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Audiovisual Translation in LSP – A Case for Using Captioning in Teaching Languages for Specific Purposes

Abstract

Audiovisual translation, or producing subtitles for video materials, had long been out of reach of language teachers due to sophisticated and expensive software. However, with the advent of social networking and video sharing sites, it has become possible to create subtitles for videos in a much easier fashion without any expense. Subtitled materials open up interesting instructional opportunities in the classroom, giving teachers three channels of information delivery for flexible use. The present paper deals with the phenomenon of subtitling videos for the ESP classroom. The author starts with a literature review, then presents implementation models and classroom procedures. Finally, technical solutions are outlined.

Keywords: Captions, subtitles, video, audiovisual translation.

1. Introduction

The use of video has been long established in teaching Languages for Specific Purposes, with numerous benefits often put forward by methodologists and tested in field research. Nowadays, together with widespread access to the internet, an abundance of video materials for teaching virtually every specialization has become easily available to instructors at virtually no financial cost. Given proper training in how to search for and download video materials of various types and file extensions, there seems basically no obstacle to authenticating LSP instruction with an audiovisual dimension.

However, a frequent objection to the use of authentic video materials has been that their didactic exploitation is hampered by lack of compatibility with the language level of target learners. Even though advanced students could be exposed to authentic videos from the workplace, learners at lower levels were put at a disadvantage due to discrepancy between the language level of the video and their own interlanguage.

The purpose of the present paper is to reflect on the phenomenon of audiovisual translation and its applicability in LSP methodology. After presenting the state of the research into the use of captioned video materials in foreign language acquisition, the major part of the paper attempts to lay down the foundations for the use of subtitled videos in the LSP classroom, starting with explaining the methodological rationale, discussing implementation models and concluding with technical solutions.

2. Literature review – Justification for the use of captioned videos in the language classroom

The use of subtitles in videos and TV programs has been met by great enthusiasm on the part of researchers for various reasons. In several studies the effects of subtitles/captions on receptive skills and vocabulary acquisition were investigated. The research focus was mainly on whether captioned videos or TV programs are more effective than non-captioned ones (Baltova, 1999; Çakır, 2006; Danan, 1992, 2004; Garza, 1991; Markham, 1993, 1999; Neuman & Koskinen, 1992). Overall, the major contribution of these studies is that subtitles and captions have significant potential as instructional tools in vocabulary acquisition and they may help to improve learners' listening and reading comprehension skills. For example, Koskinen et al. examined the effects of captioned videos on incidental reading vocabulary knowledge, confirming that as a result of teaching with captioned videos the participants' vocabulary knowledge greatly improved (cited in Yüksel & Tanrıverdi, 2009). For Gajek (2008) the use of captioned video materials is an important way to extend learners' exposure to foreign language input, at the same time offering a high level of involvement due to a motivating learning environment.

In one of the most recent studies Karakas and Saricoban (2012) confirm the significant relationship between watching subtitled and non-subtitled cartoons and its effect on vocabulary development. According to the study, no matter whether participants watched the movies with subtitles or without them, they improved at a significant level from pre-test to post-test scores. As the authors conclude, the actions, signals of hands and arms, as well as facial expressions might facilitate the understanding of the target verbs when accompanied with subtitles, while the gains of participants were thought to be the result of contextual aids of cartoons.

In her experiment with keyword captions, full text captions and no-text groups, Guillory (1998: 89) demonstrates that "the keyword captions group outperformed

the no text group and that the full text captions group outperformed the keyword captions group". Rather than focus on reading and comprehension skills, the researcher attempted to use captions to help learners link written words with their phonetic realizations. Thus, arousing the listeners' phonological visualization of aural cues proved to be another benefit of captions/subtitles in visual materials (Bird, Williams, 2002).

Video-based methodology has opened up wide instructional opportunities due to the simultaneous existence of the visual and the auditory channel of perception. When a third, textual, channel becomes available in the form of subtitles, LSP instructors can more flexibly adapt authentic or prepared content-based video materials to fit the needs of target learners.

