilitate their reading.

The use of dashes to distinguish between characters is also suggested with the proviso that "dashes only work as a clear indication of speakers when each speaker is in a separate consecutive shot" (BBC, 2019, Use dashes section). When it comes to indicating that the speech comes from an off-screen speaker, the BBC and ITC guidelines propose the use of single quotes. Single quotes

are also recommended for the utterances of out-of-vision characters, for instance, in phone conversations between two speakers who share the same colour and one of them is off-screen. However, if the out-of-vision speaker has been assigned a different colour, then it is not necessary to use single quotes. Both guidelines also propose that double quotes be used to indicate speech emanating from a machine. In the case of an out-of-shot speaker who is on the right or left, a left (<) or right (>) arrow should be typed next to his/her speech and the subtitle should be positioned on the appropriate side of the screen.

Finally, the BBC guidelines propose using nominative labels, with the name of the character in white caps regardless of the colour of the speaker's text, to identify speakers. Time permitting, the BBC advises placing these labels on a top, separate line as in the case of the two previous guidelines. If it is not possible to write a separate line for the label, then it suggests placing it on the same line as the subtitle.

4.2. Sound Effects

Sound effects may bring both denotative and connotative meanings with them. In the case of sounds with a denotative meaning, it is usually enough for the subtitlers to offer a description: 'siren wails', 'door slams'. However, when sounds come accompanied with a connotative meaning, i.e. they are used to evoke a certain emotion or to create atmosphere, then they need more consideration. As Neves (2005, p. 243) notes that subtitlers need to "distinguish the traits that confer particular effects such as source, location, on-set, frequency, speed, duration, loudness and gradation, among others".

The guidelines generally state that, if sounds are relevant to the action and important for the understanding of the viewers, they should then be rendered in the subtitles by means of labels, alteration of the font or a change of colour (e.g. colour red is only used to render sound effects in the French context). In the case of labels, these should be placed as close as possible to the source of the sound on screen. As for their linguistic configuration, the BBC (2019, Subject + verb section) guidelines recommend that "sound-effect labels should be as brief as possible and should have the following structure: subject + active, finite verb". This recommendation is important since addition of sound-effect labels adds extra burden to the reading process of viewers. However, no advice is provided as to how to indicate whether the sound is sudden, continuing, slow or fast. This information is covered in the DCMP Captioning Key (2019), where the present participle form of the verb is recommended for a sustained sound and the third person verb form for an abrupt sound.

Furthermore, the DCMP guidelines recommend using punctuation, commas and ellipses to distinguish between fast and slow paced sounds respectively.

In the Netflix guidelines, a label in square brackets describing the sound effect, with the text in lower case, except for proper nouns, is proposed. The guidelines also advise to use hyphens so as to distinguish sounds emanating from different sources; however, if the sounds or the speech are from the same source, the use of a hyphen is not required. The idea that sounds that are relevant to the action and important for the understanding of the viewers must be subtitled is discussed by Neves (2005), who argues that the criteria used by the subtitlers to decide on which sound effects are relevant and important for the understanding of any given scene are subjective and dependent on the subtitler's interpretation. To overcome this limitation and minimise potential subjectivity, Neves proposes the compulsory subtitling of all non-synchronous sounds which occur independently of what is being shown in the images.

The DCMP guidelines recommend adding an imitation or onomatopoeia of the sound to the sound-effect label since a study by Gallaudet University in the USA showed that "a combination of description and onomatopoeia was the preference of more consumers (56%) than was description alone (31%) or onomatopoeia alone (13%)" (Harkins et al., 1995, p. 18). On the other hand, the BBC (2019) and the ITC (1999) guidelines state that context and genre should be taken into consideration for the use of onomatopoeic expressions, for instance, using onomatopoeia in a highly emotional, dramatic scene is likely to ruin the atmosphere; on the other hand, using only descriptive labels in a cartoon or animation may not fit in well with the creative nature of the material. The use of labels within round brackets that describe sounds as objectively as possible, within round brackets, is employed by FOX TV.

4.3. Music

Music may comprise both linguistic (lyrics) and non-linguistic signs (instrumental sound), the latter being able to transmit strong connotative meanings and to induce emotions that may not be evoked by linguistic signs. On this issue, Gorbman (1987, p. 2-3) notes that "music taps deeply into cultural codes, giving it rich cultural associations and potential meaning, a 'veritable language' that can contribute significantly to a film's overall meaning".

