

The Need for Speed! Experimenting with “Speed Training” in the Scientific/Technical Translation Classroom

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Article abstract

Most translator training courses focus on encouraging students to reflect fully, to analyze deeply, and to weigh options carefully. However, as they near the end of a translation program, they must also begin preparing for the workplace, where they will need to translate on tight deadlines. Therefore, the addition of authentic and situated learning that tests and improves students' translation skills under time pressure makes sense. This article describes a pilot project in speed training that took place in a scientific/technical translation course taught during the final semester of a translation program at the University of Ottawa. As part of the experiment, 29 students participated in nine speed training exercises on texts dealing with various scientific/technical subjects. Gamification was introduced as a pedagogical strategy to engage the students during the speed training. The resulting translations were analyzed, the students' progress was charted over the course of the semester, and they were surveyed about their experience. Though not scientifically valid, the results nonetheless suggest that students can benefit from speed training. Participants reported feeling more confident in their abilities and judgment and less likely to rely blindly on information resources.

The Need for Speed! Experimenting with “Speed Training” in the Scientific/Technical Translation Classroom

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RÉSUMÉ

Dans la plupart des cours de traduction, on encourage les étudiants à prendre le temps de réfléchir, à analyser en profondeur et à soupeser leurs décisions. Cependant, à mesure qu’approche la fin de leur formation, ils doivent commencer à se préparer aux impératifs du marché, où ils devront travailler sous pression. Dans cette perspective, il serait judicieux d’envisager l’apprentissage situé, fondé sur des situations authentiques qui soumettent les compétences des apprentis traducteurs à des exercices en temps limité. Le présent article décrit un projet pilote de formation sous pression qui s’est tenu dans un cours de traduction scientifique et technique offert aux étudiants en fin de programme de traduction à l’Université d’Ottawa : 29 étudiants ont participé à 9 exercices de traduction éclair de textes portant sur divers thèmes scientifiques et techniques. La ludification a été introduite à titre de stratégie pédagogique afin d’optimiser la participation au projet. Les textes produits ont été analysés afin que soit noté le progrès des étudiants tout au long du cours, et ces derniers ont dû évaluer leur expérience. Bien que les résultats du projet ne prétendent pas à la validité scientifique, ils suggèrent que les exercices de traduction éclair contribuent à la formation des traducteurs en leur donnant confiance en eux. En effet, les participants ont affirmé se fier davantage à leurs capacités et à leur jugement plutôt que de s’en remettre aveuglément aux ouvrages de référence.

ABSTRACT

Most translator training courses focus on encouraging students to reflect fully, to analyze deeply, and to weigh options carefully. However, as they near the end of a translation program, they must also begin preparing for the workplace, where they will need to translate on tight deadlines. Therefore, the addition of authentic and situated learning that tests and improves students’ translation skills under time pressure makes sense. This article describes a pilot project in speed training that took place in a scientific/technical translation course taught during the final semester of a translation program at the University of Ottawa. As part of the experiment, 29 students participated in nine speed training exercises on texts dealing with various scientific/technical subjects. Gamification was introduced as a pedagogical strategy to engage the students during the speed training. The resulting translations were analyzed, the students’ progress was charted over the course of the semester, and they were surveyed about their experience. Though not scientifically valid, the results nonetheless suggest that students can benefit from speed training. Participants reported feeling more confident in their abilities and judgment and less likely to rely blindly on information resources.

MOTS-CLÉS/KEYWORDS

formation des traducteurs, traduction éclair, travail sous pression, apprentis traducteurs, ludification

translator training, speed translation, time pressure, translation students, gamification

1. Introduction

In many translator training courses, the focus is placed firmly on encouraging students to reflect fully, to analyze deeply, and to weigh options carefully before committing to a translation strategy, a terminological choice or a turn of phrase. There is no doubt that students must cultivate these deliberate analytical skills, and they must be given the time to develop them. However, as they near the end of a translation program, they must also begin preparing for the reality of the translation marketplace, where the need to translate on a very tight deadline is often a reality (e.g. Kiraly 2000: 11; Bowker 2004: 970; Charron 2005). In the professional world, there may be less time for careful deliberation; the translation must come quickly, if not automatically. Therefore, the addition of authentic and situated learning that tests and improves students' translation skills under time pressure makes sense. It is an additional way to prepare students for the working world and to let them experience translation in a different form and under different circumstances.

With that in mind, we set out to investigate whether the introduction of some type of training in “speed translation” would benefit students more than simply having additional opportunities to practice translating in a more conventional classroom scenario that is free of time pressure constraints.

Accordingly, we undertook a pilot experiment in a French-to-English scientific/technical translation course taught during the final semester of an Honours BA program in Translation at the University of Ottawa in Canada. As part of the experiment, 29 students participated in nine speed training exercises on texts dealing with various scientific/technical subjects. Gamification was introduced as a pedagogical strategy to engage the students during the speed training. The resulting translations were analyzed, the students' progress was charted over the course of the semester, and they were surveyed about their experience.

