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# **Exploring Translation Competence through Think-Aloud Data: A Case Study**

**Abstract:** The aim of this paper is to explore the value of think-aloud methodology in the process of translation competence development. The paper describes concepts of translation competence, with particular focus on the PACTE and EMT models. When considering the acquisition of translation competence as a continuous process, it is important to precisely define its starting point. This can be achieved by recording the translation process through verbalisations of thoughts. The main part of the paper is a case study presenting the application of TAP data in the translation course. The conclusions may be useful for designing translator training curricula and verifying educational results.

**Keywords:** translator training, think-aloud methodology, translation process, translation competence, verbalisations of thoughts

## **1. Introduction**

Translation competence has been the topic of multiple research projects (e.g., PACTE and EMT, briefly presented later in this paper), yet they focused mainly on individual sub-competences to be acquired, specific skills and – in the case of academic education – precisely defined learning outcomes to be achieved. However, rather than focusing on the final effect or outcome, it might be more relevant in view of the actual translation practice to focus on the process of acquiring this competence, since a translator develops throughout their entire professional career, with every translation assignment, task or project.

Although translation is regarded as an important industry, and the focus on translator training is mainly on preparing young people to enter the translation market, in university education there is also an opportunity to examine and shape the very process of becoming a translator. The aim of this paper is to examine trans-

lators' formation process at the very first stage of their interaction with translation tasks and to formulate conclusions concerning the methods and tools that are used to help make rational decisions concerning the preparation of translator training curricula and to guide trainees, not only by pointing them in the right direction, but also by showing them appropriate paths that are adjusted to their predispositions and their current stage of competence development.

## **2. Translation competence models**

The concept of translation competence is a major topic in translation education and the subject of certain large-scale research projects that have led to the development of translation competence models. The majority of these models are two-dimensional frameworks that specify individual skills and abilities with regard to both declarative and procedural knowledge and describe the relations between them. One such popular model was developed by the PACTE Group (2018) and consists of five sub-competencies: bilingual, extra-linguistic, knowledge about translation, instrumental and strategic, the latter of which is fundamental. The model of translation competence acquisition presented by Göpferich (2009) adds additional elements such as motivation, psycho-motor competence and translation routine activation competence. Göpferich's model is based on three factors: the translation brief and translation norms; the translator's self-concept/professional ethos; and the translator's psycho-physical disposition (intelligence, ambition, perseverance, self-confidence, etc.).

Another model that was proposed by the EMT Expert Group consists of six categories in a wheel arrangement: language competence, intercultural competence, info mining competence, technological competence, thematic competence and translation service provision competence (EMT Expert Group 2009: 4). The focus on this last competence area emerged from the requirement to link translator education with market demands. This trend is even clearer in the new, revised version of the EMT Competence Framework (2017). The approach introduced by the above-mentioned models is highly valued by researchers in translator education as it makes it possible to divide translator competence into smaller units that are easier to manage and assess (Kelly 2007: 137). This type of competence framework perfectly corresponds to the requirements for creating syllabuses, for which all learning outcomes must be precisely defined and assessed. However, all models are based on simplification and the boundaries between individual skills or competences

are sometimes blurred; individual items are not acquired in isolation, and their weight and relevance might differ (Kiraly et al. 2018: 20–21).

The criticism of the competence models presented above is primarily based on their two-dimensional static nature and the absence of the time component (Kiraly 2013: 214), since their linear character cannot precisely reflect the highly complicated reality of the act of translation (Piotrowska 2016: 63–64).

Hence the growing popularity is observed of the dynamic vortex models presented by Kiraly (Kiraly 2013: 213), subsequently developed and improved by the same researcher (Kiraly et al. 2018: 24), representing the emergent learning process, in which individual sub-competences are closely related and continuously formed in the course of subsequent stages of education and practice (see Figure 1).

