

A critical comparison of the problem solving processes of novice and expert translators

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DECLARATION

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Herewith, I declare that **A critical comparison of the problem-solving processes of novice and expert translators** is my own work and that all sources I have used or quoted have been indicated by means of complete references.



14 June 2021

SIGNATURE

DATE

Mrs A Lemmer

PREFACE

Herewith, I would like to thank the following people who supported me in completing this study:

- Dr Ella Wehrmeyer, my supervisor and mentor – it was a long and bumpy road, but if it weren't for your motivation and help, I wouldn't have had the courage to push through.
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- My husband, Wernich Lemmer, and my daughter, Mariné – it wasn't easy and sometimes very constraining.
- Most importantly, our Heavenly Father to whom all the glory goes.

ABSTRACT

In this study, I investigate the differences in the problem-solving processes of novice and expert translators. I aim to fill a research gap within the field of Translation Studies under the category of Translation Process Research (TPR), which pertains to the translation product and the cognitive processes underlying translation activity. I focus on the differences between third-year students of Language Practice (novices) and expert translators in the South African context in terms of Anthony Pym's (2011) postulates. These postulates outline differences in terms of preferred translation strategy, average translation units processed, revision behaviour, attention to the target text (TT) compared to the source text (ST), direction of processing (top-down or bottom-up), intrinsic versus extrinsic knowledge, the ability to relate theory to practice, level of automatization of translation decisions and the ability to identify and express difficulties and uncertainties. My findings indicate that experts use more literalism as translation strategy compared to the novices, process larger translation units, spend more time on revision and make more changes during revision, spend more time looking at the TT, follow a top-down processing approach, rely mostly on their intrinsic knowledge but do value the use of external resources, mostly do not relate theory to practice, automatise decisions, solve problems consciously, and express difficulties and uncertainties with confidence. On the other hand, novices use more paraphrase as translation strategy, but their translations are of bad quality, process smaller translation units, spend more time in the drafting phase, make fewer changes during revision, spend more time looking at the ST, and follow a bottom-up processing approach. Moreover, novices rely more on dictionaries (thus extrinsic knowledge), they do not relate theory to practice, and do not automatise decisions or consciously solve problems as well as experts do. However, they are equally confident and comfortable to express difficulties and uncertainties as experts.

Keywords: process-oriented research, translation difficulty, equivalence, translation methods, translation strategies, decision making, problem solving, novice translators, expert translators, translation competence

OPSOMMING

In hierdie studie ondersoek ek die verskille tussen onervare en ervare vertalers se probleemoplossingstrategieë. Ek poeg om die navorsingsleemte in die veld Vertaalstudies onder die kategorie Vertaalprosesnavorsing, wat fokus op die vertaalproduk en die kognitiewe prosesse wat tydens die vertaalproses plaasvind, te vul. Ek fokus op die verskille tussen derdejaarstudente van Taalpraktyk (onervare vertalers) en ervare vertalers in die Suid-Afrikaanse konteks op grond van Pym (2011) se aannames. Hierdie aannames word gebaseer op keuse van vertaalstrategieë, die gemiddelde vertaaleenhede wat geprosesseer word, hersieningsgedrag, die mate waarop aandag aan die bronteks en doelteks geskenk word, rigting van prosessering (“bo-na-onder”/“onder-na-bo”), intrinsieke kennis teenoor ekstrasieke kennis, of teorie in die praktyk toegepas word, outomatisering van besluite, bewustelike probleemoplossing, asook die verbalisering van vertaaluitdagings. Bevindinge wys daarop dat ervare vertalers meer letterlik vertaal, groter vertaaleenhede prosesseer, meer tyd aan hersiening bestee en ook meer veranderinge tydens die hersieningsfase maak, meer aandag aan die doelteks skenk, ‘n “bo-na-onder”-prosesseringsbenadering volg, meer op hul intrinsieke kennis staat maak maar tog ook die waarde van hulpbronne besef, die minimum teorie in die praktyk toepas, probleemoplossing outomatiseer maar tog ook bewustelik probleme oplos en met selfvertroue uitdagings uitwys. Aan die ander kant is die onervare vertalers meer geneig om te parafraseer en vertalings van swak gehalte te lewer, hulle prosesseer minder vertaaleenhede, bestee meer tyd aan die opstelfase en maak minder veranderinge tydens die hersieningsfase, fokus meer op die bronteks en volg ‘n “onder-na-bo”-prosesseringsbenadering, is baie afhanklik van woordeboeke, pas die minimum teorie in die praktyk toe, outomatiseer nie probleemoplossing nie, en los nie vertaalprobleme so goed soos ervare vertalers op nie. Soos die ervare vertalers, het hulle ewe veel selfvertroue en is hulle gemaklik om uitdagings te verbaliseer.

Sleuteltermes: prosesgeörienteerde navorsing, vertaaluitdagings, ekwivalensie, vertaalmetodes, vertaalstrategieë, besluitneming, probleemoplossing, onervare vertalers, ervare vertalers, vertaalvaardigheid

ABBREVIATIONS

AOI: Area of Interest

DTS: Descriptive Translation Studies

EEG: Electroencephalography

fMRI: Functional Magnetic Resonance Imaging

RTAPs: Retrospective Think-Aloud Protocols

ST: Source Text

TA: Translation Analysis

TAPs: Think-Aloud Protocols

TPR: Translation Process Research

TT: Target Text

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CHAPTER 1 INTRODUCTION AND CONTEXTUALISATION

1.1 Introduction

Translating a text is a professional service, and training students to achieve the required standards is challenging. Several scholars have tried to determine the skills that are needed. Coban (2015) argues that translation draws on different mental activities, such as accessing two languages in the brain, problem-solving, conceptualisation, information processing, and re-expressing a concept, which makes translation a complex phenomenon. Aubakirova (2016:4640) believes that a translator's professional competence means "a holistic personal characteristic of an expert, which is a summary of equally important professional linguistic and other specific competencies, such as general cultural, psychophysiological and technical competences, which enables a professional translator to efficiently provide translation services."

The capabilities of translation students and professional translators differ immensely (Muñoz Martín, 2014). Contrastive studies that investigated translation products and novices' processes, compared to advanced translation students, bilinguals or professional translators, indicate particular variables (relating to translation sub-competencies) in which their products and processes differ. However, it is unknown how these variables develop and compare (Göpferich, 2013:64). These variables will be discussed in section 1.2.3.

Based on the findings of studies conducted between 1989 and 2008, Pym (2011:486) claims that professional translators, in contrast to novice/non-expert translators:

- a) use more paraphrase and less literalism;
- b) process larger translation units¹;
- c) spend longer reviewing their work at the revision phase², but make fewer changes when reviewing;
- d) spend proportionally more time looking at the target text (TT) than at the source text (ST);
- e) use top-down processing³ related to the translation purpose, for example do not translate word-for-word but grasp and translate the main idea;

¹ The length of text that a translator processes at a particular time is known as a translation unit (Carl & Kay, 2011:952).

² Jakobsen (2002:192-193) distinguishes between three phases of the translation process, namely the initial orientation phase, the following drafting phase and the final revision phase.

³ Nord (2016:29) distinguished between five levels of top-down processing: the top level is that of the translation brief, which determines the choice of translation type and form. In the next level, the

- f) rely more on intrinsic than extrinsic knowledge;
- g) are more inclined to base their approach on principles and personal theories;
- h) incorporate the client into risk-management processes;
- i) automatise some complex tasks but also shift between automatised routine tasks and conscious problem-solving; and
- j) display more realism, confidence, and critical attitudes in their decision-making.

These postulates can possibly be used to describe translation students' developing translation skills (see section 1.2.2). Universities aim to develop the necessary skills for the various professions by setting up graduate attributes, which Bowden et al. (2000) define as "the qualities, skills and understandings a university community agrees its students should develop during their time with the institution."

The Language Practice subject group at the North-West University (NWU) (2019:239) set out programme outcomes (Appendix B) and outcomes for translation assignments (Appendix C), which may point out skills that are required for the profession. The programme outcomes imply students should have a thorough knowledge of the field of translation studies (outcome a). They should be proficient in the languages they choose to work in, and be able to apply essential methods, techniques and procedures when working with translation-related problems (outcome d). Furthermore, they should be able to use resources responsibly and effectively (outcome f). Regarding the outcomes of students' practical assignments (Law, 2018:iv), they should be experts in both the source and target languages to comprehend the ST fully, know the purpose of the TT and who the target audience is, to produce a translation product of high standard.

Although these outcomes exist, no graduate attributes have been exclusively defined. Therefore, I propose that Pym's postulates assist in defining graduate attributes beyond the programme outcomes as well as the outcomes of individual assessments.

1.2 Contextualisation of the study

Hurtado Albir and Alves (2009) state that the main factors within a translation task are to understand the ST and to translate it into another language, thus deverbaling and re-expressing it. The translator must make sure the TT is rendered successfully by using the target language correctly and be proficient in the target reader's cultural knowledge. Therefore, translators need to be expert

translator has to deal with cultural norms and conventions. The following level is that of language. At the last two levels, the remaining doubts have to be resolved first in line with contextual restrictions and, ultimately, the translator's personal preferences, if necessary.

readers and text producers with expert decision-making and problem-solving skills. In Angelone's words, "[t]he translation task is essentially a chain of decision-making activities relying on multiple, interconnected sequences of problem-solving behaviour for successful task completion" (Angelone, 2010:17). However, novices especially struggle to fully comprehend the ST, find the right equivalents, or obtain the same effect as the original text. The PACTE Group (2003), Hurtado Albir (2007) and the EMT Group (2009) believe that novices should master translation competence; however, how it is mastered it remains unresolved.

1.2.1 What is translation competence?

According to Orozco and Hurtado Albir (2002:375), scholars such as Wilss (1976) and Nord (1991) have attempted to define translation competence since the late 1970s. Wilss (1976:120) refers to translation competence as "translational competence", which he describes as "the union of a source language receptive competence and target language reproductive competence within a supercompetence" (i.e. both interlinguistic and intertextual). Nord (1991:11) calls translation competence "transfer competence", which comprises "the skills of text reception, text production, and the use of translation tools, as well as the ability to synchronise ST reception and TT production." Transfer competence is now known as strategic competence and is the main component of translation competence as it plays a decisive role in enhancing the quality and efficiency of the translation product (Zou, 2015:786). Piecychna (2013:141) claims that the abovementioned definitions from the 1970s were very much in line with linguistic competencies and bilingualism, where competence "was regarded as a summation of linguistic competencies".

As translation studies became an independent discipline in the 1980s, definitions regarding the concept of translation competence became more domain-related. Toury (2012) describes it as an emerging process of socialisation in which translation becomes assimilated through norms that internalise and modify in the development process. According to Toury (2012:286), "at every phase of its development, a native translator's competence therefore represents a certain blend of nature and nurture, of the humanly innate, the individually assimilated and the socially determined."

