

## BOOK REVIEW

**Pastor, Gloria Corpas and Durán-Muñoz, Isabel (eds.). 2018. *Trends in E-Tools and Resources for Translators and Interpreters*. Special Issue of *Approaches to Translation Studies*, vol. 43. Leiden/Boston: Brill Rodopi.**

**Reviewed by Marijan Brkić**

The volume at hand, *Trends in E-Tools and Resources for Translators and Interpreters*, is the 45th issue of *Approaches to Translation Studies*, a journal founded by James S. Holmes, whose work is widely considered to be fundamental in structuring the various translation issues into a modern academic field of inquiry. Holmes also created the term translation studies, which is the most prevalent name for the discipline in the English language. The issue was edited by two Spanish professors, Gloria Corpas Pastor from the University of Málaga and Isabel Durán-Muñoz from the University of Córdoba. As is evident from the volume's title, the editors selected papers with the aim of presenting an overview of technology's influence on translation today.

Inquiry into technology aimed at producing findings applicable in translation practice has to take into consideration the seemingly ever accelerating pace of technological evolution. Time-demanding research concerning particular tools and resources faces the risk of producing papers which are no longer relevant in the professional landscape that is continuously transformed by the growing influx of new technologies. The effects of the lag between humanistic research and technological innovation can already be observed in the foreword to *Trends*: "...while automatic translation went on to work reasonably in some scenarios and to do well for gisting purposes, even today, against the background of the latest promising results delivered by statistical Machine Translation systems such as Google Translate, automatic translation is not good enough for professional translation." (p. vii) In November 2016 Google Translate switched from using statistical machine translation (SMT) to what is termed neural machine translation (NMT). NMT is characterized by the use of artificial neural networks, computational systems "inspired by human biology and the way neurons of the

human brain function together to understand inputs from human senses.” (DeepAI 2017-2018)) The idea of MT being able to reach accuracy levels of human translation was temporarily abandoned during the 1960s, with Yehoshua Bar-Hillel’s (1960) and ALPAC’s (1966) reports marking the end of the era of MT optimism. However, recent improvements in translation quality due to neural networks once again shifted fully automated high quality translation from the domain of science fiction closer to the mainstream of current discourse on translation.

At present, however, translators and interpreters still play a substantial role in the circulation of information in the globalized society. As the editors point out, translators and interpreters, as well as human users in general, remain the main characters in the translation process. (p. vii) Humanistic inquiry into translation tools and resources is therefore a necessary counterweight to technological innovation in the process of improving translation quality and production. Papers collected in *Trends in E-Tools and Resources* bring to light various aspects of the underresearched humanistic part of the equation, with less studied interpreting tools and resources also represented. The volume is divided into three parts: the papers gathered in the first part share the focus on informational and technological competence in translation, the second one is dedicated to CAT/CAI tools and the last one to MT.

The first part, titled *Electronic Tools for Translators*, begins with Joanna Gough’s paper “Investigating the Use of Resources in the Translation Process”, which presents the methodology and sums up the findings of her 2016 doctoral dissertation *The Patterns of Interaction between Professional Translators and Online Resources*. Gough highlights the relevance of resource investigation in translation studies with the fact that “freelance translators can spend as much as 30% of their translating time on interactions with external resources.” (p. 10) However, word-based salaries fail to compensate for time spent on research using external resources. In order to raise productivity gains, Gough posits that it is necessary to understand what happens in the 30% of translation time (p.10). She outlines an investigative methodology capable of adapting to the “exponentially growing and diversifying range of resources.” (p. 13) She uses data from screen-recorded work of 16 professional translators to develop a typology of translator research styles, containing categories such as the number

of resources used or time spent interacting with a single resource. The results show that translators can vary considerably in their research styles. Gough concludes that this variability indicates that in order for research activities to be streamlined, translation resources need to be developed in a way which allows them to adapt to research styles of individual users.

The second paper is entitled "User Perspective on Translation Tools: Findings of a User Survey" and it was written by Anna Zaretskaya, Gloria Corpas Pastor and Míriam Seghiri. Recognizing the indispensable nature of technology in translation today, the authors stress the necessity of investigating the needs of professionals in regards to the tools they use. The study employs a user survey taken by 736 participants from 88 countries. Participants' familiarity with different tools and their features is correlated with their education in translation and IT. The results indicate that a university education in translation is not the most relevant factor in the level of awareness of technological trends affecting the field and it does not lead to quick adoption of the latest translation tools.