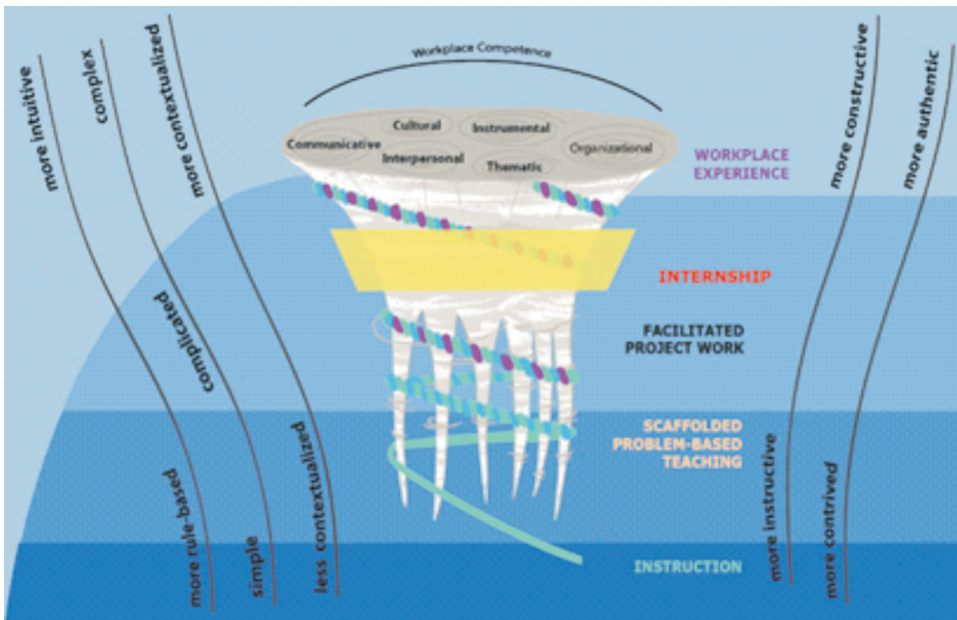


Figure 1. A dynamic, multi-vortex curricular model of translator education (Kiraly et al. 2018: 24)

### 3. The path towards professionalisation

The multi-vortex model presented by Kiraly very accurately presents the continuum of translation competence acquisition, the different stages of this process, and the changing conditions of the learning process. Instruction is perceived here as a basic element which underlies the development of individual sub-competences followed

by the translator's overall competence. The model assumes that the translator trainees start building their competences from scratch, based on instructions received from the trainer; however, in practice this is not entirely true. When choosing a translation specialisation, students have already acquired some competences, skills, and sometimes even translation experience, therefore they start the learning process from a non-zero level.

In Kiraly's model, competence development is presented as a continuous circular process of a fractal nature (self-similar, self-generating and emergent). Nevertheless, it can be argued that in university settings – where the academic year is divided into individual semesters that end with exams and are separated by winter or summer breaks – the intensity of translation students' competence-acquisition process varies, and it can be represented in certain stages or steps. Therefore, it seems justified to refer to competence-acquisition models not designed specifically for translators, yet clearly representing the path towards professionalisation, namely the Four Steps of Competence used in management training, presented in Figure 2 below (Page 2015).

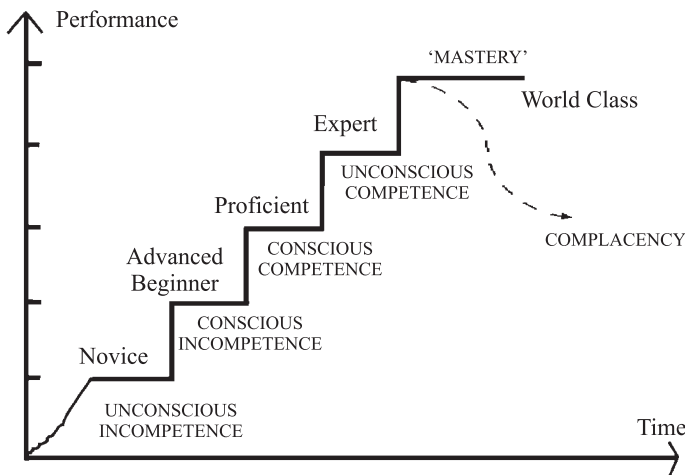


Figure 2. The four stages of competence (after Page 2015)

This approach to competence development clearly focuses on the role of awareness in the competence-acquisition process and to some extent supplements Kiraly's model. Interestingly, this visualisation corresponds to the approach that perceives the translation act as a linear process characterized as hermeneutically objectivized phases, which in the context of psycholinguistic research are referred to as preparation

(information gathering), incubation, illumination, evaluation (verification) (Poincaré 1913, in Kussmaul 1991: 93). The same steps are used in research on the creative process, including the process of translation (Hewson 2016: 15; Kussmaul 1991: 93). Students' increasing awareness indicates their progression from conscious incompetence to conscious competence and, in turn, the expert level in the above diagram, i.e., the level of unconscious competence. This might support the concept of the translator's intuition, where the level of a translator's performance is so high that – without conscious deliberations, as if through intuition – the decisions taken are correct and more importantly, creative. Whether this element of intuition is learnt or inherent to a given person brings us back to the primary but never-resolved question of whether translation is an art or rather a craft that can be acquired. This issue was reformulated by Piotrowska in the context of investigating intuition with regard to two directions of the translation process: the translator responds intuitively to a task and rationalizes their decisions later; alternatively, the translator is taught to rationalize the decisions through the strategic translation process, with this process undergoing automation in the course of professional practice (Piotrowska 2016: 66). This paper does not attempt to find an answer to this question and instead focuses on the translation process as a conscious decision-making activity rather than inborn gift or natural ability (Piotrowska 2016: 66).