The Process of Acquisition of Translation Competence and Evaluation (PACTE) Group defines translation competence "as the underlying system of knowledge, skills and attitudes required to translate" (PACTE, 2015:29), but acknowledges that an all-encompassing definition has not yet been established. This is mainly due to two gaps in existing knowledge. Firstly, there may be other unidentified skills (known as sub-competencies) a translator needs to acquire. Secondly, how translation competence is acquired still remains a mystery. Perhaps owing to these uncertainties, no model of translation competence or its acquisition is currently used in the training of translator trainees at the NWU.

1.2.2 Acquiring translation competence

The PACTE Group (2003:49) believes that the acquisition of translation competence is a dynamic process, where new knowledge is being developed on the fundamentals of prior knowledge. Various studies were conducted in order to discover how translators become competent and how translation competence develops (Dreyfus & Dreyfus, 1986; Chesterman, 2000; Robinson, 2012; PACTE, 2003).

The foundation for a translation competence model is built on the five-stage skill acquisition model of Dreyfus and Dreyfus (1986), which includes the stages of novice, advanced beginner, competence, proficiency, and expertise. They contend that acquiring a certain skill (or skills) is partly innate, acquired gradually through practice and its processing is essentially automatic.

Andrew Chesterman (2000:77) uses the same five stages of Dreyfus and Dreyfus's skill acquisition model, namely 1) novice, 2) advanced beginner, 3) competent, 4) proficient, and 5) expert. First, the trainee learns to recognise objective facts and features that are relevant to the translation task. The translator also learns the norms and characteristics of translation during translation assignments and/or education but the TT is still context-free. At the second stage, the translator learns how to see similarities between translation tasks, and to generalise from previously taught instances. The third stage is that of competence. According to Chesterman, this is where the translator develops the ability to decide between options. This means that the translator is able to analyse the task situation as a whole, prioritise decisions and make plans and carry them out. At the proficiency stage, the rational, analytical element is still present, but a trainee's skilful behaviour is more holistic, i.e. intuition and rationality are used alternately. The final stage of expertise is where intuition takes over. Chesterman believes that intuition is the driving force of skilled behaviour. An expert translator is seen as someone who works largely on intuition, but who retains the ability to draw on critical rationality when the need arises, for instance in solving particularly tough or unusual problems, or when justifying solutions to the client.

By contrast, Robinson (2012) uses Charles Sanders Peirce's (1935) three movements of human development, namely instinct, experience and habit to define translator development in three movements, namely abduction, induction and deduction. According to Robinson (2012:65), the translator's experience begins with abduction (the instinctive phase), which is where the translator is uncertain, confused and intimidated. However, they take a chance, try to understand or attempt to reformulate the expression. At the induction (experience) phase, the translator learns to handle multiple details and patterns are formed in the memory. At the deduction (or habit) phase, the translator develops sufficient patterns to have enough confidence to make generalisations, based on translation methods, principles and rules.

PACTE (2003:46) does not focus on the stages a translator goes through, but rather focuses on the cognitive processes involved in the translation process. They identify three major approaches

that play a role in understanding the translation process and in the acquisition of translation competence: 1) theory versus practice (in other words, the theory underpinning the processes during a translation task versus the practical application of theory during a translation task), 2) consciousness versus automatisisation (in other words, being aware of a task being performed versus doing something without noticing the processes as these are internalised), 3) declarative knowledge versus procedural knowledge (in other words, the remembering of facts versus the learning of motor and cognitive skills and remembering how to do something).

1.2.3 Models of translation competence

Translation scholars attempted to determine how novices reach translation competence, by identifying sub-competencies, in terms of a holistic model (PACTE, 2003). Several models of translation competence were proposed, with the most recent being that of PACTE (2003), Hurtado Albir (2007), and European Master's in Translation (EMT) Expert Group (2009).

PACTE (2003) advances six sub-competences:

- 1) *Bilingual sub-competence*. This sub-competence pertains to the ability to communicate in two languages taking into account pragmatic, textual, sociolinguistic, and lexico-grammatical knowledge.
- 2) *Extralinguistic sub-competence*. This sub-competence includes bicultural knowledge, encyclopaedic knowledge and subject knowledge to enhance problem-solving.
- 3) *Knowledge about translation sub-competence*. This sub-competence pertains to knowledge about how translation functions (types of translation units, processes required, methods and procedures used and types of problems), and knowledge related to professional translation practice (different types of briefs, clients and audiences, etc.).
- 4) *Instrumental sub-competence*. This sub-competence includes the use of documentation of sources, and the use of applied technologies.
- 5) *Strategic sub-competence*. This sub-competence includes planning and evaluating the process of translation, activating the different sub-competencies, identifying translation problems, and implementing the relevant procedures to solve the problems.
- 6) *Psycho-physiological components*. These components include cognitive components (memory, perception, attention and emotion), attitudinal aspects (intellectual curiosity, perseverance, rigour, critical spirit, knowledge of one's own abilities, motivation, etc. and other abilities such as creativity, logical reasoning, analysis and synthesis).

Hurtado Albir (2007) proposes six categories:

- 1) *Methodological and strategic competencies*. These competencies entail applying the methodological principles and strategies necessary to work through the translation process appropriately.

- 2) *Contrastive competencies*. These competencies involve differentiating between the two languages involved and monitoring interference.
- 3) *Extralinguistic competencies*. These competencies require mobilising encyclopaedic, bicultural and thematic knowledge to solve translation problems.
- 4) *Occupational competencies*. These competencies entail operating appropriately in the translation labour market.
- 5) *Instrumental competencies*. These competencies involve managing documentary resources and an array of tools to solve translation problems, and parallel texts.
- 6) *Translation problem-solving competencies*. These competencies require using appropriate strategies to solve translation problems in different text genres.

The European Master's in Translation competence framework (EMT, 2009) also proposes six categories of expert competences:

- 1) *Translation service provision competence*. This competence comprises an interpersonal and production dimension. The former pertains to the translator's social role and the translator-client relationship. This competence also includes elements of planning, management, self-evaluation, teamwork and complying with professional standards. The latter refers to translating the text according to the client's specifications and the translation situation.
- 2) *Language competence*. This competence pertains to the understanding of grammatical, lexical, idiomatic structures, and typographic conventions and using specific structures in both languages.
- 3) *Intercultural competence*. This competence comprises a sociolinguistic and a textual dimension. The sociolinguistic dimension relates to PACTE's and Albir's intercultural sub-competence. The textual dimension includes identifying and comparing cultural elements, analysing macrostructure and coherence of a text and reproducing it according to the conventions of a particular genre and rhetorical standards. Furthermore, translators also need to be able to determine their problems with text comprehension and solve them.
- 4) *Information mining competence*. This competence refers to using search engines, technological tools and strategies for terminological research.
- 5) *Thematic competence*. This competence relates to the previous competence, which refers to understanding how to search for information to gain better insight of a document's content.
- 6) *Technological competence*. This competence pertains to using a range of software tools effectively and rapidly in order to assist with translation and documentary research.

The listed sub-competencies of the three groups are compared and contrasted in Figure 1-1.

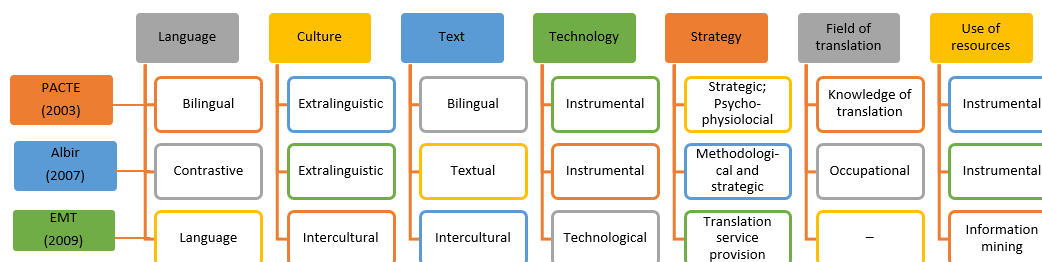


Figure 1-1: Translation competence models

All three models indicate that the sub-competencies that are most important to develop translation competence are language, culture, text, technology, strategic abilities, and the ability to use resources. PACTE and Hurtado Albir are also in favour of a sub-competence pertaining to knowledge about the field of translation (under ‘knowledge of translation’ and ‘occupational sub-competence’), in that translators must be acquainted with the processes, methods, procedures, translation briefs and users. Language and textual factors fall under PACTE’s ‘bilingual sub-competence’. Both PACTE’s and Hurtado Albir’s models refer to technological factors as well as to the use of resources under instrumental sub-competence, whereas EMT refers to the former as ‘technological sub-competence’ and the latter as ‘information mining sub-competence’. PACTE and Hurtado Albir categorise thematic knowledge under ‘extralinguistic sub-competence’, whereas EMT has it as a separate sub-competence.

In conclusion, it is expected that an expert translator should have an in-depth knowledge of the particular source and target languages, the different cultures as well as the target audiences. They should be aware of the textual factors, be familiar with translation software packages, and know how to use different resources. Furthermore, they must be able apply the necessary strategies to solve translation problems in the texts.

1.2.4 Differences observed between novices and experts

By looking at the stages of expertise in the previous section, there is a clear distinction between novice and expert translators. Several empirical studies have been done to discover the differences between the two groups (Jääskeläinen, 1996; Königs & Kaufmann, 1996; Kussmaul & Tirkkonen-Condit, 1995; Dragsted, 2010; Malkiel, 2009; Inoue, 2019; Tirkkonen-Condit, 2005; Lörcher, 2005; Rosiers & Eyckmans, 2017; Angelone & Shreve, 2010; Prassl, 2010; Göpferich, 2013; Cornelius, 2016).

In relation to Pym’s postulates outlined in section 1.1, novices have been found to focus on single words, translate out of context, depend on external resources and not view the text holistically

(Jääskeläinen, 1996; Königs & Kaufmann, 1996). In other studies, it was found that novices' translation products contain grammatical and stylistic errors and that their final product is often not equivalent to the original (Kusssmaul & Tirkkonen-Condit, 1995). Novices would also favour sequential activities, probably to reduce cognitive effort (Dragsted, 2010). Furthermore, novices tend to have "a mature attitude" concerning translation challenges, but they have a lack of self-confidence when doing revision on their translation (Malkiel, 2009). Inoue (2019) also found that they generally do not understand translators' roles and display lack of confidence regarding their competencies.

