ABSTRACT

The article addresses the issue of developing translators' digital literacy as a component of professional competence. Our aim is to provide a short practical analysis of students' experience of making subtitles and the role of the experience in developing students' digital literacy. The survey of students' opinion was conducted, whose results also support the necessity of translator students' special training in the sphere of digital technologies.

KEYWORDS

Digital literacy; subtitling; translators' professional competence; IT in the process of translator training; subtitling programs.

Introduction

Advancement in technology and, therefore, transition to a media-oriented society has made exchange of information and ideas more important than ever. With the expansion of audio-visual content's role in the dissemination of popular culture audio-visual translation has become crucial for entertainment and educational videos to be able to travel around the world or reach any user on the Internet. Furthermore, the law "About Culture" passed in Kazakhstan in 2006 has the article about compulsory translation – dubbing, subtitling or over-voicing - of all the films brought to Kazakhstan into Kazakh [1], which requires summarizing and synthesizing theoretical and practical experience in the field of audio-visual translation to be able to train highly-qualified professionals and reduce the cost of translation. Unfortunately, training of translation students in the sphere of ICT use and audio-visual translation, in particular, is not given much attention as it requires purchasing of special programs and equipment. Despite obvious necessity of the training, few researches have addressed the issue.

The aim of the research is to provide a short practical analysis of students' experience of making subtitles and the role of the experience in developing students' digital literacy. We also made an attempt to analyse the peculiarities of the computer programs used to create subtitles and the difficulties the translators face while using these programs. As a material for subtitling the students used videos of interviews and Ted talks speeches. The programs used for subtitling were “Aegisub” and “Amara.org”. A
number of students used additional programs to convert their videos into necessary format.

**Digital literacy of translators**

Digital literacy as one of the 21st century skills has been discussed in different contexts. However, the only sphere related to translation which most studies have focused on is foreign / second language education. As only few articles were written on the topic of translator’s digital literacy it is still a neglected area in the field of translation studies. Competence models of translators include basic skills of information search on the internet and use of machine translation programs (whose list is not given) [2], but they do not give a detailed outline of the skills and programs a professional translator should have and know. The research on information literacy of professional translators conducted by D. Sales and M. Pinto shows that "Translators are faced with the challenge and the responsibility of becoming acquainted with and using the diverse means that now exist for the location, retrieval, handling and dissemination of information, and of manipulating the extraordinary new resources that information and telecommunications technologies have made available for their work" [3, p.2]. The results of the survey the scholars have done among professional translators indicates the “need to strengthen computer or information-digital competences” [3, p.18], although the components included into the competence were not listed except for mentioning such specific software as a number of translation memories (e.g. Multiterm, GesTerm, TRADOS).

Another research dealing with translator digital literacy was conducted by M. Gamal, who rightly noted “the often-cited literary image of translation being a ‘bridge’ and a ‘window’ to the other will have to be replaced by that of a link and a web site” [4, p.6]. He suggests addressing such topics as “machine-aided translation, electronic resources, the online content, web site maintenance, translation ethics in the digital age, localization and audiovisual translation” [4, p.3] that he relates to digital technology and hence to digital literacy of translators demanded by industry.

According to P. Gilster digital literacy is the ability to create, assess and understand digital resources [5]. As visual content becomes more important than any other due to the Internet and TV M. Gamal suggests developing digital literacy of trainee translators through audiovisual translation studies [4].

**Subtitling as a type of audio-visual translation**

Audio-visual translation (AVT) as a branch of translation studies is a comparatively young science. Until recently different terms such as "film translation" [6], "film and TV translation" [7], "screen translation" [8, 9] and "multimedia translation" [10] were used to refer to this type of translation. Although the main function of any type of translation is to “transfer communicative effect of the source text partly modified by differences between two languages, cultures and communicative situations” (translated by the authors) [11, p.75], audio-visual translation implies multidimensional communicative code, which makes it different from other types of translation. Multidimensional code means that not only the text conveys the information, but the whole discourse including movements, colour and other visual effects, which influences the choice of methods and techniques used by the translator. D. Delabastista [7], P. Orero [12], D. Cintas [13], F. Karamitroglu [14] used the term audio-visual translation in their works, which emphasizes “the audio-visual dimensions of the communicative mode. Unlike communication through books, radio, telephone or sign language, audio-visual communication implies that both the acoustic channel through air vibrations and the visual channel through light waves is simultaneously utilised" [7, p.196]. The term has become the most accepted one to refer to this field of translation science.

The most common types of audio-visual translation are dubbing, subtitling and over-voicing. All of them are characterised by a number of specific features determining the main issues of AVT S. Cho [15] considers four concepts underlining the specificity of audio-visual translation: 1) the concept of constrained translation; 2) the concept of various audio-visual codes in AVT; 3) the concept of multimodality; and 4) the concept of prefabricated orality. Whereas dubbing and over-voicing have mostly time limitations in which the translator should fit the phrase in the target language, subtitles also have spatial restrictions and according to D. Sanchez [16] should be more literal unlike dubbing, which can stray considerably from the original to adopt the translation to the required norms / stated limitations.

