

On the Translation of Literature as a Human Activity par Excellence: Ethical Implications for Literary Machine Translation

Sobre a tradução literária como atividade humana por excelência: implicações éticas para a tradução automática de literatura

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Abstract: The quality of state-of-the-art machine translation systems have prompted a number of scholars to tap into the readiness of such systems for "literary" translation. However, studies on literary machine translation have not overtly stated what they consider as literature and mistakenly assume that literary translation is a matter of transferring meaning and/or form from one language into another. By approaching literature as art and literary translation as an artistic work of re-creation, we counterpoint, in this article, the notion that literary machine translation can be seen as an indisputable evolution within translation technology. Ethical concerns may well be utilitarian in studies to date, but by advocating for a deontological approach, we consider that aesthetical value, cultural mediation (which includes the use of paratexts), and authorship of literary translation (should) rank higher in our ethical assessments of the feasibility and actual contributions of literary machine translation.

Keywords: ethics; literary translation; machine translation; art; re-creation; authorship.

eISSN: 2317-2096

DOI: 10.35699/2317-2096.2020.22047

Resumo: A qualidade dos sistemas de tradução automática de última geração tem levado vários estudiosos a investigarem a prontidão de tais sistemas para a tradução "literária". Todavia, estudos na área não informam explicitamente o que consideram como literatura e partem equivocadamente do princípio de que a tradução literária é uma questão de transferir significado e/ou forma de uma língua para outra. Abordando a literatura como arte e a tradução literária como uma tarefa artística de recriação, contrapomos, neste artigo, a noção de que a tradução automática literária pode ser vista como uma evolução incontestável das tecnologias de tradução. Apesar da prevalência de abordagens éticas utilitaristas na área, consideramos, numa abordagem deontológica, que o valor estético, a mediação cultural (que inclui o uso de paratextos) e a autoria da tradução literária têm (devem ter) prioridade em nossas avaliações éticas da viabilidade e das reais contribuições da tradução automática de textos literários.

Palavras-chave: ética; tradução literária; tradução automática; arte; recriação; autoria.

Introduction

In the last ten years or so, literary machine translation (LMT) has emerged as a trending topic given the staggering advances in machine translation (MT) technology and paradigms, including neural machine translation (NMT). It has been predominantly addressed by scholars interested in the quality of the LMT output as a rough proxy of the feasibility of machine translating literary texts as either the final product or the input for post-editing (see VOIGT; JURAFSKY, 2012; TORAL; WAY, 2014; DINO, 2018; HADLEY *et al.*, 2019). It is not uncommon to hear enthusiasts of new computer technologies stating that "even literature" is now on the hands of digital tools. For some, because of the uniqueness of the literary text, LMT could eventually represent the ultimate achievement in machine translation (see TORAL; WAY, 2014).

As in the history of MT technology for pragmatic texts, the largest body of research on LMT has widely neglected the ethical implications of having a computer translate texts in lieu of humans. Scholars usually focus on investigating the feasibility of MT or on assessing its quality *vis-à-vis* human translation, while ethical discussions tend to be relegated,

¹ The authors could particularly notice such enthusiasm in the 13th ENTRAD – Brazilian Translation Forum held at Universidade Federal da Paraíba (UFPB), João Pessoa, Brazil, in October 2019. Some delegates clearly stated that soon enough would we see LMT paving its way into our daily lives as both readers and translators.

if at all, to the professionals who will be able to (or forced to) use or stand up against MT in their daily jobs or, else, to those responsible for educating new generations of translators (see STUPIELLO, 2014).

As much as in debates over MT and even over human translation, any ethical discussion on LMT is likely to be manifold: humankind-oriented, translator-oriented, client-oriented, institution-oriented, source or target culture-oriented, to name but a few. For instance, one could argue in favor of LMT as a low-budget, time-saving solution to provide entire populations with access to literary texts from any language, which would probably be positive for both source and target cultures, especially when it comes to "minority languages" (see GRENOBLE; SINGERMAN, 2014). In contrast, one could argue against LMT as a probable source of misunderstandings, because the machine cannot apprehend culture, ideology or social representations (see JONES; IRVINE, 2013), which would probably be negative to at least one of the parties. In fact, as different approaches emphasize different dimensions of the problem, they will eventually lead to different answers to the ethical conundrum surrounding MT in general and LMT in particular.

In this article, we set out to discuss the ethical implications of LMT from the perspective of literature – and literary translation, for that matter – as a human institution par excellence. An endeavor to consider literature as such is one that has been neglected when it comes to LMT, but one that is crucial if we are truly interested in understanding what the point is in developing LMT, if not as a sheer exercise of our computer skills and the expanding of our programming potential. Such an endeavor does not necessarily entail denying the feasibility of LMT or its potential use in editorial practices, but rather refusing to accept that LMT could be seen as an artistic task and its product, as art. By approaching literature as an art form and literary translation as an artistic work of re-creation, we counterpoint the notion that LMT can be considered an indisputable evolution within translation technology.

Some notes on MT and LMT research

Research on MT dates back to the 1950s, when computer scientists naively believed it would be relatively easy to have a computer produce a "high-speed, high-quality translation" of any text type in any given language pair (see SLOCUM, 1985, p. 1). Translation, as a task of solving

an ill-defined problem (see JÄÄSKELÄINEN, 1999), soon proved to be a much more complex endeavor, one that could not be addressed through an all-encompassing model or paradigm suitable for any text type or for any language pair.

In the 1980s, MT studies regained momentum with "more realistic expectations of what is possible in MT" and the "realization that MT can be very useful" albeit "imperfect" (SLOCUM, 1985, p. 1). This particularly entailed pre-editing texts to be more suitable for MT, applying MT to very strict domains (e.g., technical translation for war purposes), using the raw MT output for gist purposes, and/or having the MT output post-edited (i.e., revised) by a human being to assure quality for publication purposes (see SLOCUM, 1985; CASTILHO; O'BRIEN, 2017).

