

MTxGames: Machine Translation Post-Editing in Video Game Translation – Findings on User Experience and Preliminary Results on Productivity

Judith Brenner

University of Eastern Finland

jbrenner@uef.fi

Abstract

MTxGames is a doctoral research project examining three different translation modes with varying degrees of machine translation post-editing when translating video game texts. For realistic experimental conditions, data elicitation took place at the workplaces of professional game translators. In a mixed-methods approach, quantitative data was elicited through keylogging, eye-tracking, error annotation, and questionnaires as well as qualitative data through interviews. Aspects to be analyzed are translation productivity, cognitive effort, translation quality, and translators' user experience.

1 Introduction

Reports from the video game localization industry suggest that machine translation post-editing (MTPE) is increasing in demand, with game translation buyers hoping to reduce translation time and/or costs. However, there is hardly any research that could provide evidence to base this practice on. Therefore, the MTxGames project aims to shed light on the MTPE process of professional game translators when translating video games. Translators performed three different translation tasks over the course of one day: translation from scratch, static post-editing (PE), and flexible PE. Data gathered during this study allow for analyzing translation productivity, translation quality, cognitive effort, and user experience. At the current stage of analysis, preliminary results on productivity and final results on user experience are available.

The research questions and design of this study were informed by MTPE studies on informative

text types as well as from creative fields such as literary translation and from multimodal fields such as subtitling. While increases in productivity have been reported, they do not necessarily happen for all translators and show high variability (Terribile, 2024). In creative fields such as literary translation, productivity can even be decreased (Guerberof-Arenas and Toral, 2022). With contradictory results on productivity between studies with informative texts and with literary texts, the question remains how productivity is affected when translating video games by post-editing MT output. Video games are complex entities and translating them combines aspects of software localization, technical translation, creative translation, and multimodal translation (Bernal-Merino, 2015). According to several manifestos published by associations representing game translators, among other types of creative translators, translators oppose the use of MT and the MTPE practice (e.g., Deryagin et al., 2021). To include translators' perspectives, the experience of the translator as user of MT is of interest in this study. A recent study on MT user experience (Briva-Iglesias, 2024) showed higher user experience when MT was incorporated into the translation production process in another form than doing static PE. Also, Hansen and Houlmont (2022) suggest using MT as additional resource to a translation memory (TM), instead of for MTPE, to not constrain creativity when translating games. Therefore, this study compares translation from scratch with two different types of MTPE.

2 The Study

The study was conducted in collaboration with the game localization service provider Native Prime. Native Prime recruited and compensated the study participants (14 freelance game translators and 1 in-house game localization project manager), provided the game texts, access to the MT system (ModernMT), the TM and the terminology

© 2025 The authors. This article is licensed under a Creative Commons 4.0 licence, no derivative works, attribution, CC-BY-ND.