2. The Need for Speed

Time pressure is a major situational factor in professional translation. However, as pointed out by researchers such as Sharmin, Špakov *et al.* (2008: 123) and Alves and Liparini Campos (2009: 196), among others, it has received relatively little serious attention in the translation literature in general, and even less from translation pedagogy researchers. For instance, Dorothy Kelly's *Handbook for Translator Trainers* (2005) lists many desirable competences that trainees should strive to develop and that can usefully be included in the curriculum (Kelly 2005: 32-33), and she elaborates on some ways in which professionalization and authentic and situated learning can be incorporated into course content (Kelly 2005: 75-76). However, none of these discussions include translating against the clock as a skill to be developed. We do not mean to single out Kelly for criticism in this regard, and she herself notes that “the list may require completion with further elements” (Kelly 2005: 32).¹ Rather, we simply want to make the point that, in the translation pedagogy literature, the ability to translate quickly usually receives little more than passing mention as something to be developed through experience. Moreover, there is often a degree of uncertainty with regard to the impact that time pressure has on the translation processes *per se*, and whether there is a formal place for this type of training in the translation cur-

riculum. When it does get mentioned, it is typically identified as a skill that is part of a *translator's* competence, rather than *translation* competence per se (Király 2000: 13). In other words, while translation competence centres around learning the specific skills that allow one to produce an acceptable target text in one language on the basis of a text written in another, translator competence involves a host of other skills, such as being conversant with specialized fields of knowledge, being proficient in the use of technologies, and being able to deliver completed translations in short turnaround times.

While translator training programs give prominence to the development of translation competence, many do indeed provide instruction on skills such as acquiring specialized knowledge (e.g. through courses in terminology, or in some cases, through domain specific courses) and on tools and resources (e.g. through courses on translation technologies or corpus linguistics). However, there seem to be few formalized efforts to provide students with opportunities to learn to translate more quickly.

While investigations into the effects of time pressure on translation are relatively scarce, there are some exceptions. For instance, several graduate students have tackled the subject as part of their thesis work (e.g., Jensen 1999; 2001; De Rooze 2003a; 2003b; 2008; Liparini Campos 2005).

Jensen (2001) conducted a comparative empirical investigation into the effects of time pressure on the cognitive process of professional and novice translators. Her findings revealed that when translating under time pressure, the subjects' translation process became faster and showed less evidence of reflection. Additionally, when they were working on a tight deadline, both professional and novice translators spent less time on initial orientation and virtually abandoned end-revision, and they consulted fewer resources. Liparini Campos (2005) investigated the effects of time pressure on the cognitive process of five novice translators and corroborated Jensen's (2001) findings with respect to time spent on orientation and revision phases, suggesting that time pressure has an impact both on the translation process and product. In Liparini Campos' study, when translating under time pressure, novice translators showed a tendency to reduce recursiveness during online revision and had no end-revision phase, which may explain why some texts produced under time pressure presented problems related to changes in their cohesive ties and to the maintenance of thematic progression.

De Rooze (2003a; 2003b) focused on the impact of time constraints on translation quality among novices and professionals. He found that the quality of translations produced by most of the novices decreased when the time available for translating a 250-word text was reduced from 15 to 10 minutes. A surprising finding was that for a few of these participants, the quality of translation went up when they were translating under time pressure (De Rooze 2003b: 65). In contrast, there was virtually no effect on the quality of the translations produced by professionals working under the same experimental conditions.

The findings of these studies would seem to suggest that translators can indeed learn to translate well under time pressure, and that a component of translation competence that novice translators need to develop is the ability to adapt their cognitive mechanisms under time pressure to maintain the quality of their output.

Alves and Liparini Campos (2009) added another dimension to their study, investigating the impact of Translation Memory (TM) systems and time pressure on types of internal and external support used by translators. From a process-oriented perspective, they analyze pause patterns and resources accessed during a translation carried out by a dozen professional translators who undertook four different tasks, including translations rendered with the help of a TM system under time pressure. Findings from the study include the observation that in cases where time pressure was introduced, there was a reduction in the number of pauses taken by translators in both the drafting and revision phases, and the professional translators relied mostly on their own knowledge to solve translation problems.

A different approach was employed by Sharmin, Špakov *et al.* (2008), who used eye-tracking techniques to conduct a series of experiments to measure the effects of time pressure and text complexity on translators' fixations on the source text. In the time pressure experiments, they found that, when translating with a shorter deadline, translators spent less time looking at the source text, but they did not significantly reduce the amount of time spent looking at the target text. They suggest that it might be easier for translators to adjust the speed with which they read for comprehension than it is for them to adapt their typing speed.

