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Reconsidering the balance between standardisation and creativity in media accessibility: Notes on training

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ABSTRACT

Research in audiovisual translation (AVT) and media accessibility (MA) is undergoing a process of 'scientification'. The findings that were once obtained through the opinion of experts are now the result of empirical (and often user-informed) studies. Some of these studies are aimed at obtaining findings that can lead to standardised criteria, which works well in the current model in which translators and access experts do their jobs in isolation from the creators, applying specific sets of empirically based guidelines. However, as access is increasingly considered from inception through the collaboration between creators, access experts and users, new alternative and creative practices are becoming more common. Yet, training in MA does not normally account for these non-standard approaches. This article focuses firstly on how subtitling speed is being approached in the currently prevailing cognitive turn. A discussion follows about the positive and negative aspects of this model and how to reconcile creativity and standardisation in education. Finally, a tentative proposal is provided to rebalance the pedagogy in AVT/MA so that along with a technical side that is solidly backed up by empirical research, we can embrace creativity and approach AVT/MA not only as a technique, but also as (part of) an art.

KEYWORDS

Creativity, guidelines, media accessibility, standardisation, training.

1. Introduction

It has become customary (perhaps to the point of cliché) to start academic articles on audiovisual translation (AVT) and media accessibility (MA) by highlighting the momentous changes through which these areas are going. This article will be no exception, as the often-discussed process of automation brought about by the development of technology is fast becoming a reality. The past months have seen scholarly (Deckert and Bogucki 2022) and mainstream (Groskop 2021) publications, as well as academic and industry-led events (Translating Europe 2022) engaging with the 'technologisation' of AVT and MA and the impact that this is likely to have on research, training and practice. The shift to cloud dubbing and cloud subtitling and the introduction of machine translation are quickly changing the way in which audiovisual material is translated and made accessible across languages and cultures. A case in point is the recent introduction by the European Parliament of a fully automatic live subtitling method to transcribe and translate multilingual parliamentary debates in real time and in 24 languages (DGT 2019: 3).

Reactions to these changes have come from, amongst others, Higher Education institutions and professional translators. Translation departments at universities such as Universidade de Vigo and Universitat Jaume I in

Spain are updating their translation and interpreting degrees to account for this new reality. Others, such as University College London or the University of Roehampton in the UK are now regularly delivering continuing professional development courses, the flexibility of which allows them to cover the many changing processes of automation now used in professional AVT and MA. In the industry, the European Federation of Audiovisual Translators (also known as AVTE or Audiovisual Translators Europe) has just issued its 'Machine Translation Manifesto' (AVTE 2021), which highlights the negative effect that this technology is having on the quality of translated audiovisual material and on the translators' working conditions. The manifesto criticises the one-size-fits-all approach adopted by this technology, which prioritises quantity over quality. This results in bland and homogeneous translations that consider neither the context nor the visuals and are devoid of the human translators' unique styles and, in general, of their creativity. Translators' working conditions are also affected, given the tight deadlines and the low remuneration offered for revising machine-translated output. The manifesto asks the industry to place the focus on quality, which should not only be assessed on the basis of errors but also on the strengths provided by creative solutions, as well as the perhaps unquantifiable affective benefits of human interaction. It also proposes the notion of the 'augmented translator' as a creative force that can harness and benefit from the latest technology to produce high-quality output.

The arguments used by the AVTE in their manifesto chime with many of the points put forward in this article, although they will be applied here in a slightly different context: namely, how to foster creativity in MA training. All the same, it does seem that we are going through a pivotal moment in the history of AVT and MA, where, as shown in the picture used to advertise the forthcoming Media for All conference (see Figure 1.), the balance between the human and the automatic, or between what we shall here define as quality and quantity, needs to be (re)considered.

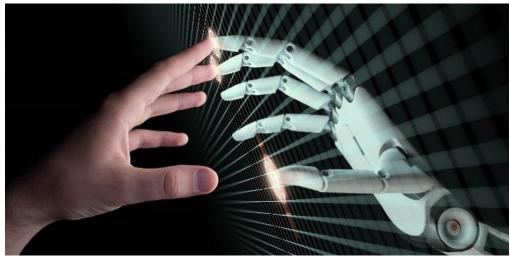


Figure 1. Picture illustrating the Media for All 10 Conference: Human agency in the age of technology (designer: Thomas Campaert).

The present article aims to reflect on the role that academics, as scholars and trainers, can have in this debate. As we shall discuss below in the context of various turns that have taken and/or are (still) taking place, research in AVT and MA is going through the so-called cognitive turn (Chaume 2018) — a process of 'scientification' whereby the findings and data that were once obtained through the opinion of experts are now often the result of empirical (and often user-informed) studies. Some of these studies are aimed at obtaining findings that can lead to standardised criteria, as in the case of experiments in subtitling speed, where the results are included as recommendations or requirements in national and international guidelines. This works well in the current industrialised model of AVT and MA in which translators and access experts do their jobs in isolation from the creators and applying specific sets of guidelines that have been informed by this empirical research. However, it may not be so suitable to a new scenario in which, as described by Greco (2018), AVT and especially MA are facing three major shifts: from concerning 'some' (mostly people with disabilities) to concerning 'all' (people with and without disabilities), from being expert-led to becoming user-led, and from being considered as an afterthought at the end of the process to being integrated into the production process. When translation and/or access are considered from inception, creators (filmmakers, theatre directors, etc.) are often keen to go beyond standard guidelines and standardised criteria and to engage in a creative conversation with translators and access experts (FWD-Doc 2021; Tendero López 2022). The latter are, however, rarely trained to speak the same language as artists and to think of translation and access as artistic contributions.

This article makes a case for rebalancing the role played by standardisation¹ and creativity in AVT and MA. It first focuses on the much-debated issue of subtitling speed and on how it is being approached from the standpoints of research, training and professional practice as per the currently prevailing cognitive turn. This is followed by a discussion on both the positive and negative aspects of this model, which in turn is placed into the wider debate on how to reconcile creativity and standardisation in education. Finally, a tentative proposal is put forward to train and, especially, to assess creative practices of translation and access that can help us reassess the roles played by art and science in this field.

