

Li, Defeng, Lei, Victoria Lai Cheng and He, Yuanjian (eds) (2019). *Researching Cognitive Processes of Translation*. Singapore: Springer Verlag, pp. 201, €83.29. ISBN 978 9811319846.

As new technological tools and resources have revolutionised the practice of translation, the field of translation studies has been undergoing similar changes thanks to the increasing application of fascinating technologies to the investigation of the way translators work, trainees learn, translations differ, etc. Research on the translation process is undoubtedly one of the prominent fields gaining tremendous momentum in these years, as evidenced by the recent upsurge of seminars, conferences and publications in cognitive translation studies. The volume under review, comprised of selected keynote presentations during the First and Second International Conference on Cognitive Research on Translation and Interpreting (ICCRTI) held at the University of Macau in 2014 and 2015, gives another impetus to this trend.

The book consists of two parts with different topical foci. The first part features a collection of three chapters centering on theoretical aspects of translation process research (TPR), while the contributions in the second part are oriented towards more practical dimensions with regard to the use of tools and methods in process-related explorations.

Chapter 1 by House presents a critical review of the validity and reliability of current TPR and advises that looking for a neuro-linguistic theory with descriptive and explanative adequacy is the “first step towards a more valid and reliable approach to investigating the translation process” (12). To illustrate her point, she proposes an interdisciplinary approach combining a functional-linguistic translation theory with a neuro-functional theory of bilingualism.

House’s opinion finds an immediate echo in Chapter 2, in which He takes an integrated perspective on the translation process by synthesising theories of universal grammar, neurocognitive bilingualism, neurofunctional control in the bilingual brain and computational models of language processing. Based on his theoretical framework, He hypothesises about processing economy in the bilingual brain, suggesting mutual complementation and compensation between memory and computation in the process of translation and interpreting.

In Chapter 3, Carl and Schaeffer use Relevance Theory and the well-known noisy channel model to expound on a computational framework for post-editing machine translation. They argue that such a combination well explains the unconscious priming effects and conscious meta-cognitive strategies taking place during translation.

Chapter 4 by Jakobsen reports on an exploratory study that looks into a possible correlation between the experience of “flow” and eye movement behavior in translation by combining data from keystroke logging and eye tracking to study the work of a professional translator. Given that the study is qualitative in nature, Jakobsen arrives at some tentative conclusions, and rightly points out that case-based research needs to be complemented by large volume analysis to yield more testable hypotheses about translational processing.

In Chapter 5, Lu and Yuan discuss the application of functional near-infrared spectroscopy (fNIRS) in exploring brain activities in translation and interpreting based on a brief review of the method. They argue that fNIRS as a noninvasive technique promises more ecological validity than other neuroimaging tools, but its potential rewards for TPR are yet to be fully realised.

Chapter 6 by Alves, Szpak and Buchweitz presents some preliminary thoughts on designing brain-imaging studies to shed light on the inferential mechanisms involved in the translation process. More specifically, building on detailed theoretical accounts of neural machinery that underpins translation as an inferential act of communication, they examine the feasibility of incorporating neurophysiological and behavioral data when we want to gain further insight into the inferential nature of the translation process.

In Chapter 7, Sun takes up the important topic of difficulty in translation and offers a comprehensive review of potential methods used for its measurement in human translation and especially in post-editing. Although measuring translation difficulty is a challenge complicated by task and human factors, Sun believes that the benefits of research in this direction do not stop at the conceptual level, but also bear profound implications for the practice and pedagogy of translation and post-editing.

The last chapter by Göpferich is less concerned with brain activities taking place during translation and focuses more on the role of translation competence in L2 writing. Based on a comprehensive review of related research, she demonstrates that resorting to the L1 in L2 writing is not only a cognitive catalyst for trans- and multiliteracy, but also a requirement for translation competence development. In her conclusion, she suggests that her findings bear practical implications for both translation and L2 writing pedagogy considering that translation competence, including the ability to translanguage, is a soft skill in a multilingual and multicultural world.

On the whole, the book is a commendable addition to the current repertoire of TPR. The biggest strength lies in its focus on the fundamental importance

of solid theoretical foundations for TPR while shedding new light on improving methodological rigor in empirical research endeavors. Indeed, despite warnings that “cognitive approaches [to translation] entered a period dominated by methodology that is now coming to an end” (Muñoz Martín 2017: 560), the decade-old demand for “a strong, commonly-accepted model (or even viable competing models) of the translation process” (Shreve and Angelone 2010: 12) remains a paramount concern for whoever might take an interest in the translation process. In this respect, the book serves as a timely renewed call for further efforts to address this need.

While it is impossible to include all of the cutting-edge research in a single edited volume, the robustness of the present one could have benefited from incorporating more of the latest empirical studies. These might have included, for instance, process research into oral interpretation, thus further widening the scope of investigation to less trodden, yet equally exciting areas.

References

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