



Translators on translation memory (TM). Results of an ethnographic study in three translation services and agencies

Matthieu LeBlanc

Université de Moncton, Canada

matthieu.leblanc@umoncton.ca

DOI: [ti.105202.2013.a01](https://doi.org/10.105202.2013.a01)

Abstract: During the last decade, research has shown that translation memory systems (TMs) have indeed changed the way translators work and interact with their texts. However, very few studies on TMs have been conducted in the workplace itself. This article presents an overview of an ethnographic study conducted in three different translation firms and services in Canada. Comprised mostly of interviews with translators and shadowing sessions of translators at work, at their workstations, the study focuses on the perceptions of the translator in an increasingly technologized working environment. The analysis pays particular attention to the advantages and disadvantages of TMs, from a translator's perspective, and to the changes in corporate and administrative practices that have followed TM implantation, with ensuing consequences on the translator's professional satisfaction and status.

Keywords: translation technology; translation memory (TM) software; translator status; translator satisfaction; ethnographic approaches to translation

1. Introduction

Translation memory systems (hereafter TMs)¹ have been around for a number of years, and their use is now widespread not only among freelance translators, but also language service providers (LSPs) and other translation services (public service or other corporate settings), who have seen the numerous advantages that TMs offer (Christensen & Schjoldager, 2010, p.2). TMs are today the most widely used translation aid on the market. While TMs do offer many advantages, they nonetheless change the way translators interact with their texts and, to varying degrees, the way they work (cf., among others, Garcia, 2007; Christensen & Schjoldager, 2010; Pym, 2011). Moreover, translators using TMs are sometimes subjected to 'external pressures', in that the TM isn't always a tool over which they have full control. TMs are in this case changing not only the way translators work (processes, workflows), but also translation practices in a wider sense, which are often beyond the translator's control. For many seasoned translators, those changes represent a radical shift, a major change in the way things are done. This raises some interesting and important questions. For example, what is the impact of TMs on translators themselves (e.g. professional satisfaction, status)? How do they influence the overall direction the

¹ A *translation memory* (TM) is 'a type of linguistic database that is used to store and retrieve source texts and their translations so that translators can reuse segments of previous translations when translating a new source text' (Bowker, 2002, pp.154-155).

profession may be taking? This brings us to the main question and focus of this article. How do professional translators use TMs? How are they expected to use TMs? What are the ‘pros’ and ‘cons’ of TMs from a translator’s perspective? To what extent are TMs transforming the way translators work, more specifically the control they have over their work, their texts? What do the translators themselves have to say about this? And finally, in what ways has the widespread use of TMs changed the business and administrative practices of translation firms and services and what impact, if any, has this had on translators?

In this article, I will present an overview of an ethnographic study I have conducted in three different working environments in Canada. I will focus on the *perceptions* of the translator in an increasingly technologised working environment. Due to space constraints, I will pay particular attention to the advantages and disadvantages of TMs. I will start by providing a brief overview of what we know about TMs and the interaction between TMs and translators. I will then provide details on the study (methodology, information on the firms and services, etc.) and on the use of CAT tools in those environments before examining translators’ perceptions with respect to TM use (advantages and disadvantages). To conclude, I will discuss the findings and suggest directions for future research.

2. TMs: What we know

As indicated by Christensen and Schjoldager (2010), who offer an exhaustive summary of what we know about TMs, a certain number of studies have been conducted on TMs during the last decade. Some of these studies/surveys were done by designers of tools or by professional associations, while others, more empirical in nature, were conducted by researchers and focused on TMs entirely. Dragsted (2006) and Colominas (2008), for instance, focused on segmentation, while Dillon and Fraser (2006) as well as Lagoudaki (2006) centered on the perceptions of the translator based on data gathered through questionnaires. O’Brien (2007, 2008) examined the cognitive load of translators with the help of eye-tracking devices. Also of interest is Bowker’s study on TMs (2005), which shows that translators, at least beginners, may not be critical enough of proposals offered by the system².