Novice translators who have no knowledge of or experience in the field might not be aware of their incompetence and deficiencies. It is the role of a trainer to make them aware of these gaps and facilitate progress to the “conscious incompetence” step (following Page 2015 terminology), i.e., the Socratic I know that I know nothing paradox. Usually, this is the step at which translator training begins in academic settings, though the translator trainer cannot assume that all students in the group are at the same stage or have the same competence level. This is why it seems justified to examine the competence of translation trainees, i.e., students who are required to complete their first translation tasks, using the Four Steps of Competence model as the framework for data analysis. Although the tests and sample translations that are sometimes used to assess the skills of novice translators reveal what they can translate, these tests do not give insight into how they approach the translation process itself; this can be achieved by recording the actual steps in the process, e.g., through TAPs or verbalisation, as discussed below.

## 4. Exploring the translation process

Although, as Kiraly states, “neither theory nor empirical research nor both together will allow us to discover the truth about translation processes” (Kiraly 2013: 197), translation researchers have long been interested in exploring the processes that occur in the translator’s mind. Currently, such methods as eye-tracking, key-stroke logging or galvanic skin response are used for this purpose, although this approach still includes the classic method, i.e. concurrent verbal reports, referred to as think-aloud protocols or TAPs (Blummer/Kenton 2014: 117–118; Saldanha/O’Brien 2014: 123–124). This introspective verbal reporting method, which originates from cognitive psychology, consists in asking the subject to verbalize the thoughts that arise during their translation activity, thus eliciting cognitive process indicators. Following this methodology, subjects are asked to verbalize everything that comes to their mind while translating a text (Kussmaul 1991: 178), and these utterances are recorded (using audio or video recording, or simply pen and paper) to be further transcribed into protocols, thus providing data for analysis. Researchers studying translators’ mind processes through think-aloud protocols (Kussmaul/Tirkkonnen-Condit 1995: 178–188; Zhou/Lin 2012: 1377) have focused on observing recurring patterns or integral parts in the work of translators that have proved useful in describing the mental processes that accompany translation tasks. What is worth emphasising in the context of translator education is that TAPs can be applied not only as a method of collecting data but also as a translator training technique that helps students to solve problems and manage uncertainty, and supports trainers in monitoring the difficulties experienced by students (Pavlović et al. 2013: 52). The literature devoted to TAPs, which presents specific approaches and methods to be applied (Someren et al. 1994: 49–50), offers ready-made models that can be used in the examination of problem-solving processes, including specific coding schemes and procedures and methods for analysing them. As regards the application of think-aloud protocols in translation studies, it is worth mentioning here Lörcher’s TAP analysis, which specifies individual elements of translation strategies applied by the subject, proposes specific codes for those items, and presents a model for their analysis along with a flow chart of translational problem solving (Lörcher 2005: 599–604).

Besides TAPs, another procedure that can be applied with the same aim in mind is the retrospective verbal report, which is produced immediately after the completion of a task. However, while the advantage of the retrospective report is that it does not interrupt the process of translation, it is considered to be less

reliable because subjects tend to forget their actual steps (Bernardini 2001: 243) as the only processing that can be verbalized takes place in short-term memory and *post hoc* verbalisation might be challenging and sometimes impossible. Along with technological development, many new multi-method possibilities of recording the translation process have emerged, including screen recording, eye-tracking and keystroke logging (Sun 2011: 936). Such multi-method approaches, also including data triangulation, provide a solution to possible doubts concerning the reliability and validity of data (Pavlović 2013: 53), as it is claimed that TAPs data is based on enforced verbalisation of cognitive operations involving non-verbal processes (Kusmaul/Tirkkonen-Condit 1995: 181). Nevertheless, TAP data that is collected traditionally, i.e., as concurrent verbal reports, still offer certain value for designing translation curricula and examining the translation process (Saldanha/O'Brien 2014: 123); this is why the TAP model, which is presented in more detail in the next section, was used in this study.