Danan (2004: 67) claims that audiovisual materials enhanced with captions or subtitles may function as a powerful educational tool in many ways. For example,

1. they improve the listening comprehension skills of second/foreign language learners;
2. they maximize the effectiveness of language learning by helping students visualize what they hear;
3. they enhance language comprehension and lead to additional cognitive benefits, such as greater depth of processing.

Karakas and Saricoban (2012) add that captions/subtitles play an important role in lowering the affective filter, which psychologically affects one's learning. For example, since it is easier for a viewer to understand foreign language films with subtitles and captions, acquiring a foreign language is more stress-free in such a context.

Gajek (2008) points out the fact that captioned videos are suitable for incidental learning of vocabulary at all levels of language proficiency. Lower-level learners will concentrate more on the contents of subtitles, since they will find it difficult to aurally grasp authentic exchanges. Together with growth in language proficiency, Gajek's argument continues, learners start to rely less on the visual-textual medium and begin to exploit more the aural channel of perception.

On the other hand, as Winke, Gass and Sydorenko (2010: 67) claim, it is difficult to generalize the findings of the previous studies on subtitling for at least two reasons: "First, several studies did not group subjects by proficiency levels; second, the types of tests used to measure the effects of language learners' processing of captions varied widely". Hence, the differences in comprehension may have resulted from the effects of captions/subtitles or from the level of proficiency, and it is not fully proven whether other students may produce similar results or not.

Danan (2004) voices another objection against the technique, reporting that many language teachers are against the use of subtitling in audiovisual materials. This might be because they fear that subtitles distract learners' attention, especially that of lower-level learners, from the actual spoken language to the written text and create a sense of laziness on the part of students (Taylor, 2005).

At this point some reflection is needed on the place of resultant subtitling-based activities in the general framework of foreign language instruction. While audiovisual translation helps learners activate and refine their use of grammar and vocabulary, in terms of language skills it contributes to the development of writing. Approaches to teaching writing are traditionally divided into writing as a product and as a process (Harmer, 2004; Kroll, 1991). Producing captions by individual students, improving subtitles made by other students or by the teacher are the manifestations of the latter approach. In White and Arndt's (1991) understanding of writing, the crucial role is played by the interaction between such processes as generating ideas, focusing (concentrating on the message the author wants to convey), structuring, drafting, evaluating and re-writing, which may occur simultaneously, consecutively and influence one another. The process of writing is not linear (from planning through drafting and editing to final draft) but recursive, as learners re-plan, re-draft or re-edit their work (Harmer, 2004). When working on captions, teachers ought to make students aware of the process of composing (Hedge, 1988), the purpose of their writing, the audience they are writing for and the content structure (Harmer, 2004). This awareness includes the sense of the type of text, the kind of language and information to include, layout, register, the sequence of ideas, facts and arguments (Harmer, 2004).

While there are diverse impressions of the use of subtitles in language education, undoubtedly due to easy accessibility and educational potential, LSP teachers are encouraged to adapt selected video materials by adding carefully considered scripts either in L1 or L2, either full script or only partial subtitling.

3. Approaches to teaching LSP with subtitled videos

Diverse ways of using subtitled videos in the Languages for Specific Purposes classroom are proposed here. The taxonomy presented below takes as its major criteria who actually produces subtitles and for whom. The term 'Sub' in the names of the models below indicates a set of procedures designed to make use of subtitling in the process of language learning, in different modes and with differing amounts of teacher control. With this in mind, three original models are put forward as follows:

3.1. Teacher Sub

The teacher is solely responsible for selecting videos, producing subtitles and making both available to students. This approach might be favoured when teaching lower-level learners who would not cope with the activity on their own, as well as in under-resourced contexts in which either only a projector with speakers or an e-learning platform are available as a means to transfer multimedia materials. Obviously, as the model favours the authority of the teacher, it might not necessarily be successful in

the LSP context in which students are usually more knowledgeable about a particular professional domain than the teacher. As such, the intermediate position, termed Class Sub, might be favoured since it takes into account student expertise at least in some areas and attempts to reconcile teacher and student needs.

