Jakobsen, Arnt Lykke and Mesa-Lao, Bartolomé (eds) (2017). *Translation in Transition: Between Cognition, Computing and Technology.* Amsterdam/Philadelphia: John Benjamins, pp. 243, €90/$128. ISBN: 9789027258809 (HB), 9789027265371 (e-book).

In *Translation in Transition*, Jakobsen and Mesa-Lao provide a multifaceted collection of research that examines how translators interact with contemporary translation technologies. In doing so, the editors present a volume that explores the fundamental shift of translation to the digital age and critically discusses the consequent effects on the translation process and its products.

In their *Introduction*, the editors weave together a comprehensive analysis of the current state-of-the-art in the field of empirical process-oriented translation studies in which they situate the changing nature of translation in the face of technology and the digital landscape of the 21st century. The editors put forward a refreshing perspective in which "translators and translation technology developers have a shared role in developing and shaping the future of translation" (5), and remind us that the impact of new technologies on translation-related cognitive processing is yet to be fully investigated as is the assumption that new technologies only bring positives, e.g., higher productivity, without any negatives, e.g., reductions in quality. The editors then move to present interdisciplinary work from twenty-eight contributors across eight chapters carefully placed into three complementary parts.

In *Chapter One*, Schaeffer and colleagues compare reading for comprehension with reading for translation. Using a clever research design, they explore the activation of linguistic systems in translation and provide a compelling argument, with supporting data, for a link between eye movements and translation choices, which the authors situate within existing theories and models of the translation process.

In *Chapter Two*, Hvelplund provides an original investigation of different types of reading within the drafting phase of translation. The author uses eye tracking to examine gaze behaviour and related typing activity and uncovers stimulating results that challenge the eye-mind hypothesis upon which much contemporary eye tracking research is based.

Chapter Three provides Carl and Shaeffer's proposal of a computational measure of translation literality based on a large multilingual corpus of translation process data containing eye movement and keystroke data. Their findings provide noteworthy insights into literal and non-literal translation choices.

In *Chapter Four*, da Silva and colleagues explore, using eye tracking and keystroke logging, the differences in cognitive effort between translating and post-editing from and into L1 and L2. They explore the impact of directionality and task type on a range of measures and present findings that they compare with previous studies.

Whyatt and colleagues present a project in *Chapter Five* that aims to analyse problem-solving and decision-making in interlingual and intralingual translation. On the back of a justification for the project design, which includes eye movement, keystroke data and screen capturing, they provide data on explication and simplification which they situate within a discussion of the overlap between interlingual and intralingual translation.

In *Chapter Six*, Vieira describes an investigation into the relationship between translation quality and visual attention during the human post-editing of machine translation output. The author's discussion of findings presents an empirical-basis for the distinction between adequacy and fluency, and a juxtaposition of post-editing and the automation of cognitive processes is also a valuable reflection on current methodologies.

In *Chapter Seven*, Guerberof describes a study in which experienced reviewers assess the quality of documents translated by professional translators employing contemporary translation technologies. The author presents results that show the complexity of the review process and the consequent convergence and divergence between reviewers with interesting patterns emerging across translation memory match values.

In the final chapter, *Chapter Eight*, Morin and colleagues investigate the multidimensional quality of translations produced longitudinally by student translators using three different translation technologies: translation memory, speech recognition, and post-edited machine translation. In presenting a range of interesting results, the authors discuss numerous factors influencing their translators' performance.

Overall, *Translation in Translation* is an exciting collection of original and novel research that not only contributes to our understanding of the translation process vis-à-vis translation technology, but also represents methodological innovations that will further safeguard the maturity of the field and its interactions with neighbouring disciplines. It augments a rigorous scientific approach with contemporary industry-relevant insight and does not shy away from the reality of translation technologies. The editors' ability to situate this collection into the wider developments within and outside of the field solidify the progress made in empirical process-oriented translation process studies over recent years. As such, it provides essential reading for scholars interested in empirical and process-oriented translation studies and its developing links to psycholinguistics,

computational linguistics, human-computer interaction, and cognitive psychology.

Stephen M. Doherty
The University of New South Wales
E-mail: s.doherty@unsw.edu.au