However, MT reached a milestone in the late 2000s, with progresses in the statistical machine translation² paradigm (instead of the rule-based machine translation³ paradigm) and the free access to webbased MT services, including Google Translate (see KARAMI, 2014). Nowadays, the state of the art is the neural machine translation⁴ paradigm, which has produced more consistent results, especially because the MT output is fluent, lexicogrammatically correct, and adequate in meaning.

To the best of our knowledge, the earliest account of the potential application of MT to literary texts was provided by Slocum in 1985. Speaking particularly from the U.S. perspective, the author argued that by that time there was little to no demand for LMT because 1) there was "no shortage of human translators capable of fulfilling this need", and 2) computers did "not fare well at literary translation", especially because literary translation places emphasis on style, "perhaps at the expense of absolute fidelity to content" (SLOCUM, 1985, p. 3).

Since the mid-2010s, LMT studies have focused on the "faring well" part of Slocum's (1985) argument, but not necessarily on the set of singularities of literary translation. In fact, studies have been showing

² Statistical machine translation (SMT): based on statistical models derived from the analysis of bilingual corpora (see NÉMETH, 2019).

³ Rule-based machine translation (RBMT): based on linguistic information about source and target languages as found in grammars and dictionaries (see NÉMETH, 2019).

⁴ Neural machine translation (NMT): based on artificial neural network (loosely inspired by the biological neural networks) to predict the likelihood of a string (i.e., sequence of words) (see NÉMETH, 2019).

somewhat optimistic outcomes regarding literary translation performed by a machine (see HUMBLÉ, 2019; TORAL; WIELING; WAY, 2018; BESACIER, 2014), while some have also pointed to problems in the quality of the MT output (see SALIMI, 2014; JONES; IRVINE, 2013). Some studies have also delved into the applicability of LMT for post-editing purposes, i.e., revision of the MT output by a human being, especially because of its contribution to productivity gains as measured through time and keystrokes (see TORAL; WIELING; WAY, 2018). We ourselves have also discussed the ill-advised use that translation students make of MT to help them translate literary texts even though they are not expected to do so according to the assignment (see DA SILVA; COSTA, in press).

To the present purposes, two important related issues should be considered regarding such studies:

- 1) the scope of what is declared as "literature", and
- 2) the criteria adopted to assess MT outputs compared to those "produced from scratch", such as "adequacy", "fluency" (TORAL; WIELING; WAY, 2018), and "acceptability" (BESACIER, 2014).

Authors investigating LMT have not explicitly stated what they deem as "literature", "literary text", or "literary translation". This is an important issue when it comes to discussing ethics in LMT, because any definition of such a complex object of study may include some products, processes or phenomena, while excluding some others. In fact, it seems that most scholars who investigate LMT are unfamiliar with literary translation theory or, to say the least, do not care to refer to it in their articles. This also has an impact on the criteria set to assess the LMT output.

Exploratory or experimental studies seem to consider MT outputs as satisfactory based on unclear criteria, or on biased criteria that favor the use of the machine beforehand. For instance, if no further disclaimer is made and we are solely measuring the quality of an LMT output based on, say, its "acceptability", loosely defined as grammatical correctness, and/or on its "fluency", loosely defined as the "natural" way that something is written in a given language, it follows that we are automatically embracing LMT provided that the output proves to be fluent and/or acceptable enough. The reason is simple and basically utilitarian: we know beforehand that it is cheaper to have a text machine translated, we lack trained translators for some language pairs, and state-of-the-art

MT systems tend to provide outputs that are "good enough" to increase speed and productivity in most cases (see CASTILHO; O'BRIEN, 2017). This very reason also applies if we are measuring quality by comparing the LMT output with a translation produced by a human "from scratch" (see CASTILHO; O'BRIEN, 2017): if the LMT output is fairly similar to the human output, a utilitarian reasoning tends to favor the cheaper and quicker solution, especially because that was the very reason why the MT system was developed in the first place.⁵

In other words, assessing the product generated by a machine as satisfactory or non-satisfactory is entirely dependent on the criteria chosen to evaluate it, which, in our case, should be drawn from our notion of "literature", "literary translation", and/or "literary text". It is clear that machines "can" translate, and will translate, more and more literature (with translation here loosely defined as "converting" a text from one language into another language) as data bases grow, MT paradigms are improved, and post-editing techniques are disseminated. It is a one-way ticket, if we consider the utilitarian arguments that have prevailed so far. Nevertheless, it is a necessary exercise to shift the focus from the feasibility and alleged cost-effectiveness to the ethical boundaries of MT. Ethical concerns may well be utilitarian, but by advocating for a deontological approach⁶ to LMT, we consider that aesthetical value, cultural mediation (which includes the use of paratexts), and authorship of literary translation rank higher in the ethical scale.⁷

By commenting on these and other aspects, we contend that LMT may be sometimes useful in economic terms or even for gist purposes, but not a substitute to the experience and product provided through human translation. Our discussion draws on the notion of literature as "verbal art" (CAMPOS, 2013, p. 147). This may exclude part of the so-

⁵ One could argue that an MT or an LMT system is developed as an exercise of the uneasy mind or as a proof of concept. While this could hold in some cases, no research that we have accessed has resorted to such an argument. The reasoning has been utilitarian, based on costs, productivity, time, speed, and/or lack of human resources.

⁶ Deontological ethics uses a series of rules to assess whether an action itself is right or wrong. It contrasts to consequentialism (i.e., ethics based on the consequences of the action), which includes utilitarian reasoning (see AUDI, 1999).

⁷ Our intention in this article is not to develop an ethical scale for literary translation or LMT, but the idea might be relevant for feature endeavors. For early research on ethical scales, see Hogan (1970) and Forsyth (1980).

called commercial fiction, or mass literature, even though the division is not definitive and should be carefully considered elsewhere. The point, however, is that considering that a text is produced within a reduced amount of time and is readable enough to be published is very different from considering it artistically conceived, aesthetically relevant and/or well-mediated – which are accolades often applied by specialized critics to describe literary translations.