As Christensen and Schjoldager (2010) mention in the concluding remarks of their article, however, we need ‘more knowledge about the translator’s perspective on TM technology’ (p.11). And as Kenny (2007) suggests, we need to focus on ‘how technology affects working conditions, pay and professional self-image’ (p.17). This is precisely what has brought me to delve into the workplace, to engage translators, to observe them at work, to listen to what they had to say. In my view, this foray into the workplace was essential in light of what has been said since the late 1990s with respect to the downsides of TMs. Bédard (2000) and Mossop (2006), among others, have cautioned against the dangers of TMs, focusing on their effect on the mental process of translation as well as the deskilling effect of such a tool. Bowker (2005), as mentioned, has warned against a sort of ‘blind faith’ (over-reliance on TMs) and error propagation, while Pym and Biau Gil (2006; cf. also Pym, 2011) have suggested that TMs have an isolating and dehumanising effect, and may even signal a return to the equivalence

² This list is not by any means meant to be exhaustive; its goal is to give an example of the type of research that has been conducted on TMs over the past years.

paradigm of the 1960s. In two key articles on translation technology, Garcia (2007, 2009) warns against the danger of focusing solely on segments and the challenges that professional translators are currently facing with respect to their status and working conditions.

All in all, these were precisely the questions I was interested in exploring further, i.e. the relationship between technology (more precisely TMs), translator satisfaction and status.

3. The study

The research, which I started in January 2012, is largely qualitative in nature and draws heavily on ethnographic research methods. In translation studies, ethnographic approaches, while not common, are on the increase, and there does seem to be a growing interest in this approach (Flynn, 2010; Koskinen, 2008). Researchers appreciate the approach's flexibility and versatility, as well as the type of data it allows them to gather. In my case, the approach has allowed me to penetrate different translation environments in order to gain a better, more intimate understanding of how they operate (for example, institutional vs. corporate settings), and, mostly, to focus on the translators at work, with their tools and their texts, in their natural habitat (Koskinen, 2008³).

For the purposes of my study, data collection was carried out through various means, notably: 1) semi-directed interviews with translators (as well as informal conversations, accounts and testimonials) and management, 2) participant observation of translators at work at their workstations (shadowing), and 3) contextual information on the texts, the clients, the service or the firm. Analysis focused on identifying consistencies and differences, and on establishing connections, where possible. This allowed me to index the data by identifying themes or patterns that seemed of relative importance (i.e. that were recurring or came up in many of the interviews, discussions or shadowing sessions). What I will present here is an interpretation of my findings with respect to one particular aspect of the translator's work, the use of TMs. As some aspects are always intimately connected to each other, I will touch on other related topics such as translator satisfaction and translator status.

3.1 The workplaces

For the purposes of this research, I spent close to a month, full-time, in three different translation environments located in Canada (January to March 2012). By 'environments' I mean either private translation firms (language service providers, or LSPs) or public service translation services (i.e. federal and/or provincial governments). The names of these firms and services will remain anonymous as is required by Canada's policy on ethics in research involving humans, but suffice it to say that all services have least twenty-five full-time employees, the majority of whom are language professionals (translators, revisers, proofreaders, etc.). All translators who took part in the study translate from English into French and were full-time, permanent

³ Koskinen (2008) has in fact mentioned that an ethnographic approach would be an interesting way to look into technology use: '(...) or that the technological environment so central to the translator's work would yield important new information on the interaction of humans and computers or on the actual uses of translation tools' (p.40).

employees of the translation firms and services in question. All worked in-house and all were professional translators with university degrees in either translation or a related field. No freelancers were involved in the study. The types of documents translators were called upon to translate on a daily basis varied immensely, from general and administrative texts to technical and highly specialised texts in a number of fields. All were destined for the French-language Canadian market. As for the degree of experience, participants had anywhere between six months to thirty-five years of experience, although the majority of participants had over ten years of professional experience. Moreover, several translators were certified members of a professional translators association. Table 1 provides some information on all three firms and services, whose names are of course fictitious.