## 5. Study subjects and materials

The study described in this paper was carried out with the participation of 45 undergraduate English Philology students at the Pedagogical University of Krakow, for whom it was the second year at the university but the first year of translation specialisation. All of them were native speakers of Polish and after their intensive course in Practical English in the first year their language proficiency in English was at the C1 level. Due to the pandemic situation and the need to transfer the course to an online platform instead of face-to-face meetings, the initial study design assumptions had to be revised. The original design assumed the use of the phonetic laboratory to record students' oral reports during the translation task; however, this was not possible. Nonetheless, the study was carried out as it was considered beneficial to get an insight into the translation process of these novice groups in order to properly design translation class curricula for future years and to assess the initial level of students.

The source text presented to students as a translation task was the Regulation of the Rector of the Pedagogical University in Krakow introducing the online mode of carrying out classes (attached as Appendix 1). The choice of text was motivated by the importance of involving students in the translation process, which is easier to achieve if the text is relevant to them, and especially if they are its actual target readers. At this point it should be explained that although the text was addressed to students and posted in its original form at the university website, students



usually do not read regulations and generally read only the title published in the News sections, e.g. “Online Classes” or “Classes Cancelled on April 5, 2022”, without following the provided links. However, in their Specialized Translation course students are exposed to texts of a similar level of formality, and the source document presented in this study corresponded to other texts translated in the class. The level of the text difficulty could be described as relatively easy, with elements of formal jargon. The students were instructed to translate the text into English and note down everything that crossed their mind during the translation, recording their translation steps while they were translating in order to ensure the concurrent nature of their reports. They were also required to reflect on the choices they made. The time limit of one hour for preparing the translation and the report was agreed with the students, but they could start working at any time of that day. The students were not forbidden to use online translators, dictionaries or bilingual corpuses. According to the study assumptions and instructions given to the students, the reports were intended to reflect the mental processes taking place during the translation exercise and sent to the teacher no later than the next day. The reports were meant to be produced concurrently, as their purpose, objectives and analysis follow the TAP methodology. Nevertheless, as the reports were not prepared in the presence of the teacher, it might be possible that some students actually prepared retrospective reports that summarized their translation process.

The source text was provided via the Moodle e-learning platform; the process transcripts along with the target text were submitted in the same way. The text was discussed with the students beforehand in terms of its function, lexis and register. The students were not provided with any TAP samples or verbal reports to prevent a situation in which they would be tempted to reproduce the suggested model or process description. Although the teacher did not tell the students which language to use in their reports, since (following the Faculty’s policy) all course activities are conducted in English, it was assumed that the reports would also be written in English. However, two students submitted their process description in the Polish language, which shows that they recorded their authentic translation work.

Since the students were also required to provide the target text of their translation assignment, it was possible for the teacher to compare their translation product to the translation process as described by course participants in order to verify the reliability of the submitted transcripts. The reports were submitted by all 45 participants. The transcripts were subsequently examined, thus identifying the major phases of the process (preparation, incubation, illumination and evaluation); they were also analysed with the use of Lörcher’s TAP analysis model, i.e., individual elements



of translation strategies were identified and the pattern of translational problem solving was analysed (Lörscher 2005: 607–608).

## 6. Identified phases of the translation process

In all the analysed reports (45), it was possible to identify the preparation phase as all the students referred to a stage that involved reading the text, and almost all of them reflected on its purpose and target readers. The preparation stage also contained elements such as noticing and analysing translation problems, accumulating relevant information (checking dictionaries and parallel texts) and gathering knowledge. According to Kussmaul's model, which is based on text analysis and interpretation (Kussmaul 1991: 93), this is a typical stage of source text comprehension.

*Reading and getting the main idea: the text is a set of guidelines from the rector of the Pedagogical University in Kraków concerning the way of conducting classes and final exams<sup>1</sup>.*

### TAP excerpt 1

Other phases of the typical translation process were less frequently identified in the reports, e.g., the incubation stage was very rarely described and was mentioned in only three reports. This corresponds to Kussmaul's claim that it is very difficult to observe any phenomena during the incubation phase of the translation process, since the cognitive activities take place on a subconscious level and are usually represented in TAPs by pauses (Kussmaul's 1991: 94); for obvious reasons, in this study these are not marked by students when writing their activity reports. Yet, following Kussmaul, the presence or absence of an illumination stage can be recognized by observing the phenomena that occur before and after these pauses: when a pause is creative, it is followed by a translation solution, which the translator subsequently evaluates in the next stage of the process.

This element was observed in seven reports. Although the students were not explicitly asked to record their pauses indicating hesitation, they were instructed to record the moments they struggled with translation. The absence of the incubation stage observation might be considered as indicative of students' unconscious incompetence. Thus, the following excerpt does not represent the moment of transition to the illumination stage:

<sup>1</sup> All excerpts are quoted verbatim as they were provided by the students, without any error correction.