Literary translation as art

To the best of our knowledge, no studies on LMT have drawn on the notion that, like the original, the translation (both as a process and as a product) of a literary text is art. Yet, literary translation studies, as well as multidisciplinary approaches on creativity, suggest that there is not much sense in separating "originals" and "translations" in the realm of literature, since literary texts inevitably "translate" what has been written/heard before (see CAMPOS, 2013; see also ECO, 1991; VALÉRY, 1989). It follows then that if computers do not create novels, it is unreasonable or odd – to say the least – to accept that they can translate them. If we are to teach machines to create and re-create art, are machines going to write literature for us as well? This question might seem to be rhetorical at first, but we will return to it in due time.

Literature can be considered as an art form not only because of its singular work with language (CAMPOS; PIGNATARI; CAMPOS, 2006), but because of its affective capacity (ARISTOTLE, 2013; ZUNSHINE, 2006; KEEN, 2007), its urge toward "union and brotherhood" (TOLSTOY, 1996, p. 171), its power to enable aesthetical experience (JAUSS, 1982), the way it represents reality and allows interpretation (AUERBACH, 2003), its potential to trigger a particular kind of pleasure (BARTHES, 1987), or its ability to impart multiple meanings (ECO, 1991). As such, most, if not

⁸ This argument could mistakenly imply that a translator necessarily is, or should be, a writer in the strict sense (i.e., she or he produces an "original" literary text). The point, however, is related to the human ability of producing art in general and literary texts in particular: we are both creators and re-creators at some level. We have the human ability to re-create a product without necessarily having created a similar product in the first place (assuming that creation antecedes re-recreation chronologically, which is not our argument in this article). The very act of re-creating is creating, because it entails a new, albeit old and recycled, process and winds up in a new, albeit old or recycled, product.

all, theoretical approaches to art are intrinsically related to human bonds/ nature/expression/mind. Art is undoubtedly human. "Without art, humans would be ignorant of others' feelings, and we would be savages", wrote Tolstoy (1996, p. 52) more than a century ago, emphasizing how art, and literature for that matter, is a means of uniting people.

Art emerges from creativity (BEITTEL, 1964; GLAVEANU et al., 2013), and creativity can be seen as the opposite of mechanical and automatic thinking. Creativity depends on individual agency and awareness. In a context in which "almost all that is done by the individual and by society is in fact rather strictly limited by such largely tacit and essentially mechanical constraints", a person who suddenly becomes aware of this, of the "mechanical" nature of everyday life, is "likely to discover that the mind is beginning to come to a more natural state of freedom, in which all conditioning is seen to be the triviality that it really is. Thus, originality and creativity begin to emerge" (BOHM, 1998, p. 25-26).

Pope suggests that creativity is directly related to "re-creation" (2005, p. 37), since nothing is ever really new; we re-create what is already there. Interestingly, a similar notion runs through the considerable body of theoretical work left by Haroldo de Campos arguing in favor of literary translation as re-creation ("recriação", in Portuguese; CAMPOS, 2013). When approaching poetry and "complex prose" as "verbal art" (CAMPOS, 2013, p. 147), the task of the literary translator – as a recreator of form, style, and multiplicity of meaning – moves away from other translation tasks that prioritize the "transfer" of a clear message. While literature may communicate feelings, ideas, and thoughts, it does not do it in the practical, utilitarian sense of the word – literary language does not intend to convey a clear message, for its creation is an end in itself (LARANJEIRA, 1993, p. 11).

A re-created work would be a double, a non-identical twin, inhabiting the same linguistic world in which the duplicity original/ translation does not matter, or even exist (CAMPOS, 2013, p. 62). Even when considering the fact that a literary translation has a much shorter life in comparison to the "original", it is also a fact that no "original" would have survived time and overcome spatial barriers without translations. "The text needs translation to travel", says Cronin (2012, p. 471). Meschonnic (2010, p. 28) even states that, contrary to common belief, there are translations that resist time and become autonomous works.

Re-creation is much related to artistry. Being capable of rebuilding meaning, style, and sound effects found in literature (BRITTO, 2012,

p. 29), among other singular traits, is a skill expected from a literary translator. Re-creating literature involves individual repertoire, cultural knowledge, and, above all, being a particularly thorough, sensitive reader (see LARANJEIRA, 1993, p. 31 and 124). In fact, the process of translation begins by a particular kind of reading, which is far from a simple "decoding" task:

[...] reading constitutes a whole-body experience in which words, and grammar, and syntax, and typographic phenomena such as typeface, margin, punctuation, activate cross-sensory, psychophysiological responses prior to concept and interpretation (SCOTT, 2015, p. 11).

This sensorial reading experience is followed by a critical stance and a knowledgeable interpretation, which shape the attitude that the literary translator will embrace when dealing with that particular text:

Writers in effect re-write the world (including other people's words) every time they set pen to paper or fingers to keyboard. Conversely, readers re-write in their own minds what they read every time they set eyes to page or screen (POPE, 2005, p. 198).

The result of this individual attitude toward the text to be translated, combined with the influences of context and editorial decisions, is a translation project (see BERMAN, 1995), a set of interpretations, choices, and strategies which singularize the translation. Translators may be more or less aware of their own projects, even though we could argue that the advancement of both translation studies and translator education in the last decades has been enabling a more conscious outlook on their part.

Obviously, literary translators are not isolated in their own worlds and do not act independently. They also exist within a cultural context (LAMBERT, 2011) and often work under the rules of the editorial market. But they do enjoy a degree of freedom in their work, which varies according to their actual expertise and perceived expertise.⁹

⁹ For an account of expertise in translation, please see Da Silva (2020). In this article, we consider actual expertise as the "real and substantive possession of groups of experts", one which individuals acquire through their membership to those groups, which entails accumulated experience and specialized knowledge (see COLLINS; EVANS, 2007, p. 3). In contrast, perceived expertise is relational, it can be either the assignment of a

Literary translators are among the first "receivers" of a given work in a new culture, acting as cultural mediators as well (BRITTO, 2010, p. 136). From a historical point of view, literary translation – and literature as a whole, actually – relies on variation and multiplicity. One author influences the other, one translator influences the next, and so on. ¹⁰ It is a collective task that also includes reception: the way a work is read will impact its endurance in a culture. Translator's meditation can be decisive to the resonance of the short story/novel/poem that is being imported into a new context:

The foreign text undergoes a radical transformation in which it comes to support a range of meanings and values that may have little or nothing to do with those it supported in the foreign culture. And the linguistic choices, literary traditions and effects, and cultural values that comprise the translator's interpretation may reinforce or revise the understanding and evaluation of the foreign text that currently prevail in the receiving situation, consolidating readerships or forming new ones in the process. (VENUTI, 2008, p. 30).