While Jensen and Lykke Jakobsen (2000) took a process-based approach to the investigation of the effects of time pressure in a journalistic context, more recently, Jiménez-Crespo (2012) has taken a product-based approach. He uses a corpus methodology to examine the linguistic features of translations of journalistic texts produced under pressure. In this study, ten different Spanish translations of U.S. President Barack Obama's inaugural speech were collected from online media outlets in the 12 hours after the delivery of the speech. Jiménez-Crespo (2012: 69-71) determined that errors such as calquing, as well as typographic and diacritic errors were highly prevalent across the target texts. Additionally, a strategy used in the lower quality translations of these journalistic texts was simply to omit difficult passages.

For her part, Bayer-Hohenwarter (2009) has reflected on the methodological challenges involved in designing time-pressure studies, pointing out that it is difficult to measure time pressure adequately, and noting that it is hard to create an experimental situation with just one variable parameter. She suggests that valid results can be obtained only by incorporating findings from other disciplines, such as endocrinology (e.g., sampling levels of adrenaline in the bloodstream while translating to determine stress levels). Bayer-Hohenwarter (2009) argues that, at present, studies of time pressure can only attempt to uncover tentative correlations between time pressure and translator behaviour.

While we do not disagree with Bayer-Hohenwarter's observations that designing scientific experiments to investigate the effects of time pressure on translation is exceedingly challenging, we also firmly believe that even an imperfect investigation can be a source of useful information, as long as one keeps in mind the limitations of such an investigation. In this vein, we would point to what Anthony Pym (2009) describes as "lousy experiments" conducted in the translation classroom. Based on his experience, Pym observes that it can be valuable to have students engage in rough experiments as part of the training process itself, both as a means of self-discovery and as an approach to learning about research. He adds the caveat that the approach of using process experiments in the classroom

can be highly effective in stimulating students to find out about their own translating, and rather less than effective as a means of producing valid research findings. The direct use of research in the classroom should thus be considered of qualitative interest to the individual student rather than quantitatively valid as a way of producing knowledge of the general. (Pym 2009: 135)

Pym himself conducted a series of “lousy experiments,” including one intended to explore the effects of time pressure. In this experiment, he asked students to work in pairs and to select and translate 200 words from a newspaper article, and then to repeat the same task one week later with a deadline that was 35% shorter (Pym 2009: 147-152). In addition to comparing the target text with the one produced by the partner, each student was asked to comment on the experience. By way of general conclusions, the experiment revealed that in order to translate more quickly, students mainly cut down on consulting documentation and on revising. Nothing to write home about, as Pym observes (Pym 2009: 150). Of more interest, he notes, is that no students reported that they felt the faster translation was of significantly worse quality; in fact, the students seemed prepared to accept that having more time to translate does not necessarily result in a higher quality end product, and that they could all speed up their normal translation processes.

3. Institutional Context

Inspired by Pym, we decided to build on this investigation of time pressure by conducting a “lousy experiment” of our own, with a few modifications to reflect the nature of the course and the profile of the students in the class.

Our experiment was carried out in the context of an obligatory final year French-to-English scientific/technical translation course that is taught as part of the Honours BA program in Translation at the University of Ottawa. There were 29 students registered in the class, and they were translating from their less dominant into their more dominant language.

This course was 12 weeks in duration and it was delivered during the final semester of a four-year program. The students in the class had already followed an introductory course in scientific/technical translation during the third year of their program, in addition to numerous other general and specialized practical translation courses.

During the first class of this final semester course, a general discussion took place which included the question of how prepared students felt for entering the work place, and whether they had any remaining specific learning objectives that they would like to accomplish before graduating at the end of the semester. The discussion was wide-ranging and revealing, but one item that was raised—and supported by a number of students—was the notion that students felt nervous about being able to work quickly enough to meet short deadlines. Further exploration of this topic revealed that up to this point in their training, no explicit attention had been paid to learning to translate quickly or under pressure, apart from formal exam situations. Even there, some students indicated they did not feel constrained by the time allotted for the exams. Student comments that came out of this initial discussion included:

- 1) “We are not really forced to translate within tight time limits.”
- 2) “If there are time limits (like for in-class exams), they’re pretty lengthy and I don’t feel constrained by them.”
- 3) “For exams, I feel like there’s plenty of time to read the text, do research, make decisions and even revise my translation.”
- 4) “I can safely say that the pressure of time is one imposed only by my own work habits.”

This initial discussion led us to reflect on the question of whether introducing some form of “speed training” in the course would benefit students more than simply spending additional time honing their translation skills in a situation that was free of time pressure. Could students develop a “habit” of working more quickly? Could this type of speed training serve as an authentic and situated learning exercise that would allow students to become comfortable with a different type of translation experience, one they will surely encounter in the workplace?

The following week, the idea was revisited in the class. Some students were enthusiastic about the idea of undertaking some type of speed training; however, others were more reluctant. Some voiced concern about needing extra time to research unfamiliar highly specialized fields. Another concern was that some students feared that they would receive poor grades for speed translation. At the end of the discussion, it was agreed that the professor would come to class the following week with a proposed format for speed training.

