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A turn to ergonomics in translator and interpreter training

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ABSTRACT

This introductory article will illustrate how ergonomics has come to occupy a prominent place in translation and interpreting studies. It will review the studies that have been carried out in recent years to measure physical, cognitive and organisational conditions within the language industry. It will be argued that, despite the growing awareness of the need to develop and teach sustainable practices within the classroom (see EMT Expert Group 2017), only scant attention has been paid to ergonomics in translator and interpreter training. This article seeks to map out the (largely uncharted) territory of ergonomics in translator and interpreter training and provide an overview of the contributions to this Special Issue of *ITT*.

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Introduction

Translation and interpreting take place in an increasingly technology-driven workplace. In translation, technology does not only speed up the translation process itself (through automated solutions), it also alters the procedural nature of the process. Furthermore, it allows for streamlined workflows, resulting in ever-faster turnaround times for translation projects and, ultimately, to ever-higher volume capacity. The technological developments can place a serious strain on translators who fail to adjust to the new reality. In interpreting, changes seem less dramatic, but the demand for (remote) interpreting has been growing in the past decades, especially in health services and business settings. Due to the growing demand, new technological solutions, so-called CAI (Computer-Aided Interpreting) devices, have been launched. Some solutions urge interpreters to reinvent their services (e.g. video remote interpreting) to attract new customers or retain existing ones. Other technologies (like search engines on computers or mobile phones) add an extra dimension or task to interpreting practices, which can make interpreting cognitively more demanding.

New times call for new professional profiles. Among the requirements for translation and interpreting professionals, adaptability or flexibility is often mentioned as a key factor for professional success. Adaptability and ergonomics go hand in hand. Since translator and interpreter training is supposed to prepare proto-professionals for new realities, and also for future realities, it seems imperative that attention be paid not only

to professional ergonomics in the language industry, but also, and all the more so, to ergonomics in translator and interpreter training.

Ergonomics in translation studies

In his lecture entitled ‘The State of Two Arts’, delivered in 1984, James Holmes spoke of a ‘far-too-rapid succession of fashions and frills of the moment’ in *Translation Studies* (1988, 106). His words still ring true today: when a new topic is introduced, translation scholars band together and claim that the topic is ‘trending’, that it has become ‘ubiquitous’ – there is no escaping it. As guest editors of this special issue on ergonomics in translator and interpreter training, we make no great claims as to the ubiquity of the term ‘ergonomics’.

Nevertheless, since the early 2000’s, ergonomics has silently sought its proper place in *Translation and Interpreting Studies*, and it has been playing a minor yet valuable part in a number of studies (e.g. on cognitive load management, workplace analysis, human-computer interaction). In October 2010, translation scholars at the Université Grenoble Alpes sensed the emerging presence of ‘ergonomics’ in the discipline and started promoting debate on translation ergonomics with a two-day conference, ‘Traduction et ergonomie’, which was followed by a special issue of *ILCEA* on ergonomics (Lavault-Olléon 2011). In March 2015, Grenoble hosted a second conference centring on this topic: ‘Translators at Work: Ergonomic Approaches to Translation Practice and Training’. Around that time, ergonomics seemed to have consolidated its position within the discipline, with research projects (e.g. *ErgoTrans* [2013–2015]), conference panels (e.g. *PACTE* [2016]; *EST* [2016, 2019]) and a number of publications (e.g. Lavault-Olléon 2011, 2016; Ehrensberger-Dow and Massey 2014; Ehrensberger-Dow and Hunziker Heeb 2016; O’Brien et al. 2017) on the topic. Despite the fact that it has not been a trending topic, translation scholars and, to a slightly lesser degree, interpreting scholars do seem to have taken a close interest in ergonomics.

Why has ergonomics sparked the interest of translation and interpreting scholars? In order to answer this question, attention should first be drawn to the definition of ‘ergonomics’ as formulated by the International Ergonomics Association (www.iea.cc). The association defines ‘ergonomics’ as ‘the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimise human well-being and overall system performance’. On the page, the IEA distinguishes between physical, cognitive and organisational ergonomics. Research on physical ergonomics studies professional environments focusing on aspects such as safety, physical health, comfort and performance. The applied branch of physical ergonomics aims to (re)design work environments in such a way that safety, physical health, comfort and performance are optimised. These days, cognitive ergonomics has become a very popular strand in ergonomics, as it deals with workload, stress, decision-making and human-computer interaction. Again, the applied branch seeks to (re)design tasks, products, environments and systems in such a way that they are compatible with people’s cognitive needs, abilities and limitations. These days, its influence is most palpable in software design. In organisational ergonomics, socio-technical systems, including (general) organisation structures, workflows and policies, are being scrutinised. Applied organisational ergonomics seeks to optimise these socio-technical systems on the basis of theoretical principles.

When applied to translation and interpreting, ergonomics thus seeks to develop a deeper understanding of the realities of translation and interpreting workplaces in various contexts (freelance, commercial and institutional), and in some cases, to alter these realities so as to improve physical, cognitive and/or organisational conditions. As mentioned in the introduction, ergonomics has become particularly relevant in the context of technologisation and automation, to which the language industry has proven to be (highly) susceptible in recent years. The entire language industry has undergone sweeping changes and the key players on the translation and interpreting market are continuously struggling to adapt to the new realities. This struggle is documented in a growing body of literature on translation and interpreting ergonomics. In recent years, a number of studies have been carried out to measure the physical and psychological effects of modern working environments on job satisfaction and personal well-being (e.g. Bednárová-Gibová and Madoš 2019). Other studies have homed in on cognitive processes in increasingly technology-driven workplaces, for instance by investigating the interplay between human and machine translation in post-editing (Moorkens and O'Brien 2017). Organisational translation and interpreting ergonomics has been covered in a number of studies that inquired into socio-systemic interaction (often with technological 'support') within translation and interpreting workplaces (Cadwell et al. 2016). All these studies factor in the technological developments, but they observe these (and other) developments from an anthropocentric vantage point.