3.2. Class Sub

This model stands in contrast to Teacher Sub as it acknowledges a much bigger role for learners in the process of preparing materials. While not necessarily producing subtitles themselves, in the Class Sub model the teacher carefully activates learners in those areas in which they can contribute to the class. These might be the following:

- searching for videos of interest on Video Sharing Sites (such as YouTube) for the teacher to caption;
- selecting videos for captioning from the teacher-made selection;
- working on teacher-made captions (editing, putting lines of the script in the correct order, listening and synchronizing, listening and correcting purposeful errors, etc.);

The in-class use of multimedia materials can either refer to language activities exploiting teacher-produced subtitled videos, or, given equipment and skills, learners' involvement in editing and/or making subtitles under the teacher's guidance. The Class Sub model also allows collaborative work on subtitles, either by having one group contribute the subtitles for others to edit, or by dividing a particular video into sections for separate groups of learners to produce subtitles. Taking into account the simplicity of the procedure of online services such as Amara and DotSUB (see fuller discussion of the technical solutions below), the latter might be a viable option for in-class project work.

3.3. Autonomous Sub

Once learners have been trained in how to make subtitles in one of the easy-to-use online services, in the Autonomous Sub model students (individually, in pairs or groups) make captions on their own out of class with much less teacher's guidance. While the technical part of the process might not be too overwhelming for today's digital native students, the linguistic challenge of the video will most probably be hard to meet for many. With this in mind, the teacher needs to carefully guide the individual subtitling projects, giving ample scaffolding through implementing the following activities:

- putting lines in the correct order to produce proper subtitles;
- inserting the missing words (e.g., articles or prepositions) in the subtitles;
- synchronising teacher-made subtitles properly with the film.

The Autonomous Sub model needs to include the stage of sharing learner-made products. Thus, it is useful to create a YouTube channel as a medium for storing videos with student-made subtitles. Alternatively, learner-prepared materials could be displayed in the virtual space dedicated to the class, e.g. a class Moodle.

4. Using subtitled video materials for vocabulary instruction in LSP – Practical techniques and guidelines

When considering how to exploit the medium of subtitles, the major decision to be taken is what language(s) to choose. Gajek (2008) shows various language combinations that can be successfully exploited in language learning:

- L2 audio + L2 subtitles – listening and reading skills are activated simultaneously to reinforce verbal and graphical representation of language.
- L1 audio + L2 subtitles – foreign language reading as well as mediation skills are developed.
- L2 audio + L1 subtitles – listening comprehension is enhanced while giving learners support in making out the meaning for themselves.
- L2 audio + L3 subtitles – integrating foreign language experiences leads to greater awareness of multiculturalism and plurilingualism of the modern world.

The decision regarding which of the above models should be applied depends on two types of criteria: learner-related, such as general proficiency, familiarity with the professional area, amount of background knowledge, attitude to technology; as well as material-related, such as density of language, style of delivery, accent, amount of redundancy, amount of completeness of language exchanges.

Subtitled videos can be used in the classroom using tried and tested techniques of video implementation (Allan, 1985; Harmer, 2001; Krajka, 2006; Krajka, 2007; Lonergan, 1984; Stempleski, Tomalin, 2001): blind viewing, silent viewing, freeze frame, fast forward, jigsaw viewing/split viewing, jumbled sequence. These techniques rely mainly on the fact that while viewing tasks join two channels of perception (aural and visual), one of them can be temporarily switched off to develop learners' skills. With subtitles, the third channel of perception (visual-textual) becomes available, and again various instructional designs are possible to enhance learners' listening and reading comprehension abilities:

- displaying full-text subtitles;
- showing only partial subtitles (e.g., only selected problem words);
- displaying gapped subtitles (with key words to be reconstructed);
- highlighting particular words/parts of speech with bold/colour;
- displaying subtitle lines in the wrong order;
- manipulating display times of subtitles (same as audio, shorter/longer than audio, displayed with delay or prior to audio).