On the other hand, expert translators:

- focus on text comprehension and relate the text to the extra-textual world (Jääskeläinen, 1996:69);
- are meaning-oriented and implement global decisions in that they use less literalism, concentrate on the text itself, its semantic, pragmatic and intertextual aspects as well as the overall style (Tirkkonen-Condit, 2005:406);
- continually monitor the emerging translation, thus avoiding distortions of the ST's meaning and errors in the TL (Lörscher, 2005:605);
- do not always aim at an optimal result, but instead at creating a TT that is adequate for a particular communicative situation (Kusssmaul & Tirkkonen-Condit, 1995);
- are ready to use their encyclopaedic knowledge and inferences about the text in general, and text type in particular, in order to make decisions (Kusssmaul & Tirkkonen-Condit, 1995:189);
- approach translation difficulties in a holistic and flexible manner (Inoue, 2019);
- tolerate ambiguity (Rosiers & Eyckmans, 2017);
- make more routinised decisions and achieve a higher success rate when with reflexive decisions (Prassl, 2010; Angelone & Shreve, 2010; Göpferich, 2013);
- are more aware of translation problems, consult sources more often and use a wider variety of sources, and are more aware of the need of accuracy and precision when translating legal texts (Cornelius, 2016).

From the literature it is clear that there are differences between novice and expert translators. However, too few studies have been done comparing novice and expert translators, especially in the South African context. Notwithstanding, the paucity of studies mean that these differences still need to be refined to gain more clarity regarding translation competence and reaching expert levels.

1.3 Research question

The literature reveals that although empirical studies on differences between novice and expert translators exist, many differences are yet to be discovered. Regarding Pym's postulates, the following gaps are identified: 1) all studies on which Pym's postulates are based had been

conducted in European countries, and too few studies have been conducted in the South African context; 2) in most cases, the sample sizes of the studies on which Pym's postulates are based are too small to verify the data statistically (with no more than six participants in each group (Künzli, 2001, 2004; Englund Dimitrova, 2005; Jakobsen & Jensen, 2008)).

Furthermore, there are no graduate attributes set out for senior students of Language Practice at the NWU. Thus, I aim to identify the skills that are lacking in students (as novices) but that are present in experts, and to use these outcomes to develop graduate attributes.

In view of the above gaps, my main research question is:

What are the differences between third-year students of Language Practice and expert translators in the South African context in terms of Pym's postulates?

The following research sub-questions will assist in answering the research question:

- *RQ1: What kind of translation choices do participants make?* This question relates to Pym's postulate (a).
- *RQ2: Is there a difference in the processing of translation units between the groups?* This postulate relates to Pym's postulate (b).
- *RQ3: What is the average time each group spends on the revision task?* This postulate relates to Pym's postulate (c).
- *RQ4: How much changes are made during this particular task?* This postulate relates to Pym's postulate (c).
- *RQ5: How does the attention to both the ST and TT differ between the groups?* This postulate relates to Pym's postulate (d).
- *RQ6: To what extent does each group engage in top-down processing (beyond individual words)?* This postulate relates to Pym's postulate (e).
- *RQ7: To what extent does each group rely on external sources?* This postulate relates to Pym's postulate (f).
- *RQ8: To what extent does each group consciously relate theory to practice?* This postulate relates to Pym's postulate (g).
- *RQ9: To what extent does each group make use of conscious problem-solving strategies?* This postulate relates to Pym's postulate (i).

- RQ10: *To what extent does each group verbalise uncertainty/difficulty?* This postulate relates to Pym's postulate (j).

Postulate (h) was not investigated as there was no brief stating that there is a client/commissioner involved. Also, none of the students had any translation experience at the time, so it was not possible to explore this specific postulate.

1.4 Main aim

My main aim is to explore how novice translators differ from expert translators in relation to the development and attainment of expert translation competence, in the South African context, and within the framework of exploring Pym's (2011) postulates. Secondly, I aim to use the findings derived from this study to identify suitable graduate attributes for the South African context.

1.5 Contribution of the study

This study contributes to addressing the gap in empirical research data in the African, and specifically South African, context by giving insight into the phenomena of decision making and problem solving. My findings also contribute to developing graduate attributes for the LPRA subject group at the NWU to render translator training more effectively. The study thereby contributes to more informed teaching and learning paradigms in the context of translator training.

1.6 Methodology

1.6.1 Theoretical framework

This study relies on two main theoretical pillars, which is based on the Holmes/Toury map (Toury, 1995) namely product-oriented translation analysis (TA) and process-oriented analysis. The first is applied in order to analyse the participants' actual translation choices in an evidence-based approach. The second is applied in order to analyse the participants' behaviour, also by means of an evidence-based approach. Using these two methods provides a rich data set for the research questions. As Bernardini (2001:461) argues, product-oriented analysis alone "provides a very incomplete and often misleading way into the translation process, hiding both successful strategies and problems".

Product-oriented translation analysis (TA)

In order to answer RQ1, Molina and Hurtado Albir (2002) and Baker's (2018) strategies were used as an analytical framework to categorise the strategies underlying participants' translation choices. Molina and Hurtado Albir's (2002:511) strategies include borrowing, calque, literal, transposition, modulation, equivalence and adaptation. Baker's (2018) strategies include translation by a more general word (superordinate), translation by a more neutral or less expressive word, translation by

cultural substitution, translation using a loan word or loan word and explanation, translation by paraphrase using a related word, translation by paraphrase using unrelated words, and translation by omission. I follow Wehrmeyer and Antunes' (2020) method of grouping the abovementioned strategies into three categories, namely literal (L), paraphrase (P) and Other (O). A detailed discussion of these strategies is presented in Chapter 2.2.4.

Process-oriented analysis

In order to answer RQ2 to RQ10, a process-oriented analysis is undertaken. Process-oriented research (which now is referred to as Translation Process Research (TPR)) mainly aims to answer questions regarding competence and expertise, and explores other factors such as writing, the relationship between mental load and linguistic complexity, revision processes, metacognition and decision making (Muñoz Martín, 2014). A detailed discussion of TPR is given in Chapter 2.3.1.

1.6.2 Analytical framework

In order to conduct this study, a mixed-method approach (qualitative and quantitative research methods) was followed. Van Maanen (1979:520) defines qualitative research as an “umbrella term covering an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not frequency, of certain more or less naturally occurring phenomena in the social world.” By contrast, quantitative research aims to generate structured data which can be represented numerically and analysed statistically (Saldanha & O'Brien, 2013:21). For this study, the qualitative data is derived from the translation products, e.g. translation strategies, screen recordings and the Retrospective Think-Aloud Protocol (RTAP) data. The quantitative data is derived from eye-tracking measurements, e.g. saccade counts, average saccade amplitude, dwell time, revisits, fixation count, fixation time and the average fixation duration.

Participants

Participants comprise two groups, namely novice and expert translators. I aimed for a total of 20 participants for each group, however, owing to Covid-19 related lockdown restrictions, I only managed to recruit 11 third-year Language Practice students from the NWU Vaal Triangle Campus (VC) for my “novice” sample, and 19 expert translators found by consulting the online database of the South African Translators Institute (SATI) and word-of-mouth contacts. Ideally, an expert translator is defined by three criteria, namely i) many years of experience, ii) a graduate qualification in translation and iii) accreditation from a recognised body (Obdržálková, 2016; Göpferich, 2013; SATI, 2021). However, because of difficulty in obtaining sufficient participants for the study, my inclusion criteria for the expert participants were 1) at least three years of experience, 2) a graduate qualification in languages, translation studies, linguistics or language practice (reflecting the South African translator context), and 3) SATI accreditation or at least membership. Again, because of

practical considerations, the sample was restricted to participants who were primarily situated in Gauteng and North West provinces.

Research procedure

Participants were requested to complete the consent form (Appendix D) and a short questionnaire to collect demographical information (Appendix E). They were then asked to translate a short text (given in Appendix F). During the translation task, the participants' processes were recorded using the SMI RED250 mobile eye tracker and a screen recording program (SMI Experiment Centre). Thereafter, participants were given the opportunity to revise their translations. This was followed by a think-aloud session, in which the participants viewed their translations and commented on decisions or actions.

Data collection

For RQ1, 13 translation units (comprising words or phrases) were identified in the ST that potentially constituted translation problems, and participants' translation choices for these words or phrases were transferred to an Excel table.

For RQ2, measurements of saccade counts and average saccade amplitude were derived from the eye tracker⁴. Saccades are defined as "rapid shifts of gaze that normally place the line of sight on a desired target with a single smooth movement" (Keller et al., 2008:107). The saccade count is the number of saccades in trial, and the average saccade amplitude is the sum of all the saccades' amplitude divided by the number of saccades in the trial (SMI, 2017:358). Saccade amplitude is usually used to measure regressions in reading. I decided to use these measurements because I postulated that when a translator is processing a translation unit, their eyes would return (regress) to the beginning of the unit. If a participant processed word-for-word, I reasoned that there would be many saccades and that the jump (amplitude) from one fixation point to the next would be small. If the participant processed higher units, there would be less saccades and the jump from one fixation point to the next would be longer.

For RQ3, the total task time of the screen recordings were taken so that the time spent on revision could be calculated.

⁴ Eye tracking is done using infrared cameras that follow the movements of the user's eyes on the eye-tracking interface (O'Brien, 2011:4). Participants' eye movement patterns and fixations can be used to understand how they complete a task (Tobii Pro, 2021).

For RQ4, the number of changes participants made were manually recorded by watching the screen recordings and typing out what each participant did. Initially it was planned to use keylogging software, but I found that this caused memory overflow on the SMI laptop.

For RQ5, measurements of the average dwell time, revisits, fixation count, fixation time and average fixation duration were derived from the eye tracker. The average dwell time refers to all fixations and saccades within an area of interest (AOI) for all selected subjects. Revisits provide information about how many times a participant returned their gaze to a particular spot. Fixation count refers to the number of all fixations for selected subjects divided by number of selected subjects. Fixation time refers to the sum of the fixation durations in the AOI. Average fixation duration is calculated by dividing the sum of average fixation time per subject in an AOI by the number of selected subjects (SMI, 2017:243-245). I also investigated the transition counts, which give "the number of transitions of fixations from one specific AOI (in this case the ST) to another (the TT)" (SMI, 2017:398).

Data for RQ6 to RQ10 were collected through Retrospective Think-Aloud Protocols (RTAPs), which are reports where participants are asked immediately after completing a translation task about how they solved translation problems (Englund Dimitrova & Tiselius, 2014:180).

Data analysis

To investigate RQ1, Molina and Hurtado Albir's (2002) list of translation techniques and Baker's (2018) list of strategies were used. I then applied Wehrmeyer and Antunes's (2020) method to categories the strategies as literal (L), paraphrase (P) or other (O) strategies and derive totals for each category for each participant.

To investigate RQ2, I examined the eye-tracking data, and from the SMI BeGaze software, derived specifically the saccadic data, including saccade count and the average saccade amplitude.

To investigate RQ3, I calculated the time participants spent on revision by subtracting the starting time of the revision from the end time.

To investigate RQ4, the total activity of participants' number of changes (including insertions, deletions and substitutions) were calculated to determine whether the experts spent more or less time on revision and whether they made fewer changes or not.

