Translation and Digital Technology: Practices, Theories, Research Methods, and The Classroom

Abstract: In this foreword, we provide the background of this issue on localization and digital technology. We attempt to explain why talking about technology is still a currency in Translation Studies and in the language service industry even though the topic “translation technology” has been around for decades and early accounts have already urged translators to adapt if they are to be or remain competitive. We briefly discuss localization as a case in point. We also provide a brief overview of the 13 manuscripts (including articles, translations, books reviews, and an interview) that have been selected to make up this issue.

As students, clients, trainers, practitioners and/or scholars involved in the language service industry in the early 2020s, we can hardly ever dissociate translation and related processes, products or phenomena (e.g., revision, localization, interpreting) from digital technology. In fact, we may even make the claim that it is cliché, redundant or untimely—to say the least—to talk about the importance of technology in translation or for translators nowadays.

Towards the end of the last century, Samuelsson-Brown had already stated:

Technology is developing at a frightening pace and the demands made on the translator do not show any signs of abating. In fact, the translator is becoming more and more dependent on information technology and, if the translator does not adapt to change, he or she may become uncompetitive. (280)

This very quote was used six years later as an epigraph to Bowker’s introduction to her 2002 book Computer-Aided Translation Technology: A Practical Introduction.

If technology in translation and related services is a given, and it has been so for decades, why do we insist on talking or writing about it as if it were some kind of novelty or as if it were the latest trending topic? The answer to that seems to be manifold.

A starting point may be that we always find ourselves “one or two steps behind” technology (Pym, 481). Let us consider, for instance, the current technological developments and the latest accounts of the state of the art in translation in the quite comprehensive handbook of translation and technology edited by O’Hagan. The same holds true if we look at older enterprises and the technological advances of the time (see, for instance, Austermühl, Somers, and Chan). None of them has been able, or even intended, to include all developments or accurately foresee technology-related changes in the language service industry.

To start with, translation-related, translation-demanding or translation-applicable technology are constantly evolving irrespective of the needs or the usual work of professional translators and translation scholars. Such continuous progress may first respond, for example, to the immediate needs of other fields (e.g., corpus linguistics, terminology, marketing, computer science, accessibility, telecommunication, ergonomics) or of the demographics originally overlooked by the language service industry (e.g., fansubbers, tourists willing to interact with locals without the mediation of a person).

Besides, translation-oriented technology, i.e., those specifically designed for translators, may not only respond to the translators’ needs such as greater usability, flexibility and
integrated with other resources or devices. They may also create new needs (notice, for instance, the constant release of new versions of translation memory systems or the emergence of competitors in the translation memory market) or require that translators expand their skillset (by managing crowd translation projects, engaging in collaborative pro-bono translation, or post-editing machine-translated texts). In fact, if we look at the bigger picture, it may turn out that we find ourselves, as individuals, much more than “one or two steps behind” technology.

In his view of translation provided in the early days of 2004, Samuelsson-Brown affirmed that an ideal technology-based translation process – with a source language document in now-outdated formats being scanned and converted into editing files for subsequent machine translation and post-editing or for subsequent human translation with the support of computer-aided translation tools, as in the case of translation memory systems – was “still some way off being a fully practical and cost-effective option” (Samuelsson-Brown, 46). In current times, however, such a process is somewhat outdated and oversimplistic.

It does not matter much if we receive the source language document by e-mail, mobile app, in different formats, or even on paper. We can, for instance, take a picture of the document and OCR (optical character ‘recognize’) it (even if it is handwritten) to send it from our cell phone or tablet to our computer through Bluetooth. We might still need to edit the resulting text, but our efforts will decrease substantially depending on the quality of the source material, the camera and the OCR software. We might still post-edit a machine-translated version of the document or translate the scanned document using previously translated segments stored in a translation memory, but chances are that we are now automatically provided with both options at once. As O’Hagan puts it, the division between MT (machine translation) and CAT (computer-aided/assisted translation) “has become blurred as MT is increasingly integrated into CAT environments” (p. 3).

