To the Verbal and Beyond: a reception study on the limits of subtitling and the possibilities of creative titles

Abstract

The appeal of audiovisual products comes greatly from the combination of visual, aural and oral resources; but professional subtitling remains focused on words, reducing nonverbal elements to a contextualising role. This assumes that nonverbal elements such as images or sounds are universal codes easily interpreted by viewers without further mediation and leaves viewers with glaring losses of meaning (Cavaliere 2008; Ortabasi 2001; Ramos Pinto 2016). In this article, I contend that all resources co-occurring with speech are signs in their own right that might present different challenges to (different) viewers, and as a result, might need to be translated. The reports on an exploratory experimental study focused on comparing the impact on viewers' meaning-making of a) current subtitling practice focused on the verbal, and b) innovative subtitling practice aiming at translating meaning expressed by nonverbal resources identified as cultural-specific. The results point towards the need for a fundamental shift in our understanding of nonverbal resources and the need to translate them.

1. Introduction

Films and audiovisual products in general are unquestionably multimodal products. Meaning-making relies on spoken, visual and aural modal resources and on a multitude of possible combinations between them, highlighting the complexity of the meaning-making process and the difficulties in analysing it. One could argue that the spoken mode has a visibly central role (especially since the 1930's), but the meaning it produces is erected within an intricate network with other visual and aural modes and modal resources from setting to clothes and music (Bordwell and Thompson 1979; Burn 2013; Metz 1974).

The difficulty in dealing with different modes and the possible combinations between them becomes all the more flagrant in translation given the new communicative setting imposed by a different language, target space and audience. Subtitling, in which this article is going to focus on, is one of the types of audiovisual translation available to make films accessible to foreign audiences, but in a blatant contradiction with the multimodal nature of the filmic text, it remains focused solely on the spoken mode and verbally expressed meaning. Many are the definitions of subtitling available, but it is generally accepted that professional subtitling:

> consists in presenting a written text, generally on the lower part of the screen, that aims to recount the original dialogue exchanged among the various speakers, as well as all the other verbal information that is transmitted visually (letters, inserts, graffiti, text messages, inscriptions, placards, and the like) and aurally (songs, voices off, voiceover narration) (Díaz-Cintas and Remael 2021: 9)

The spoken mode is the most obvious element to be translated and arguably the mode that more challenges presents to a foreign audience not versed in the source language. However, visual and

aural modal resources can equally present serious challenges to a foreign audience who might not be able to identify or interpret the meaning of certain objects, situations, behaviours or sounds on screen. Historically, there is evidence of the challenges presented by visual modal resources to a variety of audiences (Caffrey 2009; Dwyer 2012; Mclarty 2012; Ortabasi 2006; Tonder 2015), but professional subtitling practice remains focused on verbal information limiting visual and aural modal resources to the role of 'context'.

This article aims to challenge this logocentric approach to subtitling and discuss the possible challenges that both verbal and nonverbal modal resources might pose to different viewers. Adopting a multimodal perspective, it assumes spoken, visual and aural modal resources as socially-shaped modal resources that might need to be translated. The article will start with the revision of certain key concepts in audiovisual translation through a multimodal lenses, in order to then present the results of an exploratory reception study examining the impact of professional subtitling in the meaning-making process and the possibilities presented by new strategies such as the use of creative titles with additional information.

2. Multimodal audiovisual translation

The development of audiovisual translation (AVT) has promoted an important 'multimodal turn' within Translation Studies. It opened Translation Studies (TS) to the study of new source text types such as films, adverts, comics or websites that force us to consider meaning-making situations in which modal resources of different natures are brought together. The impact of multimodality (and in particular the work of Kress and van Leeuwen 1996) can now be felt beyond AVT (see Boria et al 2020 and Tuominen et al 2018), shedding a new light in areas such as literary translation or even technical translation that acknowledge that multimodality is "the normal state of human communication" (Kress 2010: 1) and that no text is truly monomodal. Following the work in Social Semiotics by Gunther Kress and Theo van Leeuwen, modes are here conceived as "a socially and culturally shaped set of modal resources for making meaning" (Bezemer and Kress 2008: 6). These have different affordances due to their different materialities and the ways in which they have historically been developed by different social groups to fulfill specific communicative needs. This means that all modal resources, either verbal, visual or aural are signifying modal resources that make meaning on their own and in relation to each other and that such meaning is space-time specific. For translation, this promotes a fundamental shift which has not yet deserved sufficient attention. It means accepting that all modes (and the meanings they promote on their own and in relation to other modes) need to be considered equally in translation, but also that each mode presents "different challenges to (different) viewers and might need to be translated" (Adami and Ramos Pinto 2020: 77). Considering films in particular, some fundamental questions come to the fore: if films are a complex multimodal product in which meaning is achieved through different semiotic modal resources and intermodal relations, can we consider that such meaning is being translated when only one of those modes is the focus of the translatorial act? Can subtitling strive towards preserving the narrative integrity of a filmic narrative if focusing only on the verbal? What is the impact of subtitling on film reception and how different is the foreign audience experience of a given film? How accessible are films to a foreign audience?

To accept that current professional practice focused on verbal information is sufficient means accepting that: a) nonverbal modal resources are universal codes easily interpreted by any audience

and not socio-culturally shaped modal resources; b) that the introduction of a new mode with subtitles in a foreign language does not alter or introduce new meanings and intermodal relations with the remaining (nonverbal) modal resources. This article aims to challenge such logocentric approach to translation and subtitling that continues to limit nonverbal modal resources to the condition of 'context' and takes them as universal codes in no need of translation. As a result, it will redefine 'source text' as a sign complex composed by the entire ensemble of modes and intermodal relations that make up the film and 'target text' as the entire ensemble of modes (including the subtitles mode) that constitute the subtitled product. It will also assume that, as socio-culturally shaped modal resources, every mode and resource might present different types of challenges to viewers, i.e., viewers might at times face challenges identifying a given object or behaviour for its cultural specificity, while at other times the challenges might instead be related to the socio-cultural meaning associated with that object or behaviour or even with its purposeful use in the film to fulfil a specific function such as the production of comedy, for example. Drawing on Chesterman (2005, 2007), Gambier (2009), Hatim and Mason (1990), Kovačič (1995) and Ramos Pinto (2017), in this article, a distinction will be made between three levels of meaning and challenges:

a. **Cultural meaning**. This refers to what is being represented and the challenges viewers might have identifying a given spoken, visual or aural modal resource. There is a considerable body of work on challenges presented and strategies available to deal with verbal culture specific elements in translation, but not enough attention has been given to the difficulties that viewers might have identifying visual and aural modal resources which can be historically and cultural specific. The challenges brought by visual modal resources are evident, for example, in the frequent online discussions around the use of objects such as tape recorders or roll film cameras in the series *Stranger Things* (2016) which many viewers could not identify.

b. **Semiotic meaning**. This refers to the socio-semiotic meaning associated to a given resource and the challenges viewers might have interpreting it because they do not share the semiotic knowledge to interpret a particular object or behaviour, for example. This is evident in the Luso-franco film *A Gaiola Dourada/La Cage Dorée* (2013) in which many of the gestures used by the Portuguese characters are challenging to a non-portuguese audience that does not share that knowledge or on the recent BBC series *Years and Years* (2019) in which some viewers were not able to understand how the older characters knew how to react when a siren (similar to those used during the WWII German raids) started. The lack of attention given to this issue by professional subtitling (motivated by the erroneous understanding of images and sounds in terms of their iconicity and universal meaning) has overlooked possible gaps in translation, but more importantly, moments of misinterpretation due to the different socio-semiotic meaning that might be associated to a particular visual or aural modal resource in the target culture. When Italian viewers watching *A Gaiola Dourada/La Cage Dorée* see one of the characters pinching their earlobe (gesture meaning 'very good' or 'excellent') without saying anything, they will likely misunderstand the situation given that for them this same gesture has an offensive sexual connotation.

c. **Diegetic meaning**. This refers to the intermodal relations established between the different modes in the film and the diegetic purposes they fulfil in the film. The gestures used by the Portuguese characters in *A Goiola Dourada/La Cage Dorée* combined with the sense of confusion showed by the French characters who do not understand what the gestures mean produces a comic moment that reinforces a specific diegetic meaning, namely the striking difference between the Portuguese and the French characters and the film as a comedy.

