The Translation Sector of the Future: Indications from the FIT 2017 Conference 'Disruption and Diversification'

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Abstract

Globalisation and mechanisation will impact upon the translation sector. This paper summarises key messages presented at the August 2017 International Federation of Translation (FIT-IFT) conference in Brisbane including: artificial intelligence; the visibility and value of language service providers; the shortcomings of the gig economy and the absence of right to title as key challenges.

Keywords: Translation and interpreting, globalisation, language services, artificial intelligence, visibility, value, right to title, copyright and intellectual property.

Resum

La globalització i la mecanització afectaran el sector de la traducció. Aquest article resumeix les idees principals que es van presentar a la conferència de la Federació Internacional de Traductors (FIT), l'agost del 2017, a Brisbane. Els grans desafiaments són: la intel·ligència artificial; la visibilitat i el valor dels proveïdors de serveis lingüístics; les deficiències de l'economia per encàrrecs i la falta d'obligatorietat de tenir un títol per exercir.

Paraules clau: Traducció i interpretació; globalització; serveis lingüístics; intel·ligència artificial; visibilitat; valor; obligatorietat d'un títol; drets d'autor i propietat intel·lectual.

Resumen

La globalización y la mecanización afectarán al sector de la traducción. Este artículo resume las ideas principales expresadas en la conferencia de la Federación Internacional de Traductores (FIT) 2017, en Brisbane. Los grandes desafíos son: la inteligencia artificial; la visibilidad y el valor de los proveedores de servicios lingüísticos; las deficiencias de la economía por encargos y la falta de obligatoriedad de tener un título para ejercer.

Palabras clave: Traducción e interpretación; globalización; servicios lingüísticos; inteligencia artificial; visibilidad; valor; obligatoriedad de un título; derechos de autor y propiedad intelectual.

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1. Introduction

The translation sector will undergo massive changes from the present until the predicted moment of the 'singularity' (Kurzweil, 2005) when artificial intelligence is expected to outstrip human capacity of all kinds in around 2050. This paper will look at the key points for debate on this topic arising from the International Federation of Translation (FIT) conference in Brisbane in the summer of 2017 and will expand upon them in the light of content received subsequently on the issues.

The FIT conference theme was set as "disruption and diversification" (FIT, 2017) deliberately adopting terms taken from current 'business speak'. The definition of 'disruption' in the call for papers came from Christensen's (1997) definition of 'disruptive innovation' where a business model aims initially to satisfy less-demanding customers or create a market where none existed before (looking not only at current needs, but anticipating unstated or future needs) while 'diversification' was defined in line with business considerations relating to the expansion or variance of the range of products or field of operation on offer. Both of these processes are impacting heavily upon the translation and interpreting sector at present with mechanisation and globalisation leading to changing business models and increased customer demands coupled with downward pressure on pricing.

The overview of the topics discussed at the FIT event by representatives of more than 100 professional associations from 55 countries clearly demonstrate that disruption and diversification are fuelling future developments (see the full programme (FIT, 2017)). Over the three days of the international conference, the leading topics of concern to those present were: globalisation and mechanisation; advances in artificial intelligence – especially Machine Translation (MT) and considerations of what human translators can do that machines cannot; translator visibility; future impacts of the freelance or gig economy; the right to title (exactly who can legally set up in business as a translator); and the issue of copyright and intellectual property. I shall explore each of these issues in turn below.

2. Globalisation and mechanisation

Presentations by Gomez-Ferry (2017), Wang (2017), Maslias (2017) and Tsuboi (2017), amongst others, explored aspects related to these two trends. Globalisation is clearly underway in a manner that is impacting upon world trade and politics: Abel and Sander (2014) presented a set of global bilateral migration flows estimated from sequential stock data in five-year intervals showing millions of people on the move, while Euromonitor International provides a clear demonstration of the global nature of trade in its infographic entitled: "Leading exporters and their trade with each other" (Gordon, 2014); this circos image shows 60% of all world trade flows in imports and exports between 34 countries around the world, measured in billions of US dollars, and provides a strong visual reminder of the interlinked nature of the global economy. Commercial translation, and interpreting to some extent, is intricately linked to commercial and political texts relating to international migration, trade and