Given the range of possible viewing techniques, the teacher can freely use subtitled materials to enhance the process of vocabulary acquisition in any of its stages. To start with, vocabulary presentation will benefit most from using subtitles in L2 and their L1 translations to reinforce the listening experience. Similarly, for vocabulary presentation the teacher can design some general viewing tasks in which subtitles only play a supplementary role, showing the graphic form of the new words without greater focus on them. Furthermore, making the context of the recording clearer to students and generating their viewing interest in the initial stages of the process can be assisted by subtitles which explain who the characters are, and where and when the story is taking place. Clearly, the Teacher Sub model described above would be most appropriate for this phase of vocabulary acquisition as it is hardly realistic to expect learners to produce subtitles for a new piece of visual material.

Vocabulary practice is the phase of vocabulary acquisition during which learners recycle newly encountered words to transfer their meaning from their sensory memory to the short-term memory, and, eventually, to the long-term memory. Usually this phase is initiated and managed by the teacher. However, nowadays learners start to have a greater say in the choice of vocabulary items. Some limited amount of learner-made subtitling could be applied in this stage, for example, by offering students subtitle lines with gaps to be filled with particular words.

Finally, vocabulary production with a communicative purpose involves free selection of vocabulary by learners. The model of Autonomous Sub could be applied here, with learners producing their own subtitle lines based on what they hear or encouraging them to add situation descriptions to captions.

5. Preparing captioned video materials – technical solutions and procedures

The technical part of producing captions for videos encompasses a number of different areas which might demand teacher skills for smooth production of subtitled materials. On the one hand, instructors need to be in possession of a selected video file so that it can be loaded to a subtitling program. For streaming videos (playing 'live' from the website, stored at YouTube and other Video Sharing Sites), this involves downloading a video file to one's computer and converting it from a Flash video (.flv) file to one of the most common formats (.avi, .wmv, .mov, etc.). Downloading and converting can be accomplished with a number of video downloaders, such as YouTube Downloader, or, alternatively, online services such as Keepvid.com.

The second issue to be resolved while preparing videos for subtitling is to make sure that the computer is equipped with a video player which supports subtitles as well as codecs required to encode and decode audio and video files of different formats.

Thus, AllPlayer for the former and K-Lite Codec Pack for the latter need to be installed to facilitate the presentation of captioned videos to a class.

It needs to be stressed that, generally, the product of captioning is a separate text file (usually with a .txt or .srt extension), which needs to be stored in the same directory as the source video file in order to be displayed properly by AllPlayer. In contrast to producing captions embedded in films, producing a separate subtitle file does not interfere with the integrity of the video material to be subtitled, which is an important copyright issue.

Once the preparatory activities outlined above have been accomplished, the actual process of producing subtitles can start. Depending on the user's needs and skills, one of the two approaches can be used: an online service or a downloadable program. The former starts with either uploading a video or grabbing a video file from a Video Sharing Site, then the user is guided through the subtitling process in a couple of steps such as uploading a video file, introducing text, synchronizing, adding video information, checking work and producing the resultant subtitle file for download. Two examples of such services are Amara and DotSUB.

