A Digital Platform for Literary Translation: collaborative translation and teaching[1]

Susana Valdez
Isabel Oliveira Martins

General overview of the project

PEnPAL in Trans – Portuguese-English Platform for Anthologies of Literature in Translation is an interinstitutional literary translation project comprising two components: research and teaching. This venture brings together teachers and researchers in literature, translation studies and linguistics from various institutions (the University of Lisbon, Nova University, the University of Minho, the Portuguese Catholic University, and, until 2014, Lusófona University). One of the main goals is to offer support for literary translation in higher education, while contributing to innovative research in other areas, such as Comparative Literature, American Studies, Diaspora Studies, Contrastive Linguistics, Literary Translation and Digital Humanities.

Drawing on the concept of process-oriented didactics and taking its cue from an extensive body of literature (KIRALY, 1995, 2013) which attempts to bridge the gap between translation teaching and translation practice, *PEnPAL in Trans* seeks to establish collaborative translation stemming from a teaching environment that extends beyond academia and the classroom, thus reaching the community at large.

The literary translator is still, to this day (and at least at first sight), not conceived as part of the online professional network, capable of taking advantage of collaborative online work by fostering translation competence through social engagement and peer empowerment: literary translators "are still absent from the

game" (MOGHADDAM, 2013, p. 205). Literary translation mirrors the romantic ideal of the author that works in isolation, oblivious to the impact of collaborative work/interaction. As Austermühl (2001, p. 11) has pointed out: "the antiquated image of a lone translator, armed only with a pencil or typewriter and surrounded by dusty books, is no longer realistic". However, even though the scientific-technical translator is closely associated with a growing mechanization or automation of the translation process within a complex multi-agent network (VALDEZ, 2019), the image of the literary translator is to some extent still crystalized. When collaborative "construction" is considered, it is not among translators but arises as a result of intervention by the publisher, editor, and sometimes the author (PAUL, 2009, p. 39).

However, *PEnPal* assumes that literary translation can be perfected in collaborative environments, and thus we agree with Moghaddam (2013, p. 200) when he supports the use of weblogs in literary translation:

> It can act as a 'mediator' between the author of the work under translation, the translator, and the prospective readers. It also provides facilitated 'collaborative possibilities' for the translation itself, by creating a virtual world around the translation which is bigger than the translator's small, isolated space... When literary translators play the role of bloggers in literary translation, they are no longer lonely and isolated translators, surrounded by different kinds of dusty dictionaries. The weblog gives them the opportunity to enlarge the world around their translation.

Thus, the didactic and research components of the *PEnPAL in Trans* project are supported by a range of digital resources developed in order to contribute to the acquisition of literary translation competence, namely:

(1) a website that connects all the digital resources and content online where all those involved can follow the project;

(2) a blog that aims to extend the "network" of literary translation training (students, authors, teachers, translators, among others), providing a forum and a record of intuitively formulated translation problems;

(3) a digital database where teachers and researchers can add translation problems, alternative solutions and discussions of their strategies.

Figure 1 provides an overview of this collaborative construction within and fostered by the PEnPal project. The combination of the website, blog and database encourages three levels of collaboration, namely: (1) collaborative research; (2) collaborative teaching; and (3) collaborative translation.

FIGURE 1 – COLLABORATIVE CONSTRUCTION WITHIN AND FOSTERED BY *PEnPAL IN TRANS*
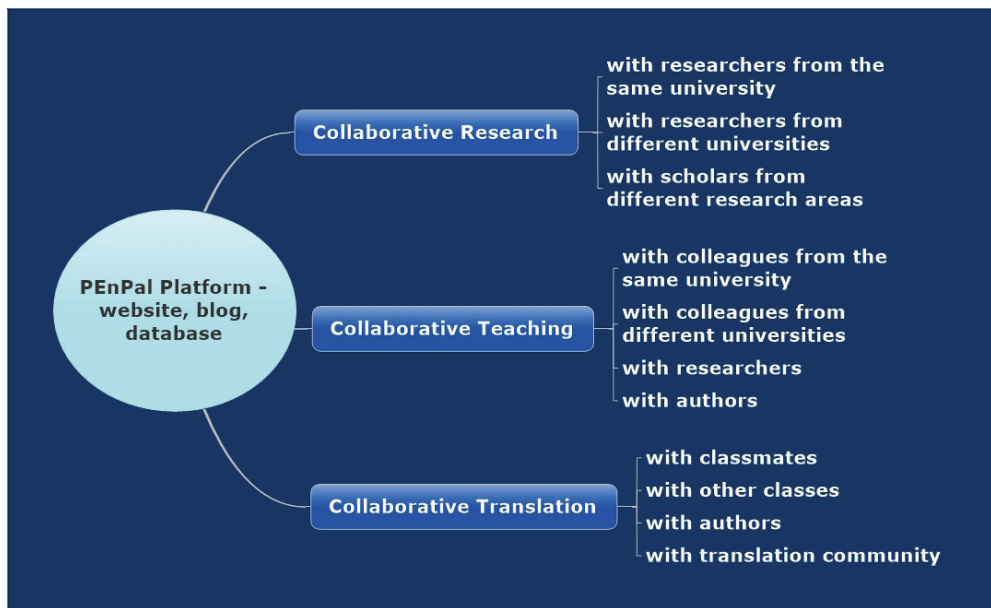
Source: Elaborated by the authors (2020).