4. Designing the Speed Training Experiment

As noted above, the course in question was a compulsory scientific/technical translation course. While some students are attracted to this type of translation, there are many more who initially arrive in the translation program with the goal of working in a more creative field. Therefore, there is usually some work to be done to motivate students to embrace scientific/technical translation in general. This time, we also had to motivate those students who were reluctant to engage in speed training.

For inspiration, we turned to Cannon and Newble’s *Handbook for Teachers in Universities and Colleges* (2000: 9). This volume contains a synthesis reminding readers that an important factor that contributes to improved student learning is a teaching and learning environment that allows for the following: intrinsic motivations (which include a strong interest in the subject); active involvement in realistic learning tasks; independence and choice; cooperative work; a challenging but supportive and low-threat environment; frequent and constructive feedback; and practice and reinforcement. Keeping these characteristics in mind, we designed the speed training exercise as outlined in Table 1.

TABLE 1
Characteristics of the speed training exercise designed to address factors that contribute to a good teaching and learning environment (Cannon and Newble 2000)

Cannon and Newble's (2000: 9) factors contributing to a good teaching/learning environment	Characteristics of the speed training exercise designed to address Cannon and Newble's factors
Intrinsic motivations	Allow students to suggest subjects and/or texts, and emphasize professional benefits to be gained by learning to translate more quickly
Active involvement in realistic learning tasks	Invite professional translators to share their experience regarding the need to meet short deadlines, then simulate short deadlines
Independence and choice	Allow students to suggest subjects and/or texts
Cooperative work	Discuss results/experience with a partner first, and then more generally with the class
A challenging but supportive and low-threat environment	Present as an in-class exercise only, not to be graded
Frequent and constructive feedback	Collect and provide feedback on the work each week (without grading it)
Practice and reinforcement	Devote 15 minutes at the start of each class to speed training for the remaining 9 classes

To start off on the right foot, we decided that it would be useful to convince students of the benefits to be gained by learning to work more quickly. Therefore, we invited three practicing professional translators—one freelance translator, one salaried translator working in the private sector, and one salaried translator working for the government—to come to the next class to speak briefly about issues relating to time pressure in the work place. They provided an indication of the pace of work expected in a professional setting, putting things into a clear context by discussing typical deadlines, daily quotas set by employers, and real versus potential earnings. Students participated actively in the discussion, and by the end, they seemed genuinely receptive to the idea of incorporating speed training exercises into the class.

As observed by Kussmaul (1995: 51), students are more likely to have a positive attitude toward their task if they actually like the text or subject matter that they are translating. Although two specific principal themes had already been pre-selected by the professor for the core portion of the scientific/technical translation course, we decided to allow the students to suggest possible topics for the speed translation exercises. Kelly (2005: 124-125) points out that there has been considerable debate as to whether scientific/technical translation courses should attempt to cover many different disciplines, or rather concentrate on one field and deal with it in depth by working with many different text types within the same subject area. The criterion of accessibility would seem to favour the second option, as continuity in content allows trainees to deal with different translation problems in depth without having to devote much time to repeating basic documentary research and comprehending essential concepts, as would be the case if different subjects were introduced each week. However, the goal of the speed training exercises was much narrower—we simply wanted students to experiment with strategies for translating quickly and to become more comfortable with the speed. Therefore, we decided that we would favour

the interest factor. As Kelly (2005: 126-27) continues, the students' interest or liking for the texts they work with is subjective, and probably quite varied. In order to maximize student engagement, we decided that it would be preferable to introduce a variety of topics, and we elected to involve the students directly by asking them to suggest topics and/or texts of interest. In the end, the students were very pleased to be able to suggest topics, but they expressed a preference for having the professor select the actual texts. Indeed, this was a good decision as it allowed us to select texts of increasing levels of difficulty. With regard to topics, 16 suggestions were received, and the following nine were retained—one for each of the classes remaining in the semester: apiculture; biometrics; engines; International Space Station; nutrition; optical character recognition; skeleton (sport); spam filtering; sports equipment.

For each topic, we selected a text of approximately 225 words. Because the topics were relatively unfamiliar to the students (i.e. they were not topics that had received in-depth attention in other translation courses), the texts that were selected were semi-specialized or popularized texts, rather than highly specialized or technical ones. As suggested by Kussmaul (1995: 51), students lose motivation if the task presented to them is either too difficult or too simple. In this case, while the texts were relatively simple, the introduction of a strict time limit added an element of challenge to the task. Additionally, while the time limit remained constant throughout the exercise, the texts presented a very slight increase in level of difficulty as the semester progressed.

With regard to the format of the speed training, it was decided to use this exercise as a "warm up" at the beginning of each class. Students logged in to their computer accounts and readied their environment (e.g. by opening any tools or resources they wished to use). No restrictions were placed on the resources that students could consult. The professor then emailed the source text to the students, and they had 15 minutes to translate the text. At the end of the 15 minutes, the students had to email their target text to the professor.