<i>Name of firm/ service</i>	Traduco	LingExport	Globolingua
No. of full-time employees	55-60 (28 translators & revisers)	22-25 (14 translators & revisers)	75-80 (36 translators & revisers)
TM technology introduced	2006	2008	2001
Types of texts translated	General/ administrative, technical and specialised	General/ administrative, technical and specialised	General/ administrative, technical and specialised
No. of semi-directed interviews conducted	17 (25 mins. to 1 hour +)	19 (25 mins. to 1 hour +)	16 (25 mins. to 1 hour +)
No. of shadowing sessions	7 half-days	7 half-days	7 half-days
Total hours on site	Approx. 100 hours	Approx. 100 hours	Approx. 100 hours

Table 1 – Information on the translation firms and services

In total, I spent close to 300 hours in the workplace, interviewed more than fifty language professionals (and some managers) and spent twenty-one half-days observing translators at their workstations (shadowing sessions). By adopting an ethnographic approach, I was able to focus not only on the workflow (the texts), the processes⁴ (i.e. the translation and editing processes) and the translation tools (notably the TMs), but also, and I would say mostly, on the translators themselves (their perceptions, opinions, complaints, etc.), their work environment and their working conditions.

⁴ As I previously mentioned, due to space constraints, I will not focus on my observations of translators at work. They will be the subject of a future article.

3.2 TM use

As expected, all three firms and services make extensive use of computer-assisted translation (CAT) tools. Translators use a variety of electronic tools (dictionaries, bilingual concordancers, terminology management tools, etc.) and of course TMs. Regarding TMs, they are completely integrated in the translators' workstations and their use is not optional. Of note is the fact that the adoption of those tools is still fairly recent in two of those services (2006 for Traduco and 2008 for LingExport), which allowed translators to recall the changes that have ensued since the introduction of TMs, i.e. the 'before' and the 'after'.

Before examining translators' perceptions with regards to TMs, I will briefly describe *how* TMs are used in those firms and services⁵. First and foremost, TMs are used for nearly *all texts*, no matter the type (general/administrative, technical, specialised) or the subject field. This in itself is interesting in that, as some researchers have shown that TMs are in fact better suited to specific types of texts (e.g. technical, highly repetitive texts). But in the case of these firms and services, the idea is to build new translation memories and to feed new data into the existing memories, to populate them, thus multiplying the possibilities for reuse. All in all, since the TMs are used to increase productivity (as well as consistency), the firms and services have a vested interest in making them as useful as possible.

That being said, not every text is suited to this way of doing things. In many cases, the TMs retrieve very little reusable text and in some cases nothing at all. The translators are then left to translate of their own invention. In other words, translators are still called upon to translate 'from scratch'⁶. However, in cases where the TM does prove to be useful, i.e. in cases where exact matches or full matches⁷ (or even substantial fuzzy matches [up to 75%]) are numerous, translators must often adhere to specific guidelines. For example, translators are not always free to reject what the TMs propose or to modify the existing translation in the database, although practices vary from one firm or service to the other. At Globolingua and LingExport, for example, translators are instructed to use exact matches as is, i.e. to leave unchanged what has already been approved by a senior translator or reviser. All changes must be thoroughly justified and approved by a reviser. Substantial fuzzy matches may only be minimally modified in most instances. The rationale behind this practice is that exact and full matches – and in some cases substantial fuzzy matches – have been translated and validated by other professional, reliable translators and revisers, and that these translations have already been delivered to a satisfied client; in other words, why reinvent the wheel? In contrast, at Traduco, translators are afforded much more freedom, at least for the time being. There, the TM is one of many tools, and translators may use their discretion to reuse segments *or* modify them to better suit the target text. The lack of freedom when it comes to the reuse of exact/full matches or substantial fuzzy matches is one of dissatisfaction at Globolingua and LingExport, but not at Traduco, for obvious reasons. We will now examine what translators have to say about TM use and the practices that entail.

⁵ The firms used different TMs, but all were very similar in the way they functioned.

