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Crowdsourcing Subtitling: A Case Study of TED Talks

(Bachelor Thesis)

Crowdsourcing v titulkování: Případová studie TED Talks

(Bakalářská práce)

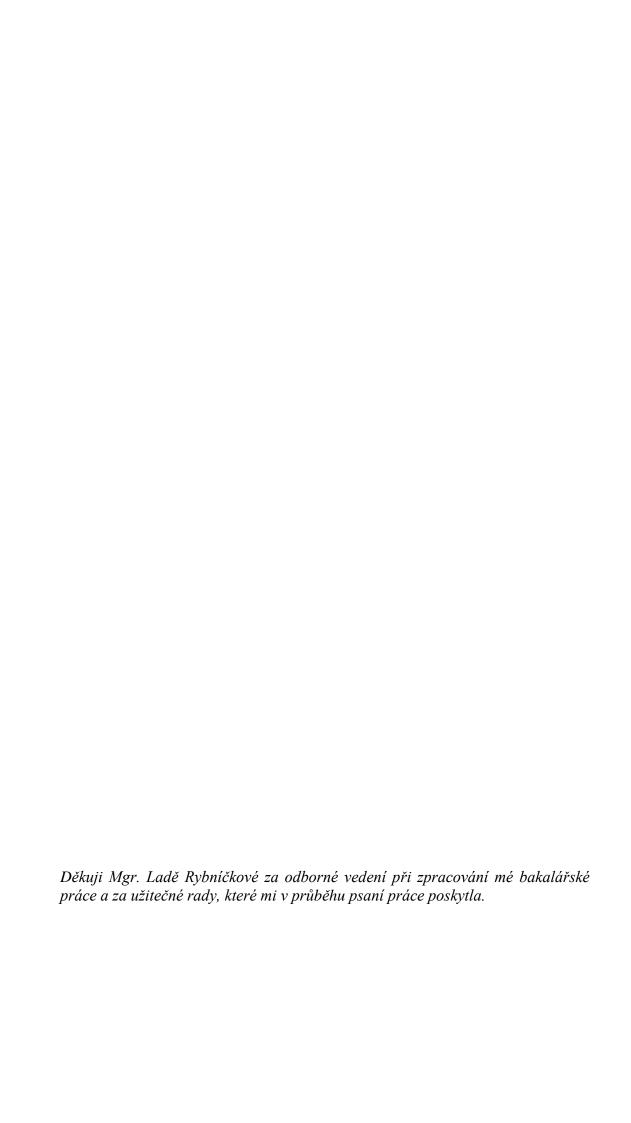
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List of Abbreviations

AVT Audiovisual Translation

CPS Characters per Second

OTP Open Translation Project

OTPdia Open Translation Project Wikipedia Website

SL Source Language

ST Source Text

TED TED Organization

TL Target Language

TT Target Text

VSS VisualSubSync

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Introduction

With the omnipresence of audiovisual material in today's globalized world, subtitling has been experiencing a significant growth in popularity. The nature of subtitling allows filmic media to easily travel across language boundaries, thus becoming available to a larger audience. This fact closely relates to the renowned and striking slogan of TED conferences – "Ideas worth spreading".

TED conferences are non-profit conferences whose outstanding concept has become a universal phenomenon over the course of its existence. The conferences host speakers of different nationalities, fields of expertise and varying background but one aspect unites them all — they have something to say, something worth spreading. The speakers give talks on diverse subjects; the talks are recorded and subsequently uploaded to the internet. Since the talks could be viewed from almost anywhere in the world, a strong need for translation emerged.

The topic of the thesis is "Crowdsourcing Subtitling: A Case Study of TED Talks". I have chosen this topic because of the increasing popularity of TED Talks and mainly because of my growing interest in TED Talks translation and subtitling practices.

The first chapter of the thesis introduces the concept of TED conferences, gives a brief historical overview and speaks about the branches of the conferences that have emerged from the initial idea over time. The chapter principally uses online resources such as the official TED website, online magazines and articles.

The second chapter deals with subtitling as a field of audiovisual translation. The chapter primarily focuses on subtitling rules and conventions concerning the spatial, temporal and typographical dimension. To mention some of the parameters described, the number of characters, reading speed and the length of individual subtitles is discussed as well as subtitling-specific punctuation. Subsequently, the chapter tackles sound representation, segmentation and translation strategies employed when creating subtitles. The primary sources of literature used are *Audiovisual Translation: Subtitling* by Jorge Díaz Cintas and Aline Remael (2007), *A Proposed Set of Subtitling Standards in Europe* by Fotios

Karamitroglou (1997) and *Titulkujeme profesionálně* by Miroslav Pošta (2011) who provides an insight into subtitling in Czech language and describes its specifics.

The third chapter provides a detailed description of TED Talks translation and subtitling practices. Firstly, the chapter discusses the concept of crowdsourcing and the process of becoming a TED translator. A reference is also made to the profile and motivation of the community of translators. Secondly, the subtitling process and the tasks of people involved in a translation of a single TED Talk are mentioned. Since all talks are subtitled by volunteers, their experience in translation and subtitling may differ considerably. The chapter therefore summarizes the issue of language expertise and experience in translation studies according to Lidia Cámara de la Fuente's (2014) case study Multilingual Crowdsourcing Motivation on Global Social Media. Furthermore, the third chapter presents official TED subtitling rules and conventions with reference to the parameters listed in the second chapter. Since many TED Talks subtitles available on YouTube do not utterly correspond to the parameters set by different theorists, for example in terms of spatial and temporal dimension, their official parameters are presumed to show differences on various levels. The subtitling software commonly used for creating TED subtitles is subsequently described at the end of the chapter and an online interface is put into contrast with an offline subtitling editor.

The main objective of the thesis is to describe how subtitling of TED Talks is realized; compare TED subtitling rules and conventions with the ones proposed by different theorists; explain TED subtitling process and provide an analysis of the online interface and offline subtitling editor with its advantages and disadvantages which directly influence the ergonomics and speed of the subtitling process as well as the subtitles as a final product.

1 TED conferences

The history goes back to 1984 when Richard Saul Wurman, an American architect and graphic designer, together with Harry Marks organized a conference that laid a foundation for TED conferences. The theme of the first conference was **Technology**, **Entertainment** and **Design**. By choosing this theme, Wurman unintentionally coined the organization's name and acronym lasting throughout the history, featuring the three initial letters – TED.

"Welcome to the dinner party I always wanted to have but couldn't," Wurman opened the conference. American Express Company listed an interview with Richard S. Wurman on their website – when asked about what made him hold the event, he replied, "In the early 1980s there was a convergence taking place between technology businesses, the entertainment industry and design professions. Not many people saw it. I did and thought it was a great opportunity to follow my passion in life, which has always been to meet interesting people¹."

Wurman's project started as for-profit, was held in Monterey Conference Center in California and hosted the first six "talks" in the history of TED era². The American Express website also mentions the first speakers, one of whom was Mickey Schulhof, a former president of Sony USA, who introduced "compact disc digital audio" well before anyone had a CD player; he was followed by demonstrations of 3D graphics from Lucasfilm which later became Pixar and Apple Macintosh with its first model of computer. According to Wurman, the number of attendees reached 300, however, the conference was not financially successful and one of its main objectives – to make money – was not met.

It wasn't until 1990 for the second conference to take place – this time Wurman succeeded and the event has been held annually ever since³. According

¹ American Express. 2014. "Richard Saul Wurman: TED's Founder Discusses How It All Began." Accessed January 18, 2016.

https://www.americanexpress.com/us/small-business/openforum/articles/richard-saul-wurmanteds-founder-discusses-how-it-all-began/.

² TED. "History of TED." Accessed January 18, 2016.

https://www.ted.com/about/our-organization/history-of-ted.

³ Wikipedia. "TED conference." Accessed January 20, 2016.

https://en.wikipedia.org/wiki/TED_(conference).

to the official TED website⁴, an entrepreneur Chris Anderson took over the highest post of TED curator after Richard Wurman in 2002. The change in leadership took place after Anderson's media company *Future* acquired TED and subsequently sold it for £4 million to the Sapling Foundation, a non-profit organization also owned by Anderson⁵. Until 2008, only one TED conference took place yearly in Monterey, California. Since 2009, two official conferences are held every year, one of them called **TED**, the other one called **TEDActive**⁶. Due to an increasing popularity and growing number of attendees, the events relocated from Monterey to Long Beach and Palm Springs, California, where they were held between 2009–2013. To celebrate the conference's 30th anniversary, the organizers decided for another relocation. Since 2014, the main TED conference and TEDActive conference are held in Vancouver and Whistler respectively⁷. According to TED website⁸, about 140 official employees are involved in the organization process of these events.

The concept of TED conferences revolves around speakers giving short, powerful talks with the objective to inform, educate and entertain in an innovative way. The topics cover whole spectrum of fields from technology, business, education and science to history, art, human relations and many others. The talks are usually up to 20 minutes long and may or may not be accompanied by a multimedia presentation. The conference has hosted many famous speakers including Stephen Hawking, Bill Gates, Al Gore and Bill Clinton. Nowadays, one conference lasts approximately five days and features more than seventy speakers.

Since TED Talks often target problematic areas of living in the 21st century and aim at "making the world a better place", there was a need to spread the ideas beyond the walls of the conference rooms. As explained on CNN website⁹, the universality of TED Talks was achieved in 2006 when "TED's

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⁴ TED. "History of TED". Accessed January 18, 2016.

https://www.ted.com/about/our-organization/history-of-ted.

⁵ Wikipedia. "TED conference." Accessed January 20, 2016.

https://en.wikipedia.org/wiki/TED_(conference).

⁶ TED. "History of TED". Accessed January 18, 2016. https://www.ted.com/about/our-organization/history-of-ted. ⁷ (ibid.).