As Venuti (2008) exposes, the literary translator bears a responsibility when introducing a text to a new audience. The visibility of the translator is not only a matter of valuing literary translation as a complex, difficult task, but it is also a means of holding translators artistically and ethically accountable for what they do. The result of a literary translation process is a text at least partially authored by the translator (VENUTI, 2002; COSTA, 2016); a text that subtly carries their mark as writers, their vocabulary, their own style, and view of the world. Hence, literary translation can also be seen as authorial – especially if we consider all creation as re-creation (POPE, 2005). As a standard of ethics and transparency, the name of the translator is generally included on the verso of the title page of a book.

label to an individual by some stakeholders or the result of comparing this individual to others who perform the same tasks, which can also entail some level of "celebrity". ¹⁰ In principle, MT systems and translation memory systems are potentially influenced by previous translations, whether they are human or not. However, such an "influence" is not artistic, but rather an unconscious imitation (emulation) of whatever seems to be close enough to a solution to a given translation problem (see NÉMETH, 2019).

The translator's visibility has been significantly increasing since Venuti's complaint in the 1990s. For instance, in one of the recent new translations of Brazilian classic *Memórias Póstumas de Brás Cubas*, by Machado de Assis, translator Flora Thomson-DeVeaux gained enough space in the Penguin-published edition – named *The Posthumous Memoirs of Brás Cubas* (2020) – to write an introduction, a translator's note, and tens of endnotes explaining her choices to the reader. In the foreword, her work is praised by a known American writer: "[Thomson-DeVeaux's translation] is a glorious gift to the world, because it sparkles, because it sings, because it's very funny and manages to capture Machado's inimitable tone" (EGGERS, 2020, s./p.).

When seen, translators can openly discuss their artistic endeavor; when invisible or obscured by a machine, they might lose their voice and a chance to participate more actively in the process of literary criticism and reception. If, for the sake of time and costs, the work of the translator is, in the best-case scenario, to improve the solutions provided by a LMT system (which might also include simply tweaking whatever the machine is not yet capable of processing), they will not be performing art, but rather delivering an ordinary product, one which is based on accepting or rejecting renditions provided by a machine. Their names may eventually be stamped on the verso of the title page in acknowledgment of their technical expertise in spotting problems in the MT output, but not in acknowledgement of their artistic insight. The fact that the product was art in the source language is not currency to award it a status of art in the target language (even "literary translations" rendered by humans are not necessarily as artistic as the source texts).¹¹

In fact, literary translators are mediators who are concerned with, respond to, or are affected by, several stakeholders, including the readers, the editors, and the reviewers in the target culture. The mediation and reading of all these players impact the reception of the literary text in a new given culture – some of them, such as translators, editors and editorial companies, might, for one, enhance a positive reception by providing readers with elaborate paratexts (GENETTE, 1997; TORRES, 2011). Consequently, should readers, in an extreme scenario, machine translate

¹¹ It is not uncommon for critics to accuse literary translations of having a harmful impact on the reception of a particular work (or author) in a given culture. On the case of Machado de Assis in English, see Krause (2010). On the case of Paul Celan, see Martins (2019). For a broader discussion, see Meschonnic (2010).

themselves a literary text, they would eventually be removing nearly all stakeholders that are by default part of art production and reception.

Ethical implications

Based on the aspects observed up to this point, the suggestion that machines may be able to substitute humans, or work with or for them (as in post-editing), seems to contradict the entire notion of literary translation as an artistic task and, consequently, as an authorial work that results in the visibility of the translator.

It is true that machines have been designed to perform tasks once considered artistical, but it is also true that, in doing so, they turned possible art (embroidery, drawing, painting, etc.) into mass-production objects empty of authenticity and "detached from the domain of tradition" (BENJAMIN, 2007, p. 221). This has happened to the production of books: "The enormous changes which printing, the mechanical reproduction of writing, has brought about in literature are a familiar story" (BENJAMIN, 2007, p. 218-219). But the translation of literature at a large scale is yet to be seen.

In 2018, an image of "Edmond de Belamy" created by a computer was largely featured on newspapers when it got sold by almost half a million dollars (see JONES, 2018). "Robot van Gogh will harmlessly cut its ear off and robot Picasso will be a genius, minus the misogyny", joked journalist Jonathan Jones in *The Guardian*, reflecting on what he considered to be pure nonsense:

[...] Art is a way humans communicate ideas, perceptions and feelings to each other. It has no existence outside the human passion to communicate. So in what meaningful sense can an AI [Artificial Intelligence] replica of certain physical traits of old master paintings be called art?

For a robot to really make art, it would need an autonomous mind that was emotional as well as rational. [...]

Maybe afterwards robots will invent their own kind of art, but it won't be some poor pastiche of human genius. It will be beyond anything we organics could imagine. (JONES, 2018, par. 4-6).

The same questions raised by the journalist could be applied to our present discussion, with the difference that, in the commonsense notion, translating literature generally does not hold the same status of art form

as painting a portrait. A painting "created" by a machine seems more like a gimmick, or a fun proof of what humans can teach computers to do. But if art is a human trait, something that concerns humankind, why should we channelize efforts to make machines mimic it? Maybe this is a trend of our time, that is, involving computer technology in everything.