Given the great importance of music in the complex semiotic system of the film, subtitlers need to act with caution when conveying its effect on the deaf and the HoH viewers, who would otherwise miss a very crucial part of the meaning of a film. All the guidelines recommend subtitling music that is part of the action or crucial to the plot. If providing detailed information is

problematic, the ITC (1999) guidelines suggest that at least the title of the music or song should be given, a piece of advice also echoed in the DCMP Captioning Key (2019, Music section), where it is stated that "if possible, the description should include the performer/composer and the title".

All the guidelines recommend the use of a sign, either a musical note (♪) or a hash (#), to indicate music. The arbitrary use of the hash is rather historical and mostly limited to analogue TV since many teletext systems did not allow the inclusion of the musical note symbol. The Netflix guidelines similarly advise that song lyrics should be subtitled in italics on the condition that they do not interfere with the dialogue. The lyrics should be enclosed within a musical note and the first letter at the beginning of each line should appear in upper case. Use of an ellipsis is recommended when the song continues but is not subtitled anymore to give priority to the dialogue. Song titles (in quotes) and album titles (in italics) are to be identified with labels and in brackets.

When it is a matter of transmitting the connotations of instrumental music, the DCMP Captioning Key (2019) suggests that subtitlers should describe the mood of the music as objectively as possible, but it only advises not using subjective words in order to achieve objectivity without any further elaboration.

In the case of songs with lyrics, nearly all guidelines propose that they should be subtitled verbatim, with only the BBC (2019, Indicate song lyrics section) guidelines pointing out two exceptions where the visual information is considered to be more important than the lyrics and "where snippets of a song are interspersed with any kind of speech". The BBC guidelines also emphasise the importance of synchrony when rendering the music, stating that song lyric subtitles should be synchronised with the soundtrack as closely as possible, e.g. if it takes 15 seconds to sing one line of a hymn, the subtitle should stay on the screen for that amount of time.

It is underlined in the ITC (1999) guidelines that, occasionally, scene changes are signalled by means of altering the incidental music rather than providing some visual cues, in which case the hearing-impaired viewers should be made aware of the scene change by presenting a subtitle like (# LIVELY DANCE BAND MUSIC), which is followed by another one, (#MOVES INTO SLOW DANCE MUSIC) in which the dramatic change of the tempo of the music is conveyed linguistically

In FOX TV, when describing the connotations of instrumental music, only the mood is identified by inserting a descriptive label like (Hareketli müzik)-(Lively music). When relevant to the plot and known, the names of the composer/performer and the title of the song are also indicated, enclosed in quotation marks and parentheses. The name of the composer/performer is

followed by the title of the song, separated with a hyphen ("Beyoncé – Halo" plays). The lyrics are subtitled verbatim when relevant and important for the plot. Unlike all other guidelines, FOX TV does not use a hash or musical note to denote lyrics and double quotation marks are used instead.

CONCLUSION

Although all the guidelines seem to accept the importance of presenting legible and readable subtitles on screen, there seems to be less unanimity on other fronts, such as on the use of various colours to denote speakers, for instance. As mentioned previously, AVMs are multisemiotic by nature and, as such, they are texts of great complexity, which is one of the reasons why subtitles need to allow the target audience ample time to read the subtitles comfortably and enjoy the image at the same time. All the guidelines seem to recommend the synchronous presentation of the subtitles with the soundtrack and the images, highlighting the necessary respect for shot changes so as to support and facilitate the reading experience of the viewers. There does not seem to be a general consensus concerning presentation rates since the recommended reading speeds vary notably depending on their professional experience and the results obtained in various research projects.

The change of medium in the subtitles, from spoken to written language, causes the loss of various features of spoken language such as intonation, dialectal inflections, overlaps, repetitions and other phonetic dimensions. This loss is especially detrimental in the case of deaf and HoH viewers as they cannot generally access the acoustic signs of the AVMs to supplement the message. Another downside caused by the viewers not being able to access the acoustic signs is the loss of non-linguistic information, which forms part of the audiovisual product and which has an impact on the meaning, such as sound effects, music, location of sounds, etc. All the guidelines suggest the use of various techniques to compensate for loss of meaning, such as assigning different colours to the various characters, displacing the subtitles, exploiting punctuation marks and resorting to descriptive labels. Although hearing loss is a universal occurrence, the experiences, expectancies, needs and preferences of the people affected by it differ from country to country due to cultural differences, discrepancies in educational systems and the absence or presence of laws protecting the rights of people with sensory disabilities, etc. The parameters which happen to be more controversial across guidelines and countries, as revealed in the present article, therefore should be experimented and tested with the specific target audience (taking their education, social status, hearing-impairment, etc. into consideration) through a reception study so

as to determine the best practices which will cater for their needs and preferences and enable them to access and enjoy the AVMs as much as their hearing counterparts do. Only then might they be able to consider themselves as equal members of the so called digital society.