⁶ Even in cases where the TMs have nothing to offer – i.e. there is nothing to recycle as the subject or client is new – translators still translate their texts within the TM environment in order to populate the TM with new translation units.

⁷ *Full matches* differ from *exact matches* (100% match) only 'in terms of variable elements (e.g., numbers, dates, times, currencies)' (Bowker, 2002, p.147).

4. Results: Exploring translators' perceptions with respect to TM use

During my interviews with translators, many topics were broached, from initial translator training, working conditions and use of technology to professional satisfaction and the translator's status. Of course, a lot of emphasis was placed on the translator's interaction with TMs and on the business and administrative practices adopted and implemented by the firms or services for which they worked. The 'pros' and 'cons' of TMs were discussed in every single interview and often times during informal conversations, but in the majority of cases, I did not have to raise the question. The vast majority of translators seemed to have something to say about TMs and were most willing to share their thoughts. Interestingly, many commented on the fact that this was the first time they were actually asked about the tools they used and the work they do. Presented here are the main – or recurring – themes that came out of the interviews. Only the themes recurring in more than *half* of the interviews are listed below.

4.1 The advantages of TMs from a translator's perspective

- *TMs help to increase productivity.* The most common and recurring comment on the benefits of TMs is by far the increase in productivity that they allow in cases where substantial recycling is possible. The result is that translators and firms are able to provide faster service to clients.
- *TMs help to improve consistency (terminology, phraseology).* According to a majority of users, the second main benefit of TMs is that they help to improve consistency, but only in cases where the TMs are continuously updated and thus 'unpolluted', to use an expression that came up often during interviews. By 'consistency', translators refer to terminological and phraseological consistency, which is made easier with the use of TMs, especially in the case of lengthy and/or repetitive texts. This is seen as a benefit for the client. Interestingly, however, no comments were made on the TMs effect on overall quality.
- *TMs eliminate uninteresting and repetitive work (e.g. updates, manuals).* As translators are often called upon to make major or minor changes to texts or update them (e.g. instruction manuals), TMs can be extremely useful in eliminating certain types of tedious and repetitive work.
- *TMs are also used as a searchable database (parallel corpus).* Many translators consider TMs as a 'one-stop shop' because of the search options they offer. In many instances, translators use TMs in lieu of term banks and even dictionaries, as well as for looking up collocations and parallel texts. Indeed, for some, the TM, used as a parallel corpus, has in some cases replaced many more traditional tools such as paper dictionaries and even other electronic tools.
- *TMs can have a pedagogical function (e.g. sharing of solutions, subject knowledge repository).* For many, TMs open up a whole array of possibilities in that they become a tool that allows them to benefit and learn from other translators' 'strokes of genius' (a term or a specific wording, e.g.). This is especially true when translators are called upon to translate texts in an unfamiliar field or when they are simply at a loss.

Other less-cited advantages (i.e. mentioned by less than half of the participants) include the competitive edge TMs can offer a translation firm or service. Also, a few translators mentioned that TMs made team work much easier than before, for example by providing simultaneous access to texts – or parts of texts – that other team members are working on. Finally, a few translators mentioned that the sentence-by-sentence approach, frowned upon by many (see section 4.2), made it easier for them to focus on semantic units. We will now see what translators have to say about the downsides of TMs.