E. Fois points out that definition of subtitles is still an ongoing process and notes that “hard translational definition of subtitle is the technical degree its writing requires, linked to conventions that may vary according to the distributor…” [17, p.5].

V.Ye. Gorschkova defines subtitles as "concise rendering of of a film dialogues representing their main idea through the written text placed in the film, usually in the bottom of the screen" (translated by the authors) [18, p.142]. Gottlieb gives more general definition as “the rendering in a different language of verbal messages in filmic media, in the shape of one or more lines of written text presented on the screen in sync with the original written message" [10, p.87]. In his earlier works he also gives the classification of subtitles dividing them into following groups:
Intralingual that are also called vertical subtitles as they change perceptive modality (spoken text is converted into written without any change);

- Interlingual or so-called diagonal type of subtitles, which change both perceptive modality and language;
- Open or non-optimal, which are integral physical part of a film or TV program;
- Closed or optional represented in form of teletext which you can view using correspondent decoder [19].

N. Matkivska suggests that three peculiarities of any type of subtitles determine their specific character, “namely correspondence between image, sound and text (transmittance of the translated message should coincide with dialogue in the source text...); change of spoken language into written one (this peculiarity often makes translator omit lexical units in translation); temporal and spatial restrictions specified by the usage sphere (size of a real screen is limited and subtitle text should be adapted to the width of the screen taking into account possibility to read subtitles)” [20, p.41]. Conventional temporal and spatial restrictions are summarised by P. Reich as follows: 1) subtitles should be placed at the bottom of the screen in order not to interrupt the image action; 2) there can be two lines at a maximum, otherwise the subtitles would cover too much of the screen, which would be very disturbing; 3) the subtitles can be either centred or they can appear at the left margin of the screen; 4) the majority of sources state that there should be maximally 35 – 40 characters in each line; 5) a full two-line subtitle should remain on the screen for 6 seconds [21, p. 21-22]. The maximum and minimum duration of a subtitle is very important as “subtitles which remain on the screen long enough to be read more than once are just as irritating as subtitles that disappear before the audience has had time to finish reading them” [22, p.67]. Karamitroglou states that the average reading speed of subtitles is 150 – 180 words per minute, which is 2.5 – 3 words per second. As a full two-line subtitle contains about 14 – 16 words, it should be projected for some 5.5 minutes. After the addition of the time necessary for the eye to notice that a subtitle has appeared at the bottom of the screen, we get to the final result – 6 seconds [23].

In our opinion subtitling is the most difficult type of AVT, especially if source and target languages have different structures and use varying amounts of verbal content to express the same meaning. At the same time subtitling is cheaper comparing to dubbing, which allows to consider it as more preferable tool for making any video content accessible to the speakers of different languages.

**Research methodology**

Since we consider our study to be an initiative stage of continuous research, the case study method was chosen as the most appropriate one. The experiment was initiated by students who wanted to try something different from paper based translation and were interested in audio-visual translation. Using case study method we worked with 10 student-volunteers who were given the task to make subtitles to a short video. Subtitling as a type of AVT was chosen for a reason that it is rather challenging, but at the same time can be used with a wider range of videos than dubbing, for instance. Theory concerning subtitling process was presented to the students. The list of sites dealing with subtitling was given for reference as well. The objectives of the experiment were to introduce trainee translators with special sites and computer programs used to create subtitles and help students implement theoretical knowledge in practice. The experience of creating subtitles was then analysed and main issues were discussed with the students. One of the remarkable features of the research was the fact that some students made subtitles in Russian and some in Kazakh (6 and 4 respectively). This gave the opportunity to compare peculiarities of English-Russian and English-Kazakh subtitling.

The students chose the computer program for making subtitles themselves from the suggested list in accordance with the type of video they have chosen. Those who have chosen the video, which was not uploaded to any of the internet channels used “Aegisub” program and those students whose video was from a channel on the internet used “amara.org”. Both programs needed to be accessed first: “Aegisub” should be downloaded and “amara.org” should be signed up for.

In terms of technical peculiarities of performance, D. Sanchez distinguishes four methods of subtitling: preliminary translation – adaptation – spotting; preliminary translation – spotting – adaptation; adaptation – spotting – translation; translation / adaptation – spotting [16, p.10]. So the next step the students had to make was preliminary translation of the text itself. Translation as a process had particular difficulties but it was not a new task for the students. The problems began when students started ‘writing’ subtitles using the computer programs. Spotting needed to decide when each subtitle would go in and out and at the same time students had to adopt the text to the temporal and spatial restrictions of the screen. Here are some examples of the difficulties students faced at this stage described in their reports:

“As for my experience, I have been teaching the language for 23 years. I think that it’s really long...”

“Что касается меня, я преподаю язык вот уже 23 к. лет. Я считаю, что это...”
period and long experience. I passed different stages of language teaching: I was a teacher of secondary public schools, I was a teacher of lyceums, and I was a language teacher of universities and institutes. Now, I work upon translation, exactly Kazakh-English translation. So, I consider myself to be a really experienced teacher ("smiles").