Kelly (2005: 49-50) underscores that students will rapidly become de-motivated if they invest time and effort in a task but do not receive any reward or explanation as to why. Positive, constructive, regular and individual feedback is thus essential. However, the students had indicated quite strongly that they did not wish to be graded on the speed training exercise. Therefore, we collected and provided feedback on the individual translations each week, but we did not assign a grade to the work. In addition, approximately 5-10 minutes of each class was reserved for students to discuss their speed translation results and experience with a partner, or with the class in general.

5. Game On!

Although the students had firmly expressed their desire not to be evaluated on their speed translation work, we thought it might nonetheless be more interesting and motivating for the students if we introduced a "reward" into the process. We decided to introduce an element of "gamification" into the speed training exercises (McGonigal 2011; Reeves and Read 2009). Gamification refers to the use of game thinking and game mechanics in a non-game context in order to engage people. In our case, the goal was to engage students in the speed translation exercise and its associated

learning process. Gamification attempts to leverage people's natural desires for competition, achievement and status, and to provide rewards for players who accomplish desired tasks. One way of introducing competition is to make the progress towards rewards visible to other players, such as by providing a leader board (Reeves and Read 2009: 177).

In the context of speed training, students had a strict 15-minute deadline in which to complete and return their translation to the professor via email to an account specially set up for the exercise. There were 29 students in the course. The first student to finish and return the translation would receive 5 points, the second student would receive 4 points, the third student 3 points, the fourth student 2 points and the fifth student 1 point. Only completed translations would qualify to receive points (i.e. no incomplete or partial translations).

Each week, the points were entered into a spreadsheet, which served as a sort of “leader board” as illustrated in Table 2. The leader board was posted on the class web site. Students were informed that the three students who had earned the most points at the end of the semester would receive prizes. The prizes were modest—gift cards valued at \$15, \$10 and \$5 for the campus coffee shop. Nevertheless, the prospect of winning a prize, and the ability to see the weekly progress on the leader board really seemed to help engage the students. Indeed, as shown in Table 2, 18 of the 29 students—or 62%—earned at least one point during the course of the experiment, showing a relatively broad engagement. Meanwhile, although there was a runaway leader,² the competition for second and third place was quite stiff, thus adding to the drama of the exercise.

TABLE 2
Leader board for the speed translation exercises

[illegible]

Students	18-Jan	25-Jan	1-Feb	8-Feb	22-Feb	1-Mar	15-Mar	22-Mar	29-Mar	POINTS
Student 21						1				1
Student 22								2		2
Student 23									5	5
Student 24										0
Student 25			1		1					2
Student 26				1		2			4	7
Student 27			4	2			2	1		9
Student 28						4		4		8
Student 29									3	3

6. Discussion

At the end of the semester, following the “awards ceremony” for the speediest translators, students were asked to reflect on their experience in the speed translation exercise and to answer the following question, as well to provide any other pertinent comments about the experience: “What did you do differently in speed translation as compared to translating for your regular homework or graded assignments?”

An analysis of the responses revealed that they fell into two main categories. On the one hand, the students reduced their use of reference documentation, and on the other hand they reduced the amount of time spent on revision. These observations are exactly in line with those found by researchers such as Jensen (2001), Liparini Campos (2005) and Pym (2009). And we certainly echo Pym’s observation that these findings are hardly surprising (Pym 2009: 150). Like Pym, however, we found some of the students’ comments to be interesting food for thought, as summarized in Table 3.

TABLE 3
Summary of some student comments following the speed translation experiment

Reduced use of documentation	<ol style="list-style-type: none"> 1) “I didn’t look things up unless I <i>really</i> needed to.” 2) “I had to stop myself from compulsively checking and re-checking things in multiple sources like I normally do.” 3) “I only used Termium.”
Reduced time spent on revision	<ol style="list-style-type: none"> 1) “I didn’t really revise my text.” 2) “I tried to get things right the first time instead of planning to go back and fix things later.” 3) “I concentrated pretty much just on the meaning and didn’t let myself get sidetracked by the fact that it might not be worded as nicely as it could have been.”
Other comments	<ol style="list-style-type: none"> 1) “It made me learn not to overthink things, to go more with my instincts, which I found out are pretty good most of the time!” 2) “In the beginning I was nervous about not having time to check things in references, but as I got used to it, I got more confident about my own abilities.” 3) “I’m really glad we did speed training—I feel like I’m more prepared to go into the workplace now.” 4) “It was fun, but I’m glad we didn’t have to get marked on the speed translations.”

7. Lessons Learned

As Pym suggested, the direct use of research in the classroom may not be the best means of producing valid, generalizable findings. However, we will permit ourselves to share our impressionistic observations about our admittedly “lousy experiment” (Pym 2009: 135).