2. Subtitling and viewing speed

As suggested above, according to Frederic Chaume (2018), AVT, to date, has taken (and, we might suggest, continues to take) at least four 'turns'. The first is the descriptive turn, which is based on the polysystem theory and which focuses primarily on analysing and describing the target text and thus helping to clarify the translation process. The second is the cultural turn, which brings to the fore "issues of ideology, otherness, post-

colonialism, power, resistance, patronage and censorship" (Chaume 2018: 42). The third is the sociological turn, which is grounded in Pierre Bourdieu's sociological paradigm and is concerned with the different roles of translators, audiences and the various other stakeholders involved in the "selection, translation and adaptation of an audiovisual text" (Chaume 2018: 42). Finally, AVT and MA seem to be going through (or may even be at the height of) the so-called cognitive turn, which employs experimental research methods in order to analyse the audience's response to translation and access through different biometric tools such as eye-tracking technology. This allows researchers to obtain statistically significant data that can validate or refute long-held assumptions that have held considerable sway over professional practice in AVT.

A case in point is the issue of subtitling speed, one of the guintessential items of discussion in AVT and MA, and loaded with financial, political and ideological connotations. A high subtitling speed (and thus less display time for the subtitles on screen) means that it is easier for subtitlers to cover the content of the original script without the need for heavy editing/reduction. Broadcasters and companies are usually happy with this option, which is more economical, as it requires less effort on the part of the professionals, i.e., less editing/reduction normally means less decision-making and thus less time. In the case of intralingual subtitles for access, most viewers with hearing loss (and deaf associations) also demand verbatim and therefore fast subtitles, mostly for political reasons. For example, many of these viewers regard slow, edited subtitles as "a form of censorship and 'denying' deaf people full access to information available to the hearing population" (Ofcom, 2005: 17). In contrast to these two groups, some scholars and researchers support slow and edited subtitles, in the process agreeing commonly with Jane Sancho-Aldridge and IFF Research Ltd. (1996: 24), who call for the need to "disentangle the politically sensitive issue of 'access' from the practical issue of which style, in real terms, provided deaf viewers with most information". For such scholars, verbatim subtitles are often too fast to provide full access for many deaf viewers (Neves 2008). As a result, a paradox emerges whereby some scholars support editing (and thus slower subtitles) in order to provide fuller access for viewers with hearing loss, because even though the latter group regularly falls into line with broadcasters in pushing for verbatim subtitles, these may not give them full access after all — for the simple reason that there is too much for them to read in the time available. It is precisely the assumptions involved in these debates that can be tested with empirical user-reception studies as part of the cognitive turn mentioned above.

Indeed, this is what researchers such as Szarkowska and her colleagues from the AVT Lab at the University of Warsaw have done over the past few years. They have used empirical research to "verify long-standing subtitling norms in a new audiovisual reality" (Szarkowska and Bogucka 2019: 102), with the aim of revisiting current subtitling guidelines and AVT industry

practices (Szarkowska and Gerber-Morón 2018) and promoting standardisation (Szarkowska et al. 2021). Placing the focus on subtitling speed, Szarkowska set out to analyse the so-called six-second rule. This is a preferred approach of unknown origin (d'Ydewalle et al. 1987) that has been applied across countries and languages for decades, and according to which two lines with a maximum of 32 characters including spaces should be displayed for six seconds on screen. In order to ascertain the impact of subtitling speed on viewers, and in an attempt to refine the analytical methods used until now in the study of subtitling speed, Szarkowska and her team propose the use of proportional reading time (PRT — or the amount of time during those six seconds that viewers actually look at the subtitles) and linear mixed effects models (LMMs, which attempt to account for differences between individual viewers)2. Their results (Szarkowska and Gerber-Morón 2018; Szarkowska and Bogucka 2019; Szarkowska et al. 2021) suggest that viewers can generally keep up with subtitles as fast as 20cps, which go well beyond the 10-12cps recommended by traditional guidelines (Ivarsson and Carroll 1998; Pedersen 2011; Szarkowska 2016).

Subtitles can also, however, be too fast. In their latest study, Kruger *et al.* (2022: 215) consider the use of PRT to analyse subtitling speed as "somewhat problematic" and show that fast speeds (from 20cps to 28cps) can have a negative impact on both the linguistic processing of the subtitles and the viewers' ability to look at the images. Szarkowska acknowledges that fast subtitling speeds cause viewers to spend more time on the subtitles and less on the images than slow subtitling speeds. However, she finds no evidence to support the data on viewing speed that Romero-Fresco presented as a result of the EU-funded DTV4ALL project in 2015 (Romero-Fresco 2015), and which has subsequently been included in several mainstream and academic publications (Díaz-Cintas and Remael 2021):

Viewing speed	Viewers' time on subtitles	Viewers' time on images
10 cps ≈ 120wpm	±40%	±60%
12.5cps ≈ 150wpm	±50%	±50%
15cps ≃ 180wpm	±60% - 70%	±40% - 30%
16.7cps ≈ 200wpm	±80%	±20%

Table 1. Time spent by the viewers on subtitles and images depending on the speed of the subtitles, as reported in Romero-Fresco (2015).

Szarkowska and Gerber-Morón (2018) have found viewers to spend between 32% and 66% of their time on the subtitles (depending on whether they are slow or fast, respectively), but they have found no condition under which viewers spend as much as 80% of their time reading subtitles, as reported in Table 1. Although the data included in this table are an accurate

representation of the results obtained at the end of the DTV4ALL project in 2011 (Romero-Fresco 2015), some limitations must be acknowledged.

Firstly, these percentages only refer to the time the subtitles are on screen. They only show the amount of time that the viewers (or rather, the participants who took part in the study) have to both read a subtitle and look at the image while the subtitle is on screen. These data may be useful to highlight that slower speeds give viewers more flexibility to prioritise viewing the image when they have to (for instance, when they pick up a sudden visual change in their peripheral vision) without the danger of missing the subtitles. Conversely, when subtitles are (very) fast, viewers are often left with no choice other than to prioritise the subtitle reading. During that time, they may be 'blind' to any changes in small details on screen that occur while they are reading, hence the notion of subtitling blindness (Romero-Fresco 2019), which was observed during the experiments, as several participants did not have time to fixate on the images that accompanied some of the fast subtitles they were exposed to. However, this is only part of the story. The viewing speed data included in this table reflect the amount of time viewers looked at the subtitles and the image while the subtitles were on screen, but they ignore the periods when there were no subtitles. If the latter were to be taken into account, the results would be very different. Faster subtitles should actually enable longer viewing time on the screen, since having the subtitles on screen for a shorter period of time would leave more time for the viewers to look at the images when there is no subtitle to be read.