4.2 The disadvantages of TMs from a translator's perspective

- *TMs change the translator's relationship with the text (segmentation).* The most frequent comment – or recurring theme – was the translators' changing relationship with the text. In essence, the main drawback of TMs is that they force translators to use a sentence-by-sentence approach, thereby requiring them to work with segments (or translation units) instead of the whole text. By working in such a way, reorganising the TT (combining, splitting, moving about sentences) becomes more complicated (if not impossible) and more time-consuming than before. This approach is seen as problematic by a majority of translators in that it changes the whole mental process and thus reduces translation to a mere sentence replacement activity. Some participants have even gone as far as saying that this practice – qualified as unnatural as it does not easily allow translators to have a full view of the ST and TT – often has an effect on the quality of the final product in terms of syntagmatic cohesion and idiomaticity. Translation has become, in their eyes, a decontextualised activity.
- *TMs are a barrier to creativity.* In well more than half of the interviews, translators commented on the sentence-by-sentence approach's effect on creativity. For many, such a restrictive approach stifles creativity in that it creates a mould that translators must adhere to. Many translators confessed that they were at times relieved when the TM had nothing to offer as this allowed them to translate more freely, in some respects. Others wondered if translation, practiced in such a way, would continue to be a profession to which creative types would be attracted.
- *TMs make translators lazy and increasingly passive.* Again, according to a majority of participants, TMs can make translators 'lazy' (this is the term most commonly used in interviews) as it becomes the sole tool used for making decisions. In other words, the more they use TMs, the less they tend to consult other and sometimes more appropriate or reliable sources of information (dictionaries, websites, term banks, other parallel texts, etc.). This is why many translators consider themselves to be 'over-lenient' or 'dependant' on TMs, or simply more 'lax' than they used to be before TMs were introduced. For others, being 'lazy' simply means accepting what the TM proposes without too much questioning, i.e. becoming increasingly passive. Aware that they rely more heavily on TMs over time, several translators explained that they had to make a conscious effort to refrain from becoming overly passive – simply 'filling in the blanks', as one participant put it – or developing a false sense of security.
- *TMs have an effect on the translator's natural reflexes.* In a similar fashion, according to many translators, TMs may have an effect on the translator's natural reflexes and may lead to a sort of dulling of

natural ability. Since the widespread implementation of TMs, translators do not translate from their own invention as much as they used to since they are now increasingly working with pre-existing texts. Many participants conceded that they do not trust their natural instincts as much as they used to, while others admitted that they consciously avoid translating from scratch as much as possible, preferring the ‘collage’ method, i.e. gathering translated sub-segments from the TM database and constructing sentences around those sub-segments. (This, in fact, has been observed in several instances during shadowing sessions.) Others have referred to a slight feeling of panic, helplessness or even insecurity when confronted to a ST for which the TM was of little or no use. By and large, many translators felt that the skills acquired during translator training and the reflexes developed at the beginning of their career were in some ways being eroded as a result of TM overuse. Others commented on the fact that they retain less information when they rely extensively on the contents of the TM database.

- *Beginner translators rely too heavily on TMs.* This observation was made not only by senior translators and revisers, but also by beginner translators themselves. Although not everyone agrees on this issue, a majority of senior translators and revisers are of the opinion that, ideally, newly minted translators employed by translation firms and services should make limited use of TMs during the first six months of their career. This is seen by some as a necessary measure that would allow junior translators to gain a better understanding of the complexity of the translation process and to familiarise themselves with other tools that are available to them. In the opinion of senior translators and revisers, most junior translators rely too heavily on TMs, which is problematic in many regards. First, because of their lack of experience, junior translators do not yet have the critical judgment or even the linguistic knowledge required to effectively assess the suitability of the TMs proposals. As a rule, they must be given a period of initial training before they become autonomous translators. Secondly, senior translators and revisers acknowledged that many errors produced by junior translators were due to segmentation (cf. Bowker, 2005) and over-reliance on the TMs. Interestingly, many new translators agreed with this statement (in fact, several readily mentioned it), admitting that they in fact rely too heavily on the TMs – which has the potential of becoming, in their words, a real ‘crutch’ – and that they are as a result reluctant to venture out on their own by offering new and innovative solutions.
- *TMs are sometimes ‘polluted’ (multiple solutions for one segment or term).* This is a recurring comment in two of the three firms and services that I examined. For many, the fact that the TMs are not always properly maintained (e.g. misaligned texts) or updated (e.g. both revised and unrevised texts populate the TMs) creates problems as it goes against the objective of consistency and ultimately increased productivity. These practices lead to terminological inconsistencies in texts and thus to longer quality control timeframes.
- *TMs contribute to error propagation.* As TMs are often polluted and not always well maintained, they contain errors, which are propagated through the recycling of translations (cf. Bowker, 2005). As translators rely more and more on TMs, error propagation becomes an issue for translators, clients and managers alike.