To investigate RQ5, first, the total dwell time, revisits, fixation count, fixation time and average fixation durations for each group were calculated. Thereafter the average distribution percentages for each group were calculated to see how the participants distributed their attention between the ST and TT. Second, I investigated the transition counts by calculating the average transitions each group made during the translation task and the revision task.

To investigate RQ6 to RQ10, I was mainly interested in detecting from their responses whether participants evidenced awareness of these variables. Therefore, only category data was derived from the analysis of the transcripts, i.e. YES if participants evidenced awareness and NO if they did not. Hence, the RTAP transcriptions were analysed to identify the following:

- RQ6: whether participants referred to larger translation units than words.
- RQ7: whether participants relied on intrinsic knowledge to complete the translation task or whether they indicated that they would have consulted a dictionary.
- RQ8: whether participants mentioned translation theories, methods and strategies to help them approach translation problems.
- RQ9: whether participants verbalised how they solved problems, which would indicate conscious as opposed to sub-conscious problem-solving processes.
- RQ10: whether participants expressed any difficulties or uncertainties.

Comparative statistical analyses of the quantitative data (t-tests) were undertaken to determine whether the two groups' differences are significant.

1.7 Scope and limitations of the study

This study focuses on third-year students of Language Practice at the North-West University and expert translators in North West and Gauteng. Owing to the Covid-19 epidemic, I was not able to recruit the desired number (20) of student participants as planned in the proposal, because universities were closed and strict protocols had to be followed. Because of where I am situated (in the North West province), and due to a lack of funding, I was only able to gather data from participants living in the North West and Gauteng provinces.

1.8 Ethics

This study received ethical clearance (see Appendix A) and resorts under Dr Ella Wehrmeyer's project of Mediated Communication (NWU-00425-15-A8). In this study, participants' anonymity was preserved. All participants were above the age of 18. Students' participation or non-participation in the research was entirely voluntary and did not influence their marks. Participants were not exposed to higher risks than encountered in daily life, since none of the experimental methods are invasive. Finally, all participants gave their consent for procedures carried out (see Appendix D).

1.9 Proposed chapter division

Earlier in this chapter Anthony Pym's (2011) postulates regarding expert translators were presented. Secondly, translation competence is contextualised by shedding light on the acquisition of translation competence and its different sub-competencies. Thirdly, the research question and objectives are stated. Fourthly, the methodology is briefly discussed by setting out the theoretical framework for both product analysis and process analysis and the analytical framework applied for

the analysis of the data. Finally, the scope and limitations as well as the ethical aspects are discussed.

In Chapter 2, an overview is given, first of of translation theory, focusing on theories of equivalence and translation strategies, and second of TPR. At the end of each section, empirical studies related to Pym's postulates are discussed.

In Chapter 3, the methodology for this study is presented. Emphasis is put on Molina and Hurtado Albir's (2002) and Baker's (2018) strategies and text analysis techniques, as well as TPR.

Chapter 4 contains the presentation and analysis of the participants' data that is analysed according to Pym's postulates. First, the demographical data of each group are presented. Thereafter, the product-oriented translation analysis, the findings derived from the eye-tracking data and the findings derived from the RTAP data are presented.

Finally, Chapter 5 presents the findings and interpretation of the results regarding Pym's postulates. Thereafter, recommendations, limitations and conclusions are provided.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter provides the relevant background for my theoretical framework: product-oriented translation analysis (TA) and Translation Process Research (TPR). The former investigates what methods and strategies translators use to render units of translation, which, in this study, include words and phrases (Newmark, 1988:65). The latter “seeks to understand translator behaviour, competence, expertise, the cognitive processes that orient these, and the relations between cognition and the translated product” (Saldanha & O’Brien, 2013:109).

In section 2.2, an overview of TA is presented and studies conducted based on translation strategies. In section 2.3, I discuss TPR and empirical studies done in TPR.

2.2 Product-oriented translation analysis (TA)

TA is studied within two major paradigms – an action-oriented (prescriptive) model and a process-oriented (descriptive) model. The prescriptive model focuses on linguistic and functional approaches that aim to prescribe how translators should translate. In contrast, the descriptive model includes more systematic approaches and focuses on how translators actually translate (Pym, 2016). The prescriptive model is ST-oriented and the primary aim is to achieve linguistic equivalence between the ST and the TT. The descriptive model, on the other hand, is TT-oriented and moves away from the idea of equivalence (Pym, 2016:271). The latter model also aims to identify the cultural and literary systems involved in a given ST to determine which strategies would be required to translate it.

In section 2.2.1, I discuss translation problems and difficulties that translators encounter when translating texts. An understanding of the challenges faced in the translation task enables us to contextualise the cognitive processes that translators undergo. In section 2.2.2 I discuss the key concept of equivalence. How translators view the relationship between the source and target texts influences the kind of choices they make, in term of where they deviate from the source meaning (shifts), their principles of translation (norms) and the methods, strategies and techniques they employ. Shifts and norms are introduced in section 2.2.3, and translation methods, strategies and techniques are dealt with in section 2.2.4. Finally, in section 2.2.5, key empirical studies done on student and professional translation strategies are presented.

2.2.1 Translation problems and difficulties

Angelone (2010) mentions that translators can encounter difficulties when translating texts. Nord (2011) distinguishes between translation problems and translation difficulties. She defines the former as “person-independent and objective, or at least inter-subjective tasks that have to be

solved to produce a TT which fulfils the intended function(s)” (Nord, 2011:9). She identifies four types of translation problems: a) pragmatic translation problems (ST elements of local, personal or temporal deixis); b) culture-pair specific/behaviour-related translation problems; c) language-pair related problems (syntax, lexis, prosody); and d) specific translation problems (puns, wordplay, creative language use of a particular author, intentional deviations from language norms, dialect, slang, and meta-language).

On the other hand, translation difficulties are “subjective and individual”, meaning that what is difficult for one translator or trainee may be elementary for another, depending on their competence in the language and culture, and general and specific knowledge. Nord also classifies four types of translation difficulties, namely a) ST-related difficulties (lexis, syntax, non-verbal elements, text deficiencies, poor quality text), b) translator-related difficulties (experience, insufficient proficiency in the source or target languages and cultures, lack of translation competence), c) task-related difficulties (translation task without a brief or an insufficient brief), and d) workplace-related difficulties (access to resources or translation tools, quality of resources) (Nord, 2011:13).

Baker’s (2018:18-22) classification of the two terms is somewhat different from Nord’s as her translation difficulties relate to Nord’s (2011) translation problems. She classifies some common problems at word level: a) culture-specific concepts, b) SL concept is not lexicalised in the TL, c) SL word is semantically complex, d) SL and TL make different distinctions in meaning, e) TL lack superordinate, f) TL lacks specific term, g) differences in physical or interpersonal perspective, h) differences in expressive meaning, i) differences in form, and j) differences in frequency and purpose of using specific forms, and i) the use of loan words in the ST. Problems that occur above word level include collocations as well as idioms and fixed expressions. Baker defines collocations as “semantically arbitrary restrictions which do not follow logically from the propositional meaning of a word” (Baker, 2011:52), whereas idioms and fixed expressions are defined as “frozen patterns of language which allow little or no variation in form and, in the case of idioms, often carry meanings which cannot be deduced from their individual components (Baker, 2011:67). Baker’s specific identification of problems provides a valuable framework for translation product analysis that I build up on in Chapter 3 for this study.

Akbari and Segers (2017) propose four ways to measure translation difficulty. Firstly, difficulties can be identified by measuring the text’s readability using readability scores⁵. Secondly, translation-specific problems can be identified through lists of problems, e.g. those proposed by Nord (2011)

⁵ They suggest readability formulas such as the Flesch Reading Ease, Dale-Chall Readability Score, Flesch Kincaid Readability Score, Coleman-Liau Readability Score, Bormuth Readability Score, SMOG Index, and Spache Readability Index.

and Baker (2018) (see also Shreve et al. (2004)⁶ and Ervin and Bower (1953)⁷). Thirdly, the translator's competence level can be assessed using translation competence models (discussed in section 1.2.3) to identify translator-specific issues. Fourthly, translation difficulty can be measured by means of evaluating translation products in four ways: holistically (i.e. understanding what the main problem is); analytically (i.e. through a set of criteria); by using a norm-referenced method (i.e. bench-marking); and by using a preselected-items evaluation method. The final method involves preselecting items for evaluation in terms of their difficulty, and comparing translator choices with "correct" solutions (see also Kockaert & Segers, 2016). This final method – i.e. focusing on a specific number of potential problems – is adopted in the framework of the present study (see Chapter 3.3.4).

2.2.2 The problem of equivalence

Related to the difficulty of finding solutions to problems at word or above word level is the question of how the TT is equivalent to the ST, since differing interpretations of the notion of equivalence lead to different ideas of what constitutes translation problems.

Since translation studies has become a more definite field of study in the 1960s, translation scholars have tried to provide answers for equivalence, borrowing from linguistic theories, structuralism, and Russian Formalism (Pym, 2016). Panou (2013) believes that scholars' interest in the kind and degree of "sameness" gave birth to different kinds of equivalence, the most prominent dichotomy being literal (word-for-word) versus free (sense-for-sense) translations.

The first approach to equivalence was of a linguistic nature. Roman Jakobson (1959) followed a semiotic approach and built on the work of linguist Saussure (1916) with regard to the signifier (the spoken and/or written signal) and the signified (the concept). He argued that "there is no full equivalence between code-units" because certain concepts in L1 are not the same in L2. In this case, the translator has to use synonyms and, thus, "translation involves two equivalent messages in two different codes" (Jakobson, 1959:233). However, he did not say that equivalence is not possible, but argued that whenever the translator comes across a translation problem, terminology may be qualified and amplified by loanwords or loan-translations, neologisms or semantic shifts, and finally, by circumlocutions (Jakobson, 1959:234). Pym (2016:272) argues that the linguistic equivalence paradigm was based on principles and opinions that originated from disciplines outside translation studies.

⁶ These problems include textual variance, textual degradation, linguistic distance between the source language and target language, cultural distance between the source language and target language, lexical intricacy, syntactic complexity and propositional complexity.

⁷ These problems include lexical meaning, grammatical meaning and functional equivalence in different cultural contexts.

Eugene Nida (1964) believed that equivalence is possible. He distinguished between formal equivalence (where form and content are preserved) and dynamic equivalence (where the message in the ST is translated in the best possible way into the TT). In favour of the latter, one of the key elements of dynamic equivalence is to bring about the “equivalent effect”, in which the TT readers should respond to the TT in the same way as the readers of the ST (Nida, 1964:159).

John Catford (1965) believed that equivalence could be addressed by “replacing textual material in the source language with equivalent textual material in the target language” (Catford, 1965:20). He distinguished between formal correspondence and textual equivalence. Formal correspondence requires that the target language entry carries the same weight as the source language entry. Textual equivalence is where any target language text is equivalent to a given source language text (Catford, 1965:27).