⁸ TED. "Who we are." Accessed January 20, 2016.

https://www.ted.com/about/our-organization/who-we-are.

⁹ CNN. 2014. "How TED got famous." Accessed January 20, 2016.

leadership decided to put its archive of recorded talks online for free. The thinking was that there were limits to how much impact a talk could have if its audience was only a thousand people, even if those people were influential ones."

1.1 Attending a TED conference

The audience made up of 1,200 attendees per a single event are an essential part of the conferences. Before 2014, the conferences have seen up to 1,400 people turnout but due to oversold premises, TED decided to downsize¹⁰. The events are application-only, as explained in the following statement. "Attendance at TED is by application, and the attendees – scientists, CEOs, designers, intellectuals – are as extraordinary as the speakers. TED's success is in bringing together up to 1,200 of the world's most remarkable people across many fields. The result? Unexpected connections. Extraordinary insights. Powerful inspiration¹¹."

Despite the fact that the events are non-profit, it is obligatory for the attendees to pay a yearly fee. Until January 2007, TED membership cost \$4,400. However, it then rose to \$6,000. TED considers the sum as a charitable contribution because, as explained below, the money is spent soon after received.

"TED makes money through conference attendance fees, sponsorships, foundation support, licensing fees and book sales, and we spend it as soon as we get it — on video editing, web development and hosting for TED Talks and TED-Ed videos (ideas are free, but bandwidth is expensive...); support for community-driven initiatives like TEDx and the TED Fellows, and of course, paying fair salaries to staffers and interns¹²."

http://edition.cnn.com/2014/03/17/opinion/cohen-30-years-of-ted/.

¹⁰ TED. 2014. "4 exciting changes." Accessed January 23, 2016.

https://conferences.ted.com/TED2014/program/.

¹¹ TED. "Conferences." Accesed January 23, 2016.

https://www.ted.com/about/conferences.

¹² TED. "How TED works." Accessed January 28, 2016.

http://www.ted.com/about/our-organization/how-ted-works.

1.1.1 TED controversies

The issue of paying an admission fee was among the reasons of a few controversies that TED conferences have faced throughout the history. Sarah Lacy, an American journalist for the Bloomberg Businessweek Magazine denoted the conferences as elitist and snobbish, though admitting her words may have partially been "sour grapes" as she never got to attend a single TED event. "I've heard some disturbing stories about people who have gone to TED for years and still are denied a 'floor pass' because they aren't important enough. One friend told me of being de-invited to TED after quitting an ostensibly prestigious San Francisco job 13," Lacy wrote in her online article from 2008.

Similarly, a Lebanese-American essayist and scholar Nassim Taleb has labelled TED as a "monstrosity that turns scientists and thinkers into low-level entertainers, like circus performers¹⁴".

However true these words might be, it is worth noting that the financial contribution of these "elitist low-level entertainers" brings TED's non-profit budget at least \$7.2 million every year.

1.2 Types of TED conferences

It is important to note that only the two main TED conferences historically taking place on the West Coast of North America have been mentioned so far. Many programmes and initiatives have emerged from the initial concept over time, resulting into a number of different "sub-conferences" organized all over the world.

One of the main programmes is called **TEDx**, where the "x" stands for "an independently organized TED event". According to TEDx website, "the TEDx Program is designed to help communities, organizations and individuals to spark conversation and connection through local TED-like experiences¹⁵". There are

¹³ Lacy, Sarah. 2008. "Why I'm fed up with TED." Accessed January 30, 2016. http://www.bloomberg.com/news/articles/2008-02-29/why-im-fed-up-with-tedbusinessweek-business-news-stock-market-and-financial-advice.

Olson, Geoff. 2014. "We need to talk about TED." Accessed January 30, 2016.
 http://www.vancourier.com/opinion/columnists/we-need-to-talk-about-ted-1.852874.
 TED. "TEDx Program." Accessed January 30, 2016.

several types of TEDx events categorized by the place or institution they are held by but also by the speakers' age and gender. Some of the existing types are TEDx University, TEDx Youth, TEDx Women and TEDx Salon.

To hold an event, organizers must first apply for a free licence from TED and meet its fairly strict rules concerning branding, speakers, a website, public relations, social media, etc.¹⁶ The organizers are allowed to charge an attendance fee but the event shall remain non-profit. For this reason, the ticket price must first be approved by TED and must not be higher than \$100. As opposed to the main TED conferences, those of TEDx cannot exceed one day in length. TEDx events take place all over the world; they are also recorded and subsequently uploaded online. TEDx events are commonly named after the city they take place in, e.g. TEDx Prague. Every event must have its theme, motto or a slogan.

A special category of TED videos called **TED-Ed** was launched in 2012. It features short animated video clips designed for educational purposes. TED-Ed is a virtual home to a global network of more than 250,000 teachers. The mission of the initiative is "to spark and celebrate the ideas of teachers and students around the world¹⁷".

1.3 TED Talks online

Since 2006 when TED decided to upload its archives online, TED's YouTube channel¹⁸ accounts for over 2,000 recorded talks originally given on the two main conferences.

TEDx Talks are uploaded to a separate channel and vastly outnumber TED Talks' channel with more than 70,000 talks from all over the world. The TED-Ed channel currently features almost 1200 videos. The videos of all TED's channels combined have been viewed for over 1.6 billion times.

http://www.ted.com/about/programs-initiatives/tedx-program.

https://www.ted.com/participate/organize-a-local-tedx-event/before-you-start/tedx-rules

http://ed.ted.com/about.

https://www.youtube.com/user/TEDtalksDirector?&ab_channel=TED

¹⁶ TED. "TEDx Rules." Accessed February 5, 2016.

¹⁷ TED. "About TED-Ed." Accessed February 5, 2016.

¹⁸ TED channel. Accessed February 5, 2016.

2 Subtitling

Subtitling is a branch of audiovisual translation (AVT) which has been experiencing enormous growth thanks to the modern globalized world, media and technology. As noted by Díaz Cintas (2009, 1) "despite being a professional practice that can be traced back to the very origins of cinema, AVT has been a relatively unknown field of research until very recently". Inghilleri (2005, 13) describes AVT as "a branch of translation studies concerned with the transfer of multimodal and multimedia texts into another language and/or culture".

Gambier (2003, 178-9) who denotes AVT as "screen translation", points out "the key word in screen translation is now **accessibility**, a concept that covers a variety of features:

- Acceptability related to language norm, stylistic choices and terminology
- Legibility for subtitling in terms of fonts, position and subtitle rates
- Readability reading speed rates, reading habits and information density
- Synchronicity defined for dubbing, voice over and commentary as appropriateness of the speech to lip movements
- Relevance in terms of what information is to be conveyed, deleted,
 added or clarified in order not to increase the cognitive effort
- Domestication strategies defined in cultural terms an audiovisual product has to be different enough to be 'foreign' but similar enough to what viewers are familiar with to retain their attention."

Subtitling is one of the main types of AVT together with dubbing, "although this does not exclude other possibilities – the typologies established by Gambier (1996), Luyken (1991) and Díaz Cintas (1999a) distinguish as many as ten types of multilingual transfer in the field of audiovisual communication (Díaz Cintas 2003, 195). To mention just a few, Gambier (1994, 275–7) firstly distinguishes between the category of **retention** and **replacement of original language** – in the category of retention he talks about subtitling, surtitling and

interpreting; in the category of replacement dubbing, narration, commentary and revoicing is mentioned.

Nowadays, subtitling is employed in many areas of everyday life, such as television, cinema and from a large part, the internet. According to Gottlieb (2001, 87), subtitling can be defined 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".

The filmic media are closely connected to the everlasting debate on advantages and disadvantages of subtitles and dubbing. Concerning the topic of this paper, TED Talks do not employ dubbing, therefore the focus of the thesis will exclusively be on subtitles. Díaz Cintas (2003, 199) affirms that subtitling is "the mode that has undergone the greatest growth, and that will continue to grow in the foreseeable future". As the main reasons he lists **speed**, explaining that subtitling "is the quickest method", and secondly **price** – subtitles are supposedly "the most economical to implement" (ibid.). Concerning price, Díaz Cintas (2003, 196) puts forward an estimate that "subtitling is some ten to twenty times less expensive than dubbing". Similarly, Pošta (2011, 29) talks about the comparison of prices in Europe based on data from an EU report. On average, dubbing was found to be 11.6 times more expensive than subtitles.

2.1 Types of subtitles

The types of subtitles can be distinguished from different perspectives. Ivarsson (2004) describes various methods and mechanical processes used for making subtitles over the course of history before the "digital age" – for example, he mentions the use of chemicals and laser for "imprinting" subtitles onto a film.

Subsequently, he talks about the placement of subtitles on the screen and other characteristics¹⁹.

This chapter deals with the linguistic and technical categories recognized by the renowned theorists of AVT. Gottlieb (1997) makes the point that subtitles can be divided **linguistically** and **technically** – the linguistic point of view differentiates between intralingual and interlingual subtitles. Díaz Cintas and Remael (2007, 14) explain "intralingual subtitling involves a shift from oral to written but stays always within the same language, hence the reluctance of some to call it translation". For more detailed classification of subtitles see Figure 1. According to Gottlieb (1997), interlingual subtitling is simply a rendition between two different languages. The difference between open and closed subtitles lies within the fact that open subtitles cannot be willingly turned off, whereas closed can. "Historically, the terms 'interlingual' and 'intralingual' subtitles correlated with open and closed subtitles respectively. Interlingual subtitles have tended to be printed on the actual film, thus becoming part of the audiovisual text itself' (Inghilleri 2009, 15). Inghilleri also mentions that intralingual subtitles in their essence nowadays stand for subtitles "for the deaf and hard of hearing in the audiovisual marketplace" thanks to the accessibility friendly initiatives which are given increasing attention; subtitles for the hard of hearing do not only contain rendition of speech but also sound constituents (ibid.).