Secondly, cognitive studies in AVT/MA have come a long way in the past decade. The methodology and the presentation of data is now more refined than ten years ago with regard to statistical analyses, presentation of results per type of viewer and audiovisual material, etc. Thus, convenient as it may be to show this viewing speed data or to extrapolate and generalise from it, it is also necessary to refer to Szarkowska's and Kruger's latest studies on this topic (Szarkowska and Gerber-Morón 2018; Szarkowska and Bogucka 2019; Szarkowska et al. 2021; Kruger et al. 2022) and to any others that may confirm or refute them. This is, after all, the point of the cognitive turn: to ensure that AVT and MA are backed up by rigorous empirical research. However, despite all of this, it is worth considering the rationale behind the notion of viewing speed and the impact that it may have on the current AVT/MA landscape and on the discussion presented in this article.

From a practical/professional viewpoint, viewing speed is a much more difficult concept to apply than subtitling speed. A subtitler can apply a specific subtitling speed to a given dialogue, setting their software to a number of characters per second, as per the recommendation of the relevant guidelines. Viewing speed is an approximation (to be confirmed, refuted or refined by further studies) of the potential impact that the

subtitling speed chosen by the subtitler may have on the viewers. As such, it requires an analysis of the viewer's comprehension of both subtitles and images, as well as of 'the whole'. Rather than a standardised figure to be included in guidelines and in professional software, viewing speed is a reminder of the need to adopt a more audiovisual approach to the analysis and professional application of subtitling speed, which, in some ways, is still very word-based. After all, many guidelines (Netflix 2022) still refer to this phenomenon as "reading speed", rather than subtitling speed, as though subtitled films were read rather than watched. Likewise, many studies looking at the impact of subtitling speed on the viewers' comprehension focus only on how viewers understand the content of the subtitles, but not the images. According to Kruger et al. (2022), no study to date has been able to measure this with the necessary rigour. This may just be a matter of time, as cognitive researchers in AVT/MA find a way to analyse audiovisual comprehension empirically, but it is hard to disagree with Zdenek (2011) when he claims that there is a great deal of logocentrism at play in AVT/MA, where the word is still king.

From a wider perspective, the notion of viewing speed can also help to adopt a more qualitative approach to the use of subtitling speed. In their now classic contribution, De Linde and Kay (1999) include eye-tracking-based evidence showing that visual narrative is as important in subtitled films as the reading of subtitles and that subtitling speed should be applied on the basis of the images. Yet, most current guidelines encourage a by-the-numbers approach to subtitling speed. They set a maximum speed regardless of the film, scene, shot, etc., typically only differentiating between adult and children's content. This has an obvious impact not only on professional subtitlers, but also on trainees, who learn to use these guidelines, who are often taught about the empirical studies that support some of them and are assessed (as will be seen below) on the basis of whether they can apply them accurately³.

With such a standardised approach to subtitles in place, it is hard to instil in students (and future professionals) the idea that every film, and indeed every shot, is different, and that rather than applying a blanket approach to subtitling speed, they need to analyse the image in front of them. A subtitler can then decide that for an important shot or a new scene, that is, for an image that has not been shown yet, it may be advisable to edit the content of the subtitle to a low speed and thus allow viewers to spend extra time looking at the new image. For subsequent subtitles displayed over this image, the subtitler may decide to render all the dialogue verbatim, at a faster speed, since viewers will need less time to process an image with which they are already familiar. For this to happen, subtitlers need to learn how to read a film (as an idiosyncratic artistic piece) and how subtitles impact on the viewers' experience as an integral part of the film, rather than as an afterthought that is a kind of 'necessary evil'. Such 'idiosyncratic' practices, which would seem at least partly at odds with the standardisation

sometimes promoted by the currently prevailing cognitive turn in AVT/MA, are at the core of both the notion of viewing speed and the accessible filmmaking (AFM) model it comes from, and which promotes the need to consider translation and access as part of the creative process in collaboration with filmmakers. For all their limitations, both the notion of viewing speed and the AFM model may thus be regarded as reminders of the need to reconsider the balance between standardisation and creativity in AVT/MA, which at present seem to be leaning almost exclusively towards the former.

3. The 'scientification' of AVT/MA, accessible filmmaking and creative practices

The cognitive turn, and what may be described as the 'scientification' of AVT/MA, does not only apply to research. In some cases, it aims to promote standardisation and to have an impact on the industry (Szarkowska and Gerber-Morón 2018), which can also easily leave a mark on the way in which training is delivered. Unlike in other areas, in which it may be more difficult to connect research, training and professional practice, it is fairly feasible for AVT/MA scholars to teach what they research, which can in turn inform the guidelines used by professionals. In this way, students know that what they are being taught is not based on the impressionistic views of the teacher, but instead is backed up by science, and professionals know that the guidelines they are applying are empirically supported and somehow democratised, as they have been informed by the users (or more accurately, by those users who took part in reception studies). This works well in the industrialised model currently at play in the industry, where translation and access are an afterthought (i.e., an element added on once the audiovisual piece has been finalised) and where there is little or no contact with the creative team. This does not mean that there is no creativity involved in this type of translation/accessibility, but this creativity must be applied within the strict confines of standard guidelines, which are also used in the classroom to prepare trainees for the professional market. However, the standardisation promoted by some of the studies included in this cognitive turn and the transformation of their results into prescriptive norms may not be so suited to a new scenario that is taking shape in this field.

Over recent years, AVT and especially MA seem to be going through a period of transformation characterised by the process of 'technologisation' or automation mentioned in the introduction, where we also highlighted the three main shifts that Greco (2018) has identified in addition to the four 'turns' mentioned above. To recap, the first shift is the transition from concerning some users (mostly people with disabilities) to concerning all users (people with and without disabilities). The second is the move from an expert-led approach to one that is informed and even led by the users. The third consists of including AVT/MA from inception rather than (as has

been the case until now) relegating it to being an afterthought at the end of the process. AFM (Romero-Fresco 2019), or the consideration of translation and/or access as an integral part of film production through the collaboration of translation/access experts and filmmakers, may be seen as an instantiation of these three shifts, especially the last. Over the past years, the number of filmmakers and theatre directors knowingly or unknowingly applying this model has grown exponentially⁴. This is shown in the recent Toolkit for Inclusion & Accessibility produced by Documentary Filmmakers with Disabilities (FWD-Doc 2021) and in the database on AFM and creative MA compiled by Tendero López (2022). This database includes over 600 examples of films that apply the AFM model and/or consider accessibility/translation during the production process, of which almost half resort to non-standard or creative approaches. Many of these filmmakers are initially presented with the standard (and often empirically based) guidelines mentioned in this paper. Yet, by entering into the artistic conversation, translation and access often become one more tool that can be used to reinforce the style or vision set out for a particular film. Here, guidelines (which are almighty in the above-mentioned industrial model) turn into mere guidance, that is, a starting point from which the creative team departs in order to allow AVT/MA to provide access for those who need it but also to become an artistic contribution in their own right. After all, if there are no set rules or strict guidelines to make a film, why should there be just one way to make films accessible across languages and types of viewers?

