Developing User-Centred Approaches to Technological Innovation in Literary Translation (DUAL-T)

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Abstract

DUAL-T is a Marie Skłodowska-Curie Post-doctoral Fellowship project which aims at involving literary translators in the testing of technology-inclusive workflows. Participants will be asked to translate three short stories using, respectively, (1) a word processor combined with online resources, (2) a computer-aided translation (CAT) tool, and (3) a machine translation post-editing (MTPE) tool.

1 Project Overview

In recent years, research has started to focus more on the application of technology to the literary translation workflow. In particular, an increasing number of studies is exploring the use of machine translation (MT) and post-editing (PE) for literary texts and their impact on productivity, creativity, quality and readability (see, for example, Toral et al., 2018; Tezcan et al., 2019; Webster et al., 2020; Guerberof-Arenas and Toral, 2022; Macken et al., 2022).

This being said, workflows which include translation technology are usually perceived "as either inappropriate or a threat to the skills and livelihoods of literary translators" (Youdale, 2019: 199). Furthermore, literary translators tend not to be included in these studies, with Moorkens et al. (2018) and Kenny and Winters (2020) being notable exceptions. This can be problematic, especially when considering literary translators' specific ways of relating to both technology and their profession. In fact, studies have shown how they prioritise social and cultural capital over economic capital (Heino 2020), are unaware of the latest technological developments (Daems 2022; Ruffo 2021), and use translation technology in novel ways (Slessor 2020; Ruffo 2022).

"Developing User-centred Approaches to Technological Innovation in Literary Translation" (DUAL-T) is a 2-year EU-funded project aiming at involving literary translators as end users in the co-creation of a technology-inclusive workflow, bridging the gap between MT-centric research and studies on literary translators' self-image and attitudes towards technology. The project is being carried out at Ghent University and sees the collaboration of a Swedish book translation company which uses MTPE as part of its workflow.

The project's objectives are three-fold:

1. to devise a technology-inclusive literary translation workflow employing a user-led approach by involving translators throughout the research and development process;

2. to assess to what extent translation technology can enhance literary translators' existing workflow(s);

3. to mediate a dialogue between literary translators and translation technology developers by feeding back data on literary translators' use of and attitudes towards translation technology to the industry partner of the project.

2 Research Design & Methodology

According to the International Organization for Standardization (ISO), usability is the "extent to which a system, product or service can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use" (ISO, 2018).

The project's research design is based on this definition, as the study seeks to understand effectiveness, efficiency and satisfaction as defined by literary translators. More specifically, between 10-15 literary translators will be asked to translate three short stories using, respectively:

1. a word processor;

2. a computer-aided translation (CAT) tool;

3. an online machine translation post-editing (MTPE) platform (provided by the industry partner).

Efficiency and effectiveness will be measured using behavioural data obtained by using Inputlog combined with screen capturing. In particular, temporal, technical, and cognitive effort will be determined by looking, respectively, at overall translation time and time spent outside of the main tool, number of keystrokes, and number and duration of pauses.

User satisfaction will be measured using attitudinal data obtained via pre- and post-task questionnaires and post-task interviews with the participants. This part of the study will elicit data on users' perceived effort, the impact of different segmentation types on the translation process, overall attitudes towards each workflow, and whether these are affected by previous knowledge of and confidence with technology.

Finally, both the participants and the industry partner will be invited to participate in a focus group aimed at uncovering features of an ideal technology-inclusive workflow, and at initiating a dialogue between literary translators and literary translation technology developers.

3   Further Steps & Expected Outcomes

The experimental set-up is currently being piloted, and participant recruitment will begin as soon as all workflows have been tested. Data analysis will primarily focus on attitudes towards different types of segmentation, workflow features which translators found (un)useful, and on comparing participants' actual and perceived effort. Additionally, an end-of-project workshop will be organised to communicate results to the general public.

Ultimately, by crossing disciplinary boundaries and centring literary translators' behaviour and attitudes, DUAL-T hopes to explore the intersection of literary translation's most creative and human components, and state-of-the-art translation technology. It is also hoped that combining user testing techniques with translation process research approaches will open new avenues for future work on co-creating workflows informed by literary translators' professional narratives.

Acknowledgements

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