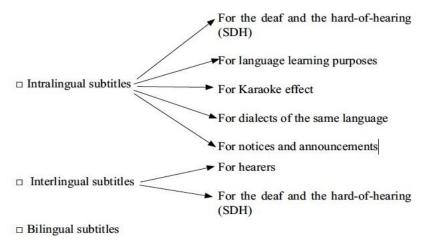


Figure 1 Types of subtitles according to Díaz Cintas and Remael (2007, 14).

¹⁹ For more information see Ivarsson, Jan. 2004. "A Short Technical History of Subtitles in Europe." Accessed February 10, 2016.

http://www.transedit.se/history.htm.

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2.2 Standards of Subtitling

When creating subtitles, it is important to follow given rules and conventions in order to maintain a unified pattern throughout the entire process. According to Karamitroglou (1997), "the attempt nowadays is rather to describe the various subtitling conventions [...] rather than to impose new ones". The subtitling conventions tackled by many theorists show differences in some respect but generally oscillate around similar criteria. Nonetheless, it is important to point out that in practice, specific parameters will vary with respect to clients' requirements.

2.3 Temporal and spatial conventions

Karamitroglou (1997) asserts a subtitle should be limited to a maximum of two lines so that only 2/12 of the screen is covered. The number of characters per line is estimated around 35 by Karamitroglou (1997), meanwhile Pošta²⁰ (2011, 43) acknowledges 30–37 characters is usually used for TV broadcasting and around 40 characters in DVD and cinema industry. In order to save space, fonts without serifs are used, for example Arial and Helvetica (ibid.). From a large part, Pošta (2011) agrees with Karamitroglou's (1997) standards of subtitling in his book. Moreover, he comments on the specifics of subtitling in Czech language.

Subtitles are sometimes presented against a one-colour background "since it has been proven that it is easier for the eye to read against a fixed rather than a varying/moving background" (Karamitroglou, 1997). The duration of a subtitle is generally determined by **reading speed** expressed in number of characters per second (CPS). Karamitroglou (1997) affirms it has been proven for an average viewer to read 150–180 words per minute, which means approximately 15–18 CPS. Pošta (2011, 49) states that not too long ago the reading speed was commonly set at 12 CPS but has already shifted to 16–17 CPS. He even mentions an occasional occurrence of 20 CPS, however, in consideration of an average viewer this seems unacceptable (ibid.). Standards are also set for subtitle

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²⁰ Unless stated otherwise, all translations from Czech are mine.

minimum and maximum duration. The varying length of subtitles according to different theorists is shown in Figure 2.

	Karamitroglou	Díaz Cintas and Remael	Carroll and Ivarsson
	and Pošta		
Minimum duration	1.5 sec	1 sec	1 sec
(e.g. 1 word)			
Maximum duration	3.5 sec	3 sec	Not specified
– one line (7–8 words)			
Maximum duration	6 sec	6 sec	7 sec
- two lines (14–16 words)			

Figure 2 Minimum and maximum duration of subtitles according to Karamitroglou (1997), Díaz Cintas and Remael (2007, 85–88) and Carroll and Ivarsson (1998).

Another temporal parameter presented by Karamitroglou (1997) is the "lead-in" time – a subtitle should not appear simultaneously with the beginning of the utterance but 0.25 seconds later to give the brain time to anticipate speech and subsequent appearance of a subtitle. Karamitroglou further argues that "subtitles should not be left on the image for more than two seconds after the end of the utterance, even if no other utterance is initiated in these two seconds" so that a feeling of distrust is not initiated (ibid.). A subtitle displayed too long may have the undesirable effect of the viewer re-reading it instead of focusing on what is happening on the screen.

In case of two consecutive subtitles, Carroll and Ivarsson (1998) propose "a minimum of four frames should be left between subtitles to allow the viewer's eye to register the appearance of a new subtitle". Pošta (2011, 46) explains four frames are equal to 0.16 seconds in case of TV broadcasting, and 0.17 seconds in case of cinema. Karamitroglou (1997) talks about a slightly longer pause, 0.25 seconds. As described later, the rule of a pause between two consecutive subtitles is often not respected in case of TED Talks subtitles.

2.4 Typographical conventions and sound representation

Punctuation in subtitling is in some respect similar to ordinary printed materials but definitely has its specifics. Karamitroglou (1997) makes the point that standard use of commas is employed "in order to suggest a short pause in the reading pace". He then asserts subtitles should end with a full stop, a question mark or an exclamation mark but the use of the latter two should be restricted (ibid.). Also, Karamitroglou (1997) mentions the possibility of ending with "sequence dots" (...) to signal the sentence is incomplete and continues in the following subtitle, which should begin with three dots as well, in this case "linking dots". Pošta (2011, 38) points out that this statement does not apply for Czech subtitles since in the case of Czech audience the sequence dots would evoke a pause or an incomplete statement which does not continue. According to Pošta, an unfinished sentence that continues is sufficiently indicated by a missing full stop, question mark or exclamation mark at the end (ibid.).

Hyphen is used to present an exchange of speakers within a single flash – as stated by Pošta (2011, 39), the use of a space character after a hyphen is optional. Example 1 demonstrates the use of hyphens without a space character.

Example 1 -You shouldn't have said that. -Why?

Díaz Cintas and Remael (2007, 111) note that hyphen on the first line is increasingly omitted for practical reasons, as shown in Example 2.

Example 2 You shouldn't have said that.
- Why?

Pošta (2007, 41) further implies for a subtitler to make use of universally known symbols such as %, \$ and €. He continues by saying that when audiovisual text contains numbers, one can encounter subtitles containing numbers 1–10 written in words and higher numbers in numerals (ibid.).

Karamitroglou (1997) describes different formatting of text and its function – italics are used to "indicate an off-screen source of the spoken text", for

example a phone conversation and narration; bold and underlined text is not to be used in subtitles. Upper-case letters are assigned the function of conveying a display or a caption, e.g. a written sign (ibid.). Carroll and Ivarsson (1998, 116) add the function of putting emphasis on a word when needed, as shown in Example 3.

Example 3 This is NOT what I'm talking about.

Anna Foerster (2010, 85) calls this method "aesthetic subtitling, as it draws attention to the subtitles via aesthetic means exploring semiotic possibilities, which include the semantic dimension without being restricted by it".

2.5 Segmentation

Once a subtitle requires the use of more characters than a single line permits or is not self-contained, segmentation comes into play. Segmentation plays a crucial role in terms of comprehension and readability, thus should be properly mastered by every professional.

Concerning segmentation, Karamitroglou (1997) recommends splitting a full single-line subtitle into two-line, as it looks more bulky and forces the viewer to accelerate the reading process. When dividing subtitles into two lines, he stresses the importance of keeping the highest syntactic nodes together (ibid.). Pošta (2011, 57) supports this by saying that the aesthetic aspect shall be sacrificed before the grammatical one. Both of the two statements are closely linked to the length of each line. Although it is preferable to keep both lines of same length, geometry should be sacrificed before syntax – the line break should therefore divide "linguistic wholes" such as a nominal phrase and a verbal phrase (Karamitroglou 1997). A demonstration is provided on Karamitroglou's sentence in Example 4, the second option is correct.

Example 4

The destruction of the city was inevitable.

The destruction of the city was inevitable.

While it is ideal for a subtitle to be self-contained, it is often impossible and sometimes even undesirable to follow. According to Díaz Cintas and Remael (2007, 172) basically the same rules of segmentation apply within and across subtitles but in case of the latter, one should remember the limitations of viewers' memory span. A way of breaking subtitles into two according to Díaz Cintas and Remael is shown below in Example 5 with the second option being correct.

Example 5

You said you didn't know her, that you had never met her, but that

was obviously a lie.

You said you didn't know her, that you had never met her,

but that was obviously a lie.

If a complex sentence occurs, a subtitler should split it into smaller ones (Díaz Cintas and Remael 2007, 172). This strategy can be applied across subtitles but also within, while one subtitle can contain the maximum of two sentences, each of them occupying one line (Karamitroglou, 1997). Karamitroglou (1997) asserts "each spoken utterance should ideally correspond to a subtitled sentence".

2.6 Translation strategies in subtitling

The limitations posed onto the medium of subtitles are clearly reflected in the use of translation strategies. Díaz Cintas and Remael (2007, 145) acknowledge the written version in subtitles is nearly always reduced in comparison with the original source text (ST) but it is required due to its interaction with the visual and oral signs and codes of the film.

Subtitlers can use partial reduction, also known as **condensation** – the features of ST are expressed in a concise form; or total reduction employing the strategy of **omission** of lexical items (ibid., 146). These two strategies are very often combined to provide a temporally and semantically suitable translation. Díaz Cintas and Remael (2007, 148) speak about "the principle of relevance" which should help to determine which linguistic units are redundant. To have a better outlook on what is redundant, or perhaps to see the "big picture", they recommend watching the entire film first, however, it is clearly stated that principles of condensation and reduction are not to be put into any strict rules and "foolproof" instructions (ibid., 148–150). The degree of reduction will differ in individual subtitles but as one of the rules in Carroll and Ivarsson's *Code of Good Subtitling Practice* (1998) states, "when it is necessary to condense dialogue, the text must be coherent".

Omission strategies mentioned by Karamitroglou (1997) include deletion of semantically empty padding expressions ("you know," "well," etc.), deletion of cumulative adjectives (teeny weeny etc.) and it is also advised to leave out responsive expressions ("yes," "no," "ok," "please," "thanks," "thank you," "sorry") which "have been found to be recognised and comprehended by the majority of the European people, when clearly uttered". This statement is similarly supported by Carroll and Ivarsson (1998) who claim "obvious repetition of names and common comprehensible phrases need not always be subtitled". On the other hand, Pošta (2010, 17) finds these statements controversial and says this phenomenon has not reached the grounds of subtitling in the Czech Republic yet, although it is starting to appear in subtitling industry of West European countries.