A recent example by the award-winning Spanish filmmaker Alfonso Zarauza may help to illustrate this point and the overall case made in this paper. Following a roundtable on AFM at the Cans Film Festival in Galicia (Spain) in 2020, Zarauza contacted the GALMA research group at the University of Vigo (Spain) to provide translation and access for his film *Pontevedra*, *Hora* Cero (2022). Until then, Zarauza had always adopted a standard, industrialised approach to translation and access, i.e., he outsourced this task to distribution companies and was not aware or informed of how it was completed or received by the viewers. For his new film, he decided to make translation and access part of the postproduction process. Pontevedra, Hora Cero was commissioned by the mayor of Pontevedra, one of the six leading cities in Galicia, who asked Zarauza to make a short documentary that could address the transformation of Pontevedra from an industrial and unappealing city to a world-recognised example of pedestrianisation and sustainability. The film shows how Zarauza initially sets out to make a classic documentary, starting by interviewing the mayor about the transformation of the city (Part I). However, unhappy with the way it is going, Zarauza interrupts the interview and confesses to the mayor that he is more comfortable with fiction and that he does not think he can make a good documentary. He then calls three actresses who have often worked in his films (Part II). They meet at a bar, and he gives them two potential scripts for them to rehearse for the film. The two scripts turn into two

fictional stories on screen: Parts III and IV. Part III is a conversation between a PhD student of Architecture and an architect from the Pontevedra Council about the transformation of the city. This scene is interrupted by the actresses, who break character and criticise the script for lacking conflict and interest. Annoyed, Zarauza gets into an argument with the actresses from behind the camera, before leaving the set. Part IV, meanwhile, features three female characters in a series of scenes that do not mention the city or its transformation, but which use Pontevedra as a backdrop for a love story narrated with a poetic tone.

Zarauza was keen to be part of the conversation around translation and access and asked whether the subtitles could to some extent convey the style of the film. Following several tests and discussions, creative subtitler Lucía Doval and Zarauza decided to experiment with the fonts, styles, display mode and positions of the subtitles. Part I (the failed attempt at a classical documentary) uses the traditional look sometimes applied in subtitles for news and documentaries: Arial font against a translucent background box (see Figure 2).



Figure 2. Subtitles with Arial font against a translucent background box for the documentary section of *Pontevedra, Hora Cero* (2022).

The background box disappears as Zarauza interrupts the mayor and tells him that this is not the type of film he would like to make and that he is more comfortable with fiction (see Figure 3.). The same style is used in Part II, as Zarauza meets his actresses and tells them about the two fictional scripts he would like them to work on (see Figure 4.).



Figure 3. Subtitles with Arial font and no translucent background box to convey Zarauza's words in *Pontevedra, Hora Cero* (2022).



Figure 4. Subtitles with Arial font and no background box for the conversation between Zarauza and his actresses in *Pontevedra, Hora Cero* (2022).

In the first fictional story (Part III), the subtitles are placed under each character and use a bold Lato font, which, although sans serif (as is normally the case with subtitles), was designed to look elegant, classical and slightly literary, thus conveying here the change from non-fiction to fiction (see Figure 5). This only changes when, during the aforementioned argument between Zarauza and the actresses, the director cuts the scene to ask them what kind of film they would like to make, his words subtitled in the Arial font that indicates non-fiction (see Figure 6).



Figure 5. Subtitles with Arial font and no background box for Zarauza's interruption of Part II in *Pontevedra, Hora Cero* (2022).



Figure 6. Displaced subtitles with a bold Lato font for Part III in *Pontevedra, Hora Cero* (2022).

Finally, in the more poetic Part IV, the main character's monologue is subtitled in Lato, the words rolling up and fading in and out of the river, as the character walks towards them over a bridge (see Figure 7.).

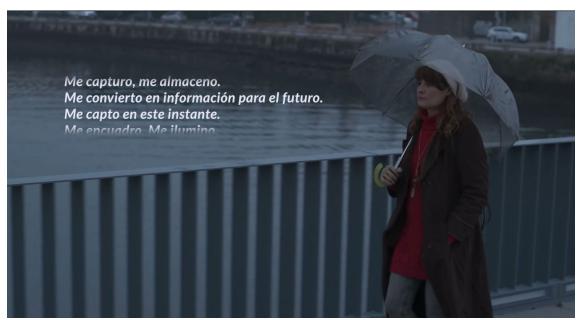


Figure 7. Subtitles rolling up and fading in and out of the river, in Lato font, for Part III in *Pontevedra, Hora Cero* (2022).

Pontevedra, Hora Cero (2022) is just one example of creativity in AVT/MA resulting from the application of the AFM model. As shown in the abovementioned database, there are many others, often produced by disabled artists who resort to alternative and creative forms of access as a (political) tool to expose and criticise the discrimination and ableism currently at play both in film and in society as a whole (Romero-Fresco 2021). The problem is that, as the demand for this type of creative work grows, it is extremely difficult to find professionals who are able to do it. In their ongoing fight to improve their working conditions, professional AV translators have traditionally stressed the creative nature of their work, i.e., it is a creative job, not a mechanical one, and it should be valued and paid as such. Yet, when AFM is applied and translation and access finally break with the industrial model and become part of the creative process (that is, when they are part of the creative conversation), there are not enough professionals who can do it, mostly because there is no training available. This, we contend, may be at least partly due to the impact of the cognitive turn on training. For all its positive aspects, the scientification of AVT/MA materialises in an approach to training that places emphasis on the technical side of translation and access and its application to standard(ised) quidelines, often leaving little room for non-standard(ised) and idiosyncratic practices. As will be discussed in the next section, this is often reflected in how students are assessed, too.

4. Standardisation vs. creativity in the assessment of AVT/MA

The above-mentioned AVTE manifesto stresses that quality should not be assessed solely on the basis of errors, but also on the strengths provided by creative solutions. However, many of the assessment models and rubrics used in AVT/MA are precisely error-based, as pointed out by Spiteri Miggiani

(2022: 92) when she acknowledges the limitations of the assessment model she puts forward for dubbing:

Another limitation of the model is that it is error-based and does not reward outstanding or 'better' solutions when the work of translators is compared. As explained further on, this approach is in line with the industry perspective that focuses on having scripts that 'work'. Companies will most likely complain about errors but will less likely reward translators for brilliant solutions, except perhaps by ensuring further translation commissions.

