

**Report on the results of
an online survey
on subtitle presentation times
and line breaks
in interlingual subtitling
Part 2: Companies**

by Agnieszka Szarkowska

ABOUT THE PROJECT

The project “**Exploring Subtitle Reading Process with Eye Tracking Technology (SURE)**” has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie Grant Agreement No. 702606. It is carried out by Dr Agnieszka Szarkowska at the Centre for Translation Studies, University College London, under the supervision of Prof. Jorge Díaz Cintas.

The goal of the project is to experimentally study the subtitle reading process to establish quality indicators on optimum subtitle presentation times (reading speed) and line breaks (segmentation).

Phase 1 of the project identifies current market practices on the subtitle presentation times and line breaks in an online survey among professional subtitlers (Part 1) and subtitling companies (Part 2). Results of the surveys will be used in the next phase of the project to inform the design of the eye tracking study on subtitle presentation times and segmentation.

ABOUT THE AUTHOR

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Results of an online survey on reading speed and line breaks in interlingual subtitling conducted among subtitling companies

1. INTRODUCTION

This study is about subtitle presentation times and line breaks in interlingual subtitling. Comfortable presentation times and line breaks allow viewers to follow the text in the subtitle and to have enough time to look at the on-screen action. If the subtitle presentation rate is too fast and the segmentation is poor, viewers may find it difficult to follow and understand the subtitles.

Subtitle presentation time (also known as **reading speed**) is usually expressed using either characters per second (cps) or words per minute (wpm). The most famous rule on the subtitle presentation times is known as '**the 6-seconds rule**' (Díaz-Cintas & Remael, 2007). According to this rule, a full two-line subtitle of should be displayed for the maximum of six seconds – not less, because viewers will not have time to read the subtitle, but not more, as they will re-read it if it is displayed longer. The 6-seconds rule translates into **12 cps** and **144 wpm** (Martí Ferriol 2013, p. 203; Romero Fresco 2009, p. 114). However, some broadcasters now use higher reading speeds on the grounds that viewers are now able to read faster (Díaz-Cintas & Remael, 2007).

Subtitle segmentation (also referred to as **line breaks**) is about how words are placed in the first and second line in two-line subtitles. Segmentation can be based on semantic and syntactic considerations, where linguistic units are put together, or on more visual considerations regarding the shape of the subtitle (a pyramid/trapeze or a rectangle).

The changing audiovisual landscape calls for more up-to-date research on how fast people can read subtitles and to revisit the quality standards accordingly. This study sets out to investigate optimum subtitle presentation times and segmentation. The first step of the study was a survey among professional subtitlers (to be found in Report 1). As the second step, an online survey among subtitling companies was conducted to establish current market practices and companies views and house styles on reading speed and line breaks.

2. THE SURVEY

The survey (Survey 2) described in this report was addressed to subtitling companies. It was distributed online from September to November 2016 through subtitling companies, subtitling organisations (AVTE, Polish Association of Audiovisual Translators STAW), Facebook Page (www.facebook.com/SureProject), LinkedIn, social media and personal networking.

It consisted of 20 close- and open-ended questions using online Microsoft Forms (see the Appendix), as shown below:

4. Are subtitlers working for your company required to spot the material? *

- Yes, most of the time they need to do the spotting.
- No, most of the time they work from a master file and they are not allowed to change the time codes.
- No, most of the time they work from a master file, but subtitlers can change the time codes if necessary.
- All of the above.
-

5. Does subtitle reading speed depend on the format (DVD, cinema, TV)? *

- Yes
- No
-

6. If you answered "Yes" in the previous question, please state briefly what the differences are between the different formats.

The survey was completed by 9 companies.

3. PROFILE OF COMPANIES

The companies who took part in the survey were mostly international companies operating in many countries and one local company.

All but one company declared to have their own house style guides on the subtitling reading speeds. When asked about what these guidelines were based on, some companies said they **adjust their styles to local standards**, including those set by local **regulatory bodies**. Others stated that the guidelines are based on *“our own experience about reading speeds and client preferences over the years”* and on *“the estimated reading speed of an average local language native speaker”*

Style guides are applied in the cases when clients do not have specific requirements.

In most companies taking part in this survey (apart from two, including one local company operating on one national market), **subtitlers work from a master file** and do not need to do the spotting. Subtitlers are allowed to change the time codes if necessary in all but one company, where they cannot change the time codes from the master file.