It is obvious that students had to rephrase some of the sentences due to restricted number of signs that can be used at a time on the screen. For instance, As for my experience was translated as что касается меня but not что касается моего опыта. The sentence Now, I work upon translation, exactly Kazakh-English translation, was compressed and translated as Сейчас я специализируюсь на переводе с казахского на английский (*улыбается*).

Those students who were making subtitles in Kazakh experienced even more difficulties as adaptation to the needs of Kazakh language broke the correspondence of sound and subtitled text in many cases as the sentences had to be divided into different chunks in Kazakh subtitles due to quite different grammatical structures of English and Kazakh (picture 2).

00:14 In 2012, when I painted the minaret of Jara Mosque 00:14 2012 жылы Джара мешітінің мұнарасын бояғанда, 00:18 in my hometown of Gabés, in the south of Tunisia, 00:18 in my hometown of Gabés, in the south of Tunisia,

It can be clearly seen from the pictures 1 and 2 that the programs used for creating subtitles give different opportunities. As “Aegisub” allows to choose the font, students made the subtitles more readable in their opinion but violated the rules of subtitles’ spatial position. Amara.org has preset text qualities, which allows to make more professional subtitles.

Survey of students’ opinion
In the course of the survey results analysis we should take into consideration such factors as (1) the age of the participants (16-20 and 20-30 age groups); (2) their personal experience in making subtitles; (3) their attitude to digital literacy formation and its future development as well as representation of those problems in curriculum.

All participants were aged between 18 and 21. Answering the first question about awareness concerning special software for making subtitles, most of the respondents (7 of 10) chose negative answer. Before they started working in the frame of Translation Center project, they had no idea which programs to use for making subtitles. This fact proves the necessity of special training for translators in order to improve their digital literacy.

Questions 2 and 3 were related to self-assessment of digital literacy level of Translation Studies students before and after work with the aforementioned subtitling programs. It is necessary to point out that 3 of 10 students only assessed their level of digital literacy as 'high' whereas 5 of them considered it as being 'low' before they started the work on the project. The situation changed dramatically after the project was completed. Thus, 6 of 10 students who participating in the project of making subtitles changed their evaluation from 'low' and 'moderate' to 'high' explaining it by the fact that they learned to work with three different programs.

Question 4 considering the students' attitude to the use of "Aegisub" / "Amara.org". for making subtitles clarified translator trainees' attitude to digital resources use in their professional activity as well as their position concerning the necessity of such competence. All the students treated the process of making subtitles as 'very useful for professional development', 'challenging kind of work', 'amazing'. Although the students participating in the project can be considered 'digital natives' all of them indicated facing some difficulties in the process of digital resources implementation in connection to translation.

By means of question 5 we made an attempt to estimate how important digital literacy was for translation students. The results showed that 6 of 10 respondents consider digital literacy and use of special IT resources as 'very important', 3 of 10 as 'important', whereas 1 respondent considered such kind of information to be 'of little importance' for the future work in the field of translation studies.

Summing up the results of the survey, it is necessary to underline that most of the respondents perceive the significance of digital resources application in the field of their professional activity. So we can conclude that most translator trainees are motivated for future work in the field of subtitling on the basis of digital technology.

Conclusion

In the course of the experiment students made subtitles for short videos (both ready-made TED talks and their own short video interviews). During the experiment both students and instructors had the opportunity to ensure that subtitling requires not only complete, stylistically, grammatically and orthographically correct translation of phrases but distinguishing between major and minor information contained in the original text, which is extremely important for the process of subtitling as compressing of the text is inevitable. Special translation skills should be combined with ability to use various computer programmes (in our case – Aegisub and Amara.org) as tools in making subtitles.

Use of the case study method allowed us to analyze the certain results of students' work in the field of subtitling (making Kazakh and Russian subtitles for the texts in English in the frame of the project suggested by Translation center). Moreover, we observed the process of translators' digital literacy formation through the choice of different programs working on the basis of the Internet platforms and requiring application of such video-hostings as YouTube and other online services and attempts to learn how they work. Adoption stage in making subtitles proved to be the most difficult for the students. Although both "Aegisub" and "Amara.org" give the opportunities to take into account specificity of source and target languages, for example, the difference in the length of words in Kazakh, Russian and English languages some of the rules suggested for European languages proved to be irrelevant for Kazakh and some students started a research on the topic.

Peculiar characteristics of contemporary translators work presuppose the necessity of digital literacy, especially for such specific type of translators' professional activity as subtitling. The survey hold by the authors props up all the aforementioned arguments since translation students realise the crucial importance of digital literacy. So the digital literacy formation requires a) use of the latest equipment and software b) strengthening the technical training of translators, improving their knowledge and skills in the application of ICT.

Литература

1. Закон Республики Казахстан от 15 декабря 2006 года № 207-III «О культуре» URL: http://online.zakon.kz/Document/?doc_id=30081960#pos=1;-263

References

1. Zakon Respublikki Kazakhstan ot 15 dekabra 2006 goda № 207-III «O kul'ture»
5. Sales D. and Pinto M. The Professional Translator and Information Literacy: Perpectives and Needs. URL: http://repositori.ua.es/xmlui/bitstream/handle/10234/39300/51333.pdf?sequence=1

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