For translation, the challenge thus comes from the need to ensure that the audience is able to identify the verbal and nonverbal modal resources in the source text as well as their socio-semiotic meaning (and as a result, their diegetic meaning). In this context, this article aims to bridge the gap between audiovisual translation, multimodality and film studies and join Romero-Fresco (2018) in his call to bring subtitling practice into the film production process within a broadened understanding of media accessibility concerned with providing "access to media products, services and environments for all persons who cannot, or cannot completely, access them in their original form" (Greco 2016: 23). As confirmed by recent industry standards (ISO/IEC DIS 20071-23), this includes "persons who need the content to be in another language" (AFNOR 2017: vi), but it still remains focused on verbal information only. This article argues for the need to expand the notion of media accessibility to all viewers as well as to audio and visual modal resources, the challenges these might pose to such viewers and the need to translate them alongside verbal modal resources.

Given the focus of subtitling on the spoken mode alone and the lack of information regarding the impact of such a logocentric approach on viewers' meaning-making, this article will report on a reception study examining the possible challenges that viewers might find identifying and interpreting verbal and nonverbal culture specific elements under two conditions employing professional subtitling strategies and creative titles with additional information.

3. Empirical reception study

3.1. Context and research questions

This article builds on several areas of academic inquiry. First, it builds on authors such as Adami and Ramos Pinto (2020), Appiah (2000), Kaindl (2012, 2020), Nornes (1999), Pérez-González (2014), and Tuominen et all (2018) who have argued for greater acknowledgment of multimodal meaning-making and the need to consider the challenges nonverbal modal resources might bring to viewers as the socially-shaped and embedded modal resources they are (instead of universal signs interpreted by everyone the same way). Second, the article builds on authors such as Leppihalme (1997), Gottlieb (2009) and Pedersen (2008, 2011) who focused on the challenges brought by culture specific elements, proposed typologies of classification and offered in-depth descriptive studies on the translation strategies typically employed. This article also builds on Alfaify and Ramos Pinto (2021) who added two new layers of classification to previously available typologies in order to distinguish between verbal, visual and aural references, as well as between cultural references that take advantage of one or more than one mode.

Third, it builds on the already substantial translation reception research available. In the context of this article it is particularly relevant to mention the studies which have confirmed that viewers: a) find it more challenging than previously assumed to access meaning expressed in the source text both through the spoken mode (Antonini 2007, Chiaro 2008) and the visual mode (Caffrey 2009); b) are capable of dealing with faster subtitles (Szarkowska 2018); c) that viewers' effort is minimised by the use of integrated titles positioned in focal points (Fox 2016, 2018); and d) that viewers are able to process more information than what is conventionally assumed (Caffrey 2009, Künzli and Ehrensberger-Dow 2011). More or less (in)directly, all these studies have questioned the validity of some of the professional norms defined decades ago (and for which much more empirical testing is required) and opened the door for the consideration and testing of more innovative and/or creative

subtitling strategies.

Fourth, it builds on fansubbing practices and the work completed by authors such as Dwyer (2012, 2016), Foester (2010), McClary (2012, 2014), Pérez-González (2007), Tonder (2015) who have reported on creative practices of translation and shown how unsatisfied viewers have taken matters into their own hands and found creative solutions to make the multimodal meaning of the source film accessible to new audiences. These studies have shown not only how viewers experience and expectations in regard to subtitling are changing, but perhaps more importantly, the impact that fansubbing can have on the enhanced understanding of the source text, and consequently, on its spread and success.

In this article, we report on an exploratory study that aims at contributing with empirical data on the reception of multimodal products, the challenges brought by both verbal and nonverbal modal resources and the impact of both professional and innovative translation strategies on viewers' interpretation and enjoyment of the source film. Given its exploratory nature, this study has not designed specific hypothesis and, instead, allowed the data to be the primary driver of the analysis taking into consideration certain research questions:

– Are participants able to identify and interpret the sociocultural meaning of key spoken, visual and aural culture specific elements when professional subtitling norms are employed?
– Would the verbal translation of meaning expressed through visual and aural culture specific elements aid participants' identification and interpretation of such elements?
– Will the employment of innovative subtitling strategies distract participants from watching the film?
– Will the employment of innovative subtitling strategies affect the participants' enjoyment of the film?
– What is the participants' opinion regarding the use of creative subtitling?

3.2 Participants

The sample of participants was drawn from the larger population of 48 000 students of the University of Lisbon. Students from all Faculties were invited to participate and those that volunteered for the study have signed an informed consent form agreeing to participate and to have their data used anonymously. Before the experiment, all participants were asked to answer a screening questionnaire to ensure that all selected participants fulfilled the following criteria: age between 19 and 25 years old, no visual impairment, no hearing impairment, used to watching audiovisual products with subtitles but not fansubbing, native speaker of Portuguese who had not lived abroad but had a high level of English proficiency. Assessing someone's language competence is a delicate and complex task, so different methods were considered, First, all participants has to score B2 or higher in an language test similar to that followed by the British Council. Second, given the fact that this study would be focusing on audiovisual products and that one can have different levels of competence in writing, speaking and listening, the method chosen was to ask the participants to watch a short film excerpt in English without subtitles and answer a few interpretation questions. Those who could follow the excerpt and answer all three the questions were considered to have a high level of competence in English. Those who could not follow the excerpt or could only answer some of the questions were considered to have a low level of competence in English. This article will only report on the results collected from 100 participants

considered to have a high level of English.

3.3 Experimental procedure and apparatus

Before taking part in this study, the participants signed an informed consent form and were told they were going to watch a couple of film clips and be asked to answer some questions afterwards. After watching the clips, participants were presented with the questions on screen and answered orally to each question while the entire situation was being audio-recorded. The answers given were later transcribed and processed using Excel. The questionnaire was divided in three parts: Part I focused on the participants' general understanding of the clip and difficulties they might have faced with specific scenes. Part II contained interpretation questions focused on participants' interpretation of the culture specific aspects identified as potentially problematic (as well as dummy questions on other film aspects to ensure participants did not identify subtitling as the focus of the study). Part III included questions on participants opinions on translation, subtitling and the use of innovative titles with additional information on screen.

All 100 participants watched the clips and answered the questionnaire, but eye-tracking data was collected from 32 of those participants. The collection of data took place in the eye-tracking room of the Psycholinguistics Laboratory of the University of Lisbon. Participants watched two clips from the films *Forrest Gump* (1994, dir. Robert Zemeckis) and *Kautokeino-opprøret* (2008, dir. Nils Gaup) while their eye behaviour was being monitored and recorded in the SMI iViewX Hi-Speed eye-tracking system. This is a head-mounted system in which the participants view the clips with their heads held static by a chin and forehead rest. The minimum fixation duration was set at 80ms with a maximum dispersion of 100 px per second and the system was re-calibrated for each subject to ensure the highest data accuracy possible. The experiment took place in a dedicated eye-tracking laboratory where light and noise are controlled, and distractions minimised.

Given the study's aim to test participants' ability to identify and interpret specific culture specific elements and the meanings being expressed, it was considered that having participants watching the same clip twice would considerably compromise the results. In order for this to be avoided while still testing the two conditions, the participants were divided in two groups with each group watching one clip with professional subtitling and the second clip with innovative subtitling. Figure 1 provides the details regarding participants' groups.
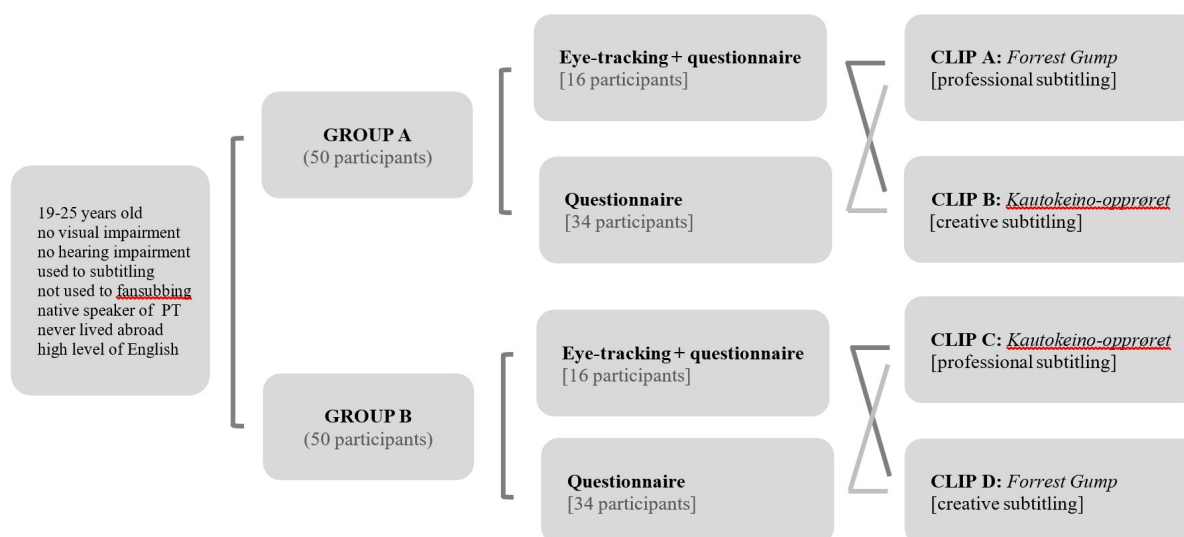
Figure 1: Schematic illustration of the participants' groups, data collection method and clips watched

3.4. Material and film analysis

The clips were selected on the basis of the following criteria:

* **Source language**: the study includes clips in a foreign language familiar to the participants (English) and a foreign language of which participants have no knowledge of (Saami, Norwegian, Swedish and Danish) in order to study the impact of having a familiar *vs* unfamiliar language/culture on participants' responses.