- *TMs influence productivity requirements for translators.* In two of the three firms and services that I examined, the time allotted to translators for translating a text is reduced significantly if the TT has exact or full matches, and reduced in the case of substantial fuzzy matches and internal repetitions, all in an effort to maximise productivity. Although this is common practice in the world of professional translation, it is nonetheless of concern to the majority of translators. Also, for many seasoned translators at Traduco and LingExport, this way of doing things still represents a considerable paradigm shift, one in which quantity seemingly trumps quality, and a confirmation that translation is in some ways becoming a word- or sentence-replacement activity (and that the whole-text, contextual approach is thus a thing of the past). Since the time allotted for translating a text is reduced considerably when the TM offers exact and full matches (and reduced sometimes by half in the case of substantial fuzzy matches, i.e. 75%), translators are forced to process segments more quickly, which in turn causes them to often accept what is proposed by the TM, even if it is not the most suitable solution. Many translators have alluded to the fact that productivity requirements – and the ways of calculating those requirements – have become a major source of stress and in some cases a cause of decreased motivation.
- *Translators are subjected to existing translations (exact or full matches) and are either strongly encouraged or required to recycle them as is.* One of the main bones of contention among translators is that they are subjected to existing translations, i.e. they are required to reuse full and exact matches from the TM *as is*, thus limiting their control over the TT. (This practice is much more prevalent at Globolingua and LingExport, as mentioned.) For many, this practice is seen as a major step in the wrong direction. That being said, it has to be made clear that in such cases it is the administrative and business practices adopted and implemented by the translation firms and services that are at fault and not the tool itself. As Mossop (2006) has suggested, this way of ‘producing translations, while certainly *enabled* by information technology, is being *driven* by business pressures’ (p.789). In the eyes of those who feel uncomfortable with this practice, subjecting translators to existing translations is considered an affront to their professional autonomy. While translators are not opposed to recycling *as is* in cases where this is desirable, there are many instances where recycling *as is* is simply not possible or not suitable to the context. Moreover, exact or full matches are not always idiomatic or, in cases where they have been produced by another translator, may not be suitable to the TT stylistically.
- *TMs render the translator’s work more mechanical (increased automation) and, when misused, may lead to a de-skilling of the translator and thus have an effect on the translator’s professional satisfaction and, ultimately, his status.* The list of disadvantages presented above shows that many translators have reflected on the issue of increased automation and its effect on their work and their professional satisfaction. For many, indeed, this increased automation is seen as worrisome, especially when it is coupled with expectations of increased productivity. Recurring comments were made about the effects of always having to ‘translate in a box’ or being ‘subordinated to existing translations’, which renders the work more mechanical

and thus not as valuable. The question of deskilling – or loss of natural ability – as a consequence of this increased automation was also a recurring concern. For most, however, it is the loss of professional autonomy over the years that seems to be the principal concern. Translators feel that they are no longer involved in decision making when it comes to productivity or quality standards, which are left to management. Some are left to wonder if, given this trend, translators risk a continued narrowing of their role, a shift in professional status (expressions such as ‘production line’, ‘worker status’ and ‘commoditisation’ came up frequently during interviews) or, in extreme cases, being replaced by non-professionals (‘translation technicians’) (Cf. Garcia, 2009).

5. Discussion and concluding remarks: The pros and cons of TMs?

The list of advantages and disadvantages presented above gives us much to reflect on and offers several avenues for further research. Above all, it confirms that the introduction and widespread use of TMs within translation firms and translation services have indeed changed the ways in which translators work. More importantly, TMs have also had an impact on the administrative and business practices that are adopted and implemented by translation firms and services following TM integration. Moreover, it confirms, as we knew, that these changes have led to some ‘disquiet’ among translators, as Kenny (2011) has suggested.