Ergonomics in translator and interpreter training

Hitherto, scant attention has been paid to ergonomics in translator and interpreter training. Some consideration has been given to ergonomics in translator (and not interpreter) training by scholars involved in the ErgoTrans project. These scholars have recommended that ergonomics be taught and fully integrated in a didactic setting, so as to make translation graduates futureproof (Peters-Geiben 2016; Meidert et al. 2016). These recommendations have clearly resonated among members of the European Master's in Translation Network: ergonomic adaptability is now listed in the EMT competence framework as one of the subcompetences a student enrolled in an EMT programme should acquire (EMT Expert Group 2017, 10 [C25]). There is a growing awareness of the need to develop and teach sustainable practices within the confines of the classroom. Still, the number of strategies that have been developed or employed to foster adaptability to physical, cognitive and organisational conditions in a working environment is limited.

Not only aspiring translators and interpreters have to be adaptable in order to be able cope with pressure, stress and competition. In recent years, national reports have been published on the 'cut-throat' competition in academia, where trainers are expected to teach and develop courses, conduct research, write articles and research proposals, assess student assignments, peer-review articles of colleagues, and so on (e.g. O'Brien and Guiney 2018). A recent study has shown that the main reason for structural overtime in academia was task diversification: trainers are being assigned more tasks than can reasonably be carried out within the scope of their contract (WOinActie 2020). The reported effects of structural overtime leave little to the imagination: the constant pressure to manage diverse responsibilities leads to anxiety,

depression and burn-out. It can be readily assumed that the situation in translator and interpreter training is no different and that the diverse responsibilities place a strain on translator and interpreter trainers. It is the proper task of ergonomics to describe educational practices and to work towards solutions for the ergonomic problems that trainers experience on a daily basis.

It stands to reason that, in order to optimise ergonomic conditions, translator and interpreter training can draw on insights that have been obtained in the field of educational ergonomics. Educational practices have been observed through various lenses. Kao distinguishes five branches in educational ergonomics: 1) learning ergonomics, 2) instructional ergonomics, 3) ergonomics of educational facilities, 4) ergonomics of educational equipment, and 5) ergonomics of the educational environment (1976, 667). Translator and interpreter trainers can benefit from ergonomic applications and principles that have been developed in each domain. Still, there is no doubt that translator and interpreter training have characteristics that require tailor-made descriptions and solutions. Van Egdom et al. (2018a, 2018b; see also Segers and Van Egdom 2018), for instance, have set out specific cognitive and organisational requirements that allow for (more) reliable and efficient product evaluation in translator training. More recently, similar requirements have been laid down for trainer-to-trainee revision practices (Van Egdom 2020, 205-211). These are but isolated attempts to contribute to the overall well-being of translator trainers and trainees, and to help improve educational performance and system design within the confines of the translation classroom.

Contributions to this special issue

This special issue is an attempt to pave the way for further research on ergonomics in translator and interpreting training. This special issue comprises six contributions that mainly focus on the benefits of ergonomic awareness for the translators and interpreters of the future. Seeber and Arbona bring a valuable interpreter training perspective to the issue. They describe the high cognitive load of simultaneous interpreting and propose a training model centred on cognitive ergonomics as a way to improve training efficiency and the time and cognitive resources needed to acquire this complex interpreting task. The authors raise in their article the desirability of empirical evidence to support training interventions and programme design. Kappus and Ehrensberger-Dow report in their article on an empirical study undertaken by them to provide an evidence base for the needs and wants of student learners of translation technology. They make recommendations at the module level for ways to take ergonomic considerations into account when designing translation technology courses and base these recommendations on quantitative and qualitative analysis of the usability of two computer-assisted translation tools. Tang brings the discussion of training beyond the module level and proposes ergonomics-related recommendations at the institutional and policy level using China as a context. These recommendations aim to resolve an identified discrepancy between translator training in China and the demands and expectations of the translation industry. The next two articles in the issue are used to describe ways in which the simulation of real-world translation project environments can be used to sensitise students of translation to ergonomic considerations. Frérot and Landry report on how observation by ergonomists of a three-day translation project carried out by second-year master's students led to new and valuable

insights about task coordination, work organisation, and group dynamics. In contrast, Şahin and Kansu-Yetkiner have translation students observe professional translators in the field as part of a broader project-based learning approach to raise the students' awareness of psychosocial and physical ergonomics. Finally, Santamaría Urbieta and Alcalde Peñalver underline in their article the physical aspect of ergonomics and use a focus group methodology to describe ways in which translators incorporate their translation work into their lifestyles as a learning point for students on healthy and sustainable patterns of work.

As can be seen from the contributions to this special issue, a wide variety of qualitative and quantitative methods are being used by colleagues to answer questions about ergonomics in translation and interpreting training. There is a clear desire among trainers to establish an evidence base for practices to be initiated in the classroom that will sustain ergonomic translation and interpreting activities in the market after graduation. Contributors view ergonomics broadly and holistically, and cognitive, physical, and organisational aspects are seen to be worthy of study. While contributors use training contexts with some geographic spread, their narratives are unified by a sense that contemporary training environments do not yet match the ergonomic demands of professional translation and interpreting.

Future research

We hope that the contributions to this special issue, which can still be considered isolated attempts to shed light on ergonomics in translator and interpreter training through small-scale projects, will provide a much-needed impetus for more comprehensive research on the subject. We also hope that the matters that have been left largely untouched, for instance that of translator and interpreter trainer ergonomics, will be explored in future research.

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No potential conflict of interest was reported by the authors.

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