This view might still be an option if we are talking about a lonely translator translating monomodal, written texts while using the keyboard. Yet, if we are translating as part of an enterprise to localize a game or internationalize the website of a higher education institution, our best scenario may include a tool that selects the translatable strings and provides a WYSIWYG (what you see is what you get) option. If we have poor typing skills or if we are concerned with ergonomics and RSI (repetitive strain injury), our best scenario may include a speech recognition tool. If we are translating in collaboration with other translators, our best scenario may include tools for terminology consistency, project management, and access to a
remote server with the shared translation memory. The list goes on and on when we include several other related practices, such as subtitling, audiodescription, dubbing, and interpreting.

Digital technologies have served as ‘enablers’ of translation (e.g., machine translation for non-translators or monolingual individuals), ‘facilitators’ of translation (e.g., translation memory systems for translators) and the very ‘object’ of translation (e.g., pieces of software and websites that need to be translated). As such, the technological advances have challenged our notion(s) of translation (as a product, a process, or a phenomenon) to the point that any attempt to prescribe or idealize a process of translation is doomed to be oversimplistic or outdated from the very beginning. Translation processes are now the result of individual choices/skills and several circumstances, including budget, institutional or national regulations, technological resources, time, client requests, quality expectations, text type, subject matter, and availability of translators for a given language pair, to name but a few.

In several circumstances, the technology favored by the language industry may have the final say over translators’ behavior when it comes to translating, pre-editing, post-editing, localizing, editing, and revising. Even in the classroom, chances are that we can no longer be sure how our students are doing their translation tasks as they move at their own risk along a continuum from translating in a very strict sense (i.e., solely or mostly using their own mental resource) to translating in a very broad sense (e.g., slightly post-editing MT outputs or at least taking “inspiration” from MT outputs) (see Da Silva and Costa).

As technology advances at a faster pace than our time and ability to learn it, identify what meets our needs and/or earn money to acquire it, we are irremediably way off from fully understanding the role or impact of technology in our daily lives as stakeholders in the language service industry and we eventually find ourselves placing technology in the trending topics over and over. Our understanding is still incipient when it comes to the impact of translation technology on our bodies, cognition, forms of communication, texts, quality standards, teaching and learning, labor relations, and ethics, to name but a few.

Furthermore, Translation Studies or translation practitioners sometimes seem to fail to include or account for the new translation practices as part of (or extension to) the theoretical/research traditions or agendas. An example is localization.

Localization means linguistically and culturally adapting a product or content to a specific market or locale, i.e., a country or territory that has its own culture and language(s) (Dunne, Jiménez-Crespo). It involves translation as one of its key stages, but also includes such processes as: adapting design, graphics, layout, local formats, currencies, and units of measures;
“modifying content to suit the tastes and consumptions habits”; and “addressing local regulations and requirements” (GALA).

A maxim in game localization is that it is intended to provide its customers across different countries with unique experiences as if its products had been originally produced for them as end-users in the first place (see O’Hagan and Mangiron, Chandler and Deming, Bernal-Merino, Souza). Even though this maxim is consistent from a marketing perspective, reverberating it in academia ignores several developments in Translation Studies as it insists on the ideal of providing the target culture player with the same game experience as that felt by the players of the original version. In doing so, some works within Translations Studies propagates the translator’s invisibility (Venuti) and the notion of translation as a neutral practice of “transferring” the content from a source language into a target language (Catford), albeit we can learn from Bernal-Merino’s claims the concepts of “co-creating” and “shared-authorship” in acknowledgment of the necessary translator’s input. Accordingly, two articles in this issue show that such an ideal is not supported by empirical evidence (see Esqueda and Melo, Fornazari), as the players’ reception of the localized game is influenced by their previous experience with or, at least, awareness of the original product. In several occasions, original and localized versions “compete” for the players’ attention and preference (see Guedes).