* **Frequency of culture specific elements**: the study includes clips with a high occurrence of culture specific elements in order to ensure that enough data was collected while keeping the experiment under 45 minutes to avoid participants' fatigue.

* **Type and nature of culture specific elements**: the study is largely dependent on the culture specific elements used in specific films, but efforts were made to select excerpts that include elements of different natures (verbal and visual) and establishing different intermodal relations with other modal resources.

The clips were shown to three experienced translators (with more than ten years of experience) who identified any verbal, visual or aural culture specific elements in the films, noting which of those would expectedly be challenging to Portuguese target viewers. Tables 1 and 2 provide information on the clips and culture specific elements identified.

	Clip from *Forrest Gump* (1994), 01:10:14 − 01:19:31 (9:08 min = 548000 ms)			
	Description/Transcription	Modes	Culture Specific Element/ Diegetic function	Potential difficulties for the TA
1	White House building in the background	Visual mode	**CSE:** White House **Function:** Placing of the scene in Washington.	Identification of the building as the White House and/or its location
2	Characters dressed in hippie clothes	Visual mode	**CSE:** hippie clothes **Function:** Placing of the action in the 1960's.	Identification of the clothes as hippie and common in the 1960's

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	Description/Transcription	Mode	Culture specific element/ Diegetic function	Potential difficulties for the TA
3	Star in the sidewalk with the name "Jean Harlow".	Visual mode	**CSE:** sidewalk star, Jean Harlow's name **Function:** Placing of the scene in Hollywood.	Identification of the Walk of Fame star and Jane Harlow as a famous person/actress
5	"It's this war and the lying sun of a bitch Johnson."	Spoken mode	**CSE:** Johnson - President Lyndon Johnson **Function:** historical accuracy	Identification of the historical figure
6	Portrait of Mao Tse Tung in the background	Visual mode	**CSE:** Mao Tse Tung portrait **Function:** Placing of the scene in Tiananmen square	Identification of the portrait and its location
7	Appearance of John Lennon and Dick Cavett next to the main character	Visual mode	**CSE:** John Lennon, Dick Cavett **Function:** highlight how famous the main character had become	Identification of the historical figures and their sociocultural significance
8	"More famous than Captain Kangaroo"	Spoken mode	**CSE:** Captain Kangaroo – famous children character **Function:** highlight how famous the main character had become and how childish he remained	Identification of the historical cartoon and his sociocultural significance
9	"They gave you the Congressional Medal of Honour!"	Spoken mode	**CSE:** Congressional Medal of Honour – most prestigious medal for acts of bravery **Function:** highlight how brave he was considered to be	Identification of the importance of the medal and its sociocultural significance.
10	"It's all they talk about at the VA"	Spoken mode	**CSE:** VA – Veteran Agency **Function:** historical accuracy, social criticism	Identification of the institution and the social function it fulfils.
11	"Go get me a Ripple"	Visual & Spoken mode	**CSE:** Rippple – fortified wine common in the 1960s and 70s **Function:** historical accuracy and identification of the character as a low income character.	Identification of the product and its sociocultural significance
12	"What is there in Bayou La Batre?"	Spoken mode	**CSE:** Bayou La Batre – city in Alabama, capital of seafood **Function:** historical accuracy and showing how far the character is willing to go	Identification of the city mentioned and its location

Table 1: List of culture specific elements identified in *Forest Gump*
(screenshots are not included due to copyright law)

Clip from *Kautokeino-opprøret* (2008), 00:00:00 – 00:00:00 (16:24 min = 984000 ms)				
	Description/Transcription	**Mode**	**Culture specific element/ Diegetic function**	**Potential difficulties for the TA**
1	Characters speaking in Sami	Spoken mode	**CSE:** Sami language **Function:** identifying the characters as Sami	Identification of the language and its sociolinguistic significance
2	Clothes of the Sami characters	Visual mode	**CSE:** traditional Sami clothes with carvings **Functions:** Identifying the characters as Sami	Identification of the clothes as specifically Sami
3	Word in the middle of the screen: "KAUTOKEINO"	Visual mode (Graphic)	**CSE:** Town of Kautokeino in Northern Norway **Function:** Placing the scene in Kautokeino	Identification of Kautokeino as a town and a town in Northern Norway
4	Characters speaking in	Spoken	**CSE:** Norwegian language	Identification of the language and its

	Norwegian	mode	**Function:** Identifying the characters as Norwegian	sociolinguistic significance
5	Clothes of the Norwegian characters	Visual mode (Graphic)	**CSE:** typical Norwegian 19th century clothes **Function:** identifying the characters as Norwegian and placing the scene in the 19th Century	Identification of the clothes as 19th Century clothes
7	Let's go back to the siida [Back translation]	Spoken mode	**CSE:** siida - Sami typical tepee housing **Function:** historical accuracy	Identification of siida as a teepee
8	Why not buy our supplies there and sell directly to the siidas? [Back translation]	Spoken mode	**CSE:** Siidas - nomad sami people **Function:** historical accuracy	Identification of the Siidas as Sami and as nomad
9	Word in the middle of the screen: KARESUANDO	Verbal Visual	**CSE:** Town of Karesuando in Northern Finland **Function:** Placing the scene in Karesuando	Identification of Karesuando as a town and a town in Northern Finland
11	Come to the church. Laestadius is speaking. [Back translation]	Spoken mode	**CSE:** Laestadius – Lutheran pastor **Function:** historical accuracy	Identification of Laestadius as a Lutheran pastor
12	Close shot on the main character hanging dry meat	Visual mode	**CSE:** dry meat **Function:** historical accuracy, image of typical Sami domesticity	Identification of the visual element as dry meat
13	State Lutheran pastor clothes	Visual mode	**CSE:** typical clothes worn by State Lutheran pastors **Function:** historical accuracy, identification of this pastor as different from Laestadius	Identification of clothes as typical clothes worn by State Lutheran pastors

Table 2: List of culture specific elements identified in *Kautokeino-opprøret*
(screenshots are not included due to copyright law)

The clips were subtitled under two different conditions: Condition 1 followed the current subtitling practice in Portugal; Condition 2 included titles with additional information on the elements identified as potentially challenging. This involved:

a) presenting the additional titles at the same time as the subtitles included in condition 1;

b) presenting the additional titles with no subtitle when a visual or aural element was deemed challenging and no dialogue was spoken.
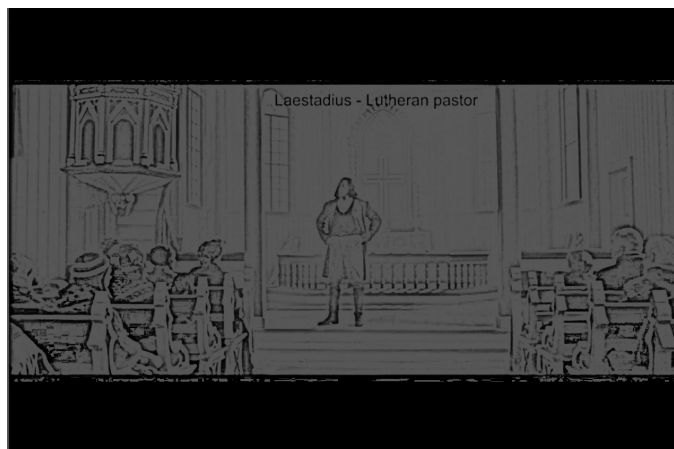
3.5 Quantitative and qualitative data

The study has collected numerical quantitative data in result of the eye-tracking experiment and frequency quantitative data in result of the questionnaire. In the eye-tracking experiment, areas of interest (AOI) were defined in SMI's BeGaze 2.5 to mark the area occupied by the subtitle (subtitle AOI), the rest of the screen (image AOI), and in the case of clips in condition 2, the area occupied by the additional title at the top of the screen (extra title AOI). The participants' eye movements were recorded and analysed with respect to these AOIs and specific attention was given to: a) the number of fixations in each AOI; b) the dwell time in each AOI; and c) the number of shits between AOIs. Given the exploratory nature of this study and the natural limitations of this article, the analysis of the eye tracking data presented here is mostly focused on the time spent in the pre-defined AOIs in order to help us understand if having additional text and information on screen would deviate the viewers' attention from the image.