To condense sentence structure, Karamitroglou (1997) further proposes a change from active to passive, the use of numerals and well-known acronyms. Díaz Cintas and Remael (2007, 150–171) discuss the strategies of reduction in length; to mention just a few, they list using short forms and contractions, the replacement of nouns with pronouns and manipulation of theme and rheme.

2.7 Quality assurance

Since AVT is an integral part of translation studies, the need for accuracy and precision is a concern in subtitling as well. In order to ensure there has not been any misunderstanding leading to mistranslation, Carroll and Ivarsson (1998) recommend for subtitlers to "always work with a copy of the production and, if possible, a dialogue list and glossary of atypical words and special references".

After the translation has been carried out, the production should be subjected to revision/editing by a person other than the subtitler himself, which will also prevent occurrence of any typing errors and misspelled vocabulary, "since subtitles serve as a model for literacy" (ibid.).

Using spell-check should be a common practice for any translator, including subtitlers. Pošta (2010, 80) points out checking for double spaces and doing a thorough re-reading while focusing on errors that computer spell-check does not recognize — for doing so, Pošta recommends using a printed copy of the production. He adds that experienced Czech script editors complain about many subtitlers having problems with grammar — according to the editors, subtitles without necessary changes occur rather exceptionally (ibid.).

2.8 Translation of documentaries

Although the topics of TED Talks show variation and can hardly be classified within one genre of translation, most of the talks share one feature – they tell a story, spread an idea or draw attention to a specific field of expertise while employing innovative ways and giving a brief overview of a complex issue. They popularize technology and sciences, to a certain extent educate the audience and deliver a message to think about. For this reason, it seems only relevant to make a reference to the translation of documentaries which shares some of these features.

Matamala (2009, 110) admits that so-called fictional programmes involve a great deal of searching for information but claims "the translation of documentaries tends to put higher demands on the translator as it requires a documentation process longer than that of a TV episode or a cartoon". She also says that in case of documentaries, translators are less likely to work against the

clock – as an example she lists a one-week deadline for a 90-minute programme, albeit "all documentaries are different – depending mainly on the target audience they address and their skopos" (ibid.).

Documentaries and educational programmes contain a fair amount of factual information. This is why Matamala (2009, 111) stresses the importance for a translator or a subtitler to make use of a script, though she acknowledges it is very often not available and "the main difficulties encountered, as opposed to fictional programmes, is the abundance of terminological units and very specific proper names". When a script is available, poor quality transcription often occurs and the translator should not trust it, be rather critical and only use scripts as a reference tool (Matamala 2009, 111–112). It is subsequently explained that mistakes are more prominent in documentaries because the core element is information while in fiction programmes mistakes are of lesser importance since the audience is aware of not watching a real story (ibid.).

It is quite impossible for a translator to be a specialist in every field he or she translates. This is especially true for documentaries when translators are compelled to carry out a systematic research in a limited time. Matamala (2009, 113) adds that nowadays "documentaries do not present a high degree of specialization due to the characteristics of their target audience" but they can often pose significant challenges in terms of terminology (e.g. nomenclature).

Terminology also forms an integral part of subtitles and is less likely to be subject to condensation or reduction. Luckily for subtitlers of TED Talks – despite speakers' thorough preparation, TED Talks still include certain amount of hesitations, false starts and repetition – features commonly found in speech. Consequently, the subtitler operates with slightly more time because the spatial and temporal restrictions are reduced.

3 Translating TED Talks

All translations of TED Talks are realized through a global initiative called **Open Translation Project** (OTP) in the form of subtitles. It wasn't until 2009 that OTP was launched with 300 translations in 40 languages, created by 200 volunteer translators.

TED describes OTP as "a global volunteer effort to subtitle TED Talks, and enable the inspiring ideas in them to crisscross languages and borders²¹". TED then explains that OTP emerged after many passionate viewers asked to translate TED Talks to make them accessible in other languages. In reaction, TED created a translation platform, thus allowing the talks to be spread in languages other than the original. OTP now includes subtitling TEDx Talks, TED-Ed lessons and videos from other TED events.

3.1 Crowdsourcing

Translation of TED Talks does, without a doubt, fall within the category of crowdsourcing. As of March 31, 2016, according to the numbers on TED's website²² OTP has currently crowdsourced almost 90,000 translations carried out by more than 20,000 volunteer translators in the total of 110 different languages. Estellés and González Ladrón (2012, 198) define crowdsourcing as

"a type of virtual participative online collaboration, which an individual, an institution, a non-profit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number, via a flexible open call, the voluntary undertaking of a task [which] always entails mutual benefit. [...] The user will receive the satisfaction of a given type of need, be it economic, social recognition, self-esteem, or the development of individual skills, while the crowdsourcer will obtain and utilize to their advantage that what the user has brought to the venture."

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²¹ TED. "TED Open Translation Project." Accessed March 4, 2016. https://www.ted.com/about/programs-initiatives/ted-open-translation-project. ²² (ibid.).

Despite the fact that OTP community is from a large part made up of amateur translators, it is worth noting that the term **volunteer translators** is not to be mistaken for amateurs exclusively. OTP community includes professional translators who want to contribute as well. Although the degree of language expertise among volunteers shows variation, their motivation mostly remains the same. As expressed by many volunteers in their TED online profiles, the rationale behind taking part in OTP corresponds to Bogucki's description of amateur subtitling/fansubbing – "to make a contribution in an area of particular interest and to popularise it in other countries, making it accessible to a broader range of viewers/readers, who belong to different linguistic communities" (2009, 49). The motivation of OTP members is illustrated in Figure 3 which shows the results of Cámara de la Fuente's (2014, 213) questionnaire answered by 177 OTP volunteers across five continents and 35 languages.

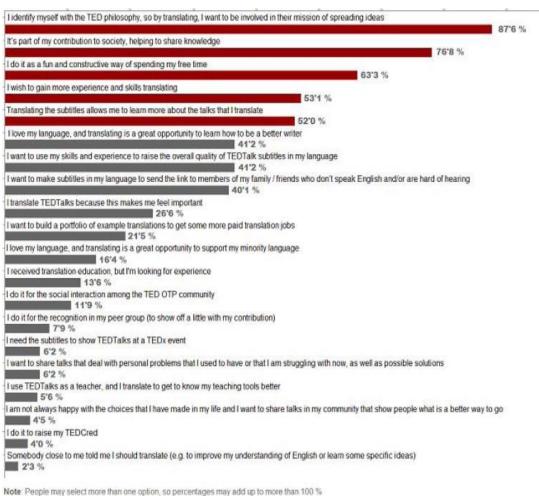


Figure 3 OTP volunteers' motivation profile (Cámara de la Fuente 2014, 213).

3.1.1 OTP community on the internet

TED organization is grateful to its translators and a whole section on its website has been devoted to them, listing profiles of all translators with their basic information and the number of talks they have contributed to. As discussed in chapter 3.5, every translation is crowdsourced by a minimum of three people while translator's and reviewer's name is usually displayed in the subtitles at the beginning of the video as a recognition of gratitude. Displaying the names at the beginning is contradicted by Carroll and Ivarsson (1998) who claim "the (main) subtitler should be acknowledged at the end of the film".

The community of translators also gathers on social networks. The largest group on Facebook is called "I Translate TED Talks" and has more than 17,000 members. The group primarily serves as a communication tool between individual translators and allows quick sharing of information targeted at all members.

3.2 OTP community profile

As mentioned above, Cámara de la Fuente (2014) gathered data from members of OTP through an online questionnaire with the total of 177 respondents from Europe (61%), Asia (20%), South and North America (13% combined) and Africa (6%). The data was gathered within the time span of June 25, 2012 and September 6, 2013.

The first part of the questionnaire focused on socio-demographic factors such as age and gender while the second part was concerned with volunteers' education in translation studies and their experience in text translation compared to the translation of subtitles.

As shown in Figure 4, most of the volunteers (39%) are aged between 26–35 years. The second largest group is between 18–25 years old (31%) followed by volunteers between 36–45 years of age (16.9%). In terms of gender distribution (also shown in Fig. 3) the ratio of men and women is almost balanced with 53.7% female and 46.3% male volunteers.

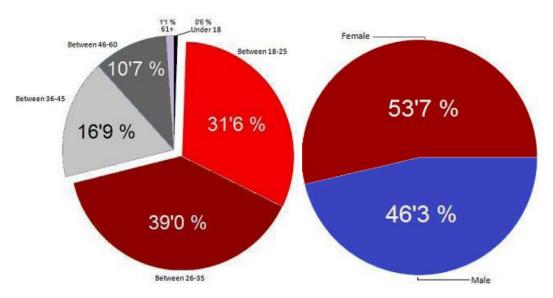


Figure 4 OTP volunteers' age and gender distribution profile (Cámara de la Fuente 2014, 206).

Volunteers' formal education in translation-related studies is illustrated below in Figure 5. Cámara de la Fuente's (2014, 208) data shows that 33.3% of all respondents answered to have attended studies or classes related to the field of translation, however, translation-related is a general term and the extent of "relation" may considerably vary. Almost 30% of the respondents had experience as a volunteer translator while the experience of 15.3% was in the form of translation for OTP. Almost 10% of the respondents lack any translation-related education but have worked as paid/professional translators.



Figure 5 OTP volunteers' education profile in translation studies (Cámara de la Fuente 2014, 208).

Figure 6 displays that before joining OTP, 20.3% of the respondents had more than five years of experience in translation; 18.1% had been translating for 3–5 years; 22.6% for 1–2 years and the majority of 39% had less than one year of experience.

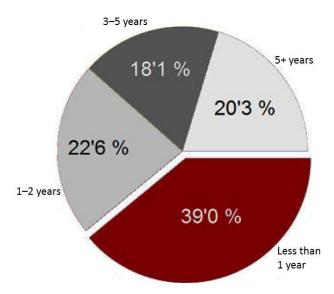


Figure 6 OTP volunteers' years of experience profile in text translation (Cámara de la Fuente 2014, 209–210).