4. SUBTITLE PRESENTATIONS TIME

Most companies stated that the subtitle presentation times do not depend on the format (DVD, cinema, etc.). However, one company said that the streaming clients seem to have much stricter guidelines in terms of reading speeds. Another company reported that cinema subtitles usually have shorter reading speeds than TV and DVD subtitles.

In line with the responses from professional subtitlers in Survey 1, most companies work with **characters per second** as the main reading speed measure rather than with words per minute. One company uses words per minute and one “subs/min”. One of the companies said it has its own proprietary algorithm for reading speed which is largely cps based, but which also factors in the total duration of a subtitle.

The **subtitle presentation times** used by the companies **differ greatly**: from 10 cps (three companies), 17 cps (one company), an algorithm-based house style ranging between 15 and 20 cps depending on the total duration of a subtitle, 180 wpm (one company) and 11 subs/min (one company).

Most companies (excluding two) verify presentation rates during the quality control (QC) stage. One company stated, however, that *“It's a guideline but not a*

"showstopper" if the speed is exceeded now and then", suggesting that some diversions from the required rate are allowed depending on the context.

The maximum number of characters per line also differed among companies. The most frequently stated number was **37 and 42 characters per line**, with one company declaring 32 characters at their maximum for one client. The maximum number of lines largely depends on clients' requirements.

The maximum number of lines per subtitle was almost uniformly declared to be 2, with one company stating that they can use up to three lines in dual stream files.

When asked about whether subtitle reading speed changed over time, three companies declared that it has not changed much, and four companies stated that it has gone up.

5. LINE BREAKS AND SEGMENTATION

Most companies stated that in their house styles segmentation primarily relies on **keeping semantic and syntactic units together**. One company said that segmentation depends on alignment, and one believed that the first line should be shorter (a pyramid-looking subtitle). When they have to prioritise, they choose keeping semantic and syntactic units together. Only one company stated they try to fit as much of the dialogues as possible in the given subtitle.

Similarly to line breaks within one two-line subtitle, the companies taking part in the survey stated they prefer to keep the semantic and syntactic units together *"in a natural way"* also in the case of **segmentation across subtitles**. Some have more detailed rules, for instance:

- *"A sentence should be continued no further than for two subtitles unless absolutely necessary"*
- *"Text should not cover more than two subtitles"*

Some companies recommended using punctuation (a hyphen) to mark the continuation of a sentence across more than one subtitle: *"usually a hyphen is used to both to end the first and start the second"* and *"it is allowed across two subtitles using dashes"*. Others, however, allow the subtitles to carry on to the next one without any punctuation marks: *"When a sentence is too long, it carries on to the next subtitle without the use of any indication (punctuation, ellipsis, etc.)"*. This, again, seems to depend on the tradition used in a given country.

When it comes to house styles on presenting dialogues in subtitles, most companies use the **"one character per line, each line beginning with a dash"** rule. Only one international company declared to use the dash only in the second line.

Most house styles recommend the **centre alignment** of subtitles, with some of them using **centre-left for dialogues** (two people per subtitle, one per line, marked with hyphens). Again, the alignment is frequently **client-specific**.

An interesting point emerged when it comes to the differences in segmentation across different formats (DVD, cinema, TV). While some companies stated the format does not impact the segmentation, one of them argued that *"It's important in this day and age to have one set of rules which work across all mediums as non-linear repurposing is now the norm."* Another company declared that *"they only change if it's specified by the client or in the case of dual streams, where one of the languages will have only one line."*

6. CONCLUSIONS

The results of this study are largely compatible with those reported in Part 1 on the subtitlers.

Subtitle reading speeds were found to depend on the country and a client, ranging from **10 to 20 cps**. Most companies declared to work with characters per second rather than with words per minute measure. The reading speeds are usually verified at the **quality control** stage; however, some variations are permitted if necessary. The average maximum line ranges from **37 to 42 characters**, with typically **two lines** set at the maximum. Because of the limited number of responses to the survey, it is difficult to generalise on the companies views regarding the question whether or not the subtitle reading speeds have gone up in recent years.

It is recommended that subtitles follow **natural line breaks**, both within and across different subtitles. That means keeping the **semantic and syntactic units** together. Some differences were observed in whether – and if so how – to mark the continuation of a sentence across two or more consecutive subtitles, but otherwise the differences do not seem to be major.