As we’ve shown, there is a real consensus on some of the concrete advantages offered by TMs. Unlike what is sometimes claimed or assumed, the translators who took part in this study are certainly not *opposed* to the use of new technologies. On the contrary, translators have welcomed the introduction of new tools over the years, from electronic dictionaries to term banks to bitexts and TM software. No one will dispute the fact that TMs can allow translators to improve consistency and to reduce repetitive work. In fact, only two participants claimed that, given the chance, they would do away completely with TMs. In other words, I did not run into many Luddites in the course of my research.

Nevertheless, the majority of participants *do* have misgivings about TMs and in some cases serious concerns about the ways those tools are being used as a whole. Looking more closely at the list of disadvantages, we can argue that some of the questioning – or dissatisfaction – with respect to TMs revolves around the tool’s conception or design. That is to say that the sentence-by-sentence approach, or segmentation, is too mechanical and unnatural, and that it can lead to problems (cohesion, coherence, etc.). However, many of the concerns expressed stem not so much from the tool’s conception or design, but rather from the way the firms and services *require their translators to use TMs*. I am referring here to the guidelines and practices adopted and enforced by translation firms and services and that seem to create some dissent among translators. What we see is that TMs are, indirectly, resulting in significantly increased requirements for productivity, which in turn forces translators to use TMs not mainly as a quality-enhancing tool but rather as a *productivity-enhancing* tool. Also, as previously mentioned, in two of the three firms and services examined, exact and full matches produced are not to be changed, thus limiting considerably the professional translator’s decision-making authority. The issue of requiring translators to recycle without being able to intervene – which can lead to a loss of control over their work, or a sense of disempowerment – and the ways

used to calculate translator output are problematic for a majority of translators, to say the least. What is notable is that translators who worked at Traduco, where previous translations were *not* imposed on translators, made significantly fewer comments on their loss of professional autonomy.

What I have presented here remains, above all, a case study, and I must stress that the objective is certainly not to generalise. This study focuses exclusively on three medium-sized translation firms and services and is not intended to be representative of the professional translation industry in Canada as a whole – or elsewhere, for that matter. Nevertheless, I do think that the numerous concerns voiced by translators, coupled with my observations of the practices used in those firms and services, speak to some of the changes observed, at least in Canada, over the past ten years or so. What we seem to be witnessing here are two shifting and competing conceptions of language or competing language ideologies, one in which language and thus translation are seen as a commodity, a product that has to be dealt with in a more cost- and time-efficient manner through increased automation, the other in which language is much more than a mere product and texts more than a series of sentences. It also represents a sort of clash between conceptions or approaches to translation, one in which the approach is simply linguistic and thus easily computable, the other in which the approach is more humanistic (and thus takes into account the social role of translation and of the translator).

Finally, are the changes I've described above also being seen in other settings? If so, what do these changes mean for the profession? For the status of translator? For the social 'role' of translation (for example in Canada, where translation plays an important role in enhancing the vitality of the French-language minority)? These are questions that go beyond tools and business practices, and that should be of interest not only to scholars and researchers, but also to professional associations of translators (and language planning authorities or groups). In the next steps of my research, I will look more closely at the data, together with my observations of the workplace, in order to better understand the ramifications of the changes we are witnessing with respect to the problematic effects of technology (Kenny, 2011) on the translator's status. And in that respect, the emerging body of research on the translator's identity and status in recent years (Dam and Zethsen, 2009; Sela-Sheffy and Shlesinger, 2011) is a welcome and valuable contribution to translation studies.