Through the use of an online platform, *PEnPal* creates a "landscape which is not mapped by conventional geographies" (BUSH, 2001, p. 127-130). Researchers, teachers and translators from different backgrounds, institutions and geographical areas interact and collaborate towards a common goal: the acquisition and development of procedural knowledge ("knowing how") based on growing declarative knowledge ("knowing what") and including learning-by-doing in an extended notion of the collaborative classroom environment. The classroom in this setting is not limited to the presence of a traditional teacher. Looking at Figure 2, it is clear that procedural knowledge is not solely centered on the teacher's intervention. "Knowing how" is stimulated by peer feedback and is based on problem solving, whilst "knowing what" is more teacher-centered (KIRALY, 1995, p. 197-224).

Figure 2 – Translation competence acquisition
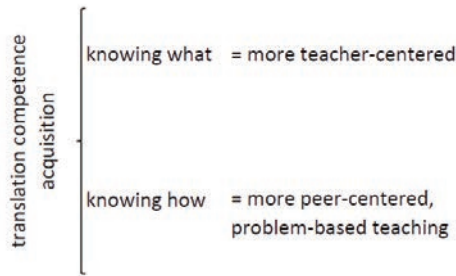
Source: Elaborated by the authors (2020).

As the PATT group stated (OLVERA-LOBO *et al.*, 2007, p. 517), and Gonzáles Davies (2004) corroborated: "teacher-centered teaching is obsolete and has largely been replaced by a learner-centered alternative which favors student autonomy and eliminates the figure of the all-knowing teacher capable of resolving all problems" (OLVERA-LOBO *et al.*, 2007). Instead, feedback from different sources feeds the organic development of translation competence. In fact, a number of studies (BARROS, 2011; DESJARDINS, 2011; GAMBIER, 2012; GATO *et al.*, 2016; KENNY, 2008; KIRALY, 2001; LISAITÉ *et al.*, 2016; O'BRIEN, 2011) have argued that collaborative translation can be advantageous for translation training.

First output

The first output of this venture is the already published anthology *Nem cá nem lá: Portugal e América do Norte entre escritas (Neither Here nor There: Writings Across Portugal and North America)*.[2] It includes works by 29 authors, comprising Americans and Canadians who write in English but maintain some sort of connection to their Portuguese heritage and American authors who live in Portugal and write in English about their Portuguese experiences. In total, the anthology contains 56 source texts divided into four categories: fiction; poetry; autobiography/memoir;

---

[2]   The anthology was funded by the Luso-American Foundation, by means of the Alberto de Lacerda Translation Award 2013; see Alves *et al.* (2016).

and historical discourse, children's literature and drama. All the translated texts involve cross-cultural transit between Portugal and North America; they are mostly narratives of displacement, cultural and interlingual exchange between English and Portuguese, and display heterolingualism, mutilated or corrupted speech, intertextuality from multiple literary traditions, lyrical evasions and dis-order, calling for different functional and hermeneutic considerations in the translation strategies employed. The anthology also contains entries on each of the 29 authors which offer not only biographical information but also some considerations on the translation process and main translation strategies used, such as selective non-translation as compensation for heterolingualism, explicitation, italicization of passages marked as foreign in the source text, replacement of disruptive language with non-standard target varieties, reliance on mixed literary repertoires, and the systematized replication of orality markers in the target language, among others.

Case studies

The project began in 2011, and some of the translations were done when the digital platform was taking its first steps and thus it was used rather unevenly. The focus of this article is to describe and discuss how the collaborative practice was performed during the translation and teaching processes, using two specific cases with different approaches:

1. Collaborative translation of Katherine Vaz's short story "Lisbon Story" in the classroom.
2. Collaborative translation of Nancy Vieira Couto's poem "They Double Up Around the Absence of Campfires" in an experimental setting[3].

"Lisbon Story"

The short story (30 pages long) was first translated in a master's seminar in 2011/2012 at NOVA University. The translation involved twenty students aged between 20 and 50 from a wide variety of academic backgrounds (former translation

---

[3]   For more information about these authors in the Portuguese-American context and the collaborative translation of selected works, see Martins (2016a, 2016b).

undergraduate students, but also students from other academic areas) and mostly did not include contact with digital tools. The text was divided and distributed between 5 groups of 4 students. They were alerted to the specific problems connected to this type of text, namely interference by the target language in the English text, and other more general problems related to the translation of literary texts – polysemy, connotation, and style, among others. Additionally, the groups were also encouraged to collaborate with each other using the blog and to contact the author.

