Interdisciplinarity in media accessibility. The case of machine translation of audio description from English into Dutch

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Since the turn of the millennium technological developments in general, and the advent of machine translation (MT) in particular, have significantly changed the way in which we translate. Over the last few years, concerns about MT as a threat to the translator's profession have given way to a proper recognition of the active mediating role this technology takes in the translation process. The question of how we can integrate MT into our workflows and how it can improve both the quality and efficiency of the translation process takes a central position in this development.

On the other hand, media accessibility and inclusion of people suffering from any kind of communication vulnerability have never been higher on the international social and political agenda. As such, there is a growing body of legislation that requires broadcasters and other providers of audio-visual productions to make their content accessible to people with visual impairments. Since the number of properly trained audio describers is still too low to meet the increasing demand for audio description, turning to (automatic) translation to translate existing audio descriptions could provide a solution to quickly meet the growing market demand. Hence, the question of the usability of MT is gaining relevance in the field of audio description (AD) too. On the one hand, AD seems a suitable candidate for MT: guidelines encourage describers for example to use concrete language and to keep sentences simple and short, which should make it easier for machines to translate them. On the other hand, research has shown that AD uses a language of its own with specific linguistic idiosyncrasies (Reviers, 2018) which, together with the multimodal context within which AD operates, may pose considerable challenges to the use of MT to translate audio descriptions into other languages, and the productivity gains of post-editing machine translation compared to from-scratch translation that previous research into MT for written texts (Nunes Vieira, 2019) and for subtitling (see for instance Matusov et al., 2019; Etchegoyhen et al. 2014) suggest might not be as significant for AD.

In this presentation, we will report on a case study that we carried out in 2021 in the framework of a 4-year project studying the feasibility of machine translation of audio description in the English-Dutch language pair. Building on earlier research in this direction (Fernandez-Torné & Matamala, 2016; Matamala & Ortiz-Boix, 2016) it focused on two questions, namely a) what type of errors do MT engines make when translating ADs and b) can possible causes of these errors be identified. The presentation will first briefly discuss the current state of the art in AD translation and MT of AD. Next, the tools used for the pilot study and the methodology adopted for error categorization will be explained. In the third and main part, a discussion of the results will be presented in order to identify probable causes for the errors and explore what kinds of optimization are required to successfully apply machine translation for AD. Finally, the presentation will pinpoint avenues for further research, such as studying ways in which machine translation systems for AD might be optimized to generate better results.

References

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