Despite the fast pace of the localization industry and the opening of numerous translation training programs worldwide, industry and academia have evolved separately and neglected one another in several ways (Da Silva and Esqueda). For instance, translation programs have worked, if at all, with unauthentic materials and tools for localization learning usually from a theoretical, rather than practical perspective, while the industry seems to ignore multimodality, narrative sequence or intertextuality/hyperlinks and commissions multiple translators or translator agencies to translate spreadsheets without providing context, images and videos. Several scholars have also insisted on solely analyzing the linguistic assets of multimedia interactive entertainment software (MIES) products (Bernal-Merino), while also neglecting non-linear narrative and handling of user- and non-user-friendly technology (see Coelho and Da Silva for a methodology to approach multimodal data). At the same time, trainers and scholars working with translation technology, including ourselves, seem to favor one translation tool over the others, instead of focusing on core instrumental skills that should allow students to adapt both to the fast changes in translation technology and to the clients’ or agencies’ different demands or preferences (see Fouces for a more thorough discussion on translation technology and teaching/learning).
Even though debates over technology in the language service industry have been around for decades, they are still incipient in several research traditions. In Brazil, several topics have not paved its way into graduate studies, as shown by Barcelos and Malta in this volume when it comes to game localization. Yet, it seems that undergraduate programs have been more open to address them. At Universidade Federal de Uberlandia, for example, several BA theses have addressed technology in the language service industry over the last five years: Teixeira, Mesquita, Ribeiro and Gois (under the supervision of Professor Igor A. Lourenço da Silva), and Alexandrino, Azevedo, Dutra, I. Coelho, Henrique, Salvador (under the supervision of Professor Marileide Dias Esqueda), just to mention those revolving around localization in contrast to the five post-graduate dissertations on game localization found by Barcelos and Malta for the 1998-2018 period.

All this certainly has implications for the translation classroom, for the theories developed in Translation Studies, for researching translation as a product, a process or a phenomenon, and for the translators’ instrumental competence. This is the very reason why we decided to make a call for papers aiming to publish studies that approach translation in the digital age from a theoretical, practical and/or educational perspectives, while also reflecting on potential dialogues between industry and academia.

This issue starts with a Portuguese-language article on “human evaluation of machine translation of specialized lexical combinations” by Borges and Pimentel. The authors selected lexical combinations with a verb+noun structure from “arbitration clauses” and evaluated the adequacy and fluency of their translation by two different translation systems (i.e., Google Translate and DeepL). Their results were consistent with the literature, according to which the output of neural machine translation tends to be more adequate than previous MT. However, they ran counter the idea that machine translation assures terminological accuracy.

The next three Portuguese-language articles delve into the internationalization of websites in universities. All of them had Brazilian Portuguese as the source language and English as the target language.

Mesquita and Da Silva used the proprietary software Alchemy Catalyst to translate the website of the Undergraduate Program in Translation of Universidade Federal de Uberlandia “aiming at publicizing the program to an English-speaking international audience”. The authors report on the commitment between them as translators and their “client”, the then coordinator of the undergraduate program, as well as on the resulting procedures and decisions made.
Góis and Da Silva analyze the internationalization of two websites of graduate programs. As their analysis revealed linguistic, cultural and translational problems, they propose reformulations, including “the revision and translation of several contents, as well as redesign of some visual aspects”.

Ribeiro and Da Silva describe the first author’s experience as a translator in an internationalization project for the Brazilian journal *Letras & Letras* under the supervision of the second author. To reflect upon what they had learnt in said experience, they take “a functionalist approach to analyze some source and translated excerpts from the journal’s website”.

Subsequently, one article in Portuguese and two articles in English address game localization. They all provide some insights into localization as a discipline, as a product and as a practice in Brazil.

In their Portuguese-language article, Barcelos and Malta map the academic production on localization and translation of video games in Brazilian graduate programs from 1998 through 2018. Their findings pointed to “a deficit of studies on the localization of videogames [in Brazil] despite the increased number of studies on translation in general”.

Fornazari reports on a bilingual corpus-based study on the localization of an often-neglected type of game within localization studies, the trading card game *Magic: The Gathering*. Her results showed that the translation product is “linguistically adequate to the target system, but not acceptable in the target cultural system”. Part of this could be ascribed to the fact that both original and translated versions coexist in the Brazilian game communities, with comparisons with and use of part of the original material being unavoidable.

Esqueda and Melo investigate the impact of expectancy and professional norms in the localization of the game *Uncharted 3: Drake’s Deception*. The authors collected and analyzed the comments that players made on websites about the fully localized game in Brazil. Their results pointed to expectancies that had been overlooked by the localizers and showed that several end consumers were both aware of the original game and that choices are made when it comes to how to localize game assets.