Some of the students did use the blog and one of the first conclusions was that their interventions were generally about semantic problems or lexical choices and had a very impressionistic character which indicated personal limitations, including a slightly limited level of competence in both languages. Moreover, it was also possible to observe that the exchange of opinions helped some of them to improve their translations, but although students were also encouraged to reflect on the strategies they should use whenever confronted with a certain type of problem (for example, corrupted Portuguese words or expressions used by the author), these strategies were not aspects the students felt compelled to discuss. This type of discussion only occurred in the classroom when prompted by the teacher and when each translation was being revised by a different group. Similarly, aspects such as coherence, namely in the use of forms of address – so very different in the two languages and particularly important in this source text – were not even considered by the students. Once again, this was an aspect which was only approached after the teacher intervened. Contact with the author – made by email – was, on the other hand, rather productive, since the students were able to understand the reasons behind the use of certain expressions in Portuguese which sounded rather unfamiliar. On the whole, this first experience showed the teacher what kind of strategies should be used in order to avoid some of the above-mentioned situations.

Thus, in 2013-2014, the same text was used in another master's seminar on literary translation. The class was composed of 14 students, again with ages ranging between 20 and 50, and once again with rather varied academic backgrounds and different levels of competence in the use of digital tools. The students were divided into groups and their task was to revise the translation produced by their classmates. The version handed to the students contained some minor or subtle

errors. They were alerted to the different aspects already mentioned and were even given a list of what kind of specific problems they should address, as well as an indication that they should use the blog both to collaborate among themselves and to see what difficulties previous students had pinpointed about that specific text or about other texts that were already online.

The general result was productive, in view of the almost final version of the translation. Some students, once again, found it difficult or were reluctant to use the digital platform. The difficulty was mainly due to some of them not being familiar with the use of digital tools, but the reluctance was related to an aspect that arises from the collaborative environment, one that was not expected: the students were willing to put forward their doubts and difficulties in the classroom, accepting suggestions and discussing possible problems with both the teacher and their classmates, but some of them did not feel comfortable revealing their own doubts and problems online. In other words, openly posting what they considered to be their own lack of knowledge was a drawback and thus peer pressure may be a factor to take into consideration.

Furthermore, we must bear in mind that the text they were dealing with was being revised and therefore some of the problems had already been dealt with. Nevertheless, the students still used the blog mostly to consider alternative lexical choices, and were not aware of some of the mistakes. Again, it was only in the classroom that they were able to work with each other more effectively and come to an acceptable version of the translation that took into consideration the list of specific problems to be dealt with, and once more this was under the teacher's supervision.

On the whole, it may seem that translating in a collaborative environment was not very helpful but actually the process as a whole was indeed quite useful, having furnished the teacher – and the final revisers – with some options and insights that might not have been considered if the translation had been done by one solitary translator. On the other hand, these two experiences, even if they are only supported by empirical observation, showed some of the aspects that the overall project should take into account and these will be suggested after the second case has been presented.

"They Double Up Around the Absence of Campfires"

Turning now to the second case study — "They Double Up Around the Absence of Campfires" — our starting point was the evaluative research question "what impact does using a blog as a collaborative online tool have on literary translation practice?" A pilot study was conducted in May 2013 to explore this question. The experiment aimed to record the translation product and the students' translation process and observe interactions between the students and the translation teachers, the author and the professional literary translator. We hypothesized that the use of the collaborative online tool would lead to a better-quality product.

In order to ensure triangulation, five types of data were collected: (1) translation product; (2) screen recording data; (3) comments posted on the blog; (4) pre-interviews and post-interviews; and (5) the researchers' observational notes. BB Flashback (https://www.flashbackrecorder.com/) was used to capture the screen recording data.

Experimental design

The experiment took place simultaneously at two different universities in two different cities – at Lusófona University in Lisbon and at the University of Minho in Braga – in a classroom setting. The translation students were asked to translate a poem at the same time and use the blog to communicate with each other and with the teachers, author and professional translator by posting their translation problems and difficulties. Part of their translation task was to help solve their classmates' problems and difficulties and share their own problems and difficulties. The author of the source text could also be contacted through the blog to give feedback on the students' problems and answer specific queries. Participants were supported in person by two specialists – their literary translation teacher at their university and one *practisearcher*[4] who monitored the entire process. The collaborative work done during the pilot study is shown in Figure 3. The students were informed that they should try to finish the translation within two hours.

---

[4]   The concept of *practisearcher* was first put forward by Gile (1998).