Firstly, we noted that in the first week of the experiment, close to one third (9 out of 29) of the translations that were submitted at the end of the 15-minute session were incomplete. However, from the mid-point of the experimental period—week 5 of 9—all the translations that were submitted were complete. This would tend to suggest that students can indeed learn to speed up the translation process.

With regard to general quality, very few errors of meaning were observed throughout the course of the experiment, which suggests that the students placed a high importance on accuracy, even when working under pressure. However, over the 9-week period, there were some notable improvements with regard to style. For instance, in the early part of the semester, we observed a higher number of structural calques, where students slavishly retained the syntax of the source language in the target text. As the semester progressed, the students did a better job of restructuring the target language phrases so that they reflected a more natural structure in English (e.g. there were fewer prepositional phrases and a greater use of pre-modification). Similarly, in the case of register, we noted that the early efforts by students often contained very informal constructions (e.g. contractions, extremely popularized vocabulary), even when these were not appropriate to the text type. In some cases, parts of the texts read as if they had been written in a spoken register. Later in the semester, the register used was more appropriate to the text type and it was more consistent throughout individual texts (i.e. there were fewer instances of a formal and informal style being inappropriately mixed in a single text).

Another observation is that those students who were the “better” translators in the class (i.e. those who received the highest marks on the graded evaluations) were still among the top students in the speed translation experiments. Although we did not formally grade the translations produced as part of the speed training exercise, we nonetheless provided feedback and kept notes on the general quality of the translations produced. Based on these informal evaluations, it is our opinion that the really top notch performers in the class did not seem to be majorly affected by the introduction of time pressure, as the quality of their translations remained more or less constant. This would seem to offer some general support for the findings of De Rooze (2003a; 2003b). In his study, there was virtually no effect on the quality of the translations produced by professionals (i.e., good translators) working against the clock.

Our findings would also seem to be in line with another observation made by De Rooze (2003b: 65), who reported that among the novice translators in his experiment, several showed an increase in the quality of their translations when they were working on a tight deadline. In our experiment, some of the students who were among the weakest performers on the graded evaluations moved towards the middle of the pack when translating under pressure. A possible reason for this might be that, as one student observed, having more time can lead to overthinking a solution.

A positive outcome of the exercise that was reported by a considerable number of the participants was that, over the course of the speed training, they gained con-

fidence in their own knowledge and abilities. Whereas they had previously used the resources as a sort of “security blanket,” in which they checked and double checked solutions without really needing to, the introduction of time pressure meant they did not have this luxury and so their tendency to compulsively seek external validation for their translation solutions was reduced.

Similarly, students indicated that they were less likely to use a solution simply because they found it in a dictionary or other reference. Because they had less time to consult resources, they were forced to develop and rely on their own judgment to a much greater degree, rather than simply placing blind faith in the reference material.

Interestingly, however, one of the comments made by a student indicated that there is still room for improvement in developing judgement and evaluating references. Owing to the introduction of time pressure, one student’s solution was to select just a single reference source for consultation. This student selected *TERMIUM Plus*,³ the online term bank developed by the Translation Bureau of the Federal Government of Canada. Further probing revealed that the student made this decision early on in the exercise (around the second or third week), and then did not revisit the decision but simply stuck with it, regardless of the text to be translated. While *TERMIUM Plus* is certainly a very highly regarded resource in general, it is not necessarily the best resource for all of the texts that were used as part of the experiment. Other resources, such as the *Grand dictionnaire terminologique*⁴ produced by the Office québécois de la langue française, would have offered similar ease of access and consultation while having a better coverage of scientific and technical terms appearing in some of the texts. As pointed out by Pearson (2000: 237), translation students sometimes show poor judgment when sourcing terminology and phraseology, and so this student’s comment opened the door for a class discussion on the importance of evaluating resources in the context of the job at hand.

With regard to the use of gamification, this strategy seemed to be effective for engaging students in the speed translation exercise, while also bringing a welcome element of levity to a course that can sometimes be a little dry and unpopular. Of course, it is important to maintain the right balance and to not stray too far down the path of “edu-tainment.” However, given that one of the primary goals of the speed training exercise was simply to encourage students to set aside their inhibitions and to try a new way of translating, the gamification strategy served a useful purpose in encouraging those students who were initially hesitant to engage more fully in the experiment.

A final observation, and an important one, is that while the speed training exercise was a fun activity for the students, the format in which it was implemented in the experiment described here proved to be exceedingly labour intensive for the professor. The activity was delivered as an additional exercise, which meant that it did not replace the regular work that needed to be done for the course. The main objective of the course, which consisted of training students in the translation of increasingly specialized scientific and technical texts, still needed to be met.