When it comes to subtitling, a clear example of this trend is the NER model, which Romero-Fresco developed in 2015 to assess the quality of live subtitles and which has since been used by universities, companies, broadcasters and governmental institutions across different continents (Romero-Fresco and Martínez Pérez 2015). The model is mostly quantitative and calculates accuracy almost exclusively on the basis of errors (both Edition and Recognition errors, as compared to the total Number of words, hence NER), making only a small exception to account for correct editions (successful instances in which the subtitler departs successfully from the original audio). One could argue that this approach is suited to live subtitles, which are error-prone and less conducive to creative solutions than subtitles for pre-recorded material. However, as noted by De Higes Andino and Cerezo Merchán (2018), after surveying the assessment tools used for subtitling at Spanish universities and in the industry, the assessment tools used for pre-recorded subtitling also focus on errors. De Higes and Cerezo Merchán put forward their own evaluation criteria, which distinguishes between 25 types of mistakes. Interestingly, they add, under "additional remarks", a final line that can potentially address the assessment of creative strategies: "Assessors may reward good subtitling solutions positively" (De Higes Andino and Cerezo Merchán 2018: 78). The balance, though, seems clearly tilted towards standardisation (AVT/MA as a technique) rather than towards creativity (AVT/MA as part of an art).

Error-based assessment tools have proved to be (and will continue to be) very useful to assess trainees and professionals, but they probably fall short of accounting for creative approaches to AVT/MA. How can an error-based rubric such as the one included above be used to assess the creative subtitles provided for Alfonso Zarauza's *Pontevedra, Hora Cero* (2022) In this example, technical aspects such as subtitling speed and the number of characters per line take a back seat to what really matters: the style of the subtitles, the extent to which they match the vision and aesthetics of the film and the choice of the different fonts, position and display modes across the four parts. These subtitles can be assessed against some of the existing standard industry guidelines, but key elements may fall by the wayside. They may be best served by a rubric (or another evaluation tool) that could tilt the balance towards art and creativity, while considering (although in this case with a secondary role) the technical aspects involved in subtitling.

A tentative proposal is included in the next section but, before that, a brief reflection may be in order.

There is little doubt that assessment tools are a key part of training, not only because of the role that they play in evaluating the students' performance, but also because of the impact they can have on the learning process before they are evaluated. The method of assessment sends a message to the students about what is expected from them throughout the course and about what the teacher thinks of the area (what is important and what is not, etc.). The message sent to AVT students here is that they will perform successfully as long as they manage to avoid errors and comply with a specific rubric or set of guidelines. They are being told that subtitling is a technique and that they can be good subtitlers by becoming good technicians. The teacher may then devote some classes to creative subtitling solutions, but this can only be seen as an addition to, rather than as an integral part of, the course. Creativity is original, idiosyncratic, different. None of this can be accommodated properly in the error-based rubrics resulting from the scientification or, perhaps more accurately, the standardisation, of AVT/MA, which encourages students to comply and to converge rather than to diverge.

This chimes with the long-held and still timely discussion around standardisation and creativity in education more generally. Standardisation is often seen as an impediment to the development of students' critical thinking and creativity (Rubin and Kazanjian 2011). This applies to teaching in general and more specifically to assessment. In their international, largescale survey on creativity in education, Harris and Bruin (2018: 168) found that standardised testing was "universally seen as detrimental to teachers' and students' developing their own creativity because it is based on one right answer and discourages risk and the seeking of alternative solutions". After all, creativity "poses a challenge to organizational systems and institutional frameworks that rely, sometimes necessarily, on compliance and constraint" (Olivant 2015: 127). This does not mean that creativity cannot be assessed, but rather that pedagogy needs to be "rebalanced" (Burnard and White 2008) so that creativity and divergent thinking can be trained and assessed. As highlighted by Bolden et al. (2020), this can be done and is being done on a regular basis by institutions that are committed to training creativity. If, as highlighted in the manifesto included in the introduction, the way forward for translators facing the technologisation of AVT and its ensuing standardisation is to present themselves as creative forces with unique personal styles, then AVT/MA trainers also need to train and test this creativity.

The next section includes a tentative proposal of what this may look like, born as it is out of a decade of fostering not just creativity but also originality in film production students, and applied as a methodology here to the AVT/MA context.

5. A proposal

We draw the distinction between creativity and originality, because film production is generally understood to be creative, even if one's creative vision is derivative of the work of others as opposed to idiosyncratic. And we make this distinction not in order to devalue the importance, or indeed the inevitability, of imitation, influence, genre, and other processes that are inherently a part of creative processes. Rather, we make this distinction because while there is a long history of apprenticeship and other imitation-based training in the arts, we also seek as instructors to empower students to embrace and to enhance the distinction, or originality, of their creative vision. That is, we seek both to honour and to nurture difference.

Within film production pedagogy, this has been achieved by shifting away from rewarding technical competence (exercises that ask students to execute, say, a successful tracking shot) and aiming instead to reward precisely an idiosyncratic vision under the umbrella of what Brown (2020 and 2021) termed "Guerrilla Filmmaking". He achieved this through a somewhat paradoxical approach to film pedagogy. The idea is to place constraints upon students in order specifically to encourage them to find creative solutions, rather than to leave them free to do (or complain that for economic reasons they cannot do) whatever it is that they wish as filmmakers. Drawing upon *The Five Obstructions* (2003), in which Lars von Trier challenges fellow Danish filmmaker Jørgen Leth to remake his short film, The Perfect Human (1968), five times, but each time with different formal constraints (no shot longer than twelve frames; shot in Cuba or India instead of Denmark; the film must be an animation, etc.), Brown instructed students equally to make a series of short films, each involving both a thematic and at least one formal constraint (for example, a film consisting only of a single take and which answers the question 'why is a refugee?'). Augmented by looking at a global history of film production in non-industrial (or, simply put, materially poor and/or politically sensitive) contexts, this educational practice pushes students towards finding original and/or idiosyncratic ways to express themselves, developing an understanding that perceived obstacles can become creative opportunities, and gaining the confidence to be different. Indeed, one of the aims of the 'Guerrilla Filmmaking' course was to help students to understand that perceived imperfections in both films and humans alike are not so much 'imperfections' as expressions of difference. The very idea that a human or a film is 'imperfect' (or indeed 'perfect') is thoroughly embroiled in ideologies that are intertwined deeply with cinema as an industrial, capitalist art form.