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development in a myriad of areas. This is certainly the case for many members of the Institute of Translation and Interpreting who work with businesses around the world. Globalisation processes create new conflicts as markets, states and political systems struggle to adapt to the new patterns (Rodrik, 2011) redrawing the lines for commercial entities working across national borders. This situation has consequences that directly impact upon translators, interpreters and language service companies working in the related sectors, bringing both benefits (allowing working across time zones to extend deadlines overnight, for example) and drawbacks (such as competition from fellow professionals in areas with a lower cost of living).

As for mechanisation, it is now generally accepted that machine translation forms part of the workflow in large corporate translation projects, with companies such as SDL (Ferguson, 2016) publicly stating that in the localization process, volume products such as SMS, email, IM, user forums, user reviews, wikis and blogs can already be largely translated by pure machine translation; areas such as user guides, knowledge bases, product descriptions, frequently asked questions, email support and alerts or notifications can largely be managed by post editing of machine translation; websites, help pages, software user interfaces and documentation manuals will be approached via a blend of post editing with more human input to smooth out style and grammar issues; while HR documents, newsletters, marketing content, legal work and contracts or advertising will still require high quality human translation. SDL argue that there are simply not enough "bilinguals" (Ferguson, 2016) to translate all the high volume low quality output needed for corporate communication, while the higher quality lower volume documents will still need a large amount of human input. Closer analysis of the metalanguage used by the MT developers would be interesting, as the role traditionally termed "translator" or "interpreter" often appears to be substituted by the broader and less specific term of "linguist" or "bilingual" inferring, perhaps, a different level of professionalism. Austermühl and Mirwald (2010) provide a particularly interesting discussion of this particular metalanguage issue through corpus analysis of term use in the literature of leading localisation concerns, suggesting the implications of term use on the value attributed to the humans in the process. The same issue is reflected in Zaretskaya (2017) where the term "linguist" is used throughout the discussion of Post Editing Machine Translation (PEMT) processes at TransPerfect, with "translator" used only in the conclusion, apparently in reference to individuals outside the company.

Kirti Vashee (2018), a leading authority on the applications of machine translation, also agrees that MT will be great for the distribution of corporate content (such as e-mail support, chat boxes, blogs, reviews, user forums) and for the spreading of general ideas and knowledge across the web. Coupled with the publicity power of entities such as Google, the idea of instant, free and accurate translation has grasped the public imagination in a way that presents a great challenge to the human translators and their professional entities, forcing them to formulate convincing arguments in defence of the human translator and interpreter post haste.

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3. Artificial Intelligence

This is potentially the issue that will have the greatest impact on the sector to 2050 and the topic was addressed in many of the speakers at FIT2017 (Yu (2017), Zetzsche (2017), Rosado (2017), Stupiello (2017)) and in panel sessions (Zhang et al. (2017), Huang et al. (2017)). According to Kurzweil, a leading authority in the pro-AI camp, we are at the knee of the curve in the development of artificial intelligence, meaning that events are about to "erupt at an increasingly furious pace" (2005:10) in the rapid advent of new technologies. Kurzweil recognises that dealing with language is the most challenging task of all for machines, hampered as they are by the inability to understand the context of words, meaning that computer language translation will be "one of the last application areas to compete with human performance" (2005: 286-288). Lane Greene of the Economist agrees that this lack of "common sense" will be a massive limitation for MT: for while there are huge stores of data that can be used to train machines (on language), "there are no training data for common sense" (2017, section 4, para 14). He predicts the future role of the translator developing toward quality control, deciding which texts need human attention to detail, and where PEMT will be sufficient: "because computers, no matter how sophisticated they have become, cannot yet truly grasp what a text means", leaving aside any notion of intertextuality. For human translators and interpreters, therefore, it is not the technologies themselves that we have to fear, but rather the new associated economic and workflow models likely to be imposed upon human work (see LeBlanc (2017) for more on this issue).