While the human role in such accomplishment – teaching a machine the task of re-creating literary style and multiplicity of meanings in another language – may be laudable, we should ethically challenge the substitution of an artist (the translator) by a machine in several ways. This eventually leads to several questions, which might be both deontological and consequential, including:

- 1) LMT requires pre- and post-editing, and these will certainly be performed by a person but will this person gain as much visibility as a translator who takes responsibility for the whole process?
- 2) Will the editors or any related stakeholder clearly state how the product was rendered or will we see a renewed form of editorial counterfeit as exposed by Bottmann in the case of retranslations?¹²
- 3) Will disclosing the production process impact the face value and the artistic value of the product?
- 4) Will translators eventually use an LMT system in any part of their process, but deliver their translations as a sheer result of their artistic skills?
- 5) Will we still consider the product described in (4) as art because it has a human authorship and involved re-creation at some level?
- 6) What impact on literary reception would a partial or total removal of mediation (in the form of paratexts, for instance) have?
- 7) The LMT output may be "passable" in the sense of readability, but can it be as aesthetically relevant as a literary translation "produced from scratch"?
- 8) Why should we dehumanize a highly subjective, sensitive, artistic task?

¹² Brazilian literary translator Denise Bottmann reports on her blog on a number of plagiarisms in retranslations produced in the Brazilian editorial market. For further information, please see https://www.academia.edu/42299479/Irm%C3%A3s_Bront%C3%AB_Katherine_Mansfield_e_Virginia_Woolf?auto=download. Access on: 15 June 2020.

There are no definite answers to these questionings, especially because LMT is becoming a reality whether we want it or not. Let us start with some general comments before focusing on questions 5-8 (particularly question 8), which seem to be crucial to our reasoning.

Some issues, such as questions 1-4, could be best approached from frameworks like the ethics of responsibility (see RIBEIRO, 2004, for further information on this framework; STUPIELLO, 2014, for a discussion related to the use of translation memory systems in the translation of texts in general), which should also rank higher than any utilitarian consideration. Such frameworks are more concerned with the profession and the relationships between the stakeholders. This is undoubtedly important, but it is beyond the scope of the present discussion.

Ouestion (5) brings us to the complex issue of how the definition of art may be affected by human-machine partnerships. It depends on how the market will deal with this technological "advancement". Will editorial companies still hire skilled translators as before, knowing that the machine is part of the process? If the answer is ves, the role of the translator may be reshaped, and their use of LMT may gain the status currently given to the use of dictionaries and corpora – translators will still exercise a reasonable control over their work. If, however, the answer is no, this may lead to less transparency in the editorial process – readers will not be able to tell "who" (or rather "what"), exactly, performed the translation. This takes us to question (6): if translators are not responsible for all the choices and strategies adopted in the rendering of a text, they cannot explain them either. If the mediation is partially performed by a machine, paratexts cannot be transparent in their clarification of the project offered to readers. The same thing can be extended to editors and other stakeholders.

Questions (7) and (8) are the most challenging from an ethical standpoint. It is possible that a machine will produce an aesthetically relevant text – for instance, future experiments (like the one performed by HUMBLÉ, 2019) may show that critics/reviewers will not always be able to differentiate machine-produced and human-produced literary translations. However, we can argue that aesthetical relevance is also related to the way art is conceived and executed (see TOLSTOY, 1996), that is, from people to people, and not only reception-oriented. Being "passable" as a text, or even admirable, does not solve the problem of authorship and of the basic human aspect of art.

Writing correctly and even beautifully may not be the central issue of LMT, though. The capacity of machines skillfully producing literary translation is intrinsically dependent on how important we consider a conscious and ethical cultural mediation. Computers are still far from acting as humans and cannot perform the exact same tasks as humans do – such as balancing between foreignization and domestication (VENUTI, 1995), as Jones and Irvine's experiment has shown:

How much a translation sounds like an original text in its target language and how much it preserves elements of its source language, which make it sound foreign, is in part an ethical choice made by the human translator. [...] Current SMT models have no awareness of this and no ability to make specific choices to balance the two tendencies in the same output. (JONES; IRVINE, 2013, p. 96).

While it can be argued that this "balance" could be brought about during the post-editing phase, this leads us back to the problem of relegating an experienced translator to a supporting role and/or to an invisible one. Also, problems in LMT sometimes prove to be more generalized. Salimi (2014, p. 13) found that "MT systems struggle with long sentences, anaphora, ambiguity, among other things". Even while outlining a positive conclusion regarding Google's capacity to translate poetry, Humblé (2019, p. 48) also recognizes that "the computer effectively has problems with what are considered to be these characteristics of poetry: alliteration, assonance, rhythm and polysemy". This could virtually mean that a computer is not able to translate a literary text at all, since all these elements are vastly present in "verbal art".

As for question (8), while also commenting on Humblé's report that human translators tend to struggle with the same aspects that seem more difficult to the machine (HUMBLÉ, 2019, p. 48), we may argue that, as for artistic tasks, humans can benefit from difficulties on a personal level and find creative solutions to their struggles, while machines are either useful or not – this means that even in the eventuality of LMT surpassing human translation in "quality" (which depends on the assessment criteria), we would still lose the human/artistic aspect.

This brings us back to the question: "If we are to teach machines to create and re-create art, are machines going to write literature for us as well?" While it seems to be possible to emulate the human process

of "translating", the outlook is different when it comes to emulating the human process of writing literature "from scratch". From a sociological point of view, having a machine write literature would necessarily require that the computers be an active part of our society, i.e., that they socialize by taking advantage from visual proximity to social practices and participation in social practices (see COLLINS, 2018). Computers are now closer to socializable entities than any previous generation of computers, but as Collins (2018), we do not believe that they can, or will ever be able to, either pass as humans to the point of socializing as humans do or, conversely, socialize like humans to the point of passing as humans.

We can go further to challenge any need to renounce to the machines any activity that make us humans. "What is the sense in providing the machines with part of our human experience? Why would we use machines for cultural encounters?" (SOTO, 2020, par. 6). Soto (2020) argues that trying to overcome the barrier of non-communication is what makes us human. In his words,

If the machine solves the problem of non-communication, it solves the conflict. But then farewell to humanity! If people do not need to learn language, or write literature, or translate, we would wind up losing the sense of community, the opportunity to find the other. We should ask ourselves: is this worth it?¹⁴ (SOTO, 2020, par. 10).

This is consistent with Collins and Evans's (2007) notion of expertise (see note 9). Applying it to our interests, expertise in translation can only be acquired through a social process, i.e., "socialization into the practices of an expert group." It can even be lost if the once expert spends a given amount of time away from the group.

