

# **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.

## **DETAILS RECEPTION STUDY DESIGN**

### **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.

### **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.

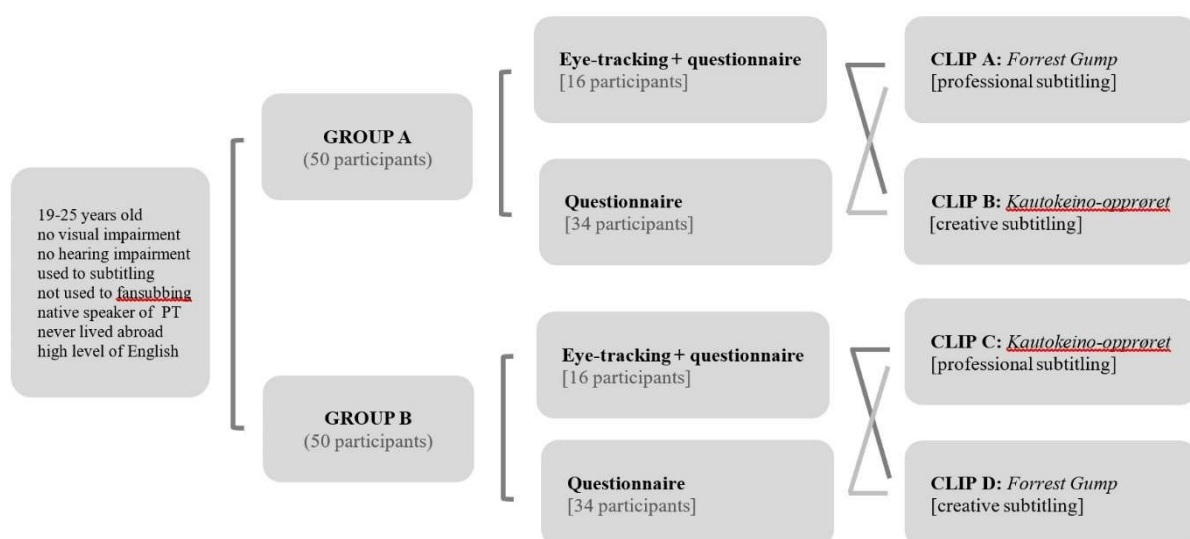


Figure 1: Schematic illustration of the participants' groups, data collection method and clips watched

## 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 <i>Forrest Gump</i> (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	<b>CSE:</b> White House <b>Function:</b> 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	<b>CSE:</b> hippie clothes <b>Function:</b> Placing of the action in the 1960's.	Identification of the clothes as hippie and common in the 1960's
3	Star in the sidewalk with the name "Jean Harlow".	Visual mode	<b>CSE:</b> sidewalk star, Jean Harlow's name <b>Function:</b> 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	<b>CSE:</b> Johnson - President Lyndon Johnson <b>Function:</b> historical accuracy	Identification of the historical figure
6	Portrait of Mao Tse Tung in the background	Visual mode	<b>CSE:</b> Mao Tse Tung portrait <b>Function:</b> 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	<b>CSE:</b> John Lennon, Dick Cavett <b>Function:</b> 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	<b>CSE:</b> Captain Kangaroo – famous children character	Identification of the historical cartoon and his sociocultural significance

9	"They gave you the Congressional Medal of Honour!"	Spoken mode	<b>Function:</b> highlight how famous the main character had become and how childish he remained <b>CSE:</b> Congressional Medal of Honour – most prestigious medal for acts of bravery <b>Function:</b> 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	<b>CSE:</b> VA – Veteran Agency <b>Function:</b> historical accuracy, social criticism	Identification of the institution and the social function it fulfils.
11	"Go get me a Ripple"	Visual & Spoken mode	<b>CSE:</b> Rippple – fortified wine common in the 1960s and 70s <b>Function:</b> 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	<b>CSE:</b> Bayou La Batre – city in Alabama, capital of seafood <b>Function:</b> 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 <i>Kautokeino-opprøret</i> (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	<b>CSE:</b> Sami language <b>Function:</b> identifying the characters as Sami	Identification of the language and its sociolinguistic significance
2	Clothes of the Sami characters	Visual mode	<b>CSE:</b> traditional Sami clothes with carvings <b>Functions:</b> Identifying the characters as Sami	Identification of the clothes as specifically Sami
3	Word in the middle of the screen: "KAUTOKEINO"	Visual mode (Graphic)	<b>CSE:</b> Town of Kautokeino in Northern Norway <b>Function:</b> Placing the scene in Kautokeino	Identification of Kautokeino as a town and a town in Northern Norway
4	Characters speaking in Norwegian	Spoken mode	<b>CSE:</b> Norwegian language <b>Function:</b> Identifying the characters as Norwegian	Identification of the language and its sociolinguistic significance
5	Clothes of the Norwegian characters	Visual mode (Graphic)	<b>CSE:</b> typical Norwegian 19 <sup>th</sup> century clothes <b>Function:</b> identifying the characters as Norwegian and placing the scene in the 19 <sup>th</sup> Century	Identification of the clothes as 19 <sup>th</sup> Century clothes
7	Let's go back to the siida [Back translation]	Spoken mode	<b>CSE:</b> siida - Sami typical tepee housing <b>Function:</b> 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	<b>CSE:</b> Siidas - nomad sami people <b>Function:</b> historical accuracy	Identification of the Siidas as Sami and as nomad

9	Word in the middle of the screen: KARESUANDO	Verbal Visual	<b>CSE:</b> Town of Karesuando in Northern Finland <b>Function:</b> 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	<b>CSE:</b> Laestadius – Lutheran pastor <b>Function:</b> historical accuracy	Identification of Laestadius as a Lutheran pastor
12	Close shot on the main character hanging dry meat	Visual mode	<b>CSE:</b> dry meat <b>Function:</b> historical accuracy, image of typical Sami domesticity	Identification of the visual element as dry meat
13	State Lutheran pastor clothes	Visual mode	<b>CSE:</b> typical clothes worn by State Lutheran pastors <b>Function:</b> historical accuracy, identification of this pastor as different from Laestadius	Identification of clothes as typical clothes worn by State Lutheran pastors

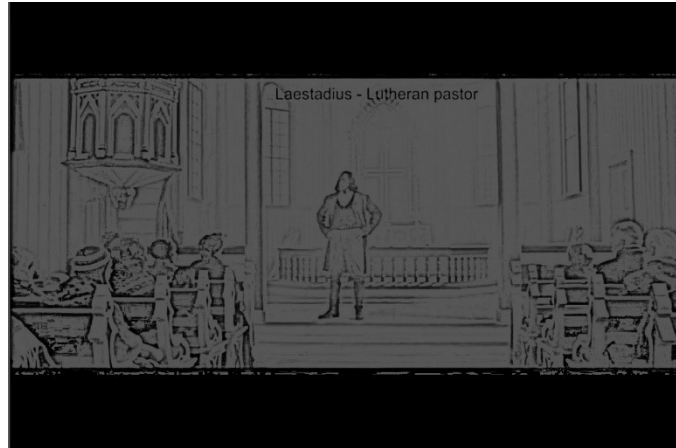
Table 2: List of culture specific elements identified in *Kautokeino-opprøret*  
(screenshots are not included due to copyright law)

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.



### **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 shifts 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.