Figure 3 - Visual representation of the collaborative work during the pilot study
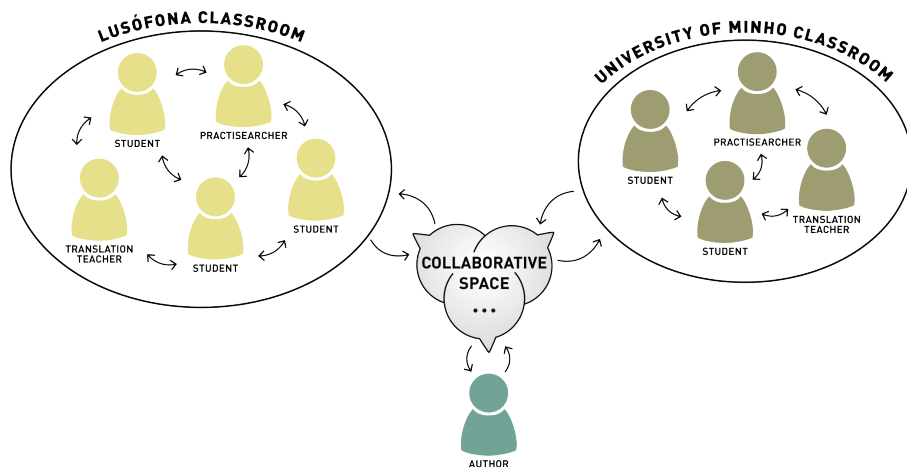
Source: Elaborated by the authors (2020).

All translations were carried out using computers and the students were instructed to use all their usual online resources, focusing on the blog in particular. Screen recording software was installed on the computers before the experiment started and all participants were informed that their translation process was going to be recorded. At the beginning of the experiment, each participant received a paper copy and a Word file of the source text. All instructions were given orally before the task.

Participants

Five students studying translation were recruited from three different Portuguese universities. The participants were all Portuguese: three undergraduate students and two MA students. Table 1 below shows information on the translators who participated in the pilot experiment. As it indicates, two of the students came from the University of Minho – one an undergraduate studying Applied Languages with no professional experience and the other a student on an MA course in Translation and Multilingual Communication with (little) professional

experience, both familiar with IT tools; two were from Lusófona University – two undergraduate students studying Translation and Creative Writing with no professional experience, one familiar with IT tools and the other not; and one student on an MA course in Translation at Nova University with no professional experience but familiar with IT tools.

TABLE 1 - INFORMATION ON THE TRANSLATORS WHO PARTICIPATED IN THE PILOT EXPERIMENT

Participant1	F	Undergraduate	Applied Languages	University of Minho	No professional experience	Familiar
Participant2	F	MA student	Translation and Multilingual communication	University of Minho	Professional experience	Familiar
Participant3	F	Undergraduate	Translation and Creative Writing	Lusófona University	No professional experience	Not familiar
Participant4	F	Undergraduate	Translation and Creative Writing	Lusófona University	No professional experience	Familiar
Participant5	F	MA student	Translation	Nova University	No professional experience	Familiar

Source: Elaborated by the authors (2020).

SOURCE TEXT

The five students were asked to translate the poem "They Double Up Around the Absence of Campfires" by Nancy Vieira Couto. The poem was selected due its representativeness of Couto's body of work. Additionally, its difficulty and length was taken into consideration, given the students' translation competence level and the time allocated for the task[5]. The author's availability for the experiment was also taken into account.

---

[5]   During the process to select the source text, we asked a professional literary translator – Ana Maria Chaves – to translate the poem in order to determine the difficulty and time needed for it to be translated.

RESULTS

The main purpose of the pilot study was to determine (1) the time spent on each of the tasks during the translation process; (2) each participant's interaction using the collaborative space; and (3) the correlation (if any) between (1) and (2) and the quality of translation.

TIME

The screen recording data revealed five clear translation phases: reading the source text, researching the author, language and terminology problems, blog-related tasks (i.e. posting questions, answering questions, reading peers' questions and answers), translation *per se* and revision. Table 2 presents the experimental data regarding the time spent in minutes by each participant. The time presented in the table for each one of the phases results from the sum of the different blocks of time spent on each task throughout the translation process, i.e. in most cases the participant did not perform each task uninterruptedly. For instance, Participant3 started by reading part of the text, researched a translation problem, and then carried on reading.

TABLE 2 - TIME SPENT IN MINUTES ON EACH TASK DURING THE TRANSLATION PROCESS

|	Reading	Research	Blog	Translation	Revision	Total
Participant1	04:88	23:65	14:57	56:00	00:00	01:40:30
Participant2	25:00	24:24	32:00	29:00	15:00	02:05:24
Participant3	03:02	10:48	36:53	17:28	39:41	01:47:52
Participant4	02:42	23:00	41:29	19:31	27:03	01:53:45
Participant5	05:16	23:11	28:14	28:19	35:00	02:00:00

Source: Elaborated by the authors (2020).

As can be seen in the Table 2, there is a big difference in the time each participant spent on each task. For example, the time spent reading varied from just under five minutes to twenty-five minutes.