In a fashion that is thoroughly enabled by the widespread availability of filmmaking equipment in the era of digital technology (anyone with a smartphone can make a film), the idea is to challenge the commonly held belief not only that you need lots of money to make a film, but also that the more a film costs, the 'better' it is (because it is glossier, involving familiar and costly film stars, etc.). If you will, the smartphone may be the apotheosis of globalised capital. It can also, however, be a tool to expose the injustices of global capital, and do so not just by mimicking the aesthetic styles that were shaped by, and which in turn helped to shape, those injustices (cinema as simultaneously a form with a historically high economic barrier to entry and as a deeply influential propaganda machine), but by inventing new aesthetic styles more suited to a more just world, where difference ('imperfection') is celebrated and encouraged. To have the courage to be different — to court the possibility of making a 'bad' or an 'unpopular' film — is what 'Guerrilla Filmmaking' seeks to develop, and in this sense students learn that it is better to try and to fail (they receive higher grades for experimenting, and for being idiosyncratic) than it is not to try to create a film that only that student could have made⁵.

This chimes with the alternative/creative notion of MA described in this article. Unlike the approach adopted by many standard guidelines, which "rely on the idea of accessibility as a set of particular, preset interventions" (Lazard 2019), authors and artists promoting alternative or creative approaches to MA see access as a conversation (Romero-Fresco and Dangerfield 2022, forthcoming), a process of speculative practice that is likely to fail (as it cannot account for every need that every person will ever have) but that is flexible enough to shift in real time with the different needs of the community (Lazard 2019). Difference and failure are thus not obstacles, but key elements to provide access, which contrasts with the definition of standardisation as "the process of making things of the same type all have the same basic features" (Cambridge Dictionary 2022).

There are precursors to 'Guerrilla Filmmaking' from outside of cinema (during the course, we regularly discuss figures from literature and the plastic arts, for example), and to mention one of these will allow us hopefully to demonstrate the applicability of this method to AVT/MA. French novelist Georges Perec adopted a similar obstruction-based approach to writing as the one embraced in Guerrilla Filmmaking. Indeed, his 1969 novel La disparition is a lipogramatic text that does not include any word containing the letter 'e'. The book was published in English as A Void in 1994, with Gilbert Adair's translation remarkably observing the same constraint. Perec reportedly said of the novel that the challenge of writing a lipogramatic text was akin to Oedipus learning only truly to see after he had blinded himself. That is, such constraints paradoxically liberate the writer, or artist more generally. Indeed, freed from the pressure for 'perfection', or from the need to meet a standard, one can begin to see that disappearances and/or voids are the norm, and that there is no perfection to pursue (work need not be measured by errors) so much as opportunities to work creatively and originally with difference in order to create difference.

Applied to AVT/MA, this means — as Adair demonstrates with his translation of Perec — that the translation is itself an original piece of work, even as it owes its existence to 'the' original. That is, originality is not a fixed (or 'perfect') entity that needs impossibly to be pursued (one can only make 'errors' in seeking 'perfectly' to translate or to make accessible 'the' original), but rather originality is a process that continues from the 'original' into the translated and/or 'accessible' version, which thus becomes itself an original work in its own right. It is something for all audiences to appreciate as a work of art, rather than a work that is somehow always 'below' or a detraction from 'the' original and only 'for' certain people. As befits Greco's (2018) first shift noted above, this rethinking of AVT/MA exemplifies the consideration of all people rather than only or primarily those with disabilities. And so, while some viewers may not 'like' what it is that a translator or accessibility professional does to a film or text, this seems no different to us from the possibility that some viewers may not 'like' the 'original'.

To be clear, we are not necessarily suggesting that people do whatever they wish with 'original' texts — the much-feared/maligned notion of 'anything goes' — at least, we are not suggesting that they do this in an official (i.e., institutionally endorsed) context. For, even as the internet is full of examples of people who unofficially do precisely what they want with 'original' texts, and audiences are seemingly always hungry for such memes, there are the intentions of authors and other agents whom translators and accessibility professionals might wish to respect. However, we are suggesting that they bring to those original works their own original capacities, perhaps even enhancing rather than chasing after those works (Romero-Fresco and Chaume 2022). And in order to achieve this, we might propose a more challenge based AVT/MA pedagogy that seeks to foster such creativity and originality in conjunction with more 'traditional' and/or standard(ised) approaches, rather than replacing them (and even if these two approaches find themselves in hopefully a productive tension with each other).

Creating subtitles using different colours, only certain parts of the screen, limiting the word count and/or the duration of the subtitle, different fonts, font sizes, incorporating textual movements and more. Getting the students to experiment, or to think outside of the typical text box will be a way to get these creative juices flowing. Likewise with signing and audio description (use no words, but only music and/or sound effects). Provide a rubric in which students are rewarded for producing a work that becomes an experience in and of itself, sitting palimpsestically on top of the original, rather than trying to hide behind it, preferably invisibly. In this way, both creativity and originality can shift away from standardisation and towards unique personal styles⁶.

6. Conclusions

AVT and MA are going through significant and potentially era-defining changes, as new technology pushes its way into translation and accessibility workflows, either replacing or assisting the work of professional translators. Training institutions are reacting by updating their curricula and creating new courses that can prepare trainees for this new scenario. Professional translators are warning about the risks that the standardised, one-size-fits-all approach brought about by technology can pose to the quality of translation and access and to their working conditions, while also highlighting the notion of the translator as a creative force that can harness the latest technology to produce high-quality output.

This paper has looked at what academics (as researchers and trainers) are doing and can do to address this situation. Research in this area is currently going through a cognitive turn, that is, a process of 'scientification' that is also having an impact on how future professionals are being trained and which is providing an empirical foundation to many of the guidelines that dictate how translation and access are applied throughout the world. For all its merits, though (and there are many), this process of scientification does not seem to be encouraging the creativity that is highlighted by translators as a necessary requirement to face the inevitable 'technologisation' of their field.

The problem here is not (only) the introduction of technology, which can, after all, be used to help translators, but rather the industrial model that relegates translation and access to the distribution phase, and which keeps translators isolated from the creative team, working with extremely tight deadlines and for very little remuneration. It is a system that is very aware of the financial value provided by translated and accessible versions (around 50% of the total revenue obtained by most blockbusters) but which refuses to recognise it (between 0.01% and 0.1% of a film's budget is normally spent on translation and access) (Romero-Fresco 2019). With this model, a subtitler producing standard (not creative) subtitles for the film discussed above, Pontevedra, Hora Cero (2022), would have been paid 180 euros to complete the job over two days with no opportunity to contact the filmmaker. Instead, by adopting an AFM approach and integrating translation and access within the production stage, a different scenario was created. Zarauza was able to secure 800 euros from the budget of the film to pay the work of the subtitler (no need to go through an intermediary language service provider, as is normally the case in the industrial model) and to give her a much more generous deadline (two weeks) to do her job.