Peter Newmark (1981) distinguished between communicative and semantic translations. The former relates to Nida's dynamic equivalence that the TT should have the same effect on its readers as the ST had on its readers. Semantic translations are similar to Nida's formal equivalence where the translator “attempts to render, as closely as the semantic and syntactic structures of the second language allow, the exact contextual meaning of the original” (Newmark, 1981:39).

In the 1970s and 1980s, scholars moved away from the linguistic approach and attempted a functional approach pertaining to the purpose or goal of the TT (Reiss, 1971; Vermeer, 1989; Snell-Hornby, 1988; Nord, 1997). Hans J. Vermeer's *Skopostheorie*, focused on the goal (*skopos*) of a text. Similarly, Reiss (1977/1989) built on Karl Bühler's categorisation of the functions of language, stating that a translation either has an informative, expressive or appellative function depending on the function of the ST.

The functional approach was followed by a register and discourse approach (based on the Hallidayan model of language and discourse) on how the message is communicated at text level rather than focusing on individual words or sentences that should be translated (Hatim & Mason, 1997; House, 1997). Paltridge (2012:1) explains that discourse analysis examines language patterns across texts and considers the relationship between language and the social and cultural context in which it is used. Register analysis is based on three variables, namely field (what the text is about), tenor (the relationship between participants), and mode (form of communication) (Halliday, 1985; House, 2015).

Baker (1992) followed a more complex discourse approach, where equivalence is influenced by linguistic and cultural factors. She differentiates between five kinds of equivalence, namely 1) at word level (exploring the meaning of single words), 2) above word level (concerning a combination of words, and expressions) 3) grammatical equivalence (dealing with grammatical categories including number and gender), 4) textual equivalence (focusing on the role played by word order

in structuring messages at text level as well as cohesion) and 5) pragmatic equivalence (dealing with how texts are used in communicative situations).

Theories that followed a more systematic approach were that of Even-Zohar's polysystem theory in the 1970s and Toury's descriptive theory of translation. The former revolves around the notion that there are multiple interconnected, interdependent literary systems that uses concurrently different options but collaborates as a whole (Even-Zohar, 2005:3). The latter, known as Descriptive Translation Studies (DTS) corresponds to a descriptive, empirical, interdisciplinary, target-oriented approach to the study of translation, focusing primarily on its role in cultural history (Rosa, 2016:94).

2.2.3 Shifts and norms

Borrowing from structuralist theories, scholars seek to identify the differences between the ST and TT, known as translation shifts (Pym, 2016:287). Shifts are noticeable and often unavoidable changes that occur during the translation process (Toury, 1995:57). Furthermore, shifts provide information about strategies, on which I elaborate below. On the other hand, norms are there to guide translators regarding choices when dealing with translation problems.

Catford (1965) introduced the concept of translation shifts, defining them as "departures from formal correspondence in the process of going from the source language to the target language" (Catford, 1965:73). He distinguished between level shifts and category shifts. Level shifts involve something that is expressed by grammar in one language and lexis in another, e.g. *This text is intended for...*(En) to *Le présent Manuel s'adresse à...*(F). Thus, the source language modifier 'This' is translated with a French article 'Le' (The) plus a lexical adjective '*présent*' (present).

Category shifts are divided into:

- Structural shifts, which involve mainly a shift in the grammatical structure, e.g. *A white house* (En) to *Une maison blanche* (Fr.), A house white (literal translation).
- Class shifts, which are shifts from one part of speech to another, e.g. *The medical student* (En) to *Un étudiant en médecine* (Fr.), A student in medicine (literal translation).
- Unit or rank shifts occur where the translation equivalent in the target language is at a different rank (hierarchical linguistic units of sentence, clause, group, word, and morpheme) to the source language, e.g. *Halloween* (En) to *'n Fees waar kinders kostuums aantrek en van deur-tot-deur klop en vir lekkergoed vra* (Afr.).
- Intra-system shifts take place when the source and target languages differ in how a concept is expressed (Catford, 1965:80), e.g. *nuus* (Afr) to *des Nouvelles* (Fr.). (News is a plural form in French).

Van Leuven-Zwart's (1989) comparative model of shift analysis involves a detailed comparison of the ST and TT and classification of all the microstructural shifts within sentences, clauses, and

phrases. She proposed first identifying basic textual units for comparison (“transemes”) and their similarities (“architranseme) are identified. Thereafter, shifts are identified and categorised to identify patterns. Pym criticises the model’s assumption that meaning is always clear and stable and that shifts can be easily identified (Pym, 2016:290).

According to Toury (2012), shifts can either be obligatory, i.e. rule-governed and more oriented toward the ST, or non-obligatory (optional) and more oriented toward the TT. The latter depends more on literary, cultural or stylistic reasons.

Toury demanded that translation theory include “cultural-historical facts”, that he calls norms (Gentzler, 2001:127). According to Toury (1995:55), norms are “performance instructions specifying what is prescribed and forbidden as well as what is tolerated and permitted” in its respective system. Toury (2012:81-83) proposes three main categories of norms: 1) preliminary norms, 2) the initial norm and 3) operational norms. Preliminary norms are concerned with translation policy (choice of works to be translated), and with directness of translation (tolerance for translating from a translation in another language rather than from the original ST (Toury, 1995:58). The initial norm determines the translator’s global approach – by either following a source-oriented approach (thus, providing an “adequate” translation by submitting to the textual relations and norms within the ST) or by following a target-oriented approach (thus, providing a more acceptable translation by submitting to the linguistic and rhetorical norms of the target language and culture). Operational norms direct decisions made during the translation process at different textual levels, including cultural, social, and political considerations, the organisation of linguistic material (matricial norms) and the selection of target language material (text-linguistic norms). It is therefore operational norms that are the focus in the present study.

Chesterman (1993:4) suggests two types of norms, namely professional norms and expectancy norms. The former is established by competent professional behaviour and governs accepted methods and strategies of the translation production process. Chesterman postulates that professional norms are governed by expectancy norms, in other words what the readership expects a translation and native text to be like (Chesterman, 1993:9).

2.2.4 Translation methods, strategies and techniques

Translators make use of methods and strategies to solve translation problems. In the literature, controversy revolves around defining these terms – some strategies are regarded as methods, while some scholars regard strategies as techniques or procedures. Owing to this confusion, I will only use the terms *methods* and *strategies*. Molina and Hurtado Albir (2002:507) define a translation method as “the way a particular translation process is carried out in terms of the translator’s objective, that is, a global option that affects the whole text.” In other words, a translation method refers to the translator’s overall approach.

Popular distinctions of methods include Vinay and Darbelnet (1958) distinction between direct (literal) translations and oblique (free) translations. According to Molina and Hurtado Albir (2002:499), translators generally aim at providing linguistic equivalents, and oblique translation occurs only when literal translation is impossible. Newmark (1988) distinguishes between several methods of which four pertain to a ST-oriented approach (word-for-word, literal, faithful, and semantic) and another four to a TT-oriented approach (adaptation, free, idiomatic, and communicative). House (1997) distinguishes between overt translation (preserving a source culture or a source culture's features in the TT) and covert translation (matching the ST to the TT in terms of functional meanings and lexical meanings). Venuti (1995) distinguishes between domestication (translating in such a manner that the TT reader reads with ease) and foreignisation (producing a TT which deliberately breaks target conventions by retaining the foreignness of the original).

Within a particular method, translators use strategies to resolve problems that they identify in terms of their particular notions of equivalence. Lörscher (1991:76) defines strategies as "a potentially conscious procedure for the solution of a problem which an individual faces when translating a text segment from one language into another".

Molina and Hurtado Albir (2002) in turn primarily built on the work of Vinay and Darbelnet (1958)⁸, but also incorporated strategies of Nida (1964), Nida and Taber (1974), Margot (1979), Vázquez Ayora (1977)⁹, Newmark (1988)¹⁰, and Delisle (1993)¹¹ (illustrated in Table 2-1).

Molina and Hurtado Albir's (2002) incorporated all the previous scholars' lists into one big list:

- *adaptation*: to replace a ST cultural element with one from the target culture.
Example: *baseball* (En) to *Fútbol* (Sp).
- *amplification*: to introduce details that are not formulated in the ST.
Example: رمضان شهر (A) to *Ramadan*, the Muslim month of fasting.

⁸ Vinay and Darbelnet's (1958) strategies consist of borrowing, calque, literal translation, transposition, modulation, equivalence, adaptation, compensation, concentration versus dissolution, amplification versus economy, reinforcement versus condensation, explicitation versus implicitation, generalisation versus particularisation, and inversion.

⁹ Vázquez Ayora (1977:257), borrowing from Vinay and Darbelnet's distinction of methods, distinguished between technical procedures of execution ("procedimiento técnicos de ejecución") and general procedures of translation ("procedimiento general de traducción"). Vázquez Ayora also added his own strategies, namely omission, displacement and inversion.

¹⁰ Newmark's (1988) strategies consist of transference, naturalisation, cultural equivalent, functional equivalent, descriptive equivalent, componential analysis, synonymy, through-translation, shifts or transposition, modulation, recognised translation, compensation, expansion, paraphrase, omission, couplets, and notes.

¹¹ Delisle (1993) simplified Vinay and Darbelnet's dichotomies of reinforcement/condensation and amplification/economy, and reduced them to a single pair. He distinguished between three types of reinforcement, namely dissolution, explicitation and periphrasis, and three types of economy, namely concentration, implicitation and concision. He also introduced three other categories: addition versus omission, paraphrase and discursive creation.

- *borrowing*: to take a word or expression straight from another language. It can be (i) pure (without any change) or (ii) naturalised (to fit the spelling rules in the TL).
Example: (i) *Lobby* (En) to *Lobby* (Sp); (ii) *Meeting* (En) to *Mitin* (Sp).
- *calque*: literal translation of a foreign word or phrase.
Example: *École normale* (F) to *Normal School* (En).
- *compensation*: to introduce a ST element of information or stylistic effect in another place in the TT because it cannot be reflected in the same place as in the ST.
Example: *Hey, diddle daddle* (En) to *Karalie Karool* (Afr).
- *description*: to replace a term or expression with a description of its form or/and function.
Example: *Panettone* (I) to *'n Tradisionele Italiaanse koek wat op Kersdag geëet word* (Afr).
- *discursive creation*: to establish a temporary equivalence that is totally unpredictable out of context.
Example: *Rumble fish* (En) to *La ley de la calle* (Sp).
- *established equivalent*: to use a term or expression recognized (by dictionaries or language in use) as an equivalent in the TL.
Example: *They are as like as two peas* (En) to *Se parecen como dos gotas de agua* (Sp).
- *generalisation*: to use a more general or neutral term.
Example: *Guichet, fenêtre, devanture* (F) to *Window* (En).
- *linguistic amplification*: to add linguistic elements.
Example: *No way* (En) to *De ninguna de las maneras* (S).
- *linguistic compression*: to synthesise linguistic elements in the TT.
Example: *Yes, so what?* (En) to *¿Y?* (S).
- *literal translation*: to translate a word or an expression word for word.
Example: *She is reading* (En) to *Ella está leyendo* (Sp).
- *modulation*: to change the point of view, focus or cognitive category in relation to the ST; it can be lexical or structural.
Example: *أبا ستصبح* (A) to *'You are going to have a child'* in stead of *'You are going to be a father'*.
- *particularisation*: to use a more precise or concrete term.
Example: *Window* (En) to *Guichet, fenêtre, devanture* (F).
- *reduction*: to suppress a ST information item in the TT.
Example: *Ramadan, the Muslim month of fasting* (En) to *رمضان شهر* (A).
- *substitution*: to change linguistic elements for paralinguistic elements (intonation, gestures) or vice versa.
Example: Putting your hand on your heart (an Arabic gesture) to *Thank you* (E).
- *transposition*: to change a grammatical category.
Example: *He will soon be back* (En) to *No tardará en venir* (Sp).