Figure 5 below displays an overview of the time each participant spent on each task, with particular emphasis on the time spent on the collaborative space, i.e. the *PEnPal* blog. What is interesting about the data in this table is that it becomes

clear that all participants spent an average of 31 minutes working collaboratively. Also, with the exception of Participant1, who only spent just under 15 minutes on the collaborative space, most students spent about the same amount of time working with each other.

FIGURE 4 - TIME EACH PARTICIPANT SPENT ON EACH TASK
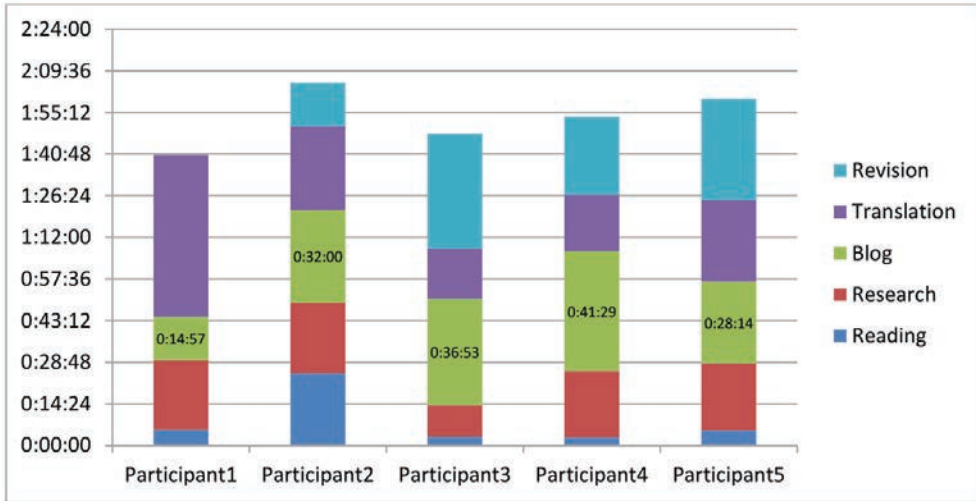
Source: Elaborated by the authors (2020).

COLLABORATIVE WORK

The analysis of the comments posted on the blog revealed three types of comments:

(1) questions related to translation problems and difficulties, such as when a translator asked what "They sing 'Oh bury me not'" refers to;

(2) answers to peers' problems and difficulties, such as when one of the translators answered the above question with a link to a Wikipedia page: "I think it is a song http://en.wikipedia.org/wiki/Bury_Me_Not_on_the_Lone_Prairie"; and

(3) observations not immediately related to problems or difficulties, like, for instance when the translators replied to a peer's answer with "Thank you!".

It should be noted that the interactions only began after one of the *practisearchers* posted the first question. Until that time, no student took the initiative to post any type of comment even though the screen recording data showed that most were visiting the blog frequently. Table 3 presents a breakdown of the interaction by each participant on the *PEnPal* blog. The total number of questions (11), answers (13) and comments (11) are not evenly distributed. As can be seen in the table below, Participant2 and Participant5, both master's students, clearly interacted more than the undergraduate participants.

TABLE 3 - EACH PARTICIPANT'S INTERACTION IN THE COLLABORATIVE SPACE

	Questions	Answers	Observations	Total
Participant1	1	0	1	2
Participant2	2	3	4	9
Participant3	1	4	0	5
Participant4	5	0	0	5
Participant5	2	6	6	14

Source: Elaborated by the authors (2020).

Of the 11 questions raised, the majority (7 questions) were related to meaning. Two of the translators, for example, asked about the meaning of "double up". The remaining questions (4 questions) were related to context, culture and the author's intentions, as in these examples: "Did you imagine them [the hats] to be made of straw or more like felt?"; "Can you please tell me if the average American would immediately know what the flappers' cloches are?" Interestingly, this is also our experience in the classroom as stated above in the "Lisbon Story" case study. Most of the students' translation difficulties were related to semantics and lexicon and therefore focused on the micro-level. Macro-level problems were rarely verbalized, as we have seen in the previous case study, unless the teacher draws the students' attention to them.
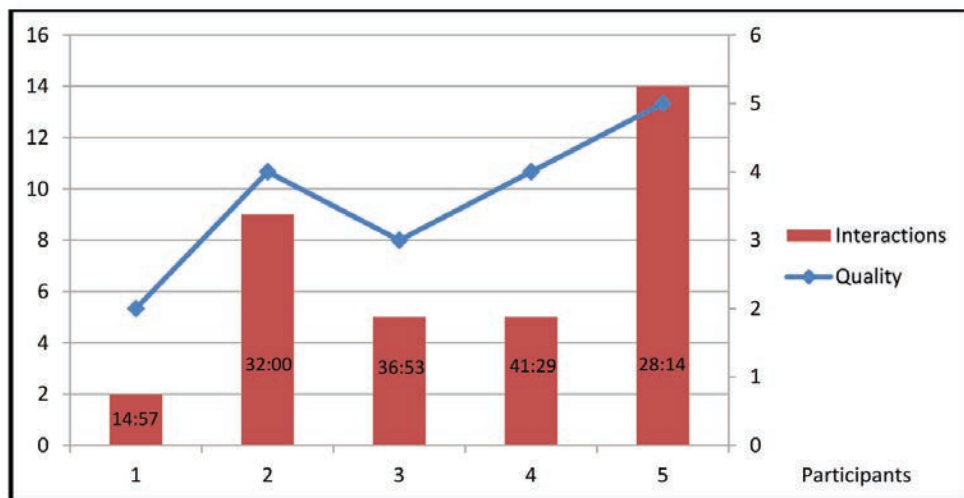
Regarding the interaction between the author and the students on the *PEnPal* blog, one participant commented in the post-interview: "I liked having direct input from the author. It's something that I'm not used to when I translate. Usually we have to guess what the author intended in the original and in this case we did not have that barrier" (our translation). One of the advantages of using a

