Towards a multilingual database of sound effects

One of the most significant linguistic and technical challenges applied to subtitling for the deaf and hard of hearing persons (SDH) is the linguistic description of sound encapsulated within the space of subtitles. This subtitle typology is crucial to hearing impaired audiences, since its main purpose is to improve the level of comprehension and appreciation of the plot, character development and, in general, of the nuances of audiovisual products.

The scope of this study is to investigate the possibilities and the applications of a multilingual database of sound effects. Such database will combine the most recent technologies in Respeaking, viewed as "the production of subtitles by means of speech recognition" (Romero-Fresco, 2018) applied to sound effects, and the most recent technologies in Machine Translation, which is more widely used in (non-AV) text translation than in AVT (Burchardt et al., 2016).

Drawing upon the BBC Sound Effect database and by means of what is supported by agencies producing Foley sounds, along with specialised SDH subtitlers and linguists, this universal tool can be potentially transformed into the common point of reference for the appropriate labelling of SDH. The use of the database can be extended to more languages with the scope of consolidating and unifying the labelling of sound effects for SDH across Europe.

Part of this research will also focus on some aspects of Sound Studies and Deaf Studies with the aim of investigating the loudness of sound effects and the limit under which a subtitle will be rendered either irrelevant or unnecessary. The outcome of this research could be used as the foundation for further interdisciplinary research and its results and data are expected to become useful resources for educational and training objectives.

References

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