The editors of the volume, along with Hernani Costa, are the authors of the third paper, which is titled "Assessing Terminology Management Systems for Interpreters", a much-needed addition to the still developing scholarship on interpreting technology. The scarcity of literature on interpreters' needs concerning tools is exemplified by the fact that the authors list all relevant previous studies and the overview barely reaches five lines of text. This paper provides an evaluation of 14 terminology management systems in use today which were developed specifically for interpreters or lend themselves to use in interpreting contexts thanks to the nature of their design. Three types of TM systems are distinguished: standalone TMS, web-based TMS and mobile TMS. A list of most important TMS features is established by means of a comparative analysis of specific TM systems and previous studies on the topic. TM systems are graded using the list, with certain features being excluded or modified according to the TM type in question. On average, web-based TM systems achieved higher grades than the other two types.

Éric Poirier's contribution rounds up the first part of the volume. The paper is titled *Human Translation Technologies and Natural Language Processing Applications in Meaning-based Translation Learning Activities*. Poirier starts with the proposition that in both translation practice and translation teaching it is of

utmost importance to understand the “centrality of meaning.” (p. 88) In order to design learning exercises which will facilitate the student’s ability to retrieve and synthesize meaning, the author suggests that much use can be made of human translation technology (word processors, dictionaries, terminology banks, etc.) and natural language processing applications. The technology can break up the translation process into a series of “iterative and replicable processes” (p. 90), which can be separately trained and graded. Some of the exercises he suggests require the student to identify which item from a list of terms does not belong to a particular subject field or to draw simplified syntax trees for target language sentences. While these exercises could be beneficial, Poirier seems to suggest that they might be better suited for translator training than tasks requiring students to produce a translation. The author argues this by citing a survey which describes traditional translation exercises as “depressing” and by saying that “typical exercises are also diverting teaching and learning efforts on translation modalities related to contingent parameters of a particular document or text genre, as opposed to meaning-based translation techniques that apply regardless of documents or text genres.” (p. 87) Another argument Poirier puts forth in favour of task-based learning activities is the fact they are “non-subjective” (p. 88) While multiple-choice quizzes can certainly be graded non-subjectively, their abstracted nature is in direct opposition to certain aspects of actual translation practice. Most subject fields often face translators with linguistic structures that do not have established equivalents in the source language. This can only be resolved by the translator’s subjective decision, which is then subjectively evaluated by the translation recipients. It is not evident how narrowly constructed tasks that constrict students’ choices and eliminate subjectivity can be of greater pedagogical value than tasks which involve a complete translation process.

The segment on CAT and CAI tools opens with the paper “Monitoring the Use of Newly Integrated Resources into CAT Tools: A Prototype” jointly written by Aurélie Picton, Emmanuel Planas and Amélie Josselin-Leray. Scholarship cited in the article’s introduction agrees that information provided by corpora exhibiting the usage of particular expressions is of more use to translators than distilled context-free lexical information found in dictionaries. However, the authors note that current CAT workstations are still not equipped with tools allowing fine-grained corpora processing. By analysing various translator

workstations, the authors sought to find the most ergonomic way to include corpora processors into a typical TW interface. Findings were used in the development of a prototype named Argos, which displays Knowledge Rich Contexts (KRC) of particular lexical items in source and target languages. Argos was used as the basis of an experiment where 42 students from translation programmes were required to translate a short text. Their interaction with the software was recorded and the translation session was followed by a questionnaire. The survey results point out that even though KRCs were assessed as highly useful, traditional lexicographical information is still indispensable for the majority of participants.

John Moran, David Lewis and Christian Saam are the authors of "Can User Activity Data in CAT Tools Help Us Measure and Improve Translator Productivity?" The titular question stems from current research on the impact of MT on translator speed. It was established that the number of edits made by a translator on an MT text does not correlate with the time spent on editing. It is then posited that clearer insight into the relation between the use of MT and productivity could be provided by monitoring user activity data (UAD). To demonstrate this, the authors conducted an experiment in which a group of 24 translators working on various language pairs were given a text with random sentences translated with MT, which would require of them to continuously switch between translating to post-editing. UAD gathered from the translating sessions allows a close look at the way typing speed and word-per-hour output varies as the translators move from translated to untranslated parts of the text, with MT exhibiting considerable variation in its impact on different translators.