It appears obvious therefore that humans will be needed for high-level texts, where there is a higher degree of contextual knowledge, style requirements or subject expertise needed, for the foreseeable future. But as tools such as Lilt and DeepL improve the superficial readability of output, it takes an increasingly skilled individual to spot the types of errors made by machines, to check against the source text and to iron the issues out.

In situations such as that of mass online sellers (for example Amazon), where the original texts of product descriptions may be machine generated and the translation is too, it can be impossible for the human being to work out what the original meaning actually was, as the content is not human generated and the human mediator does not have access to the source text anyway. Even when the systems are extraordinarily good and fed with high quality and appropriate content, the outcome may appear superficially smooth, but when examined more closely will be found to contain what Lane Greene (2017, section 4, para 2) described as a mere "eerie echo" of human language.

Massey and Ehrensberger-Dow (2017) spoke at FIT17, exploring how pressure is being exerted upon working translators, echoing their earlier work that examined the impact of ergonomics on the cognitive processing of translators. In their words, translators perform what they describe as: "a challenging multi-activity task involving receptive and productive language proficiency, advanced information literacy skills, and a high degree of instrument competence" (2014: 57). Human beings who work with MT and PEMT tools can find the process extremely stressful as the skills and knowledge

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they have developed in human translation must be twisted out of shape in order to deal with machine-produced text. One of the leading translator tool companies reported that their translators, all of whom were experienced users of Computer Assisted Translation (CAT) tools, had to be placed on rotational duties when working on PEMT as they could bear the work no more than six weeks at a time (pers. comm. Kevin Lossner). However, for new entrants to the profession, the process may not be as off-putting. In her 2016 Threlford lecture, Kenny (2016) explored the potential positioning of PEMT as another thread in a portfolio career for the translator of the future: a situation that was directly reported by members of the Institute of Translation and Interpreting (ITI—the leading professional association for translators and interpreters in the UK) attending a symposium on the post editing of machine translation in Bristol in early 2018.

Repetitive issues often classed as "mechanical" elements of grammar by human operatives, such as inconsistencies in tense, gender marking, word order and the like which are strikingly obvious to a human, appear to still be beyond the capacity of the machines (see Lumeras and Way (2017) for a fuller summary of the relative strengths of humans and MT). Also, client expectations of instant, free and almost perfect outcomes have to be managed. Huyghebaert (2018), of the translation company Jonckers, speaking at a symposium in Lille in February 2018, explained in detail how a client wanting an output of 10 million words per week across five language combinations had to be given a reality check that entailed the recruitment of 20 full time post-editors producing 6,000 words per day of good-quality output: a rate considerably slower than the initial output desired by the client. Similar pricing, pacing and quality issues were reported by representatives of companies working with the technologies at the Bristol symposium mentioned above (Illescas (2018), de Zayas Rueda (2018), Kinnersley (2018) and Ruaro (2018)).

Despite evidence to the contrary, the general opinion amongst those already working with the tools appears to be that these will reduce the strain on the human operative (translator, linguist, reviewer, editor, terminologist, project manager and others), as was summed up by Rudy Tirry (2018) of Lionbridge in the symposium in Lille: "The machines will take care of the keystrokes. The translator will add the human dimension: the cherry on the cake". However, there is a strong counter argument that the cognitive effort of making high-level decisions constantly, while the machines take over the lower level work, will increase the cognitive load on translators, increasing stress levels and reducing thinking time. New pressures will be exerted upon mental processes such as perception, memory, reasoning and motor response as humans interact with automated systems and, as yet, we have insufficient research into the potential impacts.