- *variation*: to change linguistic or paralinguistic elements (intonation, gestures) that affect aspects of linguistic variation: changes of textual tone, style, social dialect, geographical dialect.

Molina and Hurtado Albir (2002)	Vinay and Darbelnet (1959)	Nida and Taber (1974), Margot (1979)	Vazquez Ayora (1977)	Newmark (1988)	Delisle (1993)	
adaptation	borrowing	classifier	transposition	transference	reinforcement:	dissolution
amplification	calque	alteration	modulation	naturalisation		explicitation
borrowing	literal translation	cultural equivalent	equivalence	cultural equivalent		periphrasis
calque	transposition	equivalent description	adaptation	functional equivalent		addition
compensation	modulation	footnotes	amplification	descriptive equivalent		paraphrase
description	equivalence		explicitation	componential analysis	economy:	concentration
discursive creation	adaptation		omission	synonymy		implicitation
established equivalent	compensation		compensation	through-translation		concision
generalisation	concentration			shifts/transposition		omission
linguistic amplification	dissolution			modulation	discursive creation	
linguistic compression	amplification			recognised translation		
literal translation	economy			compensation		
modulation	reinforcement			expansion		
particularisation	condensation			paraphrase		
reduction	explicitation			omission		
substitution	implicitation			couplets		
transposition	generalisation			notes		
variation	particularisation					
	inversion					

Figure 2-1: Molina and Hurtado Albir’s (2002) translation strategies and its origins

In Figure 2-1, an overview of the abovementioned strategies is given. The strategies that overlap are highlighted in the same colour. Molina and Hurtado Albir (2002) also propose four different strategies, namely linguistic amplification, linguistic compression, substitution and variation.

Baker (2018) also provides strategies used by professional translators to solve problems related to non-equivalence at word level. These strategies include:

- translation by a more general word (superordinate)
Example: *apply* to *put*
- translation by a more neutral/less expressive word
Example: *mumbles* to *suggests*
- translation by cultural substitution
Example: *Cream Tea* to *pastry*
- translation using a loan word or loan word plus explanation
Example: *cap* to ‘*cap*’, *that is a plastic hat which covers the hair*
- translation by paraphrase using a related word
Example: *das überblickt* (Germ) to *which overlooks* (En)
- translation by paraphrase using unrelated words
Example: *affidavit* to *written communication supported by an oath*

- translation by omission

In Table 2-1, I compare the strategies of Molina and Hurtado Albir (2002) and Baker (2018).

Table 2-1: Comparison between Molina and Hurtado Albir’s (2002) translation strategies and Mona Baker’s (2018) strategies.

Molina and Hurtado Albir (2002)	Mona Baker (2018)
Generalisation	Translation by a more general word (superordinate)
Compensation	Translation by a more neutral/less expressive word
Adaptation	Translation by cultural substitution
Borrowing	Translation using a loan word or loan word plus explanation
Established equivalent	Translation by paraphrase using a related word
Modulation, amplification, reduction	Translation by paraphrase using unrelated words
Reduction	Translation by omission
Calque, description, discursive creation, linguistic amplification, linguistic compression, literal translation, particularisation, substitution, transposition, variation	–

Wehrmeyer and Antunes (2020) classified strategies as literal (L) if they entailed borrowing, calque, and literal translation. Particularisation and generalisation were also classified as literal if the target language lacked a full linguistic equivalent. Strategies were categorised as creative (K) if they entailed adaptation, amplification, compensation, description, discursive creation, generalisation, linguistic amplification, particularisation and variation. Transposition and modulation were classified as literal (L) if they entailed an obligatory shift, otherwise as creative (K). They borrowed the category under-translation from Newmark (1988:285), who defines this strategy as a translation

that gives less detail and is more general than the original. (This strategy also corresponds with Molina and Hurtado Albir (2002) strategies of generalisation, linguistic compression and reduction as well as Baker's (2018) strategies of translating by a more general word and omission.) Translation choices were also categorised as under-translated if a fully equivalent word exists in the target language but was not used.

In summary, a general method is employed to translate the whole text. In turn, this method will determine which strategies are used for problems occurring at smaller units. Close attention is paid to Wehrmeyer and Antunes's categorisations of the strategies identified by Molina and Hurtado Albir (2002) and Baker (2018), as their categories establish a foundation for my methodology in Chapter 3.

2.2.5 Empirical studies on translation strategies

Several studies have been conducted to determine what strategies expert and novice translators use to solve translation problems. In this section, and in relation to Pym's (2011) postulate (a), I provide an overview of some of the studies conducted globally.

Wallmach and Kruger (1999) investigated the problem-solving translation strategies of students between African (Afrikaans, Xhosa, Zulu) and European (German and French) languages. Students were asked to translate a text, choose ten words or phrases containing translation problems, identify the translation problem, provide a translation for these translation units, and explain which translation strategy they used. The translations were analysed according to Baker's (1992) translation strategies. They found that European languages and Afrikaans seem to have an advantage over African languages as students can draw upon similar roots in using loan words deemed acceptable in their respective cultures. The students who translated in the African languages used loan words or a loan word and an explanation (although it is often "frowned upon" in their culture) as well as paraphrase.

Aguado-Gimenez and Perez-Paredes (2005) investigated translation strategies used by 160 undergraduate students in a classroom-based examination. Before the study was conducted, students were introduced to Kussmaul's (1995) list of instructions to solve translation problems, the concept of equivalence and its significant authors, and how to judge their own translations. Thereafter, students were asked to translate a text from English to Spanish. The findings suggest that students consciously used strategies when approaching the translation of units. Based on Baker's (2018) strategies, the students used translation by paraphrase using a related word, translation by paraphrase using unrelated words, and translation by omission.

Nugroho (2013) investigated the use of micro-strategies (Schjoldager, 2008) in students' translations of an Indonesian news text into English. The Flesch Reading Ease Readability Formula indicated that the text was relatively difficult to read. They were allowed to use offline or online

dictionaries and web search engines. Nugroho found that six micro-strategies were used, namely direct transfer, direct translation, explicitation, paraphrase, addition, and deletion.

Cornelius (2016) investigated legal translator competence between five experienced and five inexperienced translators. Aspects such as translation methods, awareness of translation problems, consultation of resources and time spent on the task were investigated. It was found that both groups prefer faithful translation methods but for different reasons (inexperienced translators were more concerned about their inexperience and experienced translators were more concerned about legal status and effect). Furthermore, experienced translators are more aware of translation problems (experienced translators reported almost twice as many translation problems compared to the inexperienced group), are more aware of the need for accuracy and precision when translating legal texts (there were more variation among the inexperienced translators), consult sources more often and use a wider variety of sources. It was also found that the inexperienced group took almost twice as long to complete the translation task as opposed to the experienced group.

Lucito (2018) analysed students' difficulties and strategies (based on Mona Baker's strategies) used in the English translation process. Data was collected from 15 students through a test and an interview. She found that two methods were used by the participants, namely literal translations and free translations. When dealing with difficulties pertaining to vocabulary and terminology from religious culture, students used the strategies of translation by a more general word and translation by paraphrase using related words.

Rosa et al. (2019) investigated the translation strategies (based on Vinay & Darbelnet, 1958/2000) used by ten third-year students to solve equivalence-related problems in a historical recount text. Data was collected using keylogging and screen recording. They found that most of the strategies were applied to solve local culture-specific terminology owing to the text type. The students used naturalisation, generalisation, description, borrowing, and deletion.

Kruger and Crots (2014) investigated the translation strategies experienced professional translators opt for when translating. Data was obtained through a survey to record 31 translators' opinions regarding which translation strategies they would most likely select to deal with particular kinds of ethical challenges such as texts containing sexism, racism, crude language, and inappropriate, potentially offensive content. They found that the translators favoured literal translation because they wanted to remain faithful to the ST. The strategies of neutralising adaptation and refusal to translate were chosen less frequently and the strategy of omission was selected least frequently.

Using PACTE's translation competence model (2007) as theoretical framework, Qian (2017) investigated the use of translation strategies and pause patterns of 20 translators novice, paraprofessional and professional translators. Data was collected using retrospective interviews,

screen recording and keylogging. In his findings, professional and paraprofessional translators used psycho-physiological strategies and bilingual strategies, and spent more time in the revision phase. By contrast, the students used instrumental strategies and extralinguistic strategies, and spent more time on producing the TT.

Qishta (2018) investigated five experienced professional translators' strategies when translating political collocations on British news websites. After the translation, a semi-structured interview was conducted to clarify the method used and to enrich the discussion of the results. Her findings showed professionals used synonymy, literal translation, approximation, omission, paraphrasing, and elaboration and explicitation.

In summary, there are no significant differences in the strategies implemented by the groups. The strategies used by students/novices include borrowing, paraphrase, description, addition, omission, naturalisation and generalisation. On the other hand, professional translators' strategies comprise literal translation, approximation, omission, paraphrasing, elaboration and explicitation. The difference might be a result of students'/novices' inability to use the strategies appropriately and within context, implementing an equivalent effect and not having sufficient experience to solve linguistic and cultural problems.

In the following section, I provide an overview of TPR, which forms the second part of my theoretical framework.

2.3 Translation Process Research (TPR)

As discussed in Chapter 2.2.1, Angelone (2010:18) claims that translators (including both novices and expert translators) encounter a state of "uncertainty", which he defines as "a cognitive state of indecision" that can occur during the comprehension of the ST, the transfer of the ST message or when producing the TT. In Translation Process Research (TPR), scholars aim to explore translators' cognitive processes (Jakobsen, 2017:21).