blog is precisely the opportunity to connect translators with living authors with the view of active cooperation as Moghaddam (2013, p. 206) highlights: "the author helps the translation and reflects upon the feedback received by the translator, all of which are available to the public." The author – Nancy Vieira Couto – commented to this effect in the post-interview: "As a poet, I found the experiment very valuable. It illustrated just how difficult it is to translate a poem, even a short one, not only from one language to another but also from one culture to another."

COMPARISON BETWEEN QUALITY AND COLLABORATIVE WORK

Before considering a possible connection between quality and collaborative work, it was necessary to analyze the translated poems and grade them in terms of quality.The researchers and teachers came to an agreement regarding the evaluation of each translated poem on a scale of 1 (major revision needed before publication) to 5 (no changes or minor changes needed before publication). A comparison was then established between the quality of the translation and collaborative work by means of the number of interactions and the time spent on the *PEnPal* blog. The results obtained from the analysis of this comparison can be seen in Figure 5.

FIGURE 5 - COMPARISON BETWEEN THE QUALITY OF THE TRANSLATION (IN BLUE), THE NUMBER OF INTERACTIONS (IN RED) AND THE TIME IN MINUTES SPENT ON THE PENPAL BLOG (IN BLACK)

Source: Elaborated by the authors (2020).

From the graph above we can clearly see that in two of the cases – Participant2 and Participant5 – there seems to be a correlation between the collaborative work (both time and interactions) and the quality of the translation. In fact, one participant, when asked about this experiment in the post-interview, gave statements that corroborated this. She explicitly referred to the impact on the quality of the translation:

> I appreciated the interaction with classmates, and it was very useful to discuss solutions for the most difficult terms. In this respect, the blog was a contributing factor to the final quality of my translation because it accelerated the problem-solving process. (our translation)

The correlation between collaborative work (both time and number of interactions) and the (high) quality of the translation in the case of Participant4 is not self-evident. The number of interactions is lower in comparison with Participant2 and Participant5 but the time spent on the blog is the highest (41 minutes and 29 seconds). She also rates highly on the quality scale (4). This suggests that although she did not interact explicitly on the blog, she used it as a reference. In fact, she spent more time using the blog than translating *per se*: 41 minutes and 29 seconds on the blog and 19 minutes and 31 seconds translating. When asked about the time spent on the blog, the translator said: "I think that the time I spent on the blog made me translate faster because it helped solve the translation problems." (our translation)

The correlation between low quality and little collaborative work can be seen in Participant1's case. Even though she was familiar with IT tools, she reported difficulties using the blog during the experiment (e.g. logging questions and answers, using it as a reference tool). The student's poor performance may be the result of multiple factors: difficulties in using the blog, pressure from the experiment itself, time pressure, peer pressure (as in the "Lisbon Story" case), to name just a few.

Taken together, these results suggest that there is a connection between collaborative work, the proficient use of collaborative tools, and translation quality. However, with a small sample size, caution must be applied, as the findings may not be representative.

Preliminary conclusions

This study set out with the aim of assessing the impact of using collaborative online tools on translation competence acquisition and literary translation teaching and practice. We looked at two case studies for this purpose. In the first case, we dealt empirically with both the teacher's and the students' experiences using the digital platform as a complement to the classroom. In the second case, we hypothesized the existence of a correlation between the use of collaborative tools and translation quality. The data from these two cases studies revealed important insights.

The collaborative environment created by our project was shown to be productive, since generally the final translation(s) benefited from that collaboration, particularly if we bear in mind factors such as the possibility of contact with the authors and students from other universities.