References

- Bédard, C. (2000). Mémoire de traduction cherche traducteur de phrases. *Traduire*, 186, 41-49.
- Bowker, L. (2002). *Computer-assisted Translation Technology: A Practical Introduction*. Ottawa, Canada; University of Ottawa Press.
- Bowker, L. (2005). Productivity vs. quality? A pilot study on the impact of translation memory systems. *Localization Focus*, 4(1), 13-20.
Retrieved from http://irc.csismz.ul.ie/resources/lfresearch/Vol4_1Bowker.pdf
- Christensen, T. P., & Schjoldager, A. (2010). Translation-memory (TM) research: What do we know and how do we know it? *Hermes – The Journal of Language and Communication*, 44, 1-13.
Retrieved from <http://download2.hermes.asb.dk/archive/download/Hermes-44-paulsen%20christensen&schjoldager.pdf>
- Colominas, C. (2008). Towards chunk-based translation memories. *Babel*, 54(4), 343-354. doi10.1075/babel.54.4.03col
- Dam, H. V., & Zethsen, K. K. (2009). Who said low status?: A study on factors affecting the perception of translator status. *JoSTrans – The Journal of Specialised Translation*, 12, 2-36.
Retrieved from http://www.jostrans.org/issue12/art_dam_zethsen.pdf
- Dillon, S., & Fraser, J. (2006). Translators and TM: An investigation of translators' perceptions of translation memory adoption. *Machine Translation*, 20(2), 67-79. doi 10.1007/s10590-006-9004-8
- Dragsted, B. (2006). Computer-aided translation as a distributed cognitive task. *Pragmatics & Cognition*, 14(2), 443-464.
- Flynn, P. (2010). Ethnographic approaches. In Y. Gambier, & L. van Doorslaer, (Eds.), *Handbook of Translation Studies: Volume 1* (pp.116-119). Amsterdam, Netherlands, & Philadelphia, PA: John Benjamins Publishing Company.
- Garcia, I. (2007). Power shifts in web-based translation memory. *Machine Translation*, 21, 55-68. doi 10.1007/s10590-008-9033-6
- Garcia, I. (2009). Beyond translation memory: Computers and the professional translator, *JoSTrans – The Journal of Specialised Translation*, 12, 199-214. Retrieved from http://www.jostrans.org/issue12/art_garcia.pdf
- Kenny, D. (2007). Translation memories and parallel corpora: Challenges for the translation trainer. In D. Kenny & K. Ryou (Eds.), *Across Boundaries: International Perspectives on Translation* (pp.192-208). Cambridge, England: Cambridge Scholars Publishing.
- Kenny, D. (2011). Electronic tools and resources for translators. In K. Malmkjaer & K. Windle (Eds.), *The Oxford Handbook of Translation Studies* (pp.455-472). Oxford, England: Oxford University Press.
- Koskinen, K. (2008). *Translating Institutions. An Ethnographic Study of EU Translation*. Manchester, England: St. Jerome.
- Lagoudaki, E. (2006). Translation Memories Survey 2006. User's perceptions around TM use. *Translation and the Computer*, 28, London, England: ASLIB, 1-29. Retrieved from <http://mt-archive.info/Aslib-2006-Lagoudaki.pdf>
- Mossop, B. (2006). Has computerization changed translation? *Meta*, 51(4), 787-793. doi 10.7202/014342ar

- O'Brien, S. (2007). Eye-tracking and translation memory matches. *Perspectives: Studies in Translatology*, 14(3), 185-205. doi 10.1080/09076760708669037
- O'Brien, S. (2008). Processing fuzzy matches in translation memory tools: An eye-tracking analysis. *Copenhagen Studies In Language*, 36, 79-102.
- Pym, A. (2011). What technology does to translating. *The International Journal for Translation and Interpreting Research*, 3(1), 1-9. Retrieved from <http://www.trans-int.org/index.php/transint/article/view/121/81>
- Pym, A., & Biau Gil, J. R. (2006). Technology and translation (pedagogical overview). In A. Pym, A. Perekrestenko, & B. Starink (Eds.), *Translation Technology and its Teaching* (n.p.), Tarragona, Spain: Universitat Rovira i Virgili and Intercultural Studies Group.
- Sela-Sheffy, R. & Shlesinger, M. (Eds.) (2011). *Identity and Status in the Translational Professions*. Amsterdam, Netherlands, & Philadelphia, PA: John Benjamins Publishing Company.