- *thinking what DNWO.42–1/20 means*
- *outcome: I didn't find out what it means*

## TAP excerpt 2

On the other hand, the following extract quite explicitly describes the point of illumination and is characterized by a well-known gesture:

*She tries to call the academic year SCHOOL YEAR. Face palms. Corrects herself.*

## TAP excerpt 3

The problem with recording and identifying the incubation and illumination phases might be caused by two factors: students not being willing to record their hesitation (or not realising it would be of any value in such reports); or students simply immediately used online translation resources to get the task done, e.g.:

- *I upload the phrase to DeepL*
- *I read the automatic translation and look for mistranslations etc. and correct them.*

## TAP excerpt 4

Students did not seem too critical about the solutions suggested by online translation tools, although in rare cases they did express doubts concerning machine translation or online dictionaries:

*I had to change large portions of the sentence because it just didn't look good enough to me.*

## TAP excerpt 5

The absence of the incubation and illumination stage in the analysed reports may indicate that the translation process performed by beginner translators with access to electronic translation tools demonstrates no features of a creative process because these students tended to focus on improving their instrumental competence due to their high confidence in their own language skills.

Typical indicators of the evaluation stage were present in the majority of reports, as 40 reports contained an element of proofreading or verification:

*I am proofreading everything I translated to be sure that all things are good enough.*

## TAP excerpt 6

The reports also included elements related to assigning the proofreading to another person:

*In this case, my mom helped me to determine the outcome of my translation.*

TAP excerpt 7

There were also cases of assessing the final result, e.g.

*I am happy with my translation, and I will send it now.*

TAP excerpt 8

The general presence of this last phase of the process, the evaluation phase, is probably caused by the fact that students are strongly advised of the need to ensure the quality of the target text. Although their translation experience is not yet very extensive, translation training that is focused on preparing students to enter the translation market and approach translation as a service successfully results in incorporating a proofreading and assessment step into the translation process.

The phases of the translation process identified in students' reports are summarized in Table 1 below.

Table 1. Phases of the translation process identified in students' transcripts (own work)

Phase	Number of reports	Percentage value
Preparation	45	100%
Incubation	3	7%
Illumination	7	16%
Evaluation	40	89%

## 7. Translation strategies identified in process transcripts

The study material was analysed following the model proposed by Lörcher (2005). The reports were systematically coded using the notation introduced by this researcher, and each segment was assigned a specific strategy code. The term "translation strategy" in this analysis is understood as "procedures for solving translation problems", as defined by Lörcher (Lörcher 2005: 600). The translation strategies identified in the analysed material included:

- 1) REC = Reception (35 out of 45)<sup>2</sup>, e.g.

*I read the ST to find out what it is about, its purpose etc.*

TAP excerpt 9

- 2) RP = Realising a Translational Problem (30 out of 45), e.g.

*No idea about the upper left numbers – DNWO*

TAP excerpt 10

- 3) VP = Verbalising a Translational Problem (28 out of 45), e.g.

*The first problem that I encounter is whether to leave “DNWO.42-1/20” unchanged or not, because I’m not sure how to check what it is (google didn’t help).*

TAP excerpt 11

- 4) →SP = Search for a (possibly preliminary) Solution to a Translational Problem (28 out of 45), e.g.

*I check the English translation of “zajęcia dydaktyczne” on translatica.com and pl.pons.com*

TAP excerpt 12

- 5) SP = Solution to a Translational Problem (25 out of 45)

*Therefore, I searched for our University page, then I switched into English and found the term I was looking for – “rector”, so I used it.*

TAP excerpt 13

- 6) CHECK = Discernible Testing of a (preliminary) Solution to a Translational Problem (19 out of 45)

*Looking for similar documents in the target language and checking whether they use Rector or Vice-Chancellor.*

TAP excerpt 14

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<sup>2</sup> The numbers of occurrences are provided in the parentheses.

## 7) SPa (b, etc) = Search for another Solution to a Translational Problem (20 out of 45)

*For “zobowiązuję...” – I have thought of using “I command”, but I think it doesn’t suit the tone. Instead, I’ve chosen: “All University’s organisational units shall conduct the classes in accordance to the Principles.*

TAP excerpt 15

## 8) SP Ø = strategies that indicate solutions to translational problems that are still to be found (11 out of 45), e.g.

*As I was already familiar with the text, I jumped right into translating, starting from “zarządzenie”, leaving curious “DNWO...” for later research.*

TAP excerpt 16

## 9) T = Translating text segments without any problems (38 out of 45), e.g.

*Instead of writing “z dnia...”, I simply put the date in the upper right corner of the sheet.*

TAP excerpt 17

The structure of the translation process that recurred in the transcripts prepared by the students is represented in Figure 3 below.