As mentioned in 3.2, the questionnaire presented different types of questions allowing the collection of both quantitative and qualitative data. Multiple choice questions produce straightforward frequency data later analysed in excel; interpretation question produced qualitative data that was initially organised in categories given the very limited variation in the participants' answers. This allowed for an initial interpretation of the data based on frequency data afterwards complemented by an analysis of the discourse used by the participants. The same procedure was followed for questions focused on the participants' opinions.

3.6 Results and findings

Given the focus of this article in examining the possible limitations of current professional subtitling and testing the possible benefits of creative titles, the discussion of the results will be structured according to the two conditions defined for this study.

3.6.1 Condition 1, professional subtitling focused on translation meaning expressed through verbal culture specific elements

Regarding the participants' viewing behaviour, Table 4 shows the eye-tracking data collected for both Clip A and C. The table presents data regarding the number of fixations in each AOI; b) the dwell time in each AOI; and c) the number of shits between AOIs. In order to consider the values in context, the study included the calculation of the Standard Deviation and the Coefficient of Variation (CV) to measure the distance between each value and the mean and examine the level of variance between participants. In addition to this, the study also included the calculation of the Variance and the Variance Ratio (VAR ratio) to measure the spread between data sets and whether the variance between two conditions was equal or not. If the ratio of the larger variance to the smaller variance was less than 4 (a common rule of thumb), it was assumed the variances were approximately equal and an unpaired t.test of equal variance was applied (the unpaired t.test of unequal variance was applied if the opposite was true).

FILM	OVERALL TIME SPENT IN AOIs						N OF SHIFTS BETWEEN AOIs		NUMBER OF FIXATIONS IN AOIs					
	SUBTITLE			IMAGE					SUBTITLE			IMAGE		
	MEAN	%	CV	MEAN	%	CV	MEAN	CV	MEAN	%	CV	MEAN	%	CV
FG	122367 ms	31%	0.30	265652 ms	69%	0.12	257	0.22	557 ms	48%	0.23	618 ms	52%	0.24
KU	248037 ms	31%	0.20	557486 ms	69%	0.09	499	0.23	1144 ms	44%	0.15	1483 ms	56%	0.23
VAR ratio	2			613867			0		2			5		
t.test	0.00			0.00			0.00		0.00			0.00		

Table 4: Eye-tracking data collected regarding Clips A and C.

The data in Table 4 shows that when professional subtitling is employed, participants spent around 69% of their time focusing on the image and 31% focusing on the subtitles. The levels of variance between participants is low (CV always below 1), but the variance between clips is high regarding the time spent on image. This, together with the fact that the results are remarkably similar for both films in relation to time spent on subtitles, seems to indicate that visual elements demand more attention when the language/culture is unfamiliar. Another interesting result relates to the number of shifts between subtitles and the image area which is almost double when the source language was unknown. Finally, it will be worth noticing that between 44% and 48% of the number of fixations were made in the subtitles area, meaning that participants have made quicker fixations when reading subtitles then when focusing on visual elements. The fact that the t.test results show a high degree of significant difference in all categories, seems to indicate that the experience of watching these two clips was indeed different and that watching films in a known or unknown source language/culture is something that needs further testing with more participants.

The data shows that subtitling does not seem to prevent participants from dedicating most of their attention to the image area. It was now important to find if participants had been able to: a) follow the clips, and more specifically b) identify and interpret the spoken and visual culture specific elements included in both clips. Table 5 shows the frequency data collected through the questionnaire.

Clip from *Forrest Gump* (1994) – Professional subtitling		YES	NO
1	Difficulties following the film	0%	100%

2	Do you feel you understood everything in the film?	100%	0%

Table 5: Frequency data from questionnaire's general understanding questions, regarding Clip A

The data collected from the questionnaire's initial general questions (Table 5) shows that after watching Clip A, participants felt that they had been able to follow the clip and understood its content without difficulty. When we look at the more specific data regarding the different culture specific elements (Table 6) we can, however, see that the participants understanding of the clip was not as straightforward as they believed.

Clip A from *Forrest Gump* (1994) – Professional subtitling

Were viewers able to *identify* the culture specific element and *interpret* its sociocultural and diegetic meaning?	Expected answer		Did not know		Guessed the expected answer		Unexpected answer	
1 White House building in the background								
* Identification of the building	100%	[50]	0%	[0]	0%	[0]	0%	[0]
* Placing of the action in Washington	100%	[50]	0%	[0]	0%	[0]	0%	[0]
2 Characters dressed in hippie clothes								
* Identification of the type of clothes	100%	[50]	0%	[0]	0%	[0]	0%	[0]
* Placing of the action in the 1960's	100%	[50]	0%	[0]	0%	[0]	0%	[0]
3 Star in the sidewalk with the name "Jean Harlow"								
* Identification of the actress Jean Harlow	0%	[0]	100%	[50]	0%	[0]	0%	[0]
* Identification of Jean Harlow as someone famous	90%	[45]	0%	[0]	10%	[5]	0%	[0]
* Identification of the Hollywood Walk of Fame	18%	[9]	82%	[41]	0%	[0]	0%	[0]
* Placing the action in Hollywood	90%	[45]	10%	[5]	0%	[0]	0%	[0]
5 "It's this war and the lying sun of a bitch Johnson."								
* Identification of President Johnson	6%	[3]	66%	[33]	16%	[8]	12%	[6]
6 Portrait of Mao Tse Tung in the background								
* Identification of Mao Tse Tung	46%	[23]	54%	[27]	0%	[0]	0%	[0]
* Identification of its social role	0%	[0]	10%	[5]	90%	[45]	0%	[0]
* Placing of the scene in Tiananmen Square	24%	[12]	76%	[38]	0%	[0]	0%	[0]
* Placing of the action in China	82%	[41]	18%	[9]	0%	[0]	0%	[0]
7 Appearance of John Lennon and Dick Cavett								
* Identification of John Lennon	72%	[36]	0 %	[0]	6%	[3]	22%	[11]
* Identification of Dick Cavett	0%	[0]	86%	[43]	0%	[0]	14%	[7]
* Identification of *The Dick Cavett Show*	0%	[0]	96%	[48]	0%	[0]	4%	[2]
* Identification of the show as a popular show	0%	[0]	64%	[32]	36%	[18]	0%	[0]
8 "More famous than Captain Kangaroo"								
* Identification of Captain Kangaroo	0%	[0]	34%	[17]	0%	[0]	12%	[6]
* Identification of Cap Kangaroo as a famous cartoon	0%	[0]	42%	[21]	58%	[29]		
9 "They gave you the Congressional Medal of Honour!"	0%	[0]	100%	[50]	0%	[0]	0%	[0]
* Identification of the medal's meaning	0%	[0]	0%	[0]	100%	[50]	0%	[0]
* Identification of the medal's significance								
10 "It's all they talk about at the VA"								
* Identification of VA as Veterans Affairs	0%	[0]	100%	[50]	0%	[0]	0%	[0]
* Identification of their social role and significance	22%	[11]	78%	[39]	0%	[0]	0%	[0]
11 "Go get me a Ripple"								
* Identification of Ripple as a fortified wine	0%	[0]	6%	[3]	0%	[0]	94%	[47]
* Identification of Ripple as a popular drink in the 1960s	0%	[0]	0%	[0]	100%	[50]	0%	[0]
12 "What is there in Bayou La Batre?"								
* Identification of Bayou La Batre as a city	0%	[0]	0%	[0]	100%	[50]	0%	[0]
* Identification of Bayou La Batre as a city in Alabama famous for seafood fishing	0%	[0]	100%	[50]	0%	[0]	0%	[0]

Table 6: Frequency data from questionnaire's questions on culture specific elements understanding, regarding Clip A

All participants were able to identify key visual references such as the White House (100%) or the stars of Hollywood Walk of Fame (90%) which allowed them to place the action in Washington and Hollywood respectively even when the dialogue did not mention such locations. The same was not true regarding less familiar visual elements such as the picture of Mao Tse Tung. Most participants (82%) were able to understand that the action had moved to China, but only because the dialogue made that clear after some time. Less than half of the participants had been able to identify Mao Tse Tung (46%) or Tienanmen Square (26%) and did not always made the link between these elements and the fact that the character was now in China. Visual elements played an important role as well in *The Dick Cavett Show* scene; however, while the majority of the participants was able to identify John Lennon (72%), a large number of participants was not able to identify Dick Cavett (86%), the show (96%) or that it was a famous television show (64%). In fact, a considerable number of participants thought both John Lennon and Dick Cavett were different historical figures ("probably actors") and a few participants commented on the fact that it could not be a good or famous show because it looked very "boring" and was probably a "news interview". The participants confusion led to other unexpected misinterpretations, namely when Johnson was not identified as President Johnson but as another character in the film or when Captain Kangaroo was identified as one of Forrest's military superiors and not as a famous cartoon. The misinterpretation of Ripple as beer instead of fortified wine had far fewer implications; however, it did confirm once again how visual elements can be interpreted differently - in this case, ripple was interpreted as beer due to the fact that the character pointed to a bottle with brown glass very similar to beer bottles in Portugal.