REFERENCES

Armstrong, M., & Brooks, M. (2014). *TVX2014 Short paper – Enhancing subtitles*. www.bbc.co.uk/rd/blog/2014/10/tvx2014-short-paper-enhancing-subtitles.

Assis Rosa, A. (2001). Features of oral and written communication in subtitling. In Y. Gambier & H. Gottlieb (Eds.), *(Multi)media Translation. Concepts, Practices, and Research* (pp. 213-221). Amsterdam: John Benjamins.

Baker, R. G., Lambourne, A. & Rowston, G. (1984). *Handbook for television subtitlers*. Winchester: University of Southampton and Independent Broadcasting Authority.

Bartoll, E., & Tejerina, A. M. (2010). The positioning of subtitles for deaf and hard of hearing. In A. Matamala & P. Orero (Eds.), *Listening to subtitles. Subtitles for the Deaf and Hard of Hearing* (pp. 69-87). Bern: Peter Lang, 69-87.

BBC. (2019). *Subtitle guidelines V 1.1.8*. London: British Broadcasting Company. https://bbc.github.io/subtitle-guidelines/#Music-and-songs

CAB. (2012). *Closed Captioning Standards and Protocol for Canadian English Language Television Programming Services*. Ottawa: Canadian Association of Broadcasters. www.cab-acr.ca/english/social/captioning/cc_standards.pdf

Chion, M. (1994). *Audio-Vision*. New York: Columbia University Press.

DCMP. (2019). *DCMP Captioning Key*. Spartanburg: Described and Captioned Media Program. www.captioningkey.org/quality_captioning.html

Delabastita, D. (1989). Translation and mass-communication: Film and TV translation as evidence of cultural dynamics. *Babel, 35*(4): 193-218.

Díaz-Cintas, J., & Remael, A. (2007). *Audiovisual translation: Subtitling*. Manchester: St Jerome.

Gorbman, C. (1987). *Unheard melodies: Narrative film music*. London: Indiana University Press, Bloomington, and British Film Institute.

Gottlieb, H. (1994). Subtitling: Diagonal translation. *Perspectives, 2*(1): 101-121.

Gregory, S., & Sancho-Aldridge J. (1998). *Dial 888: Subtitling for Deaf Children*. London: Independent Television Commission.

Harkins, J. E., Singer B. R., Korres E., Virvan B. M., & Singer B. (1996). *Caption features for indicating non-speech information: Guidelines for the captioning industry*. Gallaudet Research Institute.

ITC. (1999). *ITC Guidance on standards for subtitling*. London: Independent Television Commission. http://sign-dialog.de/wp-content/richtlinien_199902_england.pdf

Ivarsson, J., & Carroll, M. (1998). *Subtitling*. Simrishamn: TransEdit HB.

Karamitroglou, F. (1998). A proposed set of subtitling standards in Europe. *Translation Journal, 2*(2). http://translationjournal.net/journal/04stndrd.htm.

Kerner, M. (1989). The art of the sound effects editor. www.filmsound.org/articles/purposeofsoundeffects.htm.

Kussmaul, P. (1995). *Training the translator*. Amsterdam: John Benjamins.

Marshall, J. K. (1988). An introduction to film sound. www.filmsound.org/marshall/index.htm

Matamala, A., & Orero, P. (Eds.). (2010). *Listening to subtitles: Subtitles for the deaf and hard of hearing.* Lausanne, Switzerland: Peter Lang.

Netflix. (2019). English Timed Text Style Guides. https://partnerhelp.netflixstudios.com/hc/en-us/articles/217350977-English -Timed-Text-Style-Guide

Neves, J. (2005). *Audiovisual translation: Subtitling for the Deaf and Hard-of-hearing* (Doctoral dissertation). London: Roehampton University.

Neves, J. (2007). Of pride and prejudice. The divide between subtitling and sign language interpreting on television. *The Sign Language Translator and Interpreter, 1*(2): 251-274.

Neves, J. (2008). 10 fallacies about subtitling for the d/Deaf and the hard of hearing. *The Journal of Specialised Translation, 10*: 128-143.

Perego, E. (2008). Subtitles and line-breaks: Towards improved readability. In D. Chiaro, C. Heiss & C. Bucaria (Eds.), *Between text and image: Updating research in screen translation* (pp. 211-223). Amsterdam: John Benjamins

Praet, C., Verfaillie, K., De Graef, P., Van Rensbergen, J., & d'Ydewalle, G. (1990). A one line text is not half a two line text. In R. Groner, G. d'Ydewalle, & R. Parham (Eds.), *From eye to mind: Information acquisition in perception, search, and reading* (pp. 205–213). North-Holland: Elsevier Science.