This section presents a historical overview of TPR, and key empirical studies done within TPR on novice and expert translators. Various topics such as decision-making and problem-solving processes, expertise, strategies employed, pauses and post-editing versus human translation have been investigated to gain insight into cognitive activities during the translation process. This study focuses specifically on empirical evidence on the differences between novices and expert translators based on Pym's (2011) postulates.

2.3.1 Historical overview of TPR

According to Hurtado Albir and Alves (2009:54), apart from being an act of communication and a textual operation, translation results from cognitive processing carried out by translators. However, translation research was initially conducted on texts, languages and cultures, and minimal attention

was given to cognitive processes. In 1972, James Holmes (2004) presented a framework for translation studies, dividing the field into two areas of research: pure and applied. Branches of “pure” areas of research include 1) the description of the phenomena of translation (“descriptive”); and 2) the establishment of general principles to explain and predict such phenomena (“theoretical”). Under the descriptive branch are three areas that can be investigated: 1) the translation product; 2) the function of the translation; and 3) the translation process. It is this third category that gave rise to TPR.

TPR theory dates back to the late 1960s. During this time, scholars borrowed theories and methodologies from cognitive psychology and linguistics, ranging from speculative theorising to empirical approaches (Hurtado Albir et al., 2015:5). The first attempts to study translation as a cognitive activity were based on Levý’s proposal (1967) where he studied translation as a decision-making process within a gaming theoretical framework. Levý found that translators have “selective instructions” that act as constraints or guidelines to direct their choices. He acknowledges that these instructions may be controlled by translators’ motivation or other external factors. Seleskovitch (1968), who produced ground-breaking work with her Interpretive Theory of Translation, believes that translation is a three-stage process involving 1) reading and understanding so that the sense of the ST is grasped, 2) deverbalisation, a cognitive process where transfer supposedly occurs through sense and not words, and 3) re-expression of what is understood in the deverbalisation stage into the target language.

The history of experimental TPR can be divided into three phases. The first phase is considered to be from the early 1980s until the early 1990s. During this period, empirical research started, drawing primarily on think-aloud techniques (TAPs) for data elicitation, which is based on the work of cognitive psychologists Ericsson and Simon (1984). TAPs are verbal reports recorded during the translation process in which the translator is asked to verbalise any difficulties they encounter while translating, as well as strategies used to solve these problems. These verbal reports are then transcribed for analysis (Englund Dimitrova, 2010:407). According to Hurtado Albir et al. (2015:6), TAPs “spearheaded” the first phase of TPR. Several translation scholars used TAPs as a methodology to discover what goes on in the translator’s mind (Gerloff, 1986; Krings, 1986; Lörcher, 1986, 1991; Kussmaul & Tirkkonen-Condit, 1995). Another technique, based on verbal reports includes retrospective interviews. According to Ferreira et al. (2018:98), retrospection “builds on the assumption that during a translation task, parts of the information in the subject’s short-term memory will be stored in the long-term memory and can be retrieved afterwards by the subject.”

It was also during the first phase that several models of the translation process were proposed, which according to Alves and Hurtado Albir (2010:29), “put forward different accounts of the mental processes carried out by translators/interpreters”. Bell (1991) proposed a linguistic and psycholinguistic model that comprises phases of analysis and synthesis. Gutt’s relevance-

theoretical model (1991) is based on relevance theory¹² in which he views translation as interpretive language use. Kiraly (1995) proposes two models, namely a social model and psycholinguistic model. In his social model, the translator engages in the ST, the TT and a particular context related to the translation activity. Kiraly's psycholinguistic model is based on cognitive psychology, in which the brain is seen as an information processor. He argues that the translation process is a combination of controlled and uncontrolled, non-observable processes and, through TAPs, offers insights into the specificities of controlled processes in translation. Gile's effort model (1995) is also based on cognitive psychology, specifically on the notion of processing capacity. Although his model relates to interpreting, it also applies to translation. Gile argues that there are four types of effort, including effort related to listening (reading in the case of translation) and analysing, effort related to discourse production in reformulation and short-term memory efforts, in other words making sense of the ST as comprehension is non-automatic. In a refined model, Gile (1997) added the coordination effort, which serves to ensure that mental/attentional capacity is directed to the correct effort.

The second phase of TPR development is considered to be from the mid-1990s to the early 2000s. During this time, translation researchers started triangulating data using different kinds of tools such as TAPS, retrospective interviews, questionnaires, and psychophysiological measurements. This phase is also marked by the development of the keylogging software *Translog* (Jakobsen & Schou, 1999) and different software packages (*Proxy*, *Camtasia*) with screen recordings to capture process data, which were not previously available. With keylogging, all the "keystrokes made in producing a text, including typos, pauses, deletions, changes, mouse clicks, cursor movements" are recorded and saved on a logfile (Jakobsen, 2014:71). These new tools created the conditions for more robust analyses of larger sets of data. Subsequently, the impact of translation technology, mainly Computer-aided translation (CAT) tools, also attracted the attention of researchers (Dragsted, 2004).

The third phase of TPR development started in the mid-2000s by incorporating eye-tracking data into the triangulation approach in experimental research. Eye tracking is used to monitor and record eye movements, specifically fixations, gaze paths and pupil size (O'Brien, 2006:185). O'Brien's (2006) study is one of the first studies combining eye tracking and translation memory. Her findings indicated that eye-tracking data, especially pupil dilation measurements and gaze replays, is an effective way to investigate translation processes. Her study was followed by others that used eye-tracking data to corroborate assumptions not yet proven by key-logged data (Jakobsen & Jensen, 2008, Alves et al., 2009, Dragsted & Carl, 2013; Balling et al., 2014; Carl et al., 2016). Other

¹² Relevance theory is a cognitive approach in pragmatics that starts from two broadly Gricean assumptions: (a) that much human communication, both verbal and non-verbal, involves the overt expression and inferential recognition of intentions, and (b) that in inferring these intentions, the addressee presumes that the communicator's behaviour will meet certain standards (Wilson, 2019).

methods that have also been used in TPR include electroencephalography (EEG) and functional magnetic resonance imaging (fMRI). These are used to discover which brain regions are involved in translation tasks (Schwieter & Ferreira, 2018).

Jakobsen (2017) argues that future research needs to incorporate equipment such as EEG, fMRI and other equipment for psychological reactions, and needs to focus more on individual, emotional, interactional, technological and institutional factors” (Jakobsen, 2017:40) as previous TPR excluded “the influence of emotion and intuition on human cognition”.

Recently, a fourth phase in TPR has been emerging owing to the increasing interaction between humans and machines in the translation industry. Jakobsen (2017:40) explains, “the recognition of the importance of translators’ interaction with translation technology has led to a strong focus on exploring both the efficiency and the perceived quality of the human mind’s interaction with technologies”. Krings’s (2001) pioneering work paved the way to research that draws on computational linguistics, studies of human-computer interaction, and speech recognition for studying, for instance, the impact of post-editing tasks on human cognitive processes (Balling et al., 2012).

In summary, TPR has come of age and different data elicitation techniques can now be used as a way of capturing the process-product interface in translation.

2.3.2 Novice versus expert translation units

As noted in Chapter 1, postulate (b) avers that expert translators can process larger translation units than novices. Carl and Kay (2011) investigated fixation units (gaze fixation patterns on the ST) and production units (keystroke patterns) of 12 novices and 12 experienced professional translators using eye tracking and keystroke logging¹³. They found that the professional translators can better divide their attention in parallel on comprehension of the ST and TT production. On the other hand, novices operate more in an alternating mode where they either read the ST or write the TT.

Borresly (2016) investigated natural translators (“people who have had no special training” (Harris & Sherwood, 1978:155)) and trainee translators in the context of societal bilingualism. His study comprised two groups of participants: the first group consisted out of ten bilinguals who lived in a bilingual environment and graduated (this excludes the degrees of philology, linguistics and language teaching); the second group comprised ten trainee translators (first-year MA students) with little practical experience. The main aims of the research were to examine the translation process and better understand participants’ perceptions of translation. Participants were asked to

¹³ According to Saldanha and O’Brien (2013:132), keylogging or keystroke logging involves “the use of a special software program that records all keys pressed on the keyboard, as well as mouse movements and pauses between key presses during a text production task.”

translate an English text into Arabic. Borresly (2016:107) found that 40% of trainee translators translated strictly on lexicological unit¹⁴ level, 10% translated on sentence level, 20% translated on paragraph level, and 30% shifted between lexicological units and sentence level. On the other hand, 40% of the natural translators translated at word level, 30% translated at lexicological unit level, 20% translated at paragraph level, and only one participant translated at sentence level.

The studies above both reveal interesting findings. Although Carl and Kay's (2011) findings do not specifically confirm Pym's postulate, they indicate that professional translators can read and translate simultaneously, and therefore can comprehend the ST faster than the trainees. Borresly's (2016) findings indicate that translator training enhances the processing of larger translation units.

2.3.3 Novice versus expert revision behaviour

Postulate (c) claims that expert translators spend longer reviewing their work at the revision phase, but make fewer changes when reviewing.

Rosa et al. (2018) investigated translators' revision behaviour by looking at pauses. They define pauses as "a temporary stop or a break indicating doing other than typing activities in a certain period of the translation process" (Rosa et al., 2018:18). The participants included two student translators enrolled for the MA Program of Linguistics and two experienced professional translators who had completed an MA in Translation and Interpreting studies, had more than five years of professional experience in translation and were members of the Association of Indonesian Translators (HPI). Participants were asked to translate a text from English into Bahasa Indonesia and the data were collected using keylogging, TAPs and screen recording. Rosa et al. (2018:24) found that students preferred to revise simultaneously with drafting, while the professional translators allocated a particular time for revisions. Furthermore, the researchers also found that the revisions done by students tended to be at a clause level, while the professional translators focused their corrections at text level (Rosa et al., 2018:26).

Schaeffer et al. (2019) investigated eye-tracking revision processes of translation students and experienced professional translators. They inserted errors into six manually translated texts in the CRITT-TPR Database (Carl et al., 2016) and asked participants to post-edit the texts. Data was collected through eye tracking and keylogging. The researchers found that students corrected significantly fewer errors as compared to professional translators. Furthermore, students spent considerable cognitive effort on errors regarding orthography, consistency and grammar, and on double and triple-checking consistency errors. On the other hand, professional translators are more efficient in error recognition and correction, because they prioritise their search for errors more

¹⁴ Vinay and Darbelnet (1958:21) define a lexicological unit as "lexical elements grouped together to form a single element of thought."

adequately than students. Furthermore, they were also more strategic in terms of cost/benefit in their reading behaviour.

The abovementioned studies support Pym's postulate as they indicate that professionals are more TT-oriented and focus on the skopos, and make fewer changes.

2.3.4 Novice versus expert attention to ST and TT

According to Hvelplund (2011:3), "translating involves the repeated shifting of the focus of attention between the ST and the TT". He states that attention to the ST indicates comprehension, whereas attention to the TT indicates production. In postulate (d), Pym claims that expert translators spend more time looking at the TT than novices, thus focusing on producing an adequate translation.