Given the familiarity that participants had with American culture, it was important to see if similar behaviour and difficulties would be identified when the film portrayed a less familiar culture and when participants could not understand the source language(s). Tables 7 shows the frequency data collected through the questionnaire.

Clip from *Kautokeino-opprøret* (2008) – Professional subtitling		
	YES	**NO**
1	Difficulties following the film	73%	27%
2	Do you feel you understood everything in the film?	26%	74%

Table 7: Frequency data from questionnaire's general understanding questions, regarding Clip C

The data collected from the questionnaire's initial general questions (Table 7) shows that after watching Clip C, a majority of the participants (73%) were left aware that they had difficulties following the film and that they had not understood the film (74%). When we look at the more specific data regarding the different cultural elements (Table 8) we can start to understand why (contrary to what happened in Clip A) participants were in this case so aware of the difficulties they had encountered.

Clip C from *Kautokeino-opprøret* (2008) – Professional subtitling				
Were viewers able to *identify* the culture specific element and *interpret* its sociocultural and diegetic meaning?	Expected answer	Did not know	Guessed the expected answer	Unexpected answer
1 Characters speaking in Sami				
• Identification of the language	0% [0]	100% [50]	0% [0]	0% [0]
• Identification of the characters as Sami	0% [0]	100% [0]	0% [0]	0% [0]
2 Clothes of the Sami characters				
• Identification of the clothes as typical Sami	0% [0]	14% [7]	0% [0]	86% [43]
• Identification of the characters as Sami	0% [0]	14% [7]	0% [0]	86% [43]
3 "KAUTOKEINO"				
• Placing the scene in Kautokeino	0% [0]	40% [20]	0% [0]	60% [30]
• Identification of Kautokeino as a town in Northern Norway	0% [0]	100% [50]	0% [0]	0% [0]
4 Characters speaking in Norwegian				
• Identification of the language as Norwegian	0% [0]	100% [50]	0% [0]	0% [0]
• Identification of Norwegian as a different language from Sami	6% [3]	0% [0]	0% [0]	0% [0]
• Identification of the characters as Norwegian	0% [0]	100% [50]	0% [0]	0% [0]
5 Clothes of the Norwegian characters				
• Identification of the characters as Norwegian	0% [0]	86% [43]	0% [0]	14% [7]
• Placing the action in the 19th Century	8% [4]	26% [13]	22% [11]	44% [22]
6 [Let's go back to the siida]				
• Identification of siida as a Sami teepee	0% [0]	62% [31]	30% [15]	8% [4]
7 [Why not buy our supplies there and sell directly to the siidas?]				
• Identification of siidas as nomad sami	0% [0]	66% [33]	34% [17]	0% [0]
8 "KARESUANDO"				
• Placing the action in Karesuando	0% [14]	72% [36]	28% [0]	0% [0]
• Identification of Karesuando as a town in Northern Finland	0% [0]	100% [50]	0% [0]	0% [0]
9 [Come to the church. Laestadius is speaking.]				
• Identification of Laestadious as a historical figure	0% [0]	100% [0]	0% [0]	0% [0]
• Identification of Laestadius as a religious figure	0% [0]	4% [2]	28% [14]	68% [34]
• Identification of Laestadius as a Lutheran pastor	0% [0]	100% [50]	0% [0]	0% [0]
10 Close shot on the main character hanging dry meat				
• Identification of visual element as dry meat	12% [6]	40% [20]	3% [15]	18% [9]
11 Clothes of the State Lutheran pastor				
• Identification of the religious figure as a State Lutheran pastor	0% [0]	14% [7]	0% [0]	87% [43]

Table 8: Frequency data from questionnaire's questions on culture specific elements understanding, regarding Clip C

In contrast with the data collected for Clip A, few participants watching Clip C were able to place the scenes in Kautokeino (0%) and Karesuando (28%) despite the fact that the names of these towns appeared written at the center of the screen following a common filmic convention. The 28% able to guess the scene was taking place in Karesuando, did so due to that filmic convention, but they weren't entirely sure or able to know the location of these cities. In fact, this confusion led to a large number of participants (60%) to rely on visual elements (e.g. the overwhelming presence of snow) and assume the action was taking place in a variety of places from Russia to the Nordic countries, the North pole and more generally "somewhere with lots of snow". Other visual cues such as the Sami characters' clothes supported this interpretation - 0% of the participants were able to identify the characters as Sami and 86% misidentified them as "Eskimos" which led them to place the action in locations known for snow, even if such locations were not inhabited by the Inuit and the Yupik indigenous communities commonly referred to as Eskimos. The clothes worn by the Norwegian characters were more familiar to the participants, but they also seem to not have assisted the

identification of such characters as Norwegian. The clothes were not specific enough for most participants (86%), but for 14% of the participants details such as the ladies's white cap led them to say they might be Mormons. This was also the main element in the film that could assist participants in placing the action in the 19th century. 30% of the participants were able to conclude that the action was taking place in the 19th century through the clothes of the Norwegian characters, but 26% said they "did not know" and 46% interpreted the clothes as either much older (answers ranged from 15th to 18th century) or much more recent (beginning of the 20th century) which accounts to a majority of the participants being left confused.

The languages spoken by the characters are another important element aiding the characters identification as either Sami or Norwegian, but this seems to also not have assisted the participants, given that 0% of the participants were able to identify any of the characters as such and that only 6% noticed that there two different languages in the clip. In this clip, it becomes evident that while Sami characters keep changing between Sami and Norwegian and are able to communicate in both languages, the Norwegian characters mostly speak Norwegian and often don't understand Sami. This helps participants to understand the existing social hierarchies and the sociocultural status of the different characters, but fails to fulfill this function when the participants don't even notice that there are two languages at play.

In the context of the topic of the film, the scene in which the character Laestadius first appears is of central importance. Unsurprisingly, 0% of the participants were able to identify the historical figure of Laestadius. However, participants also had difficulties identifying his social role as religious leader, more specifically as a Lutheran pastor. 28% of the participants were able to infer from the situation and visual modal resources (i.e. the fact that the character appeared speaking to a large audience in a church) that Laestadius was a religious figure, but the same visual modal resources were interpreted very differently by 68% of participants that gave more relevance to the character's clothes and inferred that he was most likely the town's mayor because he was "not dressed as a priest". This understanding of Laestadius seemed to have been confirmed later in the clip when another Lutheran pastor, this time a state Lutheran pastor, appears in black clothes very similar to catholic priests' gown. This figure was indeed interpreted as a catholic priest by 87% of the participants, so it seems safe to assume that the divergence in Laestadius teachings within the Lutheran church was not accessible to participants and led to a historically-incorrect interpretation given that these communities were not catholic.

Finally, historical and cultural accuracy were also achieved by other verbal and visual modal resources such as references to "siida" or the inclusion of a typical domestic Sami scene in which the man chops wood while the woman is setting meat to dry. 30% of the participants inferred from the sentence construction that "siida" must be something like "home", but 62% did not know what it was referring to and 8% interpreted it as "another place", sometimes a "playground".

The final section of the questionnaire collected information on the participants opinion regarding the subtitling. In both Clip A and C, 100% of participants said the subtitling was "easy" to follow and "as expected". However, when asked if they had any further remarks to make about their experience watching the clip, 21% and 34% (respectively) of the participants mentioned that they were "surprised" to see that after all there was much they had not understood and that "perhaps the subtitling was not very good". The final question of the questionnaire asked participants if they would like to see the rest of film. 100% of those that watched Clip A said "yes", but 98% of those watching Clip C said they "did not like the film" and responded "no". This group also described the film as "not interesting", "boring", "strange".

3.6.2 Condition 2, creative titles translating meaning expressed by both verbal and nonverbal culture specific elements.

Following the data analysis steps conducted for condition 1, Tables 9 and 10 show the eye-tracking

data collected for both Clip B and D. Given that in some moments of the clips the translation included not only a subtitle but also an additional title with extra information, it was important to distinguish between moments in which there were one or two titles on screen and if there was a significant difference in viewing behaviour.