¹³ Our translation to: "Qual é o sentido de dar às máquinas uma parte da experiência humana? Por que razão nós usaríamos máquinas para o contato cultural?"

¹⁴ Our translation to: "Se as máquinas resolvem a incomunicação, resolvem o conflito. Porém, adeus humanidade!, porque se as pessoas não necessitassem aprender línguas, nem fazer literatura, nem traduzir, perderíamos o senso de comunidade, a oportunidade de encontro com o outro. Então é isto que devemos nos perguntar: vale a pena?"

Final remarks

Evidently, there are pro-LMT arguments. Not only some of the research cited here has reported satisfactory results, but computers translating literature may accelerate the production of commercial books, for several studies point to a higher productivity when LMT is combined with post-editing (PLITT; MASSELOT, 2010; TORAL; WIELING; WAY, 2018). LMT may also enable easier access to little-disseminated works that would otherwise remain unknown. These possible advantages also rely on the fact that most fiction or non-fiction texts published would hardly be considered "verbal art" in the sense proposed by Campos – they are mostly entertainment/informative material that do not challenge machines anymore at this point in time.

The notion of LMT as a fruitless try of mimicking human art can sound elitist and detached from the competitive scenario of the editorial market. The argument is, however, more deontological ethics-oriented than utilitarian ethics-oriented – it is indeed charged with a degree of idealism and the will to question a technological evolution frequently seen as welcome and even natural.

By examining ethical aspects related to LMT, our objective was not to contradict the possibility of a machine "translating" literature in the strict sense – it is certainly capable of doing so. What can be discussed, however, is the possibility of machines substituting humans in a task that is inherently human; a task that is, even, desirably human, performed by people to the enjoyment of other people.

Reading a new rendering of a literary work means either getting to know for the first time a text originated in another culture or renovating the experience with a particular work through the lens of a new translator. In the literary sphere of translation studies, analyzing different translations of the same work and understanding a translator's outlook is essential to the building of knowledge. This is how scholars, researchers, and critics have been shaping their reflections and theories. A literary translation performed by a machine would suggest an entirely different set of studies, mostly related to the way technology works and how it could work better by increasing data collection and setting up connections of algorithms which could simulate more and more accurately the human way of (re-) creating texts.

Future examinations may deepen and expand arguments in various ways. A possible path is to investigate how much the medium (computer) may be gaining power over the content itself (literature) and the task (translating), as a deployment of McLuhan's (2003) proposition concerning media and message. Another one is to try and delimitate some criteria to separate commercial fiction from literature (as an art form), and then compare possible outcomes in the use of MT based on the complexity of the text. Anyway, it is certainly essential to reflect further on the implications of machine performing literary translation.

We might seem to be swimming against the tide, but this exercise is sometimes necessary to review what we have been taking for granted. To say the least, studies concerned with LMT should clearly state what they consider as literature and literary translation and, based on that, improve their criteria to assess the LMT output. Depending on our notion of literature and literary translation, we will wind up realizing that LMT is not a natural or necessary evolution of MT systems. This type of exercise is yet to pave its way into MT studies. Following Badiou's (2001) truth-based ethics, which inspired Venuti (2013), truth does not mean illumination or adequacy to reality, but rather an investigative process triggered by an "event, which brings to pass "something other" than the situation" defined by "opinions and instituted knowledge" (BADIOU, 2001, p. 67; VENUTI, 2013, p. 184).

Acknowledgements

The authors are thankful to the support provided by CAPES – Coordenação de Aperfeiçoamento de Pessoal de Nível Superior, i.e., the Coordination for the Improvement of Higher Education (grant 88887.375027/2019-00), and FAPEMIG – Fundação de Amparo à Pesquisa do Estado de Minas Gerai, i.e., the Research Foundation of the State of Minas Gerais (grant APQ-02483-18).

References

ARISTOTLE. *Poetics*. Translated by Anthony Kenny. Oxford: Oxford University Press, 2013. DOI: https://doi.org/10.1093/oseo/instance.00258601.

AUDI, Robert. *The Cambridge Dictionary of Philosophy*. 2. ed. Cambridge: Cambridge University Press, 1999.

AUERBACH, Erich. *Mimesis:* The Representation of Reality in Western Thought. Translated by Willard R. Trask. Princeton: Princeton University Press, 2003.

BADIOU, Alain. *Ethics:* An Essay on the Understanding of Evil. Translated by Peter Hallward. London: Verso, 2001.

BARTHES, Roland. *O prazer do texto*. Translated by J. Guinsburgl. São Paulo: Perspectiva, 1987.

BEITTEL, Kenneth R. On the Relationships Between Art and General Creativity: A Biased History and Projection of a Partial Conquest. *The School Review*, Chicago, v. 72, n. 3, p. 272-288, 1964. DOI: https://doi.org/10.1086/442704.

BENJAMIN, Walter. The Work of Art in the Age of Mechanical Reproduction. *In*: BENJAMIN, Walter. *Illuminations:* Essays and Reflections. Translated by Harry Zohn. New York: Schocken Books, 2007. p. 217-252.

BERMAN, Antoine. *Pour une critique des traductions*: John Donne. Paris: Gallimard, 1995.

BESACIER, Laurent. Traduction automatisée d'une oeuvre littéraire: une étude pilote. *Traitement Automatique du Langage Naturel*, Marseille, p. 1-7, July 2014. Available on: https://hal.inria.fr/file/index/docid/1003944/filename/taln-besacier.pdf. Access at: 15 June 2020.

BOHM, David. On Creativity. London: Routledge, 1998.

BRITTO, Paulo Henriques. *A tradução literária*. Rio de Janeiro: Civilização Brasileira, 2012.

BRITTO, Paulo Henriques. O tradutor como mediador cultural. *Synergies Brésil*, São Paulo, n. esp. 2, p. 135-141, 2010.

CAMPOS, Haroldo de. *Transcriação*. São Paulo: Perspectiva, 2013.

CAMPOS, Haroldo de; PIGNATARI, Décio; CAMPOS, Augusto de. *Teoria da poesia concreta*: textos críticos e manifestos 1950-1960. Cotia: Ateliê Editorial, 2006.