From a teacher-centered to a student-centered approach

Both cases studies revealed that teachers and particularly students are used to a teacher-centered approach. The students' lack of autonomy was visible. In "Lisbon Story" and "They Double Up Around the Absence of Campfires" students did not make the first step to verbalize and problematize translation problems and difficulties. Most cues came from facilitators – teachers and/or *practisearchers*. In "Lisbon Story", verbalization and problematization at micro level was clearly more accessible for students than problematization at macro level, and thus students' online behavior mirrored what happened in the classroom. Only when the teacher called their attention to macro-level issues, were (some of) the students able to verbalize and problematize at a different level. In the second case study —"They Double Up Around the Absence of Campfires" — the participants' interactions were also mainly focused on micro-level translation problems and difficulties (both in their questions and answers), and even those type of interactions only began after one of the *practisearchers* initiated the dialogue. In other words, the facilitators had/have to be the catalyst and this raises another problem: the participants' technological competence.

Development of technological competence

An underlying assumption of our approach with *PEnPal in Trans* was that technological competence was one part of the students' and teachers' acquired competences. However, as we found out throughout the different stages of the project, teachers, researchers and students showed difficulties in using online tools effectively. It was also assumed that the potential difficulties did not have an impact on translation practice and translation competence acquisition.

Yet it became clear that without technological competence (1) teachers and researchers may not be able to understand the advantages of the online tools and teach correct and effective use of the tools to students; (2) teachers and researchers that do not master technological competence may avoid the use of the tools or scarcely encourage their use; and (3) consequently only a small number of students will use the tools. As pointed out by Moghaddam (2013, p. 207), "we need to be aware of the fact that some of the most celebrated literary translators may still prefer old habits", and this can also be said for teachers, researchers and students.

Therefore, this reflection has enabled us to suggest the creation of two advanced courses for teachers and researchers: (1) "Digital Humanities" by Diogo Queiroz de Andrade (June 2015) and (2) "Digital Humanities and Literary Translation" by Maarten Janssen, Manuel Portela and Margarida Vale de Gato (June 2016).

Additionally, a redefinition of technological competence is suggested based on this experience. Widely varying definitions of the term technological competence have emerged. Technological competence, sometimes referred to as "instrumental subcompetence" (PACTE Research Group, 2003), is one of the competences needed to successfully execute the translation process. This term has come to be used to refer to the knowledge associated with the use of translation tools. The EMT expert group (2009, online) specifies the procedural expertise that constitutes technological competence in greater detail:

> Knowing how to use effectively and rapidly and to integrate a range of software to assist in correction, translation, terminology, layout, documentary research (for example text processing, spell and grammar check, the internet, translation memory, terminology database, voice recognition software); knowing how to create and manage a database and files; knowing how to adapt to and familiarise oneself with new tools, particularly for the translation of multimedia and audiovisual material; knowing how to prepare and produce a translation in different formats and for different technical media and knowing the possibilities and limits of MT.

As far as it was possible to ascertain, technological competence is restricted in previous literature to the tools that are unique to the translation task (such as, for instance, CAT tools). Although no definition can be completely comprehensive, up to date, and comprise all possible scenarios, these definitions may be problematic. Professional translation is an increasingly collaborative effort. Translators not only directly resort to input from peers by asking for feedback through different technological resources such as professional forums, *Facebook* profiles, *Facebook* groups or messages, email and *Skype* calls, but also do so indirectly by looking up previously posted translation problems on blogs, professional groups and websites (*Kudoz, Ciberdúvidas*, and *WordReference* are among the most recurrent resources used and mentioned by Portuguese translators and translation agencies in style guides and QA reports). Therefore, this definition has been broadened to include all tools used by translators and is not restricted to those that are unique to the task of translation, such as CAT tools and quality control tools. Therefore, we propose a redefinition of technological competence as knowing how to use online and offline technological resources productively in order to effectively perform all tasks involved in the translation process (including translation, revision, terminology, layout, documentary research, and others).

Despite these insights, there are still many unanswered questions about the use of collaborative tools in collaborative translation in general and collaborative teaching and learning in particular. Further research should be undertaken to investigate the correlation between collaborative work and quality, and also to document and foster multi-agent networking in literary translation practice, teaching and research.

References

ALVES, T. F. A. *et al.* (Ed.). *Nem cá nem lá:* Portugal e América do Norte entre escritas. Lisboa: Edlp, 2016.

AUSTERMÜHL, F. *Electronic Tools for Translators*. Manchester: St. Jerome, 2001.

BUSH, P. Literary Translation, Practices. In: BAKER, M. (Ed.). *Routledge Encyclopedia of Translation Studies*. London and New York: Routledge, 2001. p. 127-130.

DESJARDINS, R. Facebook Me!: Initial Insights in Favour of Using Social Networking as a Tool for Translator Training. *Linguistica Antverpiensia, New Series– Themes in Translation Studies,* v. 10, p. 175-196, 2011.

DONATA, L. *et al.* Negotiating Meaning at a Distance: Peer Feedback in Electronic Learning Translation Environments. *Translation and Meaning – New Series,* v. 41, n. 1, p. 99-116, 2016.