Concerning experience in translation of subtitles illustrated in Figure 7, the majority of all respondents (73.4%) had no experience in the field of subtitling while 18.6% had volunteered as subtitle translators and only 4% of the respondents had worked as a paid/professional subtitle translator.

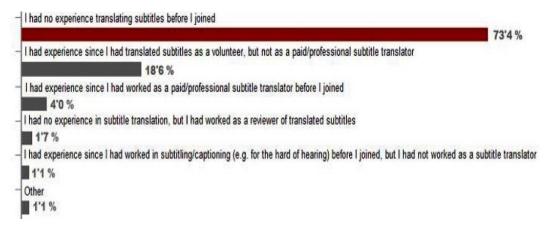


Figure 7 OTP volunteers' experience profile in translation of subtitles (Cámara de la Fuente 2014, 209).

3.3 Becoming a TED translator

To become a TED translator, volunteers must first create an account on TED website and subsequently use this account to sign into the **Amara interface** – an online platform where all the subtitling and transcribing of TED Talks takes place (for more detailed description see chapter 3.9).

To eliminate incompetent translators and ensure a degree of quality, volunteers must first apply to enter OTP community. The application states that volunteers should be fluent in the target language(s) (TL) and should be able to faithfully represent the speaker's words, style and personality. Applicants are then asked to answer the following four prompts, preferably in English.

- 1. In a sentence or two, why do you want to subtitle for TED?
- 2. Please provide a brief description of your experience using the target language(s).
- 3. On a scale from 1 to 5 (1 = poor, 5 = excellent) rate your language skills in the target language(s).
- 4. How did you learn about the Open Translation Project?

The application is then assessed by a member of TED Open Translation Team and the applicant should receive a response within five days.

3.4 Types of subtitles in TED Talks

In reference to chapter 2.1, a generalization can be made about the types of subtitles in TED Talks. Most often the subtitles can be classified as closed because viewers must turn them on manually, unless the subtitles have been directly inserted into the video before being uploaded and are now part of the visual content. To make the reading process more comfortable, all closed subtitles are presented against a black background (see Figure 8).



Figure 8 A screenshot of closed YouTube subtitles²³ presented against black background.

Open subtitles occur very rarely in TED Talks, however, they were used in the video of Zuzana Holubcová's TEDx Talk²⁴ when her voice is drowned by loud music, which is why the makers of the video decided to include open intralingual subtitles for Czech viewers.

Most TED Talks are available with both intralingual and interlingual subtitles since they are commonly translated at least into one language other than the original.

3.5 TED Talks subtitling process

The first task that needs to be carried out to enable a translation of a video into different languages is **transcription** in the form of intralingual subtitles following the general subtitling conventions proposed by TED. In case of TED Talks the TED organization provides transcribers with a copy of speakers' prepared written speech, however, TEDx Talks are transcribed only from audio²⁵. Creating

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²³ Bill Gates: The next outbreak? We're not ready. Accessed March 18, 2016. https://www.youtube.com/watch?v=6Af6b_wyiwI&ab_channel=TED.

²⁴ See part 3:24 – 4:28, Zuzana Holubcová – Fascinující drama vzniku nového lidského života. Accessed March 18, 2016.

https://www.youtube.com/watch?v=Pb-rGLMPO_U&ab_channel=TEDxTalks.

²⁵ TED. "Get Started." Accessed March 18, 2016.

subtitles in the SL is not only important because they serve as a ST for translation into other languages but also because they make TED Talks available to the deaf and hard of hearing. Also, the transcripts are uploaded to TED website as normal text, thus becoming available to more people since the transcript will appear in Google search when searching for related topics.

TED has established a mechanism geared to ensure a degree of quality based on the principle that the finished transcription is subsequently subjected to a **review** by a more experienced member of OTP. To start reviewing, TED advises volunteers to first subtitle at least 90 minutes of TED Talks to become familiar with translation practices, subtitling conventions and to be able to spot mistakes of others. The reviewer's task is to check the transcriber's work, apply finishing touches if necessary and approve the transcription for uploading. If the transcription contains too many mistakes, reviewers have the right to send it back for corrections. More importantly, reviewers should provide transcribers with a feedback on what to improve.

Once approved, the transcription proceeds to a **language coordinator** – an experienced volunteer who works as a mentor for a specific language and organizes collaboration. Language coordinators should work as the final proofreaders and they are in charge of uploading finished subtitles online. The number of language coordinators for every language is relatively small (e.g. 11 for English and 4 for Czech).

The same scenario follows when transcriptions are translated into different languages. A translation is carried out by a subtitler, checked by a reviewer and uploaded by a language coordinator.

3.6 TED guidelines

With respect to the size of the subtitlers' community, TED aims at keeping subtitles within a unified pattern. For this reason, the members of OTP are advised to follow rules and standards which have been summarized in a series of tutorial

http://www.ted.com/participate/translate/get-started.

videos available on a special YouTube channel called *TED OTP*²⁶. The tutorials explain how to tackle a transcription, translation and a review while featuring the most important subtitling conventions and strategies to be respected.

For detailed guidelines in different languages TED uses a Wikipedia page commonly referred to as OTPdia²⁷. This page was specifically created to serve as an easily accessible global OTP online manual. The English guidelines provide step-by-step instructions for both novice and more advanced subtitlers while focusing on the description of crucial strategies in subtitling such as compression and line-breaking. Despite the fact that OTPdia is a community-created website and is therefore subject to change, the main sections describing key rules and standards (e.g. temporal and spatial parameters) are official guidelines set by TED organization and are less likely to change since it would lead to confusion in a well-established system. Only members registered in OTPdia can propose changes to these guidelines and all changes must be approved by OTP staff members.

3.6.1 Translation guidelines

Since some of the volunteers are not only new to subtitling but also translation itself, one section of the OTPdia guidelines focuses on a series of general tips and remarks on how to translate. OTPdia²⁸ advises translators to avoid literal translation, focus on the meaning, pay attention to style and register, be careful with terminology, and importantly, take time to complete the translation since volunteers have 30 days to complete every task. More detailed description of the general tips is given in OTPdia sections *The Translator's Research Toolbox* and *English Style Guide*.

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²⁶ The OTP Learning Series. Accessed March 22, 2016.

https://www.youtube.com/playlist?list=PLuvL0OYxuPwxQbdq4W7TCQ7TBnW39cDRC&nohtm15=False&ab_channel=TEDOTP.

²⁷ OTPdia Guidelines. Accessed March 30, 2016.

http://translations.ted.org/wiki/Main_Page.

All information and references to OTPdia guidelines and manuals listed from this chapter onwards are available in sections of the official OTPdia website listed below. Acessed March 30, 2016.

http://translations.ted.org/wiki/Main_Page.

The *Translator's Research Toolbox* section contains useful translation-related links for dictionaries, glossaries and corpora while also providing information on how to search specific context and google effectively.

The *English Style Guide* section tackles some of the basic language strategies to be applied. To mention some, the use of either American or British English spelling is recommended. The use of slang forms of verbs (e.g. wanna, gonna, etc.) is prohibited. Volunteers are advised to avoid translation of proper names which do not have an equivalent; if such name shall be translated, due attention should be paid to its spelling (e.g. *Tchaikovsky* in English as *Čajkovskij* in Czech).

Idioms and culture-specific elements should not be translated literally but with the help of translation strategies (e.g. generalization – *Wendy's* could be expressed as *a fast food chain*). Units of measurements should be converted into the units commonly used in the TL country.

3.6.2 Transcription guidelines

Despite mostly the same formal parameters apply for transcribing and translating TED Talks, there are a few specific rules to be followed by transcribers since they are the first to tackle the ST and their work is crucial for subsequent rendition into different languages. According to OTPdia, transcribers should omit slips of the tongue, hesitation sounds and semantically empty words that would look redundant in subtitles. If needed, the ST can be "condensed" through reduction or omission. The subtitles should respect synchronization, include all essential sound information and on-screen text.

Transcribers are allowed to correct obvious mistakes (e.g. "we thinks" changed to "we think"²⁹) but in case the edit would significantly alter the meaning, the change should be enclosed in square brackets (e.g. "I woke up at 10 AM and the sun was [up]³⁰.").

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²⁹ OTPdia Guidelines. "How to Tackle a Transcript." Accessed March 30, 2016. http://translations.ted.org/wiki/How_to_Tackle_a_Transcript ³⁰ (ibid.).

The first step of the transcribing process workflow recommended by OTPdia is writing the text down and splitting it into subtitles. The second step is synchronization of the subtitles and editing the reading speed.

3.7 TED Temporal and spatial conventions

OTPdia dictates that subtitles of TED Talks are limited to a maximum of two lines while their length should ideally be the same. Syntax is preferred to aesthetics but one line should not be shorter than the other by more than 50%. The lines should be divided on the highest syntactic units possible. The number of characters per line is set at 42, which is slightly higher than the numbers proposed by different theorists in chapter 2.3.

The minimum and maximum duration of a subtitle corresponds with Carroll and Ivarsson's limit – between 1–7 seconds. The reading speed 15–21 CPS listed in TED guidelines exceeds reading speeds proposed by Karamitroglou (1997), Díaz Cintas and Remael (2007), and Pošta (2011), which varied from 12 to 18 CPS. 21 CPS is beyond the reading speed of an average viewer. If we take into account the information density in TED Talks, lower reading speed around 12–15 CPS seems as a more adequate solution. A possible counter-argument is that TED subtitles are not meant to be shown in cinema. Higher reading speed allows the rendition of more information and in case a reader fails to read the subtitle in time, the video can always be paused or rewound for re-reading.