CASTILHO, Sheila; O'BRIEN, Sharon. Acceptability of Machine-Translated Content: A Multi-Language Evaluation by Translators and End-Users. *Linguistica Antverpiensia*, Antwerp, v. 16, p. 120-136, 2017.

COLLINS, Harry. *Artifictional Intelligence:* Against Humanity's "Surrender" to Computers. Cambridge: Polity Press, 2018.

COLLINS, Harry; EVANS, Robert. *Rethinking Expertise*. Chicago: University of Chicago Press, 2007. DOI: https://doi.org/10.1086/442704.

COSTA, Cynthia Beatrice. *Dom Casmurro* em inglês: tradução e recepção de um clássico brasileiro. 2016. 392f. Dissertation (Doctorate degree) – Postgraduate Translation Studies programme (PGET) at Universidade Federal de Santa Catarina, Florianópolis, 2016.

CRONIN, Michael. The Translation Age: Translation, Technology, and the New Instrumentalism. *In*: VENUTI, Lawrence (ed.). *The Translation Studies Reader*. 3. ed. New York: Routledge, 2012. p. 469-482.

DA SILVA, Igor A. Lourenço. Translation, Expert Performance, and Cognition. *In:* ALVES, Fabio; JAKOBSEN, Arnt L. (ed.). *The Routledge Handbook of Translation and Cognition*. London: Routledge, 2020. p. 461-477. DOI: https://doi.org/10.4324/9781315178127-31.

DA SILVA, Igor A. Lourenço; COSTA, Cynthia Beatrice. A tradução automática de textos literários e o comportamento do tradutor em formação: reflexões para o ensino da tradução. *In*: PEREIRA, Germana Henriques; COSTA; Patrícia Rodrigues. *Os desafios da formação de tradutores no Brasil:* passado, presente e futuro. São Paulo: Pontes Editores. [in press].

DIÑO, Gino. Machine Translates Literature and about 25% Was Flawless, Research Claims. *Slator – Language Industry Intelligence*, [*S.l.*], 19 Jan. 2018. Available on: https://slator.com/technology/machine-translates-literature-and-about-25-was-flawless-research-claims/. Access at: 15 June 2020.

ECO, Umberto. *Obra aberta*. Translated by Giovanni Cutolo. São Paulo: Perspectiva, 1991.

EGGERS, Dave. Foreword. *In*: ASSIS, Machado de. *The Posthumous Memoirs of Brás Cubas*. Translated by Flora Thomson-DeVeaux. New York: Penguin Books, 2020. *E-book*.

FORSYTH, Donelson R. A Taxonomy of Ethical Ideologies. *Journal of Personality and Social Psychology*, Washington, DC, n. 39, p. 175-184, 1980. DOI: https://doi.org/10.1037/0022-3514.39.1.175.

GENETTE, Gérard. *Paratexts:* Thresholds of Interpretation. Translated by Jane E. Lewin. New York: Cambridge University Press, 1997.

GLAVEANU, Vlad; LUBART, Todd; BONNARDEL, Nathalie *et al.* Creativity as Action: Findings from Five Creative Domains. *Frontiers in Psychology*, Lausanne, v. 4, p. 1-14, Apr. 2013. DOI: https://doi.org/10.3389/fpsyg.2013.00176. Available on: https://www.frontiersin.org/articles/10.3389/fpsyg.2013.00176/full. Access at: 15 June 2020.

GRENOBLE, Lenore; SINGERMAN, Adam Roth. Minority Languages. *In*: OXFORD Bibliographies. Oxford: Oxford University Press, 2014. DOI: https://doi.org/10.1093/obo/9780199772810-0176. Available on: https://www.oxfordbibliographies.com/view/document/obo-9780199772810/obo-9780199772810-0176.xml. Access at: 15 June 2020.

HADLEY, James; POPOVIĆ, Maja; AFLI, Haithem; WAY, Andy (ed.). *The Qualities of Literary Machine Translation*. Dublin: Machine Translation Summit, 2019.

HOGAN, Robert. A Dimension of Moral Judgment. *Journal of Consulting and Clinical Psychology*, Washington, DC, v. 35, n. 2, p. 205-212, 1970. DOI: https://doi.org/10.1037/h0030095.

HUMBLÉ, Philip. Machine Translation and Poetry: The Case of English and Portuguese. *Ilha do Desterro*, Florianópolis, v. 72, n. 2, p. 41-56, maio/ago 2019. DOI: https://doi.org/10.5007/2175-8026.2019v72n2p41.

JÄÄSKELÄINEN, Riitta. *Tapping the Process*: An Explorative Study of the Cognitive and Affective Factors Involved in Translating. Joensuu: Joensuun Yliopisto, 1999.

JAUSS, Hans Robert. *Aesthetic Experience and Literary Hermeneutics*. Translated by Michael Shaw. Minneapolis: University of Minnesota Press, 1982.

JONES, Jonathan. A Portrait Created by AI just Sold for \$ 432,000. But is It Really Art? *The Guardian*, London, 12 Oct. 2018. Available on: https://www.theguardian.com/artanddesign/shortcuts/2018/oct/26/call-that-art-can-a-computer-be-a-painter. Access at: 15 June 2020.

JONES, Ruth; IRVINE, Ann. The (Un)Faithful Machine Translator. *In:* WORKSHOP ON LANGUAGE TECHNOLOGY FOR CULTURAL HERITAGE, SOCIAL SCIENCES, AND HUMANITIES, 7., Sofia, 8 Aug. 2013. *Proceedings...* Sofia: Association for Computational Linguistics, 2013. p. 96-101. Available on: https://www.aclweb.org/anthology/W13-2713.pdf. Access on: 15 June 2020.

KARAMI, Omid. The Brief View on Google Translate Machine. *In*: SEMINAR IN ARTIFICIAL INTELLIGENCE ON NATURAL LANGUAGE, Jan. 2014, Germany. Germany, 2014. [Paper presented.]

KEEN, Suzanne. *Empathy and the Novel*. New York: Oxford University Press, 2007. DOI: https://doi.org/10.1093/acprof:oso/9780195175769.001.0001.