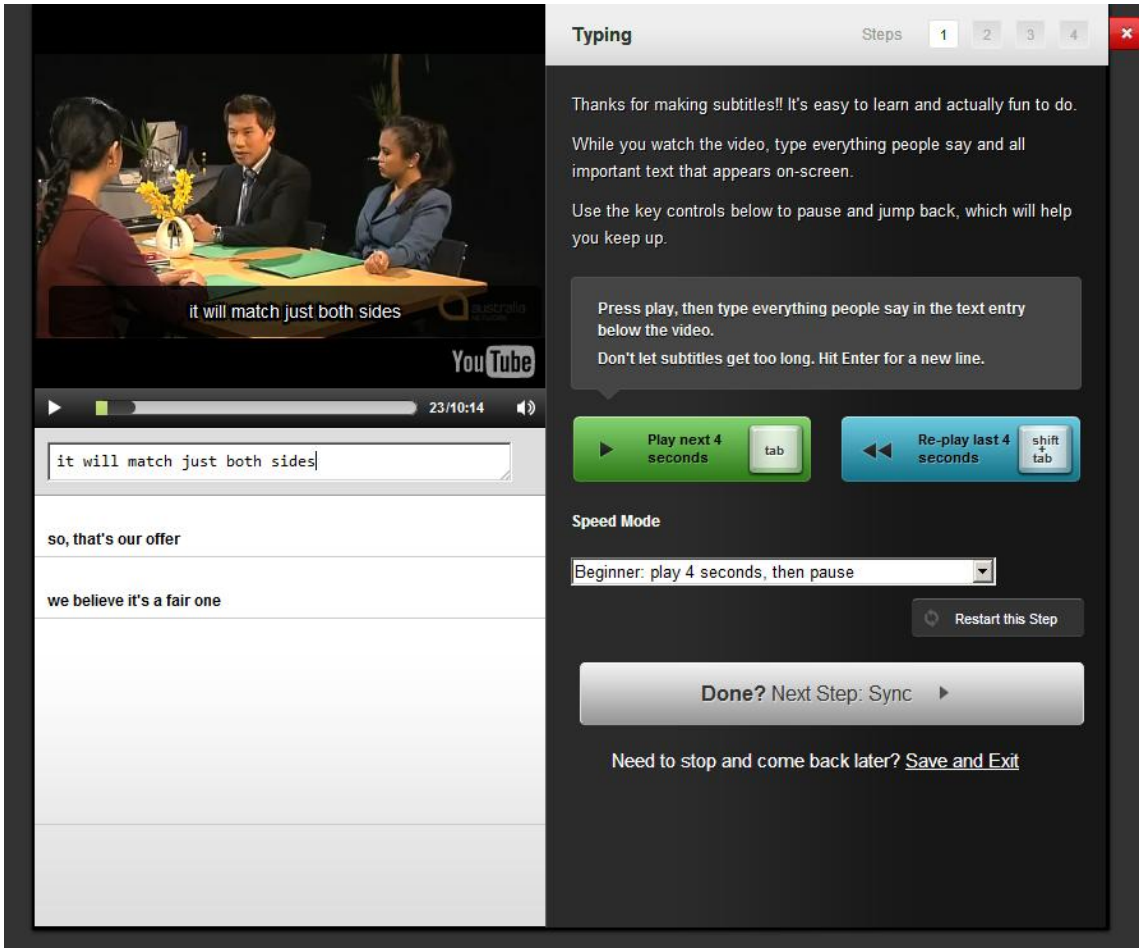

Figure 1. Captioning a YouTube video with Amara

Both Amara and DotSUB are free of charge and require only registration. Furthermore, the former can use existing accounts from some other social media sites such as Facebook, Twitter or Gmail in order to register. In terms of selecting videos, the former allows only subtitling online videos, while the latter also allows for uploading a file from one's computer. Amara seems to be slightly more user-friendly and especially the step of subtitle synchronization is done very intuitively, by pressing certain keyboard keys when a particular phrase should appear. DotSUB, on the other hand, needs a more traditional approach of writing in- and out-times. Finally, DotSUB allows multiple users to work on particular subtitles, which can be an interesting option for collaborative projects in the LSP classroom.