FILM	OVERALL TIME SPENT IN AOI									N OF SHIFTS BETWEEN AOI	
	SUBTITLE AOI			EXTRA TITLE AOI			IMAGE AOI				
	MEAN	%	CV	MEAN	%	CV	MEAN	%	CV	MEAN	CV
CLIP D_FG_two titles	129622 ms	35%	0.16	6846 ms	2%	0.58	229604 ms	63%	0.09	34	0.21
CLIP D_FG_one title	11374 ms	45%	0.22	-	-	-	14012 ms	55%	0.15	34	0.21
VAR ratio_FG	64						102			1	
t-test	0.00						0.00			1.00	
CLIP B_KU_two titles	167288 ms	26%	0.21	40614 ms	7%	0.84	428016 ms	67%	0.15	515	0.24
CLIP B_KU_one title	49964 ms	32%	0.17	-	-	-	104370ms	68%	0.13	157	0.19
VAR ratio_KU											
t-test											
VAR ratio_two titles	3			75			9			318	
t-test	0.00			0.00			0.00			0.00	
VAR ratio_one title	12						58			18	
t-test	2.65						8.55			0.00	

Table 9: Eye-tracking data collected regarding Clips B and D concerning time spent in AOI and number of shifts between AOI when extra title

FILM	NUMBER OF FIXATIONS IN AOI								
	SUBTITLE AOI			EXTRA TITLE AOI			IMAGE AOI		
	MEAN	%	CV	MEAN	%	CV	MEAN	%	CV
CLIP D_FG_two titles	615	49%	0.18	31	3%	0.43	603	48%	0.22
CLIP D_FG_one title	61	48%	0.16	-	-	-	67	52%	0.20
VAR ratio_FG	119						94		
t-test	0.00						0.00		
CLIP B_KU_two titles	730	37%	0.18	127	6%	0.90	1104	56%	0.14
CLIP B_KU_one title	258	46%	0.19	-	-	-	302	54%	0.13
VAR ratio_KU	16						22		
t-test	0.00						0.00		
Var ratio_two titles	1			75			1		
t-test	0.01			0.00			0.00		
Var ratio_one title	24						9		
t-test	0.00						0.00		

Table 10: Eye-tracking data collected regarding Clips B and D concerning number of fixations between AOI

The data in tables 9 and 10 shows that the presence of additional titles at the top of the screen do have an impact on participants' viewing behaviour. The variation between participants is low (CV always bellow 1), but all categories present a significant difference in behaviour when there was one

or two titles on screen. Perhaps surprisingly, it is important to note that participants are still dedicating more time to the image area, which seems to indicate that having more text on screen, does not necessarily deviates too much of viewers' attention from visual resources. Regarding Clip D, it is interesting to notice that the number of shifts is similar independently of having one or two titles on screen which, together with the fact that only 2% of time was spent in the top title, might be indicative that several of those titles might not have been read. A different scenario is found regarding Clip B given that participants spent more time in the extra title area and show to have shifted between these three areas much more than with Clip D. The significant difference found between the two clips seems once again to confirm that the change in behaviour is related to the familiar/unfamiliar language/culture between clips.

Following similar steps as in the previous section, Table 11 shows the frequency data collected through the questionnaire regarding Clip D.

Clip from *Forrest Gump* (1994) – Creative subtitling		YES	NO
1	Difficulties following the film	0%	100%
2	Do you feel you understood everything in the film?	100%	0%

Table 11: Frequency data from questionnaire's general understanding questions, regarding Clip D

The data collected from the questionnaire's initial general questions (Table 11) shows that after watching Clip D, participants felt that they had been able to follow the clip and understood its content without difficulty. This is not particularly surprising given that no difficulties had been reported when watching Clip A, but it was important to confirm that the presence of additional titles on screen did not compromise understanding or levels of enjoyment. Looking at the more specific data regarding the different cultural elements (Table 12) allows us to confirm if creative subtitling and the use of additional titles had an impact on the results.

Clip D from *Forrest Gump* (1994) – Creative subtitling				
Were viewers able to *identify* the culture specific element and *interpret* its sociocultural and diegetic meaning?	Expected answer	Did not know	Guessed the expected answer	Unexpected answer
1 White House building in the background				
＊ Identification of the building	100% [50]	0% [0]	0% [0]	0% [0]
＊ Placing of the action in Washington	100% [50]	0% [0]	0% [0]	0% [0]
2 Characters dressed in hippie clothes				
＊ Identification of the type of clothes	100% [50]	0% [0]	0% [0]	0% [0]
＊ Placing of the action in the 1960's	100% [50]	0% [0]	0% [0]	0% [0]
3 Star in the sidewalk with the name "Jean Harlow"				
＊ Identification of the actress Jean Harlow	100% [50]	0% [0]	0% [0]	0% [0]
＊ Identification of Jean Harlow as the name of someone famous	100% [50]	0% [0]	0% [0]	0% [0]
＊ Identification of the Hollywood Walk of Fame	100% [50]	0% [0]	0% [0]	0% [0]
＊ Placing the action in Hollywood				
5 "It's this war and the lying sun of a bitch Johnson."				
＊ Identification of President Johnson	74% [37]	26% [13]	0% [0]	0% [0]
6 Portrait of Mao Tse Tung in the background				
＊ Identification of Mao Tse Tung	82% [41]	0% [0]	18% [9]	0% [0] 0%
＊ Identification of its social role	100% [50]	0% [0]	0% [0]	[0] 0% [0]
＊ Placing of the scene in Tiananmen Square	92% [46]	0% [0]	8% [4]	0% [0]
＊ Placing of the action in China	100% [50]	0% [0]	0% [0]	
7 Appearance of John Lennon and Dick Cavett				
＊ Identification of John Lennon	100% [0]	0% [0]	0% [0]	0% [0]
＊ Identification of Dick Cavett	0% [0]	8% [4]	92% [46]	0% [0]
＊ Identification of *The Dick Cavett Show*	92% [46]	8% [4]	0% [0]	0% [0]
＊ Identification of the show as a popular show	0% [0]	0% [0]	100% [50]	0% [0]
8 "More famous than Captain Kangaroo"				
＊ Identification of Captain Kangaroo	84% [42]	16% [8]	0% [0]	0% [0]
＊ Identification of Cap Kangaroo as a famous cartoon	0% [0]	0% [0]	100% [0]	0% [0]
9 "They gave you the Congressional Medal of Honour!"				
＊ Identification of the medal's meaning	76% [38]	24% [12]	0% [0]	0% [0]
＊ Identification of the medal's significance	0% [0]	0% [0]	100% [50]	0% [0]
10 "It's all they talk about at the VA"				
＊ Identification of VA as Veterans Affairs	92% [46]	8% [4]	0% [0]	0% [0]
＊ Identification of their social role and significance	0% [0]	0% [0]	100% [50]	0% [0]
11 "Go get me a Ripple"				
＊ Identification of Ripple as a fortified wine	100% [0]	0% [0]	0% [0]	0% [0]
＊ Identification of Ripple as a popular drink in the 1960s	0% [0]	100% [50]	0% [0]	0% [0]
12 "What is there in Bayou La Batre?"				
＊ Identification of Bayou La Batre as a city	100% [50]	0% [0]	0% [0]	0% [0]
＊ Identification of Bayou La Batre as a city in Alabama famous for seafood fishing	0% [0]	100% [50]	0% [0]	0% [0]

Table 12: Frequency data from questionnaire's questions on culture specific elements understanding, regarding Clip D

Unsurprisingly, all participants were able to place the action in Washington and Hollywood, but the same now seemed to be also true regarding the placing of the action in China. Most participants were now able to identify Mao Tse Tung (82%) and Tienanmen Square (92%) and even those that could no longer recall the exact names of Mao Tse Tung and Tienanmen Square, were able to identify them as "chairman" and "square in Beijing". As mentioned before, visual elements also played an important role in *The Dick Cavett Show* scene and creative subtitling seems to have also assisted participants in the identification and interpretation of such elements. 100% of the participants were now able to identify John Lennon and 92% were able to identify *The Dick Cavett Show*. More interesting still is the fact that identifying the show allows the participants to then infer who Dick Cavett was, that the show was a popular show and that Forest had to be quite famous in order to have been invited. Overall, it seems that creative subtitling has considerably reduced the

level of confusion among participants given that, contrary to what had been noticed regarding Clip A, there were no unexpected interpretations of this scene. The same seems to be true regarding the references to Captain Kagaroo, the Congressional Medal of Honour and the VA - a higher number of participants were able to identify these elements (84%, 76% and 92% respectively) and such identification allowed the participants to infer their socio cultural meaning and diegetic function. Perhaps as importantly, no unexpected interpretations were made and confusion was reduced. In the case of the references to Ripple and Bayou La Batre creative subtitling assisted participants in the identification of the elements as fortified wine and a city in Alabama, but participants were not able to infer more than that. This has reduced confusion and avoided unexpected interpretations, but it also shows that providing information is not sufficient in itself and that what participants are able to infer from it is dependent on the dialogue between characters (e.g. references to Captain Kagaroo, the Congressional Medal of Honour and the VA) or visual elements (e.g. *The Dick Cavett Show* scene).