KRAUSE, James Remington. *Translation and the Reception and Influence of Latin American Literature in the United States*. 2010. Dissertation (Doctorate in Philosophy) – Vanderbilt University, Nashville, 2010.

LAMBERT, José. Literaturas, tradução e (de)colonização. Translated by Marcia A. P. Martins and Paulo Henriques Britto. *In*: GUERINI, Andréia *et al* (org.). *Literatura e tradução* – textos selecionados de José Lambert. Rio de Janeiro: 7Letras: PGET, 2011. p. 183-196.

LARANJEIRA, Mário. *Poética da tradução*: do sentido à significância. São Paulo: EdUSP, 1993.

MARTINS, Maria Silvia Cintra. Em torno de "Todesfuge", de Paul Celan. *Pandaemonium Germanicum*, São Paulo, v. 22, n. 37, May-Aug. 2019. DOI: https://doi.org/10.11606/1982-88372237357. Available on: https://www.scielo.br/scielo.php?pid=S1982-88372019000200357&script=sci_arttext. Access at: 15 June 2020.

MCUHAN, Marshall. *Understanding Media:* The Extensions of Man. New York: McGraw-Hill, 2003.

MESCHONNIC, Henri. *Poética do traduzir*. Translated by Jerusa Pire Ferreira and Suely Fenerich. São Paulo: Perspectiva, 2010.

NÉMETH, Gergely D. Machine Translation: A Short Overview. *Towards Data Science*, [S.l.], 18 Oct. 2019. Available on: https://towardsdatascience.com/machine-translation-a-short-overview-91343ff39c9f. Access at: 15 June 2020.

PLITT, Mirko; MASSELOT, François. A Productivity Test of Statistical Machine Translation Post-Editing in a Typical Localization Context. *The Prague Bulletin of Mathematical Linguistics*, Neuchâtel, n. 93, p. 7-16, Jan. 2010. Available on: https://ufal.mff.cuni.cz/pbml/93/art-plitt-masselot.pdf. Access at: 15 June 2020.

POPE, Rob. Rewriting Creativity: The Case of "Lterature". *In*: _____. *Creativity:* Theory, History, Practice. London: Routledge, 2005. DOI: https://doi.org/10.4324/9780203695319.

RIBEIRO, Renato J. Ética, ação política e conflitos na modernidade. *In*: MIRANDA, Danilo Santos de (org.). *Ética e cultura*. São Paulo: Perspectiva, 2004. p. 65-88.

SALIMI, Jonni. Machine Translation of Fictional and Non-Fictional Texts: An Examination of Google Translate's Accuracy on Translation of Fictional Versus Non-Fictional Texts. 2014. 22f. Thesis (Bachelor's Degree) – Department of English, Stockholms Universitet, Stockholm, 2014. Available on: http://www.diva-portal.org/smash/get/diva2:737887/FULLTEXT01.pdf. Access at: 15 June 2020.

SCOTT, Cliven. *Literary Translation and the Rediscovery of Reading*. Cambridge: Cambridge University Press, 2015.

SLOCUM, Jonathan. A Survey of Machine Translation: Its History, Current Status, and Future Prospects. *Computational Linguistics Formerly the American Journal of Computational Linguistics*, Austin, v. 11, n. 1, p. 1-17, Jan-Mar. 1985. Available on: https://www.aclweb.org/anthology/J85-1001.pdf. Access at: 15 June 2020.

SOTO, Pablo Cardellino. A privatização da humanidade. *De Scripta*, 5 June 2020. Available on: http://descripta.com.br/2020/06/05/a-privatizacao-da-humanidade/. Access at: 15 June 2020.

STUPIELLO, Érika Nogueira de Andrade. Ética profissional na tradução assistida por sistemas de memórias. São Paulo: UNESP, 2014. DOI: https://doi.org/10.7476/9788568334461.

TOLSTOY, Leon N. *What Is Art?* Translated by Aylmer Maude. Indianapolis: Hackett, 1996.

TORAL, Antonio; WAY, Andy. Is Machine Translation Ready for Literature? *Translating and the Computer*, Lausanne, v. 36, p. 174-176, 2014.

TORAL, Antonio; WIELING, Martijn; WAY, Andy. Post-Editing Effort of a Novel with Statistical and Neural Machine Translation. *Frontiers in Digital Humanities*, Lausanne, v. 5, p. 1-9, 2018. DOI: https://doi.org/10.3389/fdigh.2018.00009. Available on: https://www.frontiersin.org/articles/10.3389/fdigh.2018.00009/full#B11. Access at: 15 June 2020.

TORRES, Marie-Hélène. *Traduzir o Brasil literário*: paratexto e discurso de acompanhamento. Tubarão: Copiart, 2011.

VALÉRY, Paul. *The Art of Poetry*. New Jersey: Princeton University Press, 1989.

VENUTI, Lawrence. *The Scandals of Translation*: Towards an Ethics of Difference. London: Routledge, 2002. DOI: https://doi.org/10.4324/9780203047873.

VENUTI, Lawrence. *The Translator's Invisibility:* A History of Translation. London: Routledge, 1995.

VENUTI, Lawrence. *Translation Changes Everything:* Theory and Practice. London: Routledge, 2013. DOI: https://doi.org/10.4324/9780203074428.

VENUTI, Lawrence. Translation, Interpretation, Canon Formation. *In*: LIANERI, Alexander; ZAJKO, Vanda (ed.). *Translation & the Classic:* Identity as Change in the History of Culture. Oxford: Oxford University Press, 2008. p. 27-51.

VOIGT, Rob; JURAFSKY, Dan. Towards a Literary Machine Translation: the Role of Referential Cohesion. *In*: NAACL-HLT 2012 WORKSHOP ON COMPUTATIONAL LINGUISTICS FOR LITERATURE, 2012, Montreal. *Proceedings*... Montreal: Association for Computational Linguistics, 2012. p. 18-25.

ZUNSHINE, Lisa. *Why We Read Fiction:* Theory of Mind and the Novel. Columbus: Ohio State University, 2006.

Recebido em: 30 de abril de 2020.

Aprovado em: 13 de outubro de 2020.