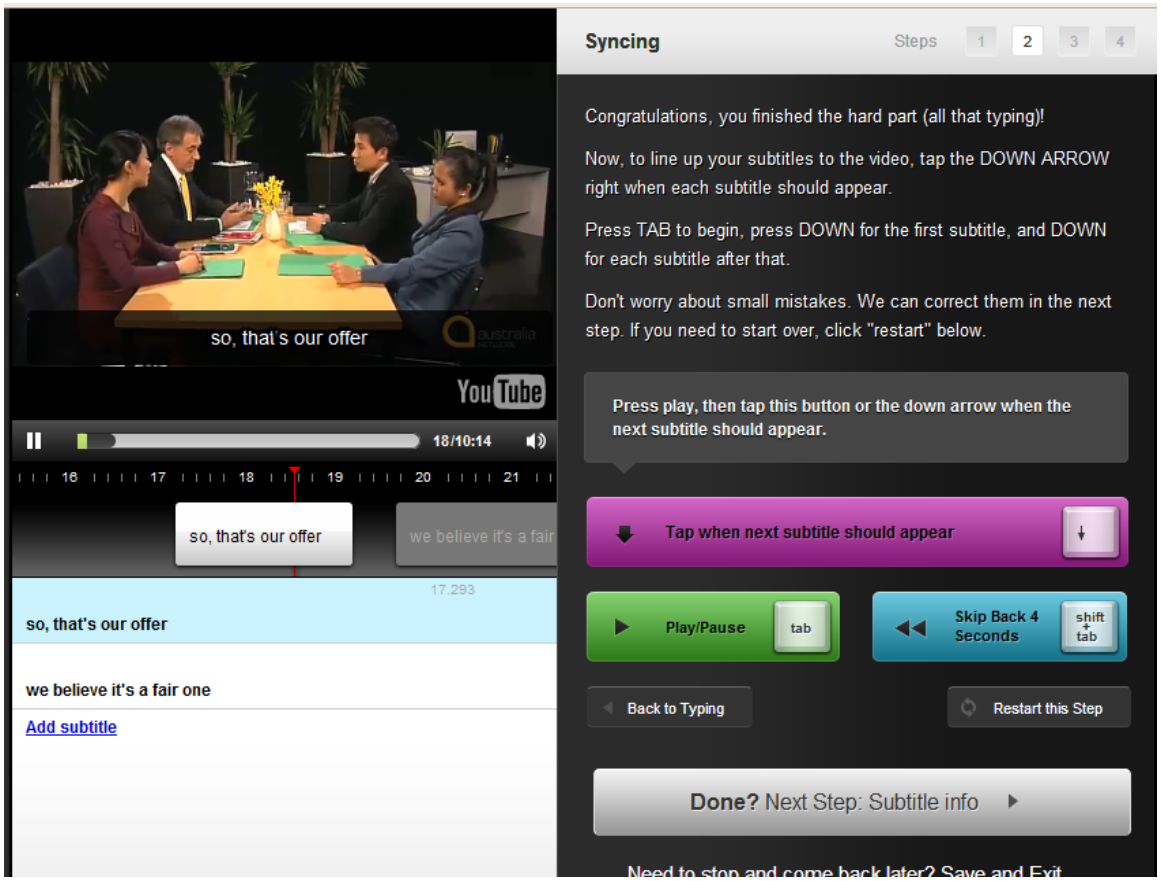

Figure 2. Synchronising subtitles in Amara using keyboard keys

Rather than use online services, which need reasonable bandwidth, a software solution can be adopted. Similarly, a number of freeware downloadable subtitling programs are available, differing in the degree of user-friendliness of interface and amount of functionalities. With regard to this point, Subtitle Workshop can be recommended for a multitude of functionalities needed by more advanced translators, as well as support for a variety of languages with non-Roman characters. Just like the online services described above, adding captions in Subtitle Workshop at the simplest level requires loading a video file, playing a video, inserting new subtitles and specifying their in- and out-times.