EMT expert group. *Competences for Professional Translators, Experts in Multilingual and Multimedia Communication.* 2009. Disponível em: <http://ec.europa.eu/dgs/translation/programmes/emt/key_documents/emt_competences_translators_en.pdf>. Acesso em: 08 Sep. 2015.

GAMBIER, Y. Teaching Translation/Training Translators. In: GAMBIER, Y.; DOORSLAER, L. v. (Ed.). *Handbook of Translation Studies.* Amsterdam and Philadelphia: John Benjamins, 2012.

GATO, M. de V.; JANSSEN, M.; BARROS, R.; VALDEZ, S. Teaching and Researching Literary Translation in the Digital Context: PEnPAL in Trans as a Case-Study. *MATLIT: Materialities of Literature,* v. 4, n. 1, p. 63-80, 2016. Disponível em: <http://iduc.uc.pt/index.php/matlit/article/view/2377/1940>.Acesso em: 08 Sep. 2015.

GILE, D. Observational Studies and Experimental Studies in the Investigation of Conference Interpreting. *Target,* v. 10, n. 1, p. 69-93, 1998,

GONZÁLEZ DAVIES, M. *Multiple Voices in the Translation Classroom.* Amsterdam: John Benjamins Publishing Company, 2004. (v. 54).

HUERTAS BARROS, E. Collaborative Learning in the Translation Classroom: Preliminary Survey Results. *JosTRANS Journal of Specialized Translation*, v. 2, p. 42-60, 2011. Disponível em: <http://www.jostrans.org/issue16/art_barros.php>. Acesso em: 07 Sep. 2015.

KENNY, M. A. Discussion, Cooperation, Collaboration: The Impact of Task Structure on Student Interaction in a Web-Based Translation Exercise Module. *The Interpreter and Translator Trainer,* v. 2, n. 2, p. 139-164, 2008.

KIRALY, D. *Pathways to Translation:* Pedagogy and Process Translation Studies. Kent, Ohio, & London: Kent State University Press, 1995.

KIRALY, D. Towards a Constructivist Approach to Translator Education. *Quaderns: Revista de Traducció,* v. 6, p. 50-53, 2001.

KIRALY, D. Towards a View of Translator Competence as an Emergent Phenomenon: Thinking Outside the Box(es) in Translator Education. In: KIRALY, D.; HANSEN-SCHIRRA, S.; MAKSYMSKI, K. (Ed.). *New Prospects and Perspectives for Educating Language Mediators.* Tübingen: Narr Francke Attempto, 2013. p. 197-224.

LISAITĖ, D.; VANDEPITTE, S.; MAYLATH, B.; MOUSTEN, B.; VALDEZ, S. CASTEL-BRANCO, M.; MINACORI, P. Negotiating Meaning at a Distance: Peer

Feedback in Electronic Learning Translation Environments. *Translation and Meaning.-New Series,* v. 1, n. 41, p. 99-116, 2016.

MARTINS, I. O. Katherine Vaz. In: ALVES, T. F. A. *et al.* (Ed.). *Nem cá nem lá:* Portugal e América do Norte entre escritas. Lisboa: Edlp, 2016a. p. 378-381.

MARTINS, I. O. Nancy Vieira Couto. In: ALVES, T. F. A. *et al.* (Ed.). *Nem cá nem lá:* Portugal e América do Norte entre escritas. Lisboa: Edlp, 2016b. p. 334-336.

MOGHADDAM, E. H. The Weblog: A Tool for Literary Translators. *Perspectives,* v. 21, n. 2, p. 200-208, 2013.

O'BRIEN, S. Collaborative Translation. In: GAMBIER, Y.; DOORSLAER, L. v. (Ed.). *Handbook of Translation Studies.* Amsterdam and Philadelphia: John Benjamins, 2011. p. 17-20.

OLVERA-LOBO, M. D.; ROBINSON, B.; CASTRO PRIETO, R. M.; QUERO GERVILLA, E.; MUÑOZ MARTÍN, R.; MUÑOZ RAYA, E.; MURILLO MELERO, M.; SENSO RUIZ, J. A.; VARGAS QUESADA, B.; DÍEZ LERMA, J. L. A Professional Approach to Translator Training (PATT). *Meta: Journal Des Traducteurs*, v. 52, n. 3, p. 517-528, 2007.

PACTE Research Group. Building a Translation Competence Model. In: _____. *Triangulating Translation:* Perspectives in Process Oriented Research. Amsterdam: John Benjamin, 2003.

PAUL, G. *Translation in Practice*. Champaign: Dalkey Archive Press, 2009.

VALDEZ, S. Perceived and Observed Translational Norms in Biomedical Translation in the Contemporary Portuguese Translation Market: A Quantitative and Qualitative Product- and Process-Oriented Study. 2019. (Phd diss.) - University of Lisbon and Ghent, 2019.