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Day One: Translation technology and usability

Translation Memory was first incorporated into Computer-Assisted Translation (CAT) tools in the early 1990s, but after over 20 years of development, we found that users were still dissatisfied with the usability of CAT tools (Moorkens and O’Brien 2017). Lagoudaki’s survey of TM UIs in 2006 suggested that industry research and development was mostly motivated by “technical improvement of the TM system and not how the TM system can best meet the needs of its users” (Lagoudaki 2008, p.17). This situation is belatedly changing, and the added competition in this space from the likes of MemoQ and, more recently, Lilt and Matecat, has meant that SDL have made usability a central tenet of Trados Studio 2017. In this session, we look at the history of user-centred design for translation technology, present some studies carried out on user requirements (Moorkens and O’Brien 2017), testing new functionality to support post-editing (Moorkens et al. 2015), and our ongoing work on creating a CAT tool for touchscreen and mobile with consideration of universal design principles (Moorkens et al. 2016).


Day Two: Translation quality evaluation

Evaluation of human and machine translation employs an increasing variety of metrics depending on the domain, text type, and intended purpose of the translated text. As the distinction between machine and human translation becomes fuzzier, “theorists and professionals overwhelmingly agree there is no single objective way to measure quality” (Drugan 2013, p.35). Researchers are accordingly required to learn how to apply many metrics in translation quality evaluation, including automatic evaluation metrics such as BLEU and HTER, use of post-editing as an evaluation metric, measures of adequacy and fluency, and error typologies such as LISA QA and MQM-DQF. In this session, we will discuss the scenarios in which various evaluation methods might be appropriate, look at previous studies of translation quality, and carry out small-scale evaluation practice in order to measure inter-annotator agreement within the cohort.

**Day Three: MT - perception vs reality**

In survey research presented on Day One, we saw that many translators are dissatisfied with the current level of incorporation of machine translation (MT) in commercial translation and localisation workflows. However, added functionality to support MT post-editing is not always appreciated or productive when implemented. More recently, claims have been made that the advent of Neural MT has led to output that approaches human quality (Wu et al. 2016). We look at comparative evaluations of Neural and Statistical MT quality (by Bentivogli et al. 2016, Toral and 2017, and ourselves, using methods described on Day Two) to show that, while fluency and overall error counts are lower with Neural MT, it represents more of an iterative improvement to MT quality rather than a panacea.


**Day 4: The vendor model, technology, and commodification of translation**

Translation is often mentioned in media articles as a profession under threat of automation, citing reports such as Brynjolfsson and McAfee (2012) and Vandermeer (2016). However, Way (2013) feels that emerging use cases for MT does not threaten translators, and Cochrane (2014) believes that the rate of growth of machine intelligence is “at best linear with time and not exponential” (p.8). This fits with our evaluations of state-of-the-art MT on Day Three. Translation is, however, ahead of the trend towards freelance or contingent work being experienced across all professions, and exhibits data dispossession common to many creative roles. In this final session, we look at employment prospects for translation graduates and the future of the profession. We consider to what extent MT and crowdsourcing should be considered a threat to translators as Neural MT increasingly becomes the norm, and look at how the combined pressures of economy and incrementally improving MT quality are pushing raw MT into use cases that encroach on the professional domain.