As has been seen in past mechanisation developments, placing technical and economic issues above human issues creates unhealthy working conditions. One good example of these can be seen in the design of keyboards as explored by Pineau and Rosenfield (in Ehrensberger-Dow and Massey, 2014: 61). Also, the working interfaces produced by the technologists can often produce cramped working spaces for the

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human beings, providing too little flexibility of operation to fit coherently with the skills, knowledge and working processes of the operative (Moorkens and O'Brien, 2017; Torres-Hostench et al., 2017). This can include issues as simple as: having to work in a segmented manner in CAT tools with no overview of the broader text; processes that require moving between multiple windows, some of which may have cramped interfaces; and using Excel-based tools that were simply designed for text-processing. This can result in both physical and cognitive friction for translators (O'Brien, 2012: 115).

There are some fundamental underlying differences between human and machine translation, not least of which is the fact that MT is essentially a forensic process. MT language is all retrospective, based on past language production, whereas human language use is creative and adaptable dependent on entirely different rules to those used in the algorithms that re-create past language. Human translation is a multi-activity task that places heavy demands on concentration, working memory, bilingual lexical retrieval processes and consideration of practical issues such as client requirements and target audience needs (Ehrensberger-Dow and Massey, 2014: 61).

For human translators and interpreters, and the companies that employ them, the surviving paid roles will be those that require soft skills and the application of quality markers beyond the scope of the machines (Griffin-Mason, 2017).

Human translators should therefore not fear oncoming obsolescence. In the summing up session at the TQ2018 conference in Lille, the panel concluded that there would be an exponential increase in the amount of content translated in the future, adding that sophisticated human translators will be much in demand for text production at the high-end of the market in the coming years (the global shortage of human translation specialists was already being bemoaned several years ago by authors such as Taravella and Villeneuve (2013)). In order to ensure healthy and coherent conditions for the future humans involved in the production of 'human-augmented MT' though, there is a desperate need for more research and development of human-informed paradigms for translation research into MT, using the knowledge and experience of professional translators throughout the research and development cycle, as recommended by Burchardt (2018) when speaking at the event in Lille (citing Burchardt et al. (2016 and Popović et al. (2014)). The message in favour of good integration of the human and the machine through cooperation between LSPs, translators and researchers is also strongly stated in the conclusions given by Silva (2014:47).

It is difficult to understand exactly where the supreme translators, interpreters and related text-workers of the future will come from if the new generations in the sector are given no opportunity to actually develop the underlying skills of translation and if practitioners are deprived of the time they need to synthesise and process their learning due to overly demanding production schedules. It is widely recognised in education that sense is made of recent learning during the 'downtime' between active inputs (Sabourin et al., 2011; Jabr, 2013), and it is a recognised fact that for translators to remain at the top of their game they must learn constantly. This has wider implications for the future of human capital development (see Heckman, 2018)

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where the speed of technological development will change curriculum content, teaching and learning methods (Gomez-Ferry, 2017; Zhao, 2017) in a landscape of increasing mechanisation (Carr, 2010: 177-197; and 2015: 65-85). Teachers are already being told that there are four dimensions needed in the 21st century curriculum: knowledge, skills, character and a "meta-layer" that is about learning to learn (Charles Fadel in OECD, 2012: 35; Pellegrino, 2017) where teaching adaptability is a key tenet. Further discussion of future skillset requirements is covered by authors such as Pym (2013) and Rico and Torrejón (2012).

4. The visibility and value of language service providers

So, translators will certainly not be out of a job for the time being. According to Common Sense Advisory (2017), the demand for language services continues, and is growing at an annual rate of 6.5% and the size of the overall global language industry in 2016 was estimated at US$40 billion, with estimates of up to US$45 billion by 2020. While MT may take over in less sensitive areas of corporate content; whenever the aim of the document is to persuade, convince or influence the reader, human input to the supply chain is likely to remain a key element. Rodriguez and Melby (2017), speaking at FIT2017, also outlined a new area of opportunity for translators in language services 'advisement': an area they described as offering roles where intercultural knowledge for communication is almost as important as the actual language skills of a practitioner.