Romero-Fresco, P. (2009). More haste than speed: Edited versus verbatim respoken subtitles. *Vigo International Journal of Applied Linguistics, 6,* 109−133.

Romero-Fresco, P. 2012. Quality in live subtitling: The reception of respoken subtitles in the U. In A. Remael, P. Orero & M. Carroll (Eds.), Audiovisual translation and media accessibility at the crossroads (pp. 111-133). Amsterdam: Rodopi.

SEBEDER. (2019). Türkçe dil içi ayrıntılı altyazı çevirisi uygulamalarını araştırma ve iyileştirme projesi. Ankara. https://sebeder.org/images/icerik/Turkce_Dil_Ici_Ayrintili_Altyazi_Cevirisi_Uygulamalarini_Arastirma_ve_Iyilestirme_Projesi_www.sebeder.org_391.pdf

EXPANDED SUMMARY

In a digital society, audiovisual materials (AVMs) command a prominent position which is becoming more important day by day, consolidating their place in the lives of people and helping individuals obtain information pertaining to all domains of their lives. The prevalence of these productions in daily communication, together with the variety and importance of the information that they provide, makes them an indispensable part of people's lives, whether for entertainment, education, general information or finance etc. although it is true that these audiovisual sources of information create opportunities and facilitate the lives of people able to take full advantage of them, they can also lead to sharp inequalities and disadvantages for those who do not have proper access to them. In particular, those with a sensory disability run the risk of lagging behind in (the digital) society due to their inability to access a medium that targets and utilises the senses in order to receive and enjoy the information delivered. To make sure, then, that society is inclusive and offers the same opportunities to all its members, these individuals require special services if they are to access and enjoy AVMs in a similar way to other members without any sensory disabilities. However, just providing access services might not be enough unless these services meet the required quality standards. Guidelines therefore assume important role for setting these standards and enable the suppliers to provide accessibility services which cater for the needs and preferences of the sensory-impaired viewers.

Having a set of guidelines therefore would assume a crucial role and help subtitling for Deaf and Hard-of-Hearing (SDH) suppliers provide subtitles which are properly tailored for the hearing-impaired audience in the respective socio-cultural context. Even pioneering countries in this field, like the UK or the USA, realised at an early stage the need for a set of standards that would help

guarantee the presentation of consistent and accurate subtitles. On Turkish TV, SDH is only provided on very few channels and on a scarce number of programmes, which means that there is not a set of guidelines which is widely accepted in the industry or employed by the regulator authority. Due to this lack of standards subtitles run the risk of varying from one supplier to another, which will complicate the reading process and make it difficult for the hearing-impaired audience to comprehend the subtitles and access to the AVMs. Descriptive analysis of the practices implemented across different countries and comparison of the guidelines adopted in these countries is a firm starting point in revealing the most adopted and also controversial conventions. Four guidelines implemented in three different pioneering countries (Canada, the UK and the USA) in the production and research of SDH are analysed and compared in the article. The parameters investigated are grouped under four categories namely, layout and presentation on screen, temporal dimension, linguistic issues and non-linguistic information. Under the category, layout and presentation on screen, parameters (font, positioning of subtitles, number of lines and line breaks and use of colours) which affect the readability and legibility of subtitles on screen are investigated. Even if subtitles are created by taking into account all other technical dimensions, they may not succeed in providing access to AVMs unless they are presented in a way that allows the viewers to read subtitles with least effort possible. Under the category, temporal dimension; synchronisation, leading and lagging times, shot changes and presentation rate are scrutinised. Since subtitles as additions to the finished film, need to "interact with and rely on all the film's different channels" (Díaz-Cintas and Remael, 2007:45), they must synchronise with the other semiotic channels. Under the linguistic issues category, the attention is paid to the issues of implied meaning, non-standard language and paralinguistic codes which are likely to cause trouble for the hearing-impaired viewers since speech features are transferred to written subtitles and hearing-impaired viewers cannot respond to the sound in the same manner as hearing viewers, and given that some belong to another language community, i.e. the Deaf community. Under the last category of non-linguistic information, speaker identification and location of sound, sound effects and music which bring denotative and a network of connotative meanings are investigated. This analysis and comparison of guidelines reveal some of the shared values of good practices and potential divergences which need to be tested in the Turkish context with the Turkish deaf and hard-of-hearing audience to create socio-culturally specific guidelines.