Creative subtitling seems to have addressed some of the challenges felt by participants when watching Clip A, but Clip C had brought considerably more challenges and it was important to see if creative subtitling had the same level of impact in the participants' viewing experience. Table 13 show the frequency data collected through the questionnaire regarding Clip B.

Clip from *Kautokeino-opprøret* (2008) – Creative subtitling		YES	NO
1	Difficulties following the film	27%	73%
2	Do you feel you understood everything in the film?	70%	30%

Table 13: Frequency data from questionnaire's general understanding questions, regarding Clip B

The data collected from the questionnaire's initial general questions (Table 13) shows that after watching Clip B, in a striking opposition to the data collected regarding Clip C, a majority of the participants (73%) felt they were able to follow the film without any major difficulties and that they had understood the film (70%). The data collected regarding the reception of the different cultural elements (Table 14) we can start understanding why, contrary to what had happened in Clip C, participants were in this case so aware of the difficulties they had encountered.

Clip B from *Kautokeino-opprøret* (2008) – Creative subtitling				
Were viewers able to *identify* the culture specific element and *interpret* its sociocultural and diegetic meaning?	Expected answer	Did not know	Guessed the expected answer	Unexpected answer
1 Characters speaking in Sami				
⁜ Identification of the language	100% [50]	0% [0]	0% [0]	0% [0]
⁜ Identification of the characters as Sami	100% [50]	0% [0]	0% [0]	0% [0]
2 Clothes of the Sami characters				
⁜ Identification of the clothes as typical Sami	0% [0]	0% [0]	100% [0]	0% [0]
⁜ Identification of the characters as Sami	0% [0]	0% [0]	100% [0]	0% [0]
3 "KAUTOKEINO"				
⁜ Placing the scene in Kautokeino	80% [40]	20% [10]	0% [0]	0% [0]
⁜ Identification of Kautokeino as a town in Northern Norway	100% [50]	0% [0]	0% [0]	0% [0]
4 Characters speaking in Norwegian				
⁜ Identification of the language as Norwegian	100% [50]	0% [0]	0% [0]	0% [0]
⁜ Identification of Norwegian as a different language from Sami	100% [50]	0% [0]	0% [0]	0% [0]
⁜ Identification of the characters as Norwegian	0% [0]	0% [0]	100% [50]	0% [0]
5 Clothes of the Norwegian characters				
⁜ Identification of the characters as Norwegian	0% [0]	0% [0]	100% [50]	0% [0]
⁜ Placing the action in the 19th Century	70% [35]	4% [2]	26% [13]	0% [0]
6 [Let's go back to the siida]				
⁜ Identification of siida as a Sami teepee	74% [37]	22% [11]	4% [2]	0% [0]
7 [Why not buy our supplies there and sell directly to the siidas?]				
⁜ Identification of siidas as nomad sami	84% [42]	0% [0]	16% [8]	0% [0]
8 "KARESUANDO"				
⁜ Placing the action in Karesuando	86% [43]	14% [7]	0% [0]	0% [0]
⁜ Identification of Karesuando as a town in Northern Finland	98% [49]	2% [1]	0% [0]	0% [0]
9 [Come to the church. Laestadius is speaking.]				
⁜ Identification of Laestadious as a historical figure	0% [0]	100% [50]	0% [0]	0% [0]
⁜ Identification of Laestadius as a religious figure	74% [37]	0% [0]	26% [13]	0% [0]
⁜ Identification of Laestadius as a Lutheran pastor	74% [37]	26% [0]	0% [0]	0% [0]
10 Close shot on the main character hanging dry meat				
⁜ Identification of visual element as dry meat	100% [50]	0% [0]	0% [0]	0% [0]
11 Clothes of the State Lutheran pastor				
⁜ Identification of the religious figure as a State Lutheran pastor	70% [35]	30% [15]	0% [0]	0% [0]
⁜ Identification of this pastor as different from Laestadius	100% [50]	0% [0]	0% [0]	0% [0]

Table 14: Frequency data from questionnaire's questions on culture specific elements understanding, regarding Clip C

Contrary to the data collected for Clip C, the majority of participants were able to identify both Kautokeino and Karesuando as towns and place the action in these towns (80% and 86% respectively). From the answers collected, it is possible to note that the majority of participants did not remember the exact names (12% and 18% respectively started their answer by "can't remember the name exactly, but…"). However, all those participants also referred to them as "small towns" or "villages" and noted that "it had appeared on screen". A minority of participants answered "I don't know", but even in those cases participants retained the information that the action was located in the north of Norway and Finland. This, together with the fact that there were no unexpected answers, points in the direction of a much reduced level of confusion.

Another important element in this clip was the identification of the characters as Sami and Norwegian and the social stratification between them, something achieved through the languages spoken and the clothes worn by the two groups of characters. The creative subtitling designed for the experiment, did not identify the clothes, but it did identify the languages spoken which seem to have considerably helped participants achieve the expected interpretation. 100% of the participants were able to identify the languages spoken and from that they seem to have been able to infer that

there were Sami and Norwegian characters, that they belonged to two different groups with different social status and wore specific clothing that participants now identified as "typical Sami clothes" and "regular western clothes from the 19th century".

As seen in the previous section, clothes were also of central importance regarding the interpretation of the character Laestadius. Hardly unexpectedly, 0% of the participants were able to recognise Laestadius as a historical figure; however, 74% of the participants were now able to identify Laestadius as a religious figure and a Lutheran pastor more specifically. 26% of the participants were able to do such identification (most likely because they could not read or remember the information provided in the additional title); still the level of confusion seems to be much lower as there were 0% of unexpected interpretation of the character and situation. This seems to also be true regarding the second pastor that appeared towards the end of the clip. 70% of the participants were now able to identify him as a Lutheran pastor and, even though 30% were not able to make such identification, 0% interpreted him as catholic which resulted in a lower level of confusion and seems to have supported the identification of the internal divisions within the Lutheran church as 68% of the participants were able to identify this character as with a different philosophy from Laestadius. The historical accuracy introduced by the reference to siida and visual modal resources such as the dried meat seem to also have been easier to interpret by participants given that 74% and 100% (respectively) of the participants were now able to identify those elements and 0% gave unexpected answers.

When asked about their opinion regarding the subtitling in Clips A and C, unexpectedly 100% participants used terms such "different", "unexpected", "not traditional" and "not typical". 78% (clip A) and 80% (Clip C) of the participants thought the experience of watching the clips with creative subtitling as "positive" or " very positive" and described it as "interesting", "good", "useful" and "important". 22% (Clip A) and 20% (Clip B) of the participants did not particularly enjoy having the additional titles on screen with 8% (Clip A) and 4% (Clip C) saying that having additional information on screen was "not how subtitling was done" and was at times "patronizing". However, the remaining 92% (Clip A) and 96% (Clip C) of those mentioned the fact that they "could get used to it in time" and that "having more information would be important for other participants". When asked if they would like to have creative titles being offered as an option, 100% said they would like to have the option because "for films like this [i.e. *Kautokeino-opprøret*] it was very helpful".

When asked if they would like to see the rest of the film, 100% and 96% of the participants said "yes". This was not surprising in relation to Clip A given that the same result was found in Condition 1, but the difference in results is quite striking in relation to Clip C. Out of these 96%, 100% described the film as a "good" or "very good" film, 84% also described it as a "beautiful film" and 12% also noted that it was "nice to learn about this [Sami] people".

4. Conclusion

This article reports on an exploratory study that set out to investigate the possible challenges brought by verbal and nonverbal modal resources and the impact of both professional and creative translation strategies on viewers' interpretation and enjoyment of the source film. It set out a series of guiding questions which is important to return to in this concluding section.