OTPdia states a subtitle should be synchronized with speech and should not appear sooner than 0.1 sec before the utterance, however, one of the YouTube OTP tutorials *How to tackle reading-speed issues*³¹ says that the start time of a subtitle can be off-set by the previous subtitle to achieve a lower reading speed because a good reading speed is always more important than synchronization. After an utterance, the subtitle should not stay on the screen for more than one second.

³¹ The OTP Learning Series 08: How to tackle reading-speed issues. Accessed March 30, 2016. https://www.youtube.com/watch?v=QVz0XyEAbHU&index=8&list=PLuvL0OYxuPwxQbdq4W7TCQ7TBnW39cDRC&ab_channel=TEDOTP.

While Pošta (2011, 46) and Karamitroglou (1997) recommend a 0.16–0.25 sec gap between consecutive subtitles, OTP members are not required to include these gaps if they are using the online Amara interface because, unlike offline subtitling editors, Amara does not support the function of creating the gaps automatically. These gaps must be set manually for every subtitle in Amara and the time-consuming nature often results in many translators completely omitting the gaps. If a subtitler is working with offline subtitling software, OTPdia recommends inserting a 0.1 sec gap.

3.8 TED typographical conventions and sound representation

OTPdia agrees with the general convention of indicating a pause, an unfinished or broken-off sentence with sequence dots. A difference occurs in the way of rendering on-screen text – Karamitroglou (1997) states that upper-case letters should be used but in TED Talks the text should appear in square brackets, e.g. [On-screen text]. Using upper-case letters for putting emphasis on a word in TED subtitles is prohibited. The use of numerals is not restricted. If quotes and apostrophes are needed, subtitlers should use the simple, straight version instead of curled.

OTPdia also prohibits all rich-text formatting such as italics, which is normally used to indicate an off-screen speaker. The reason is that the subtitles are used in different formats with different players on different websites. Some players do not support text formatting and would display the subtitle incorrectly (see Example 6).

Example 6 <i>This is a subtitle.</i> instead of

This is a subtitle.

To indicate an off-screen speaker, TED guidelines prefer to show full name of the speaker followed by a colon. The same rule applies for indicating the exchange of speakers within and across subtitles. Karamitroglou (1997) uses hyphen for this

purpose but TED proposes using a full name the first time and continue with speaker's initials in case of repetitive occurrence (see Example 7).

Example 7 Bill Gates: I don't think you're right.

Chris Anderson: Okay, what do you think?

BG: I think the numbers you mentioned have become much more alarming recently.

CA: By what cause?

Example 8 shows how to tackle a situation when an off-screen comment comes from the audience.

Example 8 (Audience) I have a question!

The use of parenthesis is also recommended to identify other sounds made by the audience – most commonly (Applause) and (Laughter). Interestingly, the applause at the beginning of a video is not to be subtitled.

To identify when music is playing, (Music) should be displayed for about 3 seconds when it starts and (Music ends) should appear 1.5–2 seconds before the music is over. By contrast, as expressed by Koplík and Strnadová (2008), subtitles containing information for the deaf and hard of hearing are usually enclosed in square brackets, not round parenthesis. A use of a different language in TED Talks should be written in parenthesis as well – e.g. (Arabic). Generally, any relevant sound should appear in subtitles, especially if the speaker makes a reference to it, as shown in Example 9.

Example 9 (Baby cries)

Bill Gates: Yes, we will go home soon.

Since TED Talks often involve a video presentation, the speaker identification and sound representation may sometimes interact in subtitles. This situation is demonstrated in Example 10.

Example 10

(Video) Al Gore: The greenhouse effect increases the temperature of the Earth.

Allan Savory: We cannot ignore this fact.

3.9 Amara interface

Amara is the online tool used for crowdsourcing TED Talks translation. Amara can be described as a simplified version of subtitling software which is freely accessible and can also serve for subtitling videos outside of OTP.

After logging into Amara, OTP volunteers can choose which video they want to work on and decide whether they want to transcribe, translate or review. Figure 9 shows the beginning of the transcription process.

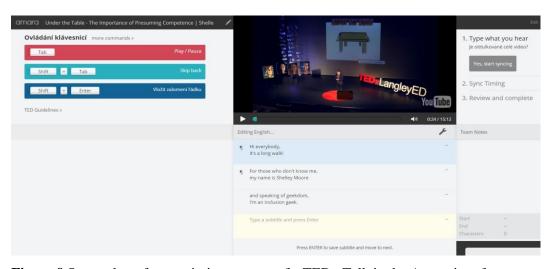


Figure 9 Screenshot of transcription process of a TEDx Talk in the Amara interface.

The interface features a video player, windows for individual subtitles and a table of simple keyboard shortcuts for easier navigation. The transcriber starts by writing down the speaker's words according to the guidelines and then proceeds to synchronization which is realized on a simple timeline shown in Figure 10.



Figure 10 Screenshot of the timeline in the Amara interface.

The start and end time of the edited subtitle is displayed in a dialogue box next to the subtitle window, together with the number of characters on both lines. If the number of characters and/or reading speed is not within the limit set by OTP guidelines, a small exclamation mark appears in the subtitle window. The color of the erroneous parameters turns from gray to orange and warnings explaining the problem appear (see Figure 11).



Figure 11 Screenshot of the error-checking system in the Amara interface.

However, the dialogue box does not show the exact length of the subtitle. If subtitlers need to verify the length parameter, its absence can slow them down by forcing them to do a subtraction of the start time value from the end time. Despite the minimum length of a single subtitle should be 1 second, an error warning in the dialogue box only appears if the subtitle is shorter than 0.7 seconds. When the subtitle goes over the maximum length (7 seconds), no warning is shown in the dialogue box.

Another drawback of the interface is that when the subtitler wants to change the reading speed by adjusting the length of a subtitle, the reading speed in the dialogue box remains the same after the start or end time is shifted. To see the new reading speed, the subtitler must click into a different subtitle window and return to the previously edited one, which makes the process highly impractical.

A specific feature of subtitling TED Talks is shown in the top-left corner of Figure 12. As mentioned before, the subtitles are uploaded to TED website as normal text, so the subtitler should divide the subtitles into meaningful chunks of text by placing the paragraph sign as in normal text.

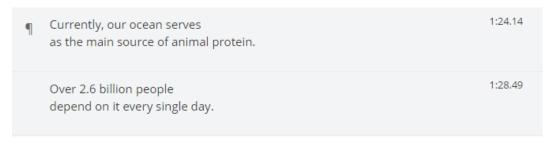


Figure 12 Screenshot of placing a paragraph sign in the Amara interface.

Furthermore, the interface does not incorporate a spell-check function. To carry out a spell-check in Amara, subtitlers need to use a browser spell-check which must firstly be downloaded and configured for a specific language in a specific browser.

The translation and review mode of the interface features subtitle windows in two columns with the ST on the left and the TT on the right. The review mode is shown in Figure 13.

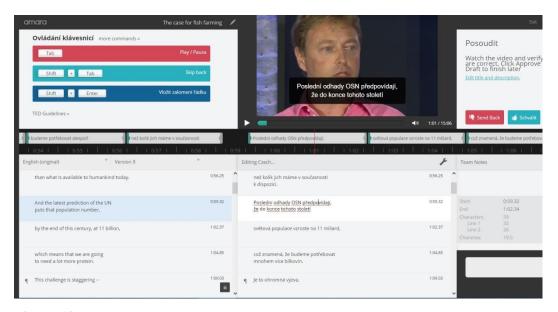


Figure 13 Screenshot of a review in progress in the Amara interface.

The timeline displays several consecutive subtitles with small gaps in between which have to be set manually for each subtitle (as discussed in chapter 3.7).

3.10 Subtitling offline

Creating TED subtitles is not limited to Amara and can be partly carried out outside the online interface. Subtitlers may choose to use various subtitling editors, although OTPdia only recommends more advanced users to do so. Unlike with Amara, TED does not provide any technical support for offline software. Some of the most popular freeware subtitling editors are Subtitle Edit, Aegisub, Jubler, VisualSubSync and Subtitle Workshop.

To create TED subtitles in an offline editor, the subtitler must first download the video from Amara, download the subtitles in SL and import them in a supported format into the editor. Once the translation is done, the task must be completed online by uploading the subtitles back into Amara.

Subtitling editors make both transcribing and translating easier by offering more features and functions than Amara. Figure 14 shows the environment of the VisualSubSync editor (VSS).

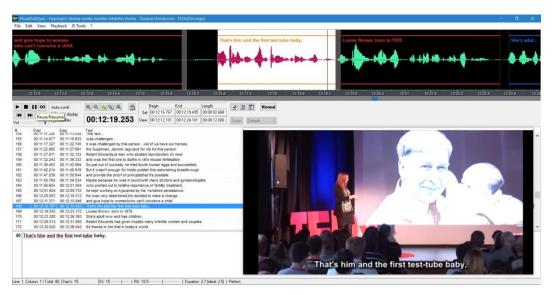


Figure 14 Working environment in the subtitling editor VisualSubSync.

At the top of the editor we can see a timeline with a waveform and individual subtitles. The waveform enables the subtitler to achieve precise synchronization of subtitles with speech. The detail of the waveform is displayed in Figure 15. The gray line between the consecutive subtitles is the automatically

inserted gap preventing subtitles from merging. The gap also creates a little flash of the subtitles and the viewer can easily notice the appearance of a new subtitle.

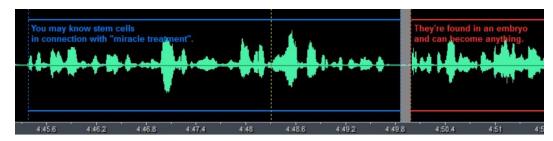


Figure 15 VisualSubSync editor timeline and waveform in detail.