The database mentioned in this article (Tendero López 2022) shows that AFM is already a reality. Yet, there is no point in being naïve about it. As shown by Joshua Branson's (*forthcoming*) account of the complex integration of access into the production of the feature-length documentary

The Real Chaplin (2021), AFM is still easier in small-budget films (such as Zarauza's) than it is in bigger productions, at least for now. Likewise, it is probably foolish to expect AFM to replace an industrial model that, like capitalism (of which it is a clear manifestation), is designed to survive. Crucially, though, one of the built-in mechanisms that guarantees its survival may be the standardisation promoted by some of the studies included in the process of scientification of AVT/MA and the way in which their results are shaping the training of future professionals. In other words, there is not much point in arguing for the need to consider translation/access as a creative enterprise if we are researching it, teaching it and assessing it as a technique. By doing this, we are only perpetuating a system that is built upon the isolation of translation and access from any artistic consideration and which is now making a move to further devalue this job to the status of a technical task that can be performed by technology.

This does not mean that science should not have a place in AVT/MA. Its benefits are undeniable. It does mean, however, that we may need to consider rebalancing [or decolonising] our pedagogy (Burnard and White 2008) so that, along with a technical side that is solidly backed up by empirical research, we can embrace creativity and approach AVT/MA not only as a technique, but also as (part of) an art. Crucially, this creativity (which might potentially be researched through scientific studies not aiming at standardisation) does not only consist of experimenting with subtitle fonts, positions and display modes. It can also be used, as shown by the recent work of disabled artists such as Liza Sylvestre, Christine Sun Kim and John Lee Clark, to question the current status quo, where accessibility is still used by non-disabled artists as a tool to enable disabled users to access their work. In other words, a tool that perpetuates ableist power structures that contradict the traditional disability principle "nothing about us without us" (Romero-Fresco and Dangerfield 2022, forthcoming). Embracing creativity can help us to move beyond the problem-solving approach that has been so pervasive in MA until now, and to unleash its potential to contribute to a more equitable and inclusive society.

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References

- **Bolden, Benjamin** *et al.* (2020). "Context and Implications Document for: Assessment of Creativity in K-12 Education: A Scoping Review." *Review of Education* 8, 377–379.
- **Branson, Josh** (forthcoming). Originals without Origins: An Ethnographic Study of Accessible Filmmaking. PhD thesis. University of Roehampton.
- **Brown, William** (2020). "Teaching Practice as Theory: Guerrilla Filmmaking." Agnieszka Piotrowska (ed.) (2020). *Creative Practice Research (In the Time of Neoliberal Hopelessness*). Edinburgh: Edinburgh University Press, 150–163.
- **Brown, William** (2021). "Making kin, making children and making *Coyote* under lockdown." *The Projector: A Journal of Film, Media and Culture* 21(2), https://www.theprojectorjournal.com/making-coyote-under-lockdown (consulted 19.11.22)
- **Burnard, Pamela and Julie White** (2008). "Creativity and performativity: Counterpoints in British and Australian education." *British Educational Research Journal* 34(5), 667–682.
- **Chaume, Frederic** (2018). "An overview of audiovisual translation: four methodological turns in a mature discipline." *Journal of Audiovisual Translation* 1(1), 40–63.
- **De Higes Andino, Irene and Beatriz Cerezo Merchán** (2018). "Using evaluation criteria and rubrics as learning tools in subtitling for the D/deaf and the hard of hearing." *The Interpreter and Translator Trainer* 12(1), 68–88.
- **De Linde, Zoé, and Neil Kay** (1999). *The Semiotics of Subtitling*. Manchester: St. Jerome.
- Deckert, Mikolaj and Łukasz Bogucki (2022). "Innovation in audiovisual translation: from production to reception." XLinguae 2. http://www.xlinguae.eu/issue-n_2_2022.html (consulted 19.11.22)
- **Díaz-Cintas, Jorge and Aline Remael** (2021). *Subtitling Concepts and Practices*. London: Routledge.
- **d'Ydewalle, Géry, Johan van Rensbergen and Joris Pollet** (1987). "Reading a Message When the Same Message is Available Auditorily in Another Language: the Case of Subtitling." J. Kevin O'Regan and A. Levy-Schoen (eds) (1987). *Eye Movements: From Physiology to Cognition*. Amsterdam: Elsevier, 313–321.
- **Greco, Gian Maria** (2018). "The nature of accessibility studies." *Journal of Audiovisual Translation* 1(1), 205–232.
- **Groskop, Viv** (2021). "Lost in translation? The one-inch truth about Netflix's subtitle problem." *The Guardian*, Oct. 14. https://www.theguardian.com/tv-and-radio/2021/oct/14/squid-game-netflix-translations-subtitle-problem (consulted 19.11.22)
- Harris, Anne and Leon R. de Bruin (2018). "Secondary school creativity, teacher practice and STEAM education: An international study." *Journal of Educational Change* 19, 153–179.
- Ivarsson, Jan and Mary Carroll (1998). Subtitling. Simrishamn: TransEdit HB.

- **Kruger, Jan-Louis, Natalia Wisniewska and Sixin Liao** (2022). "Why subtitle speed matters: Evidence from word skipping and rereading." *Applied Psycholinguistics* 43(1), 211–236.
- **Neves, Joselia** (2008). "10 fallacies about Subtitling for the d/Deaf and the hard of hearing." *The Journal of Specialised Translation* 10, 128–143.
- **Ofcom** (2005). Subtitling An Issue of Speed? London: Office of Communications.
- **Olivant, Katie F.** (2015) "'I Am Not a Format': Teachers' Experiences With Fostering Creativity in the Era of Accountability." *Journal of Research in Childhood Education* 29(1), 115-129.
- **Pedersen, Jan** (2011). Subtitling Norms for Television. An Exploration Focussing on Extralinguistic Cultural References. Amsterdam: John Benjamins.
- Romero-Fresco, Pablo and Juan Martínez Pérez (2015). "Accuracy Rate in Live Subtitling: The NER Model." Jorge Díaz-Cintas and Rocio Baños Piñero (eds) (2015). Audiovisual Translation in a Global Context. Mapping an Ever-changing Landscape. London: Palgrave, 28–50.
- Romero-Fresco, Pablo (2015). The Reception of Subtitles for the Deaf and Hard of Hearing in Europe: UK, Spain, Italy, Poland, Denmark, France and Germany. Bern: Peter Lang.
- Romero-Fresco, Pablo (2019). Accessible Filmmaking: Integrating Translation and Accessibility into the Filmmaking Process. London: Routledge.
- **Romero-Fresco, Pablo** (2021). "Creativity in Media Accessibility: A Political Issue." *Cultus: the Journal of intercultural mediation and communication* 14, 162–197.
- Romero-Fresco, Pablo and Frederic Chaume (2022). "Creativity in Audiovisual Translation and Media Accessibility." *Journal of Specialised Translation* 33, 75–101.
- Romero-Fresco, Pablo and Kate Dangerfield (2022, forthcoming). "Accessibility as a Conversation." The Journal of Audiovisual Translation 5(2).
- Rubin, Daniel Ian and Christopher John Kazanjian (2011) "Just Another Brick in the Wall': Standardization and the Devaluing of Education." *Journal of Curriculum and Instruction* 5(2), 94–108.
- Sancho-Aldridge, Jane and IFF Research Ltd. (1996). Good News for Deaf People: Subtitling of National News Programmes. London: Independent Television Commission.
- **Spiteri Miggiani, Giselle** (2022). "Measuring quality in translation for dubbing: a quality assessment model proposal for trainers and stakeholders." *Xlinguae* 2, 85–102.
- Szarkowska, Agnieszka (2016). Report on the Results of an Online Survey on Subtitle Presentation Times and Line Breaks in Interlingual Subtitling. Part 1: Subtitlers. London: University College London. http://avt.ils.uw.edu.pl/files/2016/10/SURE Report Survey1.pdf (consulted 19.11.22)
- Szarkowska Agnieszka and Olivia Gerber-Morón (2018). "Viewers can keep up with fast subtitles: Evidence from eye movements." *PLoS ONE* 13(6), 1–30.