Question 1 focused on participants' ability to identify key spoken, visual and aural culture specific elements and interpret their sociocultural meaning when professional subtitling norms are employed. The data seems to confirm Multimodality's fundamental postulate, that nonverbal modal resources are not natural universal signs easily interpreted by everyone the same way. Instead they are as culture specific as verbal modal resources and do present challenges to viewers' that current subtitling norms do not address. Despite its exploratory nature, this study has shown that viewers are often not able to identify the resource and/or interpret its sociocultural meaning leading to

situations of partial or complete misinterpretation. This is naturally very evident when the source film presents a context very unfamiliar to the viewer as we could see with *Kautokeino*-opprøret, but it showed (perhaps surprisingly) to also be true in the case of *Forest Gump* even if to a lesser extent. Going back to the three levels of meaning discussed in section 2, we can conclude that it is important to acknowledge the difference between cultural and semiotic knowledge and that viewers might sometimes face challenges with identification of a specific element, while other times the challenges will relate to interpreting its sociocultural meaning. Similar challenges have been identified in regards to verbal modal resources, so this is not particularly new or surprising, but it will be important to acknowledge that these challenges are felt not just in regards to verbal modal resources and that subtitling needs to address the challenges faced in regards to visual modal resources.

Given the socio-semiotic approach to nonverbal modal resources adopted in this study, the reception tested two different conditions and compared the impact of professional subtitling norms and the use of additional titles translating meaning expressed through visual or aural modal resources. **Questions 2 and 3** thus focused on the possible benefit and cognitive demand of including a verbal translation of meaning expressed through visual elements. The data seems to allow the conclusion that viewers are indeed able to divide their attention between the different AOIs and still dedicate most of their attention to the image AOI. The data also seems to point towards a clear benefit of using additional titles to support viewers in identifying specific elements and avoid misidentification which tends to lead to further misinterpretation (as seen in regards to location and characters clothing). The results were less clear regarding the interpretation of sociocultural meaning and more data needs to be collected through a study focused on testing this particular issue. However, it is important to note that when additional titles were used (despite their focus on supporting identification) there was considerably less variation in the participants' answers, i.e. it happened more frequently that a single category had 100% and that there were considerably lower percentages in the categories "Did not know" or "Guessed the expected answer". As discussed before, this points towards a lower level of confusion, but it also alerts us to the risk of reducing the margin for interpretation that is part of the experience of watching a film. Using additional titles to support identification seems to allow viewers the space to follow the film while leaving them the opportunity to conduct further research if they wish, but one should not discard the possibility that information on sociocultural meaning can easily slip outside of the realm of translation by explaining the film and, because of that, be considered as patronizing by viewers. More experimental research on this is required.

In addition to reception data, it was equally important to collect data on viewers' perception of creative subtitling strategies and the impact these might have on their overall enjoyment of the film. The data collected, despite the need for a much larger study, points in the direction that viewers might be much more receptive of strategies deviating from the two lines at the bottom of the screen than we might traditionally assume. Quite significant, however, was to note the positive impact that the use of additional titles had on lower levels of confusion, the viewer's enjoyment of the film and, perhaps more importantly, on the overall profile of the film and general assessment regarding its quality. Adami and Ramos Pinto (2020) alerted to the need to ask questions "regarding the profile of the texts audiences have access to [… and] how this might be indirectly reinforcing power imbalances" (p. 83). The data collected here seems to confirm exactly that. Western sign-making practices and contexts have shown to be more easily interpreted as in the case of *Forest Gump*, while divergent practices and less familiar contexts bring considerable more challenges to viewers' as in the case of *Kautokeino*-opprøret. What is crucial to note here is the fact that challenges in identifying and interpreting nonverbal modal resources allowed by current subtitling norms led the

viewers', not to demand a different translation or to acknowledge their lack of knowledge, but instead to assess the film as a low quality film which they did not wish to continue watching.

As always in translation, the assessment made regarding the possible challenges viewers' will face is the great mediator regarding the choice of a particular translation strategy; however, current subtitling norms do not allow the translator the creative agency and space to make those choices in relation to visually or aurally expressed meaning. We hope this study is a first step in changing that situation.

Acknowledgements

Bilbiography

ISO/IEC DIS 20071-23. Retried from https://www.iso.org/home.html

Adami, E. & Ramos Pinto, S. (2019). Meaning-(re)making in a world of untranslated signs: towards a research agenda on multimodality, culture and translation. In M. Boria, A. Carreres, M. Noriega-Sanchez & M. Tomalin (Eds.). Translation and Multimodality: Beyond Words. Routledge.

Appiah, K. (2000). Thick Translation. In L. Venuti (ed.), The Translation Studies Reader (pp. 417–429). Routledge.

Bezemer, J. & Kress, G. (2008). Writing in Multimodal Texts: A Social Semiotic Account of Designs for Learning, Written Communication 25, 166–95.

Bordwell, D. & Thompson, K. (2013). Film art: an introduction. McGraw-Hill.

Boria, M., Carreres, A., Noriega-Sánchez, M. & Tomalin, M. (2020). Translation and multimodality: beyond words. Routledge.

Burn, A. (2013) The Kineikonic Mode: Towards a Multimodal Approach to Moving Image Media. In Jewitt, C. (ed) The Routledge Handbook of Multimodal Analysis. Routledge.

Caffrey, C. (2008) Participant perception of visual nonverbal cues in subtitled TV Anime. European Journal of English Studies 12(2), 163 - 178.

Chesterman A. (2005) Consilience in Translation Studies, Revista Canaria de Estudios Ingleses 51. Pp. 19–32.

Chesterman, A. (2007) Bridge concepts in translation sociology. In M. Wolf & A. Fukari. Constructing a Sociology of Translation (pp. 171-183). John Benjamin.

Díaz-Cintas, J. & Remael, A. (2021) Subtitling : concepts and practices. Routledge.

Dwyer, T. (2012). Fansub Dreaming on Wiki, The Translator 18(2), 217–43.

Gambier, Y. (2009). Challenges in research on audiovisual translation. In A. Pym & A. Perekrestenko (eds.). Translation Research Projects 2 (pp. 17–25). Tarragona.

Gottlieb, H. (2009). Subtitling Against the Current: Danish Concepts, English Minds. In J. Díaz Cintas (ed.) New Trends in Audiovisual Translation (pp. 21–43). Multilingual Matters.

Greco, G. (2016). On Accessibility as a Human Right, with an Application to Media Accessibility. In A. Matamala & P. Orero (eds.), Researching Audio Description. New Approaches (pp. 11–33). Palgrave Macmillan.

Kovačič, I. (1995). Reception of subtitles: The non-existent ideal viewer. Translatio (FIT Newsletter) 14(3–4), 376–383.

Kress, G. (2010). Multimodality. A Social Semiotic Approach to Contemporary Communication. Routledge.

Kress, G. & van Leeuwen, T. (1996). Reading Images. The Grammar of Visual Design. Routledge.

Künzli, A. & Ehresberger-Dow, M. (2011). Innovative subtitling: A reception study. In C. Alvstad, A. Hild, & E. Tiselius (eds.) Methods and Strategies of Process Research (pp. 187-200). John Benjamins.

Hatim, B. & Mason, I. (1990) Discourse and the Translator, Longman.

Leppihalme, R. (1997). Culture Bumps. An Empirical Approach to the Translation of Allusions. Multilingual Matters.

McCLarty, R. (2014 [2013]). In Support of Creative Subtitling: Contemporary Context and Theoretical Framework, Perspectives: Studies in Translation Theory and Practice 22 (4), 592–606.

Metz, C. (1974). Film Language: A Semiotics of the Cinema, University Chicago Press.

Nornes, A. (1999). For an abusive subtitling. Film Quarterly 52(3), 17–34.

Pedersen, J. (2008). High Felicity: A Speech Act Approach to Quality Assessment in Subtitling. In D. Chiaro, C. Heiss and C. Bucaria, Between Text and Image. Updating Research in Screen Translation (pp. 101–116). Benjamins.

Pedersen, J. (2011). Subtitling Norms for Television. An exploration focusing on extralinguistc cultural references. John Benjamins.

Pérez González, L. (2007). Fansubbing anime: insights into the 'butterfly effect' of globalisation on audiovisual translation, Perspectives: Studies in Translatology 14 (4), 260-277.

Ramos Pinto, S. (2017). Film, Dialects and Subtitles: An Analytical Framework for the Study of Non-standard Varieties in Subtitling. The Translator 24(1), 17–34.

Romero-Fresco, P. (2018). In support of a wide notion of media accessibility: Access to content and access to creation. Journal of Audiovisual Translation 1(1), 187-204.

Van Tonder, L. C. (2015). Fansubbing and creative subtitling – How amateur approaches can help improve professional products. South African Tranlsators' Institute – Second Triennial Conference: The Changing Face of Translation and Interpreting. Kempton Park, South Africa. Retrieved from: https://www.academia.edu/16564660/Fansubbing_and_Creative_Subtitling_How_Amateur _%20Approaches_can_Help_Improve_Professional_Products

Tuominen, T. , Jiménez Hurtado, C. & Ketola, A. (2018) Why methods matter: approaching multimodality in translation research. Linguistica Antverpiensia: New Series – Themes in Translation Studies, 17, pp. 1–21.