The panel below the timeline offers features such as the buttons for controlling and replaying the video; a subtitle length indicator, start time, end time and others. The user can also switch between two modes – *normal* and *timing*. All subtitles created in the project are displayed in a list on the left. Subtitlers may choose to show or hide the video window, change its size and position. Subtitles are typed into the white window at the bottom. The number of characters is displayed next to the text window and the reading speed is shown on the bar at the very bottom.

The editor allows much greater personalization then the Amara interface. VSS allows configuring up to 95 different keyboard shortcuts while Amara only offers about twenty. Users can also download an active spell-check which can be installed into VSS to minimize typing errors. Another useful function is linked to transcribing the talks from audio – VSS can slow the video down to 60% of its initial speed to give the subtitler a chance to recognize incomprehensible utterances.

After the whole task has been completed, an error checking function can be used to detect any spatial and temporal problems. To get an accurate error report, it is crucial to set the correct parameters in *Preferences* folder. While Amara only checks every subtitle separately without offering any error report, in VSS all subtitles can be checked at once. If any errors occur, they are clearly specified in the error report (see Figure 16).

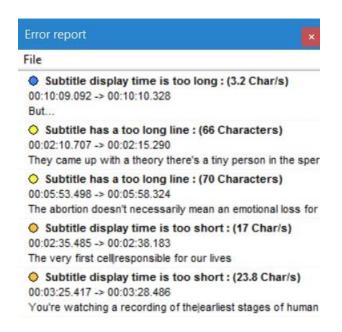


Figure 16 Error report in VisualSubSync editor.

4 Conclusion

The thesis focused on crowdsourcing subtitling of TED Talks. Its aim was to provide a description of the translation and subtitling practices of TED Talks, explain the different stages of the subtitling process and compare the official TED subtitling rules and conventions with the ones proposed by different theorists of audiovisual translation. The motivation of TED subtitlers is tackled as well as the degree of their expertise in translation studies and subtitling. The thesis also dealt with analysing the Amara interface commonly used by the community of TED subtitlers. The interface is compared with an offline freeware editor specifically designed for creating subtitles while the differences in various features and functions are also commented on.

The thesis may subsequently serve as a source material for another case study with the focus on comparing different projects and communities involved in crowdsourcing subtitling. One such project is the website www.videacesky.cz based on the idea of fansubbing videos into Czech.

Despite the fact that the history of TED conferences goes back to 1984, the first TED subtitles were only created in 2006 after TED organization decided to put its archives of recorded talks online. This act gave birth to the Open Translation Project – a crowdsourcing project counting more than 20,000 volunteer subtitlers. The motivation behind "spreading TED ideas" is mostly the contribution to a particular field of interest and the chance to make the talks accessible to a larger audience. Based on Cámara de la Fuente's (2014) questionnaire answered by 177 respondents, it can be estimated that most of TED subtitlers (around 40%) are aged 26–35 and the second largest group (around 30%) is between 18 – 25 years of age. While a third of the subtitlers has attended translation related studies or classes, around 40% of them have only had experience with translation for less than a year. What's more, the overwhelming majority (over 70%) had no experience with subtitling before they joined the Open Translation Project.

The subtitling process of TED Talks is divided into several stages. To make translation into different languages possible, the talks must be firstly transcribed. This means that a volunteer creates a transcript in the form of

intralingual subtitles while taking into account the TED subtitling conventions which include on-screen text and sound representation for the deaf and hard of hearing. The subtitles are subsequently checked by a reviewer whose task is to correct any discrepancies left by the transcriber. If the subtitles are found to contain an excessive amount of mistakes, the reviewer has the right to send them back to the transcriber for corrections. If the subtitles are of sufficient quality, the reviewer should approve them and importantly, provide the transcriber with a feedback on positive and negative aspects of his/her work. The subtitles then proceed to a language coordinator who works as a final proofreader and is responsible for uploading the finished subtitles online. The same workflow follows when talks are translated into another language with the only difference of the transcriber being replaced by a translator. The subtitles created by the transcriber are used as a source text; they are translated and potentially adjusted in terms of spotting to achieve a suitable reading speed. The task of the reviewers and language coordinators remains as mentioned above. Generally speaking, both intralingual and interlingual subtitles are usually created but their availability differs with every talk and, supposedly, its popularity. TED subtitles can be mostly classified as closed with an exceptional use of open subtitles.

The official TED subtitling rules and conventions are summarized on the Open Translation Project Wikipedia website commonly referred to as OTPdia. TED has also set up a special YouTube channel featuring tutorial videos for OTP members. Some of the TED subtitling conventions correspond to the ones proposed by AVT theorists but also show differences in various parameters. For instance, the conventions differ in number of characters per line because TED subtitlers are allowed to use up to 42 characters while Karamitroglou (1997) and others propose using 30–40 characters. A considerable variation is shown in the parameter of reading speed where the maximum for TED Talks is set at 21 CPS. Such reading speed is too high for an average viewer who can normally read 12–15 CPS. While some of the theorists recommend using a short lead-in time, TED subtitles should be ideally synchronized with every utterance. The conventions proposed by OTPdia also vary in terms of typographical conventions, sound representation and identifying on-screen text. It is prohibited to use any rich-text

formatting in TED subtitles because they are used on different websites with different players which may not be compatible with text formatting. Furthermore, the sound information for the deaf and hard of hearing is usually enclosed in square brackets but TED subtitlers should use round parenthesis instead. The different conventions are summarized in Figure 17 below, together with the conventions prescribed by Karamitroglou (1997), Díaz Cintas and Remael (2007) and Pošta (2011) previously listed in chapters 2.3 and 2.4.

	Karamitroglou,	
	Díaz Cintas and Remael,	TED OTPdia
	Pošta	
Number of lines	2	2
Number of characters	30-40	42
per line		
Length of	Ideally same length,	Ideally same length,
individual lines	syntax before aesthetics	one line max. 50% shorter
Reading speed	12–18	15–21
Minimum duration	1 sec	1 sec
of a subtitle		
Maximum duration	7 sec	7 sec
of a subtitle		
Lead-in time	0.25 sec	None, subtitle and utterance
		are ideally synchronized
Lagging-out time	2 sec	1 sec
Gap between consecutive	0.16-0.25	Amara – not specified
subtitles		Offline software – 0.1 sec
Indicating an exchange of	Hyphens	Name of the speaker/Initials
speakers within a subtitle		
Indicating off-screen	Italics	Name of the
speaker		speaker/(Audience)
Indicating on-screen text	Upper-case letters	Square brackets
Emphasizing a word	Upper-case letters	-Not permitted-

Figure 17 Subtitling conventions by Karamitroglou (1997), Díaz Cintas and Remael (2007) and Pošta (2011) compared to TED OTPdia conventions.

The reason why TED Talks subtitling conventions adhere to more benevolent parameters (e.g. higher reading speed and number of characters per line) may be the fact that they are suited for the skills of amateur subtitlers with the intention of reducing the spatial and temporal limitations posed by the medium while allowing the rendition of more information. Higher number of characters per line may as well help to avoid constant flashing of short subtitles which would look distracting in combination with continuous speech. Furthermore, TED subtitles are not intended to be shown in cinema where the viewers only have one chance to read every subtitle. TED videos can be paused or rewound for rereading. Also, TED Talks are often watched by educated viewers and academics who are more likely to adapt to faster reading. Since the parameters proposed by TED and the AVT theorists vary, the hypothesis of different conventions was therefore confirmed.

The Amara interface which is used as a global subtitling platform is fairly simple to work with, however, it does pose problems in terms of respecting the temporal parameters such as subtitle length, gaps between consecutive subtitles and synchronization of subtitles with speaker's utterances. The offline subtitling editor has proven to be a more practical subtitling tool, though a little more complicated for amateur subtitlers. Compared to the Amara interface, the VisualSubSync editor offers a timeline with a waveform allowing a perfect synchronization. The editor also integrates a spell-check function while Amara forces subtitlers to use browser spell-check. Another advantage of VisualSubSync is the error-check function providing subtitlers with a report of subtitles which do not match the desired pre-set parameters.

To conclude, using the Amara interface seems less practical for advanced subtitlers because it may require more time to finish a task and result into subtitles of poor quality. Despite the fact that the interface has its drawbacks, it is designed to be easily accessible and user-friendly for subtitlers with little or no experience. Having said that, the interface and the whole system of subtitling TED Talks by all means serves its purpose.

Summary

Tématem této práce je "Crowdsourcing v titulkování: Případová studie TED Talks". TED Talks jsou jednotlivé projevy, které jsou přednášeny na konferencích TED. Konference se zrodila v roce 1984, kdy muž jménem Richard Saul Wurman uspořádal první konferenci, jejímž tématem byla tři odvětví: Technology, Entertainment a Design, tedy Technologie, Zábava a Design – odtud samotná anglická zkratka TED. Smyslem konference je každoroční shromáždění vlivných jedinců, kteří mají zájem se aktivně podílet na změně aktuálních problémů v celosvětovém měřítku. Od roku 2006 jsou TED Talks pravidelně nahrávány na server YouTube ve formě jednotlivých videí, kde jsou volně přístupné široké veřejnosti, která pro jejich rozšíření projevila zájem o překlad do nejrůznějších jazyků formou titulkování. Titulkování TED Talks probíhá formou online crowdsourcingu, na kterém se podílí přes 20 000 členů projektu s názvem "Open Translation Project".

Cílem této práce je provést rozbor titulkování TED Talks, shrnout formální parametry a konvence titulkování dle několika autorů z oblasti audiovizuálního překladu a porovnat je s oficiálními parametry pro titulkování TED Talks, které jsou uvedeny na internetové stránce Wikipedie. Práce si rovněž klade za cíl popsat titulkovací proces TED Talks, analyzovat online rozhraní Amara, ve kterém se samotné titulkování odehrává a porovnat jej s offline titulkovacím programem na základě specifických vlastností a funkcí.

Úvodní kapitola práce se věnuje historii konferencí TED, popisuje jejich koncepci a další projekty, kterým konference dala postupem času vzniknout.