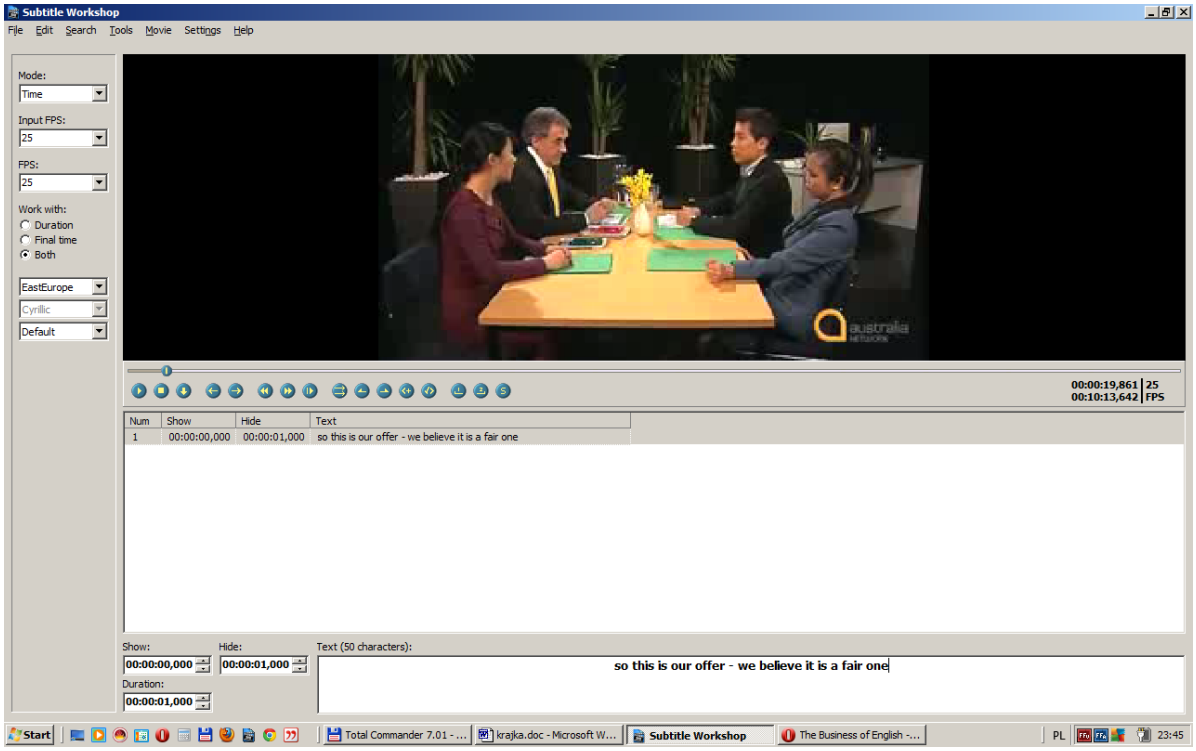

Figure 3. Adding subtitles with Subtitle Workshop

6. Implementing subtitles in a Business English lesson – A practical proposal

To exemplify how to use the subtitled materials in practice, the following proposal refers to the use of captioning in a Business English course for pre-intermediate learners. The subtitled videos are not applied during a single lesson only – instead, a longer process needs to be implemented in order to properly prepare learners for the experience as well as exploit the materials in various ways. The learning outcomes of such a curriculum addition would be to enhance learners' listening and reading comprehension skills, make them more confident in the acquisition of language from video-based context and expand upon their vocabulary by exposing them, both aurally and visually, to Business English vocabulary beyond their current level of proficiency.

1. The whole unit starts with viewing tasks during the initial topics of the curriculum to make learners confident enough with viewing comprehension.
2. Subsequently, the activities based on a script in the printed form follow, so that learners could become skilled at using the two channels: the verbal and the auditory.
3. Next, the printed support is replaced with full subtitles on the screen in further viewing tasks so as to make learners accustomed to reading L2 text.

4. Finally, the amount of subtitling is reduced from full scripting to individual words and selected phrases in order to develop learners' listening comprehension skills even more.

Thus, as can be observed in the proposal above, skillful use of captioning adds impact to the Business English course, enabling the teacher to adapt viewing comprehension tasks to the needs of the class depending on how difficult they may find the video extract.

7. Conclusion

Audiovisual translation, formerly restricted to translators with sophisticated and expensive movie editing software and subtitling translation skills, has become much more accessible to language teachers worldwide. Depending on the technical expertise and experience in producing video captions, various kinds of technical solutions can be used free-of-charge to enhance video materials with the visual channel of perception.

Once such materials are produced, LSP instructors are free to choose from among different implementation setups, ranging from teacher-prepared materials (Teacher Sub), through teacher-monitored learner group work (Class Sub) to learner-initiated individual work (Learner Sub). Thus, different degrees of learner involvement in the process can be envisaged, depending on the technical resources available, learners' familiarity with computers and their willingness to work on developing materials for the classroom.

The area of enhancing foreign language instruction with subtitled video materials is a relatively new one, and it needs both carefully controlled experimental studies and practical small-scale classroom applications. It is hoped that these two spheres will become reconciled and the procedures of audiovisual translation will find their way to the LSP instructor's teaching inventory.

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