The second segment of the volume concludes with Claudio Fantinuoli's contribution titled "Computer-assisted Interpreting: Challenges and Future Perspectives". Following the assessment by Anthony Pym, Fantinuoli believes that the slow development of scholarship on this topic can be linked to a pervading aversion to technology in interpreting circles, both professional and academic. It is held that technological innovation is hurting the profession by distancing interpreters, with current tools in remote video-interpreting not requiring them to be present at events for which they are providing services. Fantinuoli's paper serves as a recapitulation of scholarship on CAI tools made so far, providing a summary of most important studies and outlining the historical

development of CAI technology. He then switches his sights to the future, pointing out various directions that require further study. The conclusion is unsurprising – ignoring technological advancement is not a viable long-term strategy.

As was already mentioned, the final segment of the volume is dedicated to machine translation, and the opening article is titled “The ACCEPT Academic Portal: A Pre-editing and Post-editing Teaching Platform”. Pierrette Bouillon, Johanna Gerlach, Asheesh Gulati, Victoria Porro and Violeta Seretan, all based at the University of Geneva, present the ACCEPT Academic Portal, an online platform designed to showcase MT workflow. The authors believe that all MT tools are far too complex for teaching purposes, which raises the necessity for a more streamlined and easy-to-use software that could serve as a platform where students will be introduced to basic MT concepts. This is what prompted them and other scholars from the University of Geneva to create the ACCEPT Academic Portal, a free online MT software divided into four modules, each dedicated to a specific step in MT process – pre-editing, translation, post-editing and evaluation. The authors note that, to the best of their knowledge, no other tool available on the market instantly displays the effects of specific pre-editing choices on the outcome of translation besides ACCEPT.

“The Challenge of Machine Translation Post-editing: An Academic Perspective” by Celia Rico, Pilar Sánchez-Gijón and Olga Torres-Hostench continues the MT section of the volume. The development of MT has caused post-editing to overtake a considerable share within the language service industry and all indications point to its further growth. The authors stress the responsibility of academia to notice this trend and respond with adequate scholarly effort. Following an overview of most important previous studies on the subject and possible directions for future research, a case study is described in which students without previous post-editing experience attended a 20-hour seminar consisting of theoretical classes and practical training both in and outside of a classroom setting. The students showed immediate progress in post-editing and agreed on its importance for translation services.

The volume’s concluding article is entitled “SCATE Taxonomy and Corpus of Machine Translation Errors” and is written by Arda Tezcan, Veronique Hoste and Lieve Macken. Using their SCATE taxonomy of error, the authors have built

a corpus of MT errors using English-Dutch sentence pairs translated with statistical machine translation (SMT) and rule-based machine translation (RBMT). The most challenging aspect of corpora building is that various categories involved in error recognition must be defined in such a way that different text annotators produce matching annotations. For the purposes of building their corpus, the authors have created a new method of measuring inter-annotator agreement (IAA), which they call alignment-based inter-annotator agreement. This IAA analyses whether the annotated error spans the same textual segment between different annotators, a criterion not employed in other IAA methods. According to the usual procedure used to grade IAA, the results reported by the authors range from substantial to almost perfect. According to the authors, the feature which distinguishes their corpus from others is that accuracy errors found in the MT output are linked to the corresponding source text fragments.

The need for further study is stressed in almost every paper of this volume even though the amount of articles being published is growing each year. The urgency for keeping abreast with technological innovation is keenly felt throughout academia and especially in areas dedicated to professions marked by a pervasive reliance on electronic tools and resources such as translation, notwithstanding the more sceptical attitudes found among interpreters. *Trends in E-Tools and Resources* provide a rounded selection of papers exploring many different venues through which technology is shaping translation today. One of the most noticeable processes currently occurring is the growth of post-editing in the language service market. With digital technology's exponential rate of advance, the adaption of academic dissemination of research seems crucial in the task of securing practical relevance. In this era of digital live feed, when magazines dedicated to technology are dismissed as obsolete the moment they hit the stands, academic journals, locked into lengthy publishing cycles, could soon be facing a transformation of their own.

## Reference

DeepAI. 2017-2018. "Neural Network". URL: <https://deepai.org/machine-learning-glossary-and-terms/neural-network>. Accessed on: 19 Nov. 2018.