The two last articles in this issue address audio-visual translation, more specifically subtitling. However, they are quite different in their objectives.

Gaudencio, Branco and Veloso use image processing and information technology to analyze facial expressions of movie characters as an important factor for selecting verbal language in subtitling. Their results showed that “the textual reduction imposed to subtitles does
not jeopardize spectatorial comprehension due […] semiotic cohesion. In fact, “the human face and facial expressions are relevant in the filmic narrative as complex sign systems”.

Wang semantically and pragmatically analyzes the English-language translation of Portuguese-language diminutives in the speech of characters in the Brazilian movie Central do Brasil (1998). His findings showed that “not all diminutives are translated correctly or completely”, with the greatest difficulty lying in translating the pragmatic dimension.

This issue also includes one translation of a book chapter from English into Portuguese, two book reviews in Portuguese, and one bilingual interview in English and Portuguese.

Henrique, Salvador and Esqueda provide their translation for Dunne’s chapter on “Localization” originally published in the Routledge Encyclopedia of Translation Technology. It particularly “examines localization and its evolution form the 1980s to date”.

The first book review is about the book O processo da tradução para a dublagem brasileira: teoria e prática, written by Dilma Machado. According to both reviewers, Moura and Matos, the book has a practical orientation and provides an overview of Brazilian dubbing based on the author’s own experience and aspects of the Brazilian market.

The second book review is about the book Translation and Localisation in Video Games: Making Entertainment Software Global written by Miguel Ángel Bernal-Merino. According to the reviewer, Morais, “Bernal-Merino’s book contributes to the training of new professional translators or translators who already work on the localization market”, as it guides and raises “the awareness of trainers, scholars and/or professional translators about the problems and challenges to be faced” in the localization of entertainment software.

Last but not least, Da Silva and Radin report on an interview with Julian Quijano. He is the founder of Beautiful Glitch, an independent developer which produced the visual novel Monster Prom. The game has not undergone any process of localization, but the interviewers claim that such an interview provides a better understanding of “the videogame market, moving away from the traditional approach to big companies.”

We hope that the readers of Belas Infiéis feel as delighted as we do to explore this still uncharted territory that is technology in the language service industry. Enjoy your reading!

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**BIOGRAPHICAL NOTES**

Igor A. Lourenço DA SILVA – Assistant professor at Universidade Federal de Uberlandia, Uberlandia, Minas Gerais, Brazil. Permanent member of the Graduate Programs in Linguistics at Universidade Federal de Minas Gerais (POSLIN/UFMG) and Universidade Federal de Uberlandia (PPGEL/UFU). PhD and MA in Linguistics and BA in English from Universidade Federal de Minas Gerais. *Universidade Federal de Uberlândia, Instituto de Letras e Linguística, Bacharelado em Tradução*. Uberlandia, Minas Gerais, Brazil. Academic CV: http://lattes.cnpq.br/6440150670404908 ORCID: https://orcid.org/0000-0003-0738-3262 E-mail: ials@ufu.br

Miguel Ángel BERNAL-MERINO – Senior lecturer at the University of Roehampton, London, UK. PhD and MSc in the Localisation of Multimedia Interactive Entertainment Software from the Imperial College, London, UK. BA in English & Spanish from Universidad de Alicante, Spain. University of Roehampton, Centre for Research in Translation and Transcultural Studies. London, England. Academic CV: https://pure.roehampton.ac.uk/portal/en/persons/miguel-%C2%81ngel-bernal-merino ORCID: https://orcid.org/0000-0003-2052-9713 E-mail: m.bernal@roehampton.ac.uk

Marileide Dias ESQUEDA – Associate professor, Universidade Federal de Uberlandia, Uberlandia, Minas Gerais. PhD and MA in Applied Linguistics from Universidade Estadual de Campinas. BA in Translation from Universidade Sagrado Coração. *Universidade Federal de Uberlândia, Instituto de Letras e Linguística, Bacharelado em Tradução*. Uberlandia, Minas Gerais, Brazil. Academic CV: http://lattes.cnpq.br/3341029625579574 ORCID: https://orcid.org/0000-0002-6941-7926 E-mail: marileide.esqueda@ufu.br