In the meantime, professional associations for translators and interpreters have their work cut out in convincing the public of the immensely valuable role of translators and interpreters. While many accolades may be awarded for literary translation, the large bulk of commercial translators remain unnamed and invisible. A large step forward was made in UN recognition of September 30 as International Translation Day in 2017, but a great deal more work remains to be done in educating the public and potential translation clients the value of professional services.

5. The challenges of the gig economy and the right to title

Lemster (2017) directly broached the topic of "How to Make a Living in the Age of MT?" in the title of his presentation at FIT2017. The position of the human translator is not strengthened by the fact that the bulk of practitioners in Europe work on a freelance basis (GALA, 2017), with few long-term contracts and often working at the end of chains of outsourcing that may be unreliable. The current trend toward outsourcing appears to be increasing and the gig economy taking an ever-greater hold in the UK (House of Commons Work and Pensions Committee, 2017) and beyond (Manyika et al., 2016: 4). As freelancers are effectively in charge of every aspect of running their own company, they rarely have extra time available to work on collective actions to protect their position. They are responsible for their own ongoing training, business development, sickness, leave and pension contributions. Professional associations offer some form of support, but most practitioners find themselves

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needing to be self-reliant. The situation is compounded by the fact that there are effectively no minimum requirements for setting up in business as a translator or interpreter, making for fierce competition and unprofessional rates of pay in all but the most specialised of areas. The recent ISO 17100 (ISO, 2015) sets a world standard for translation service providers, where the minimum qualification is simply five years of full time professional experience in translation regardless of any academic study.

6. Copyright and intellectual property

FIT produces guidance on the issue of copyright for member entities and a panel discussion of the issue was chaired by Geoffrey Westgate of the World Intellectual Property Organisation (WIPO) on day 2 of FIT2017. When it comes to the copyright or intellectual property of a translator's work, in general, only work with a specified degree of 'originality' has any protection (European Commission, 2014). In actual fact, many commercial translators will find they have signed away their right to any copyright or intellectual property within the agreements made in their contracts with their clients. Jaap van der Meer (2013) even goes so far to suggest "we should look at translation data as data in the same way as the medical industry treats human genome data": essentially stating that as information technology plays an ever-increasing role in the daily work of the translator, translation data should be looked upon as publicly-owned content to be mined for commercial ends.

7. Conclusions

There will be both foreseen and unforeseen 'disruption' and 'diversification' for professionals and new entrants in the work environments of the coming 50 years, and 'adaptability' will almost certainly be the key element for success in the translation and interpreting sector. The tools will improve and there will be greater symbiosis between MT systems and the humans who need to work with them. In the premium market, it is more likely that translators will remain the masters of the machines they use to serve them, improving on the data- and algorithm-driven decisions of the MT systems by adding their broader understanding of language, culture, and genre conventions beyond the scope of the tools. But this will certainly not be the case throughout the multiple layers of the sector.

Exactly who owns the translated content will continue to form a bone of contention until translators are given the recognition and rewards appropriate to the importance of their work, and many will continue to feel deeply uncomfortable about submitting work that directly feeds the machines designed to replace them.

Given the many challenges ahead, we must draw strength from the fact that the skills of the premium-sector professional translator are still exceptional and that need for these services is only likely to increase in the future. In the UK, for example, the British Chamber of Commerce has reported that 96 percent of English exporters do not have the foreign language ability for the markets they serve (Coussins, 2017).

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Furthermore, the space for the human translator will always stand where the question asked is not: "Is this a good translation?" but rather "Is this effective communication?" (Jemielty, 2017), something that no machine will be able to answer for the foreseeable future. We can take heart from the fact that even when machines have more data than any human being can possibly process, they will not have the understanding to judge how this will be received by a human recipient.

In the meantime, human translators and their professional associations will have their work cut out for them in building easily understood arguments about the limitations of machines for the legions of translation clients who have proven happy to swallow the rhetoric of free, instantaneous and perfect translation peddled by the technologists. Those in defence of the humans must curate and broadcast honest and clear messaging on exactly where and how human translators and interpreters offer greater value than the automated solutions: a topic worthy of more extensive exploration in a future article.

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