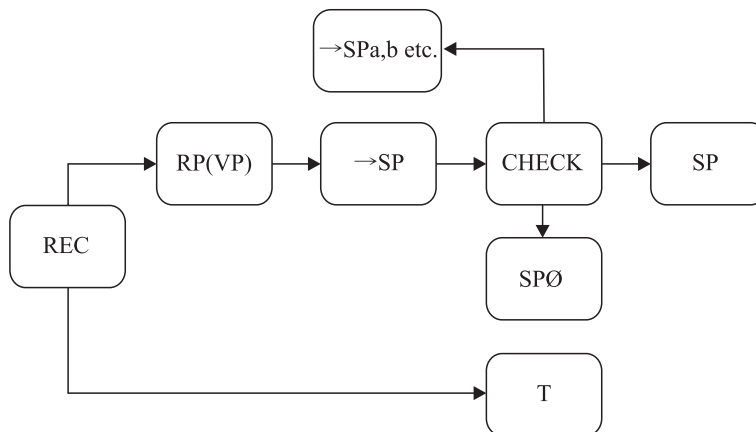


Figure 3. Translation process diagram (own work)

After getting acquainted with the text (REC), students either immediately started translating without any problems (T); if they encountered a problem (RP) or possibly verbalized it (VP), they started to look for a potential solution →SP. In some cases, they were satisfied with this particular solution and directly used it in their

translation task (SP); however, in multiple cases they wanted to verify their potential solution by consulting different sources (online services, consultation with peers). Depending on the outcome of this verification, they either applied the given solution (SP) or took a step back to search for another potential solution →SPa,b... etc.). However, translation problems were left unsolved (SPØ) in eleven cases.

The translation strategies identified in the students' reports are summarized in Table 2.

Table 2. Translation strategies identified in students' transcripts (own work)

Strategy	Number of reports	Percentage value
REC – Reception	35	78%
RP – Realising a Translational Problem	30	67%
VP – Verbalising a Translational Problem	28	62%
→SP – Search for a Solution to a Translational Problem	28	62%
SP – Solution to a Translational Problem	25	56%
CHECK	19	42%
SPa (b, etc.) – Search for another Solution to a Translational Problem	20	44%
SP Ø – Solutions still to be found	11	24%
T – Translating text segments without any problems	38	84%

## 8. Discussion

The decision-making process presented above might seem quite simple, yet it mirrors the reports submitted by the students, which might suggest that the students either did not reflect too deeply on their translation assignment as they were aiming for a quick completion of the task, or they simplified the process in their records since they are not trained to precisely control and record their cognitive processes. In both cases, this points to the need to increase translators' awareness during their training so they focus not only on the quality of the final product but also on the translation and decision-making process. In the analysed material, the students in many cases did not seem to recognize translation problems at all: they produced translations by simply substituting linguistic equivalents, often with the use of online tools. This corresponds to the results obtained by Lörcher, who came to the conclusion that most foreign language students participating in his study adopted a form-oriented approach without verifying the sense of the TL text produced (Lörcher 2005: 605). Also, as was the case with Lörcher's results, the novice translators

in the study described in this paper did not tend to verify TL utterances in terms of their sense and probably did not realize any problems *ex-post*. However, unlike in the study by Lörcher, the students were particularly careful about the language correctness of their output, perhaps because they were going to pursue translation specialisation and have been made aware of the importance of language quality assurance of the final product since the very beginning of their university education.

The missing elements of the translation process (incubation and illumination) in the process transcripts under analysis might be explained by the fact that translators are believed to be constrained by the source text and their work tends to be more reproductive than creative (Hewson 2016: 11; Kussmaul 1991: 93). Moreover, it might be argued that the source text to be translated by the students did not bear any features of creative writing. Nevertheless, creativity in translation should not be understood merely as producing creative content but as a creative approach to the translation task that is demonstrated by being able to recognize a problem, gather adequate data and form initial hypotheses about potential solutions (Kussmaul 1991: 93). Additionally, there are researchers, e.g., Ballard (Ballard 1997, in Hewson 2016: 12), who claim that the very fact of writing in another language involves the art of creation since it requires expressing the same content using completely different material. It is important to notice that the absence of the incubation and illumination stages might stem from the students' failure to recognize possible translation problems, which means that novice translators are still at the first stage of the translator's competence-acquisition process, i.e. unconscious incompetence. Therefore, it is the task of the translator trainer to properly use the knowledge gathered about the students to focus on the deficiencies demonstrated by this study in order to properly design the translation training syllabus.