- Szarkowska, Agnieszka and Lidia Bogucka (2019). "Six-second rule revisited: An eye-tracking study on the impact of speech rate and language proficiency on subtitle reading." Translation, Cognition & Behavior 2(1), 101–124.
- Szarkowska, Agnieszka, Breno Silva and David Orrego-Carmona (2021). "Effects of subtitle speed on proportional reading time: Re-analysing subtitle reading data with mixed effects models." Translation, Cognition & Behavior 4(2), 305–330.
- Tendero López, Andrea (2022). Accessible filmmaking: creación y análisis de una base de datos como ilustración de un nuevo modelo de accesibilidad y traducción audiovisual.
 MA dissertation. Universidade de Vigo. https://fass.open.ac.uk/research/projects/EDIEF/projects/inclusive-description-for-equality-and-access (consulted 19.11.2022)

Filmography

- Pontevedra, Hora Cero (2022). Dir. Alfonso Zarauza, Spain.
- The Five Obstructions (2003). Dir. Lars von Trier, Denmark.
- The Perfect Human (1968). Dir. Jørgen Leth, Denmark.
- The Real Chaplin (2021). Dir. Peter Middleton and James Spinney, UK.

Websites

- AVTE (Audiovisual Translators Europe) (2021). Machine Translation Manifesto. https://avteurope.eu/wp-content/uploads/2021/09/Machine-Translation-Manifesto ENG.pdf (consulted 19.11.2022)
- **Cambridge Dictionary** (2022). *Standardization*. Cambridge University Press. https://dictionary.cambridge.org/dictionary/english/standardization (consulted 19.11.2022)
- **DGT (Directorate-General for Translation)** (2019). Live speech to text and machine translation tool for 24 languages Innovation partnership Specifications. https://etendering.ted.europa.eu/cft/cft-display.html?cftId=5249. (consulted 19.11.22)
- FwD-Doc (Documentary Filmmakers with Disabilities) (2021). A Toolkit for Inclusion & Accessibility: Changing the Narrative of Disability in Documentary Film. https://static1.squarespace.com/static/5dd1c2b5a0f7a568485cbedd/t/602d4708d39c1d1154d0902a/1613581716771/FWD-Doc+Toolkit+small.pdf (consulted 19.11.22)
- Lazard, Caroline (2019). "Accessibility in the Arts: A Promise and a Practice", edited by Kemi Adeyemi. https://promiseandpractice.art/. (consulted 19.11.22)
- Netflix (2022). English Timed Text Style Guide. https://partnerhelp.netflixstudios.com/hc/en-us/articles/217350977-English-Timed-Text-Style-Guide (consulted 19.11.22)
- **Zdenek, Sean** (2011) Logocentrism: The tendency to privilege speech over non-speech in closed captioning. https://seanzdenek.com/2011/07/02/logocentrism-the-tendency-to-privilege-speech-over-non-speech-in-closed-captioning/ (consulted 19.11.22)

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Notes

¹We are not referring in this article to standardisation as the creation of standards, which, in the area of accessibility, follows a specific procedure. Instead, we are addressing standardisation as "the process of making things of the same type all have the same basic features" (Cambridge Dictionary 2022), which often leads to the eradication of difference. ² PRT replaces the commonly used absolute reading time (ART), which has been used to ascertain how much time a viewer gazes at the subtitles in absolute terms (seconds or milliseconds). PRT provides instead a percentage of time spent in the subtitle area relative to subtitle duration. LMMs replace ANOVA analyses, which are useful but disregard the variation in scores for each individual subtitle and/or participant. LMMs allows researchers to account for otherwise unexplained variance (i.e., error) in the data, thus increasing accuracy and power (Szarkowska *et al.* 2021).

³ Regardless of how large (in terms of participants) and rigorous an experiment on subtitle reception may be, generalising/extrapolating its results to films and audiovisual content that have not been tested seems at least contentious. This applies to the viewing speed data discussed in this paper but also to the results of more recent and refined studies on subtitle reception and on the reception of AVT/MA in general. These results are sometimes included as recommendations or even prescriptive norms in national and international guidelines, which thus treat AVT/MA as a standardised technique while ignoring the fact that it applies to an art that by definition is (to a greater or lesser extent) creative, idiosyncratic and different.

⁴ Needless to say, one does not need to know about the existence of 'accessible filmmaking' to be able to integrate access and/or translation into the production process.

⁵ Students provided both oral and/or written explanations for their work and presented their work to audiences, in class and elsewhere. This helped to clarify that the aim was not to produce solipsistic and/or cynical work, but rather work that wants to or should be seen. That said, while audiences can surely help filmmakers to improve the clarity of their expression, filmmakers cans still develop the confidence to be embrace the originality of their vision (you can't please everyone all of the time, even though the film industry, and a society driven more broadly by media spectacles, demand that this be so; you don't need to be popular, but you do need to be able to know what you are doing and to justify/stand behind it — thereby winning audiences over sometimes if not all of the time).

⁶ This might make the AVT/MA process more fun, which may also be passed on to those audiences who engage with their work.