Mapping readers' receptions of human- and machine-translated literary texts: "Appreciation heatmaps" as an innovative method for reception research

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Abstract

As Jauss (1982, p. 21) argues, "a literary work is not an object which stands by itself and which offers the same face to each reader". To date, the evaluation of literary translations has mainly been based on text-centric approaches such as error analysis. These approaches evaluate translations with an overly simple binary conceptualisation between *errors* and *non-errors*, taking into account neither the nuanced differences between alternative solutions nor the diversity of literary reception. While some studies have investigated the reception of audio-visual translations with methods such as eye tracking and electroencephalography, few empirical methods have been proposed to thoroughly investigate the reception of literary translations. Thus, this paper presents a mixed-methods study that compares 131 readers' reception of human- and machine-translated literary texts from English into Chinese. In this study, the "appreciation heatmap" is proposed as an innovative technique to visualise the readers' positive and negative annotations in the translations. As Figure 1 shows, the appreciation heatmaps use different shades of highlighting colours to illustrate the frequency with which the text items in a translation were liked or disliked by the readers. Thereby, the appreciation heatmaps provide fine-grained insights into how human- and machine-produced solutions differ in their effect on the readers' literary appreciation. This innovative method reveals that, although the overall reception of machine translations was less favourable than that of professional human translations, a notable proportion of the MT outputs received positive appreciation from most readers, challenging the pervasive conviction that machine-translated literary texts are completely unreadable.

MT – Likes (N = 39):	MT – Dislikes (N = 39):
这是七月初的一个宁静而温暖的日子。 [66.67%] 在午后的阳光下， [56.41%] 望着平坦的埃塞克斯乡间， [53.85%] 一片绿意盎然， [76.92%] 一派宁静， [61.54%] 人们几乎无法相信， [23.08%] 就在不远的地方， [28.21%] 一场大战正在既定的道路上进行。 [25.64%] 我觉得自己突然误入了另一个世界。 [43.59%]	这是七月初的一个宁静而温暖的日子。 [7.69%] 在午后的阳光下， [2.56%] 望着平坦的埃塞克斯乡间， [5.13%] 一片绿意盎然， [5.13%] 一派宁静， [12.82%] 人们几乎无法相信， [17.95%] 就在不远的地方， [12.82%] 一场大战正在既定的道路上进行。 [43.59%] 我觉得自己突然误入了另一个世界。 [12.82%]

Figure 1. An abridged demonstration of the appreciation heatmaps

Biography

Dr. Ke HU is a lecturer of Translation Studies at the Chinese University of Hong Kong, Shenzhen (CUHK-SZ). He received his Ph.D. and M.A. in Translation Studies from the University of Melbourne. Before joining CUHK-SZ, he worked as a Teaching Fellow at the University of Melbourne. His research interests lie in large language models, translation technologies, and translation reception research. He is also a Professional Translator certified by National Accreditation Authority for Translators and Interpreters (NAATI) of Australia.