## 9. Limitations of the study

The application of multiple methods to record students' cognitive processes (audio/video recording or keystroke logging) would certainly improve the design of the study, as in the present form it strongly relies on students' honesty and approach. However, given the pandemic circumstances and the fact that almost the entire course was conducted remotely, this was the only way the study could be undertaken. It is believed that this method of self-reflection could help translation trainees to take more deliberate steps in their translation practice; therefore, this case study was carried out despite the unfavourable conditions. Due to the lockdown forced by



COVID-19, translation courses had to be conducted differently, and even though the translation process took place with online collaboration (using, among others, collaboratively edited MS Word files shared through OneDrive), the teacher did not have an opportunity to monitor the translation process of individual students. Therefore, this project, which involved the recording of subsequent translation steps taken by course participants, helped the teacher gain insight into the cognitive processes taking place in the students' minds.

Another issue worth investigating was the quality of the student's translation. The target texts produced by the students were discussed in the class, and the major problems and errors were spotted and corrected. However, this study did not include correlating quality assessment with process findings, as its main objective was to examine the translation process and not the product. Such correlation would certainly contribute to a better understanding of the translation process itself and it will be examined in subsequent studies carried out as a follow up of this research.

## **10. Conclusions and directions for further research**

The results of this study helped to identify deficiencies and translation competence gaps in specific groups of students; these should lead to better understanding of the given groups' translator training needs and to better-designed academic translation courses in general. This particular project proved that students have problems with recognising possible translation problems; they do not reflect properly on the target text they are producing, and they rely heavily on internet sources and machine translation output. Given the rapid development of translation technology, which is gradually improving and replacing human translators in simple translation tasks, students must be aware that the process they follow in their individual assignments should be remodelled so that they can offer higher quality services, e.g., through a creative approach to translation tasks. In view of the inevitable expansion of machine translation, students should be trained in the process of post-editing, which, however, differs from the procedure applied by novice translators. The study will be repeated for the same groups of students at the end of their first-degree translation education and at the end of their MA programme, assuming that they will form a group in which they continue their education at the same institution.

Think-aloud protocols in the form of concurrent or retrospective reports, or any other means helping to obtain insight into the translation process pursued by translation course participants, reflect the steps taken by trainees at the beginning

of their path towards professionalisation. It is the task of the translation teacher to guide them in their journey, provide advice on major milestones and progress to be achieved, and show best patterns and proper directions.

## Bibliography

- Ballard, M. (1997), *Créativité et traduction*. Target 9/1: 85–110. DOI: <https://doi.org/10.1075/target.9.1.06bal>.
- Bernardini, S. (2002), *Think-Aloud Protocols in Translation Research: Achievements, Limits, Future Prospects*. Target 13/2: 241–263. DOI: 10.1075/target.13.2.03ber.
- Blummer, B./Kenton, J.N. (2014), *Improving Student Information Search. A Metacognitive Approach*. Oxford: Chandos Publishing.
- EMT Expert Group. (2009), *Competences for Professional Translators, Experts in Multilingual and Multimedia Communication*. [http://ec.europa.eu/dgs/translation/programmes/emt/key\\_documents/emt\\_competences\\_translators\\_en.pdf](http://ec.europa.eu/dgs/translation/programmes/emt/key_documents/emt_competences_translators_en.pdf) [accessed: 5.11.2015].
- EMT Competence Framework. (2017), [https://ec.europa.eu/info/sites/info/files/emt\\_competence\\_fw\\_k\\_2017\\_en\\_web.pdf](https://ec.europa.eu/info/sites/info/files/emt_competence_fw_k_2017_en_web.pdf) [accessed: 12.08.2020].
- Göpferich, S. (2009), *Towards a Model of Translation Competence and its Acquisition: the Longitudinal Study TransComp*. In: Göpferich, S./Jakobsen, A.L./Mees, I. M. (eds.), *Behind the Mind: Methods, Models and Results in Translation Process Research*. Copenhagen: Samfundslitteratur Press: 11–37.
- Hewson, L. (2016), *Creativity in Translator Training: Between the Possible, the Improbable and the (Apparently) Impossible*. Linguaculture 2: 9–25. DOI: 10.1515/lincu-2016-0010.
- Kelly, D. (2007), *Translator Competence Contextualized. Translator Training in the Framework of Higher Education Reform: In Search of Alignment in Curricular Design*. In: Kenny, D./Ryou, K. (eds.), *Across Boundaries: International Perspectives on Translation Studies*. Newcastle upon Tyne: Cambridge Scholars Publishing: 128–142.
- Kiraly, D. (2013), *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. (eds.), *New Prospects and Perspectives for Educating Language Mediators*. Tübingen: Gunter Narr: 197–222.
- Kiraly, D./Massey, G./Hofmann, S. (2018), *Beyond Teaching: Towards Co-Emergent Praxis in Translator Education*. In: Ahrens, B./Hansen-Schirra, S./Krein-Kühle, M./Schreiber, M./Wienen, U. (eds.), *Translation, Didaktik, Kompetenz. Translationswissenschaftliches Kolloquium V. Beiträge zur Übersetzungs- und Dolmetschwissenschaft*. Berlin: Frank and Timme: 1–64.
- Kusssmaul, P. (1991), *Creativity in the Translation Process: Empirical Approaches*. In: van Leuven-Zwart, K. M./Naaijkens, T. (eds.), *Translation Studies: The State of the Art. Proceedings of the 1st James S. Holmes Symposium in Translation Studies*. Amsterdam: Rodopi: 91–101.
- Kusssmaul, P./Tirkkonen-Condit, S. (1995), *Think-Aloud Protocol Analysis in Translation Studies*. TTR: Traduction, Terminologie, Rédaction 8/1: 177–199. DOI: 10.7202/037201ar.
- Lörscher, W. (2005), *The Translation Process: Methods and Problems of its Investigation*. Meta 50/2: 597–608. DOI: <https://doi.org/10.7202/011003ar>.
- Malmkjær, K. (2009), *What is Translation Competence?* Revue française de linguistique appliquée 14/1: 121–134. DOI: 10.3917/rfla.141.0121.
- PACTE Group (2018), *Competence Levels in Translation: Working Towards a European Framework*. The Interpreter and Translation Trainer 12: 111–131. DOI: 10.1080/1750399X.2018.1466093.