One company pointed out an important issue of **re-using subtitles across platforms** and therefore of having one consistent set of rules regarding quality indicators like the reading speed and layout.

Similarly to professional subtitlers in study 1, companies also operate based on commonly observed rules, with certain deviations depending on the traditions in a given country, rather than on any new research studies.

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APPENDIX

Survey on reading speed and line breaks in interlingual subtitling

This survey is part of the EU-funded project on the quality of subtitling carried out by Dr Agnieszka Szarkowska at the Centre for Translation Studies at UCL.

Thanks are due to Dr Yota Georgakopoulou, Sr Director, Research & Int'l Development, Deluxe Media, for her input in the survey structure.

The goal is to identify current market practices and company policies on reading speed and line breaks in subtitling. The results will be used to inform eyetracking research on subtitle quality.

This survey is about standard pre-recorded interlingual subtitling. It is NOT about subtitling for the deaf and hard of hearing or live subtitling.

It is strictly confidential. No personal data is collected. We will not disclose any information that could be attributed back to any organisation.

The survey will take you about 10 minutes to complete.

It will be open until 30 November 2016.

If you have any comments, please email Agnieszka Szarkowska at a.szarkowska@ucl.ac.uk.

Thank you!

1. Which category does your company belong to?
 - a. International company operating in many countries
 - b. Local company operating mainly in one national market
2. Does your company have style guidelines for subtitlers regarding subtitle reading speed?
 - a. Yes
 - b. No
3. If you answered "Yes", what are these guidelines based on? How do you decide on the right reading speed if you don't receive any information from the client?
4. Are subtitlers working for your company required to spot the material?
 - a. Yes, most of the time they need to do the spotting.
 - b. No, most of the time they work from a master file and they are not allowed to change the time codes.
 - c. No, most of the time they work from a master file, but subtitlers can change the time codes if necessary.
 - d. All of the above.
5. Does subtitle reading speed depend on the format (DVD, cinema, TV)?
 - a. Yes

- b. No
6. If you answered "Yes" in the previous question, please state briefly what the differences are between the different formats.
 7. Is the presentation rate given in characters per second or words per minute?
 - a. Characters per second (cps)
 - b. Words per minute (wpm)
 - c. Both
 8. If you answered "Both" in the previous question, please specify how you calculate the equivalent between cps and wpm. For example, what is the equivalent of 15 cps in wpm?
 9. What is the most common subtitle reading speed used by your company? Please state the number and the measurement, for example 15 cps or 180 wpm.
 10. Are presentation rates verified - and corrected if necessary - during QC?
 - a. Yes
 - b. No
 11. What is the maximum number of characters per line? If there are different numbers for different clients, please give all of them.
 12. What is the maximum number of lines per subtitle? Please remember this survey is NOT about subtitling for the deaf and hard of hearing.
 - a. Two
 - b. Three
 13. Has subtitle reading speed changed over time?
 - a. Yes, it has gone up.
 - b. Yes, it has gone down.
 - c. No, it hasn't changed much.
 - d. I don't know.
 14. What is your house style on segmenting two-line subtitles (line breaks)?
 - a. First line should be shorter (subtitle should look like a pyramid)
 - b. Second line should be shorter (like an inverted pyramid)
 - c. Both lines should be of equal length (like a rectangle)
 - d. Segmentation should primarily rely on keeping semantic units together
 15. What does your company prioritise?
 - a. Keeping semantic and syntactic units together
 - b. Keeping aesthetic equilibrium between the two lines (pyramid, rectangle)
 - c. Fitting as much of the dialogue as possible in a given subtitle
 16. Does your company have any policy on segmenting text across subtitles (a long sentence carrying over one subtitle)? What is it?
 17. What is your house style on presenting dialogues in subtitles?

- a. One character per line, each line beginning with a dash
 - b. More than one character per line, each character's utterance beginning with a dash
 - c. One character per line, with a dialogue dash only on the second line
18. What is the typical alignment of the subtitles produced by your company?
- a. Centred
 - b. Centred left-aligned
 - c. Left-aligned
19. Do line breaks (subtitle segmentation) depend on the format? (DVD, TV, cinema)?
How?
20. Have you got any further comments to add regarding the quality of subtitling in your company? Thank you very much for your input. I will use it to write a report on current market practices regarding reading speeds and line breaks based on the input from companies (from this survey) and from professional subtitles (a separate survey I carried out). Please include your email if you would like to receive a copy of the survey results once they are published.