Because we wanted to see how the speed translation experiment would develop, we gave feedback on the speed translations produced by each student every week, which amounted to between 6500 and 7000 words of text to correct per week for the speed translations alone. In addition, class time was allotted each week for students to discuss their speed translations with their peers. In a future iteration of this

experiment, we would need to consider ways to reduce the work load for the professor. This might include giving individual feedback to only a rotating selection of students each week; doing speed translations only every second week; or having some weeks where there is no individual feedback but only a peer or class discussion.

8. Concluding Remarks

There is no denying that the results of the speed translation experiment are not scientifically valid. As such, it is not possible to identify a definite correlation or causation relationship between speed training and the ability of the students to translate more quickly without sacrificing too much in regard to quality. However, this experiment has led us to conclude that it does not make sense to *exclude* speed training from a translator training program simply on the assumption that an aptitude for translating more quickly will eventually be developed through professional experience.

Moreover, like Pym (2009: 153), we found the exercise to have considerable pedagogical value. It provided an opportunity for the students to practice a new skill—working under pressure—as well as to make direct observations about their own strategies and to draw their own conclusions. We also support Pym's suggestion that this type of rough experiment can be useful for helping to identify competencies that might usefully be included in the lists of desiderata for professional translators that are used by translator trainers. As noted above, the ability to translate under pressure does not typically appear on such lists, though it is clearly valued in the workplace and appears regularly in job advertisements for translation positions (Bowker 2004: 970).

A future consideration will be to determine whether speed training exercises might be better introduced to a translator training program in a different form, at a different time or in a different type of course. We did experiment briefly with introducing speed training in a third-year scientific/technical training course; however, this latter group of students found the exercise to be more stressful and less beneficial. This suggests that speed translation might be better reserved for more advanced students,⁵ whose translation competence is more fully developed, and who are somewhat more confident and are looking to develop complementary skills that will help them to transition into the workplace.

Another possibility that we are currently exploring is whether speed training can be introduced through exercises that are not translation-based *per se*. For example, students in the University of Ottawa's BA in Translation program also take courses in professional writing. It might be preferable to first introduce the idea of speed training in a native-language writing context, rather than in a translation context. For example, students could be asked to prepare a *précis* or summary of a longer text on a tight deadline. This would allow them to sharpen a number of skills and reflexes that are also useful for translation: the ability to analyze and grasp meaning quickly, the ability to extract key ideas and structure from a text, the ability to organize ideas, and the ability to convey ideas accurately and to recognize and avoid distortion in information transfer. By introducing speed training in a writing context, we hope to help students to better hone their skill for making decisions quickly, and this approach can then be extended to a bilingual context at a subsequent stage of their training. Our investigation into this approach is ongoing.

Finally, it may also be worth considering whether it is possible to develop exercises that will sharpen the ability to make rapid decisions, but which do not require students to immediately execute the following steps. For instance, in a course on revision, students could be asked to simply identify those elements of a text that need to be corrected or modified, without having to actually make the correction.⁶ The goal here would be to focus on developing the ability to make decisions efficiently, and not on implementing the correct solution. Of course, once the students become accomplished at this initial rapid decision making, the next step could be to have them make the necessary corrections. Further investigations in this regard would be welcome.

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NOTES

1. Indeed, Kelly does make reference to the value of speed training in a subsection on “Feasibility” in the section “Criteria for text selection” in the chapter on sequencing activities in translator training: “Trainers can make an otherwise simple task much more demanding (and hence motivating) by requiring it to be carried out in a very short period of time (with the aim of encouraging advanced students to learn to work at speed, as required professionally)” (Kelly 2005: 127).
2. Interestingly, the student who was the winner of the speed translation contest went on to complete the Master in Conference Interpreting program immediately after graduating from the BA in Translation.
3. *TERMIUM Plus*: Visited on 30 October 2013, <<http://www.btb.termiumplus.gc.ca/>>.
4. *Grand dictionnaire terminologique*: Visited on 30 October 2013, <<http://www.granddictionnaire.com>>.
5. This is in line with Kelly’s observation as reported in footnote 1, and with Pym’s observation that “... the direct use of process experiments may be recommended as a pedagogical exercise, at least in advanced classes...” (Pym 2009: 153).
6. A similar idea was proposed by Louise Saint-André (2015: 138) as a possible exercise for training post-editors to correct machine translation output.

REFERENCES

- ALVES, Fabio and LIPARINI CAMPOS, Tânia (2009): Translation technology in time: Investigating the impact of translation memory systems and time pressure on types of internal and external support. In: Susanne GÖPPERICH, Arnt LYKKE JAKOBSEN and Inger MEES, eds. *Behind the Mind: Methods, Models and Results in Translation Process Research*. Copenhagen: Samfundslitteratur, 191-218.
- BAYER-HOHENWARTER, Gerrit (2009): Methodological reflections on the experimental design of time-pressure studies. *Across Languages and Cultures*. 10(2):193-206.
- BOWKER, Lynne (2004): What does it take to work in the translation profession in Canada in the 21st century? Exploring a database of job advertisements. *Meta*. 49(4):960-972.
- CANNON, Robert and NEWBLE, David (2000): *A Handbook for Teachers in Universities and Colleges*. London: Kogan Page.
- CHARRON, Marc (2005): Plus vite, encore plus vite: la traduction à l’heure de la mondialisation. *Translation Studies in the New Millennium: An International Journal of Translation and Interpreting*. 3:15-27.
- DE ROOZE, Bart (2003a): *La traducción, contra el reloj*. Doctoral dissertation, unpublished. Granada: Universidad de Granada.