- Page, T. *The Four Stages of Competence*. <https://www.frontpage.solutions/blog/four-stages-competence> [accessed: 20.08.2020].
- Pavlović, T./Hadziahmetovic Jurida, S./Jahić, A. (2013), *The Role of TAP in Translation Process Research*. *Bosanski jezik* 10: 47–62.
- Piotrowska, M. (2016), *Intuicja tłumacza w kontekście badań przekładoznawczych*. *Między Oryginałem a Przekładem* 32: 57–71. DOI: <https://doi.org/10.12797/MOaP.22.2016.32.05>.
- Saldanha G./O'Brien, S. (2014), *Research Methodologies in Translation Studies*. London – New York: Routledge. DOI: <https://doi.org/10.4324/9781315760100>.
- Someren, M./Barnard, Y./Sandberg, J. (1994), *The Think Aloud Method – A Practical Guide to Modelling Cognitive Processes*. London: Academic Press.
- Sun, S. (2011), *Think-Aloud-Based Translation Process Research: Some Methodological Considerations*. *Meta* 56/4: 928–951. DOI: 10.7202/1011261ar.
- Zhou, Y./Lin, Y. (2012), *Probe into Translation Process Based on Think-Aloud Protocols*. *Theory and Practice in Language Studies* 2/7: 1376–1386. DOI: 10.4304/tpls.2.7.1376–1386.

## Appendix 1

The source text used in the case study.

DNWO.42–/20

### **Zarządzenie Nr R/Z.0201–33/2020 Rektora Uniwersytetu Pedagogicznego im. Komisji Edukacji Narodowej w Krakowie z dnia 7 maja 2020 roku**

w sprawie: **zdalnego odbywania zajęć i sesji egzaminacyjnej w semestrze letnim roku akademickiego 2019/2020.**

Działając na podstawie art. 23 ust.1, art. 76a ustawy z dnia 20 lipca 2018 r. – Prawo o szkolnictwie wyższym i nauce (tj. Dz.U. z 2020, poz. 85 z późn. zm.) oraz § 16 ust. 5 Statutu Uczelni zarządzam, co następuje:

#### **§ 1**

Zajęcia dydaktyczne oraz sesja egzaminacyjna w semestrze letnim roku akademickiego 2019/2020 w Uniwersytecie Pedagogicznym im. Komisji Edukacji Narodowej w Krakowie będą się odbywały z wykorzystaniem technologii informatycznych zapewniających kontrolę ich przebiegu i rejestrację zgodnie z zasadami, które stanowią załącznik Nr 1 do niniejszego zarządzenia.

#### **§ 2**

Zobowiązuję wszystkie jednostki organizacyjne Uczelni prowadzące zajęcia dydaktyczne do postępowania według Zasad, o których mowa w § 1.

#### **§ 3**

Zarządzenie wchodzi w życie z dniem ogłoszenia.

R e k t o r