Následující kapitola se zabývá titulkováním, jakožto odvětvím audiovizuálního překladu. Kapitola se především zaměřuje na popis parametrů a konvencí titulkování dle těchto autorů: Fotios Karamitroglou, Miroslav Pošta, Jorge Díaz Cintas a Aline Remael, Jan Ivarsson a Mary Carrol.

Tématem třetí kapitoly je titulkování TED Talks. Úvodem je představen pojem crowdsourcing a následuje rozbor profilu komunity překladatelů. Tato část se také zabývá jejich mírou zkušenosti v oblasti překladu a titulkování. Následuje popis parametrů pro tvorbu titulků TED Talks a srovnání rozhraní Amara s titulkovacím programem VisualSubSync.

Appendix

A CD containing this Bachelor Thesis in the PDF format.

References

Bogucki, Łukasz. 2009. "Amateur Subtitling on the Internet." In *Audiovisual Translation: Language Transfer on Screen*, edited by Jorge Díaz Cintas and Gunilla Anderman, 49. Houndmills: Palgrave Macmillan.

Cámara de la Fuente, Lidia. 2014. "Multilingual Crowdsourcing Motivation on Global Social Media. Case Study: TED OTP." *International Journal of Web Based Communities* 11(2): 206–13. Accessed March 11, 2016. doi: 10.1504/IJWBC.2015.068542.

http://revistaseug.ugr.es/index.php/sendebar/article/viewFile/1541/2615.

Díaz Cintas, Jorge. 2003. "Audiovisual Translation in the Third Millennium." In *Translation Today*, edited by Gunilla Anderman and Margaret Rogers, 195–199. Frankfurt Lodge: Multilingual Maters.

Díaz Cintas, Jorge. 2009. "Audiovisual Translation: An Overview of its Potential." In *New Trends in Audiovisual Translation*, edited by Jorge Díaz Cintas, 1. Bristol: Multilingual Matters.

Díaz Cintas, Jorge, and Aline Remael. 2007. *Audiovisual Translation: Subtitling*. Manchester: St. Jerome.

Estellés Arolas, Enrique, and Fernando González Ladrón de Guevara. 2012. "Towards an integrated crowdsourcing definition." *Journal of Information Science* 38 (2): 198. Accessed March 4, 2016. doi: 10.1177/0165551512437638. http://www.crowdsourcing-blog.org/wp-content/uploads/2012/02/Towards-an-integrated-crowdsourcing-definition-Estellés-González.pdf.

Foerster, Anna. 2010. "Towards a creative approach in subtitling: a case study." In *New Insights into Audiovisual Translation and Media Accessibility*, edited by Jorge Díaz Cintas, Anna Matamala, and Josélia Neves, 85. Amsterdam/New York: Rodopi.

Gambier, Yves. 1994. "Audiovisual Communication: Typological Detour." In *Teaching Translation and Interpretation 2*, edited by Cay Dollerup and Annette Lindegaard, 275–277. Amsterdam/Philadelphia: John Benjamins.

Gambier, Yves. 2003. "Screen Transadaptation: Perception and Reception." In *Screen Translation*, edited by Yves Gambier, 178–179. Manchester: St. Jerome Publishing.

Gottlieb, Henrik. 1997. "Subtitles, Translation & Idioms." Thesis, University of Copenhagen.

Gottlieb, Henrik. 2001. "Subtitling: Visualizing Filmic Dialogue." In *Traducción subordinada (II)*, edited by L. Garcia and A. M. Pereira Rodriguez, 87. Vigo: Servicio de la Universidad de Vigo.

Inghilleri, Moira. 1998. "Audiovisual Translation." In *Routledge Encyclopedia of Translation Studies*, edited by Mona Baker, 13–15. London: Routledge.

Ivarsson, Jan. 2004. "A Short Technical History of Subtitles in Europe." Accessed February 10, 2016. http://www.transedit.se/history.htm#Laser.

Ivarsson, Jan, and Mary Carroll. 1998. Subtitling. Simrisham: TransEdit HB.

Ivarsson, Jan, and Mary Carroll. 1998. "Code of Good Subtitling Practice." Accessed March 2, 2016.

http://www.esist.org/ESIST%20Subtitling%20code_files/Code%20of%20Good%20Subtitling%20Practice_en.pdf.

Karamitroglou, Fotios. "A Proposed Set of Subtitling Standards in Europe." *Translation Journal*, Volume 2, no. 2 (1997). Accessed February 23, 2010. http://translationjournal.net/journal//04stndrd.htm.

Koplík, Raimund, and Věra Strnadová. 2008. *Problematika tvorby skrytých titulků k předtočeným pořadům*. Praha: Česká komora tlumočníků znakového jazyka.

Matamala, Anna. 2009. "Main Challenges in the Translation of Documentaries." In *New Trends in Audiovisual Translation*, edited by Jorge Díaz Cintas, 110–113. Bristol: Multilingual Matters.

Pošta, Miroslav. 2011. *Titulkujeme profesionálně*. Praha: Apostrof.

Online Resources

American Express. 2014. "Richard Saul Wurman: TED's Founder Discusses How It All Began." Accessed January 18, 2016.

https://www.americanexpress.com/us/small-business/openforum/articles/richard-saul-wurman-teds-founder-discusses-how-it-all-began/.

CNN. 2014. "How TED got famous." Accessed January 20, 2016. http://edition.cnn.com/2014/03/17/opinion/cohen-30-years-of-ted/.

Lacy, Sarah. 2008. "Why I'm fed up with TED." Accessed January 30, 2016. http://www.bloomberg.com/news/articles/2008-02-29/why-im-fed-up-with-tedbusinessweek-business-news-stock-market-and-financial-advice.

Olson, Geoff. 2014. "We need to talk about TED." Accessed January 30, 2016. http://www.vancourier.com/opinion/columnists/we-need-to-talk-about-tedz1.852874.

TED. "4 exciting changes." Accessed January 23, 2016. https://conferences.ted.com/TED2014/program/.

TED. "About TED-Ed." Accessed February 5, 2016. http://ed.ted.com/about.

TED. "Conferences." Accessed January 23, 2016. https://www.ted.com/about/conferences.

TED. "Get Started." Accessed March 18, 2016. http://www.ted.com/participate/translate/get-started.

TED. "History of TED." Accessed January 18, 2016. https://www.ted.com/about/our-organization/history-of-ted.

TED. "How TED works." Accessed January 28, 2016. http://www.ted.com/about/our-organization/how-ted-works.

TED. "TED Open Translation Project." Accessed March 4, 2016. https://www.ted.com/about/programs-initiatives/ted-open-translation-project.

TED. "TEDx Program." Accessed January 30, 2016. http://www.ted.com/about/programs-initiatives/tedx-program.

TED. "TEDx Rules." Accessed February 5, 2016.

https://www.ted.com/participate/organize-a-local-tedx-event/before-you-start/tedx-rules.

TED. "Who we are." Accessed January 20, 2016.

https://www.ted.com/about/our-organization/who-we-are.

Wikipedia. Accessed March 28, 2016.

http://translations.ted.org/wiki/Main_Page.

Wikipedia. "How to Tackle a Transcript." Accessed March 30, 2016.

http://translations.ted.org/wiki/How_to_Tackle_a_Transcript

Wikipedia. "TED conference." Accessed January 20, 2016.

https://en.wikipedia.org/wiki/TED_(conference).

YouTube. "Bill Gates: The next outbreak? We're not ready." Accessed March 18, 2016.

https://www.youtube.com/watch?v=6Af6b_wyiwI&ab_channel=TED.

YouTube. "TED channel." Accessed February 5, 2016.

https://www.youtube.com/user/TEDtalksDirector?&ab_channel=TED

YouTube. "The OTP Learning Series." Accessed March 22, 2016.

https://www.youtube.com/playlist?list=PLuvL0OYxuPwxQbdq4W7TCQ7TBnW39cDRC&nohtml5=False&ab_channel=TEDOTP.

YouTube. "The OTP Learning Series 08: How to tackle reading-speed issues." Accessed March 30, 2016.

https://www.youtube.com/watch?v=QVz0XyEAbHU&index=8&list=PLuvL0OYxuPwxQbdq4W7TCQ7TBnW39cDRC&ab_channel=TEDOTP.

YouTube. "Zuzana Holubcová – Fascinující drama vzniku nového lidského života."

Accessed March 18, 2016.

https://www.youtube.com/watch?v=Pb-rGLMPO_U&ab_channel=TEDxTalks.

Anotace

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titulkování, crowdsourcing, TED Talks, pravidla titulkování, srovnání, online rozhraní, titulkovací program	
subtitling, crowdsourcing, TED Talks, subtitling conventions, comparison, online interface, subtitling editor	

Anotace v ČJ:

Bakalářská práce se zabývá titulkováním TED Talks, které probíhá formou online crowdsourcingu. Cílem této práce je shrnout obecná pravidla, parametry a strategie titulkování dle několika teoretiků a porovnat je s těmi, které jsou stanoveny pro titulkování TED Talks. Práce se rovněž zabývá procesem titulkování TED Talks. Dále se věnuji profilu titulkářů TED Talks a rozvádím jejich zkušenosti s překladem a titulkováním. Následuje popis online rozhraní používaného pro tvorbu titulků TED Talks s rozborem jednotlivých prvků a srovnáním s offline titulkovacím programem.

Anotace v AJ:

The thesis deals with the subtitling of TED Talks which is realized in the form of online crowdsourcing. The aim of the thesis is to summarize general subtitling rules, conventions and strategies proposed by different theorists and to make a comparison with those of TED Talks. The subtitling process of TED Talks is discussed as well. Subsequently, the profile of TED Talks subtitlers is described together with their experience in translation studies and subtitling. The thesis also encompasses the online interface used for creating TED subtitles, describes its specific features and compares them with the features an offline subtitling editor.