- DE ROOZE, Bart (2003b): La traducción, contra reloj. In: Ricardo MUÑOZ MARTÍN, ed. *Actas del 1.º Congreso Internacional de la Asociación Ibérica de Estudios de Traducción e Interpretación*. (Granada, 12-14 February 2003) Vol. 2. Granada: AIETI, 59-66. Visited on 30 October 2013, <http://www.aieti.eu/pubs/actas/I/AIETI_1_BR_Traduccion.pdf>.
- DE ROOZE, Bart (2008): La traducción contra reloj. Consecuencias de la falta de tiempo en el proceso de traducción. In: María FERNÁNDEZ and Ricardo MUÑOZ, eds. *Aproximaciones cognitivas al estudio de la traducción e interpretación*. Granada: Comares, 1-37.
- JENSEN, Astrid (1999): Time pressure in translation. In: Gyde HANSEN, ed. *Probing the Process in Translation: Methods and Results*. Copenhagen: Samfundslitteratur, 103-119.
- JENSEN, Astrid (2001): *The Effects of Time on Cognitive Processes and Strategies in Translation*. Doctoral dissertation. Copenhagen: Copenhagen Business School. Copenhagen: Working Papers in LSP, 2001/2.
- JENSEN, Astrid and LYKKE JAKOBSEN, Arnt (2000): Translating under time pressure: An empirical investigation of problem-solving activity and translation strategies by non-professional and professional translators. In: Andrew CHESTERMAN, Natividad GALLARDO SAN SALVADOR and Yves GAMBIER, eds. *Translation in Context*. Amsterdam: John Benjamins, 105-116.
- JIMÉNEZ-CRESPO, Miguel Ángel (2012): Translation Under Pressure and the Web: A Parallel Corpus Study of Obama's Inaugural Speech in the Online Media. *Translation & Interpreting*. 4(1):56-76. Visited on 30 October 2013, <<http://www.trans-int.org/index.php/transint/article/view/191/98>>.
- KELLY, Dorothy (2005): *A Handbook for Translator Trainers*. Manchester: St. Jerome Publishing.
- KIRALY, Don (2000): *A Social Constructivist Approach to Translator Education: Empowerment from Theory to Practice*. Manchester: St. Jerome Publishing.
- KUSSMAUL, Paul (1995): *Training the Translator*. Amsterdam: John Benjamins.
- LIPARINI CAMPOS, Tânia (2005): *O efeito da pressão da tempo na realização de tarefas de tradução* [The effect of time pressure when performing translation tasks]. Master thesis, unpublished. Belo Horizonte: Federal University of Minas Gerais.
- MCGONIGAL, Jane (2011): *Reality is Broken: Why Games Make Us Better and How They Can Change the World*. New York: Penguin Press.
- PEARSON, Jennifer (2000): Surfing the Internet: Teaching Students to Choose their Texts Wisely. In: Lou BURNARD and Tony MCENERY, eds. *Rethinking Language Pedagogy from a Corpus Perspective*. Frankfurt am Main: Peter Lang, 235-239.
- PYM, Anthony (2009): Using process studies in translator training: self-discovery through lousy experiments. In: Susanne GÖPFERICH, Fabio ALVES and Inger MEES, eds. *Methodology, Technology and Innovation in Translation Process Research*. Copenhagen: Samfundslitteratur, 135-156. Visited on 30 October 2013, <http://usuaris.tinet.cat/apym/on-line/training/2009_lousy_experiments.pdf>.
- REEVES, Byron and READ, J. Leighton (2009): *Total Engagement: Using Games and Virtual Worlds to Change the Way People Work and Businesses Compete*. Boston: Harvard Business Press.
- SAINT-ANDRÉ, Louise (2015): *Quelle formation donner aux traducteurs-postéditeurs de demain?* Master thesis. Ottawa: University of Ottawa. Visited on 5 January 2015, <<http://www.ruor.uottawa.ca/handle/10393/31881>>.
- SHARMIN, Selina, ŠPAKOV, Oleg, RÄIHÄ, Kari-Jouko, et al. (2008): Effects of Time Pressure and Text Complexity on Translators' Fixations. *Proceedings of the 2008 Symposium on Eye-Tracking Research and Applications (ETRA '08)*. New York: ACM, 123-126. Visited on 30 October 2013, <http://www.sis.uta.fi/~csolsp/docs/Sharmin_ETRA_08.pdf>.