Jakobsen and Jensen (2008) asked six experienced professionals and six translation students to read four almost identical texts, each with a different purpose: a) for comprehension, b) with the intention of translating the text afterwards, c) to translate the text whilst reading, and d) to read and simultaneously provide a written translation. The researchers found that professional translators focus longer on the TT than on the ST owing to revision and editing, whereas students spend more time looking at the ST. The researchers argue that professionals focus more on their revision while students most likely struggle with comprehension (Jakobsen & Jensen, 2008:119).

Sharmin et al. (2008) investigated the eye movements of 18 student translators to make observations on differences in the fixation durations during ST reading and TT reading. Data was collected through an eye tracker, *ClearView* and *Translog*. They found that TT fixations were longer than ST fixations, in other words, the students concentrated significantly longer on the TT (266 ms) than the ST (212 ms).

Hvelplund (2011) investigated how 12 experienced professional translators and 12 student translators distribute their attention. Three indicators were employed to evaluate translators' allocation of cognitive resources: 1) the combined duration of attention units, 2) the duration of individual attention units and 3) pupil size during individual attention units. Data were collected using an eye tracker, *Translog* and *R*. They found that 1) both students and professional translators spent more time on TT processing than on ST processing, 2) that professional translators focused attention on TT reformulation for longer periods than on ST comprehension as opposed to students who focused more on ST comprehension than on TT reformulation; and 3) students' pupil size was significantly larger during TT reformulation than during ST comprehension, and that the cognitive load was higher for the students than the professionals during TT processing and ST processing. In summary, Hvelplund (2011) found that attention unit duration and pupil size measures were successful in providing insight into translators' allocation of cognitive resources. However, the total attention duration indicator was less successful in revealing significant effects on distribution of resources in translation.

In the study of Rosa et al. (2018) mentioned in 2.3.3, the researchers also found that experienced professional translators wanted to ensure the strategies used to produce their TT were correct. Thus, they spent more time looking at the TT.

Pym's postulate is both supported and contradicted by the findings above. The comparative studies confirm that experts focus more on the TT than on the ST, however, Sharmin et al. (2008) indicates that novices do likewise.

2.3.5 Novice versus expert top-down processing

In postulate (e), Pym claims that expert translators use top-down processing when translating, in other words look at the text as a whole rather than focusing on individual words.

Obdržálková (2016) investigated translation as a decision-making process. Six students and six experienced professional translators (people who earn their living as translators and obtained their degree from the Translation Studies Department of the Charles University) participated. They were asked to translate two texts within three hours and complete a questionnaire based on the problems identified during the translation process. In Obdržálková's (2016:312) findings, professional translators more often mentioned problems associated with higher levels of text construction and overall translation strategies such as TT function and translation method, and the quality of the ST.

Nadrah (2019) investigated the types of errors students make while translating a text. Twenty-four students participated and data was collected through a test, a questionnaire and an interview. In his findings, factors contributing to translation errors were students' inability to identify ellipsis, idioms, lexical meaning, and lack of background on the content.

These studies support Pym's postulate that professionals focus more on the purpose of the TT, and producing a text of quality, while students primarily get stuck on word-level.

2.3.6 Novice versus expert use of resources

Whether paper-bound or digital, resources are inevitable for a translator (Austermühl, 2014; Hvelplund, 2019). Regarding postulate (f), Pym claims that experts rely more on intrinsic than extrinsic encyclopaedic knowledge.

Daems et al. (2017) conducted a comparative analysis of human translation and post-editing in which they focused primarily on the translation process (translation speed, cognitive effort and the use of external resources), the quality of the final product and translators' general attitude towards post-editing and human translation. Participants comprised 10 MA students and 13 experienced professional translators. Data were elicited through eye tracking and keylogging. The researchers found no significant difference in the time spent on external resources by both groups. However,

students relied significantly more on dictionaries than the professional translators (Daems et al., 2017:262-265).

Hvelplund (2017) investigated 18 experienced professional translators' use of digital resources during the translation process. He found that almost 20% of the translation process time was devoted to dictionary consultation, website browsing, terminology verification, whereas (6,7%) was devoted to translation drafting, and 18% to revision.

In another study, Hvelplund (2019) examined experienced professional translators' use of digital resources with specific emphasis on 1) attention and cognitive effort in translation involving digital resource consultation, and 2) translators' processing flow during translation involving digital resources. Data were collected by means of eye tracking and keylogging. Hvelplund found that digital resources are introduced at several places in the translation process, which aids in comprehending the ST and the reformulation process.

According to Gough (2017), professional translators can spend on average as much as one-third of their actual translation time on various external consultation of resources. Gough (2019) investigated the research activities of 16 professional freelance translators. Data was collected by means of profile questionnaires, screen recordings accompanied by TAPs, and post-task e-mail questionnaires. Participants were asked to translate a text out of English into Spanish, Polish, Portuguese, Brazilian Portuguese, French, Dutch, Hungarian or Indonesian. They were allowed to use the tools and resources they normally used in their work setup. In her findings, Gough identified three resource behaviour characteristics amongst the professionals, namely the Dictionary Enthusiast, the Parallel Text Fan and the Mixed User. The first type looks up words in dictionaries (monolingual, bilingual and synonym dictionaries), the second prefers to look up keywords in a search engine, and the last group exhibited both behaviours.

Gough also established translation research activity (TRA) distribution patterns, i.e. the behaviour of when translators do research during a translation task. Other patterns associated with TRA include backtracking, indirect research and prospective and retrospective research (Gough, 2019:352). Backtracking means that the translator jumps between the ST, TT and resources. Indirect research refers to "finding potential terms while reading parallel or background texts at points in time other than of encountering a research need." Retrospective research is done when the translator looks up an item more than once and long after the first time the translator encountered a problem.

In essence, both novices and experts were found to contribute a significant amount of time looking at resources, as it contributes to better understanding of the ST and producing a better TT.

2.3.7 Novice versus expert awareness of theory

In postulate (g), Pym (2011) suggests that expert translators are more inclined to base their approach on principles and theories.

The investigation by Kruger and Crots (2014) discussed in section 2.2.5, revealed that professional translators tend to translate faithfully, and an interplay between personal and professional ethics as motivation for this choice. 'Personal ethics' are defined as "a person's intuition, religion, values, morals and beliefs" and professional ethics refer to "the norms, values and principles that guide the translation profession, the rules governing the translator's conduct and the obligation not to harm the client, author, and/or target audience" (Kruger & Crots, 2014:158). Furthermore, Kruger and Crots argue that experience leads to a greater preference for both faithful strategies and a stronger influence of professional ethics.

Corbella and De León (2014) investigated implicit theories¹⁵ in ten translation trainees' processes. The researchers aimed to 1) reconstruct implicit theories in trainee translators by analysing the metaphors they used, 2) identify correlations between reconstructed implicit theories and observable behaviour during the translation process, 3) identify correlations between reconstructed implicit theories and the translated text, 4) explore pedagogical methods to foster cognitive effort and conceptual change and to test if such conflicts and changes led to changes in the translation process, and 5) explore a specific methodology to reach these goals (Corbella & De León, 2014:282). Data was collected by means of three questionnaires (sociolinguistic, translation-related, and an outline of the translation process), interviews (prompting a metalinguistic reflection of the conceptual metaphors they used, theoretical essays, assignments, commentaries explaining decisions, and translations that were recorded on *Translog*). The researchers found that trainees' implicit theories mostly involve transfer and change. They argue that this might be because of these metaphors being prevalent in Western cultures (in this case, German and Spanish) and that they "are acquired as part of the enculturation process" (Corbella & De León (2014:292). Furthermore, the researchers contend that these metaphors can also be modified through experience and formal instruction.

In essence, these studies support Pym's postulate in that experts do base their approach on professional principles and personal theories, acquired throughout experience and the nature of their work.

¹⁵ Implicit theories are based on the notion that translators "may make decisions without necessarily taking into account rational factors and without being aware of what they know or the basis of their decisions" (Reber, 1993:13).

2.3.8 Novice versus expert problem-solving behaviour

Problem solving in a translation task is inevitable. Translating a text entails a lot of decision making, including aspects regarding the ST, its author, the author's intention, the TT, the target audience, the translation's purpose, and language-related problems. In postulate (i), Pym claims that expert translators automatise some complex tasks but also shift between automatised routine tasks and conscious problem-solving.

Hunziker Heeb (2012) investigated the problem-solving processes of six experienced professional translators and eight MA translation students. Participants were asked to translate a short English (L2) journalistic article into German (L1) and with the help of online resources. Translation problems were categorised as problems on word, expression and context levels. Data were collected using retrospective verbalisations, screen recordings and eye tracking. She found that both groups showed about the same level of problem awareness. However, proportionally more professionals appropriately categorised two translation problems and adequately used external resources to find solutions. The professional translators also performed more steps (based on Nord's (2002) research process model) to solve translation problems than the students.

TransComp (Göpferich, 2013) investigated different measures used for 1) strategic (creative) behaviour and for 2) translation routine behaviour of 12 students of translation and ten experienced professional translators who had at least ten years of experience. The former behaviour was measured by means of: a) the extent to which participants in the study evidenced an awareness of the criteria that a specific TT section has to fulfil in order for it to be an adequate correspondent for the respective ST unit; b) participants' ability to switch between a routine mode of translation, assumed to involve low cognitive effort, and a creative and cognitively more demanding mode of translation; and c) the distribution of cognitively demanding decisions in relation to cognitively less demanding routine decisions. The last behaviour was measured through the number of comprehension problems the participants encountered in their translation processes. Professional translators invested less effort in nearly all decision-making categories (with regard to strategic competence), and were more successful in low-effort decision-making than the students. However, they also found that the professional participants in their study had not yet achieved expertise as their success rate in high-effort decisions (problem-solving) was only slightly higher than that of the students'.

Using TAPs, Shih (2015) investigated two experienced professional translators' problem-solving and decision-making behaviour during revision processes. She found that the translators first had to identify a translation problem, which may evolve during the revision process in either a divergent or convergent way. Thus, a single translation problem can be subdivided into smaller problems and be "tackled individually".

Araghian et al. (2018) investigated the impact of affective factors such as self-efficacy beliefs on the selection and application of translation problem-solving strategies by a group of four translator trainees. Data was collected through translation self-efficacy questionnaires (based on Bandura's self-efficacy theory), completing a translation task on *Translog* and TAPs. The researchers found that trainees who scored a low level of efficacy spend too much time translating owing to repeated attempts at production and extensive revision.

In summary, research shows that expert can identify translation problems better than student translators. Furthermore, they switch more effectively between high-effort problem solving and routine translation tasks. On the other hand, novices struggle to identify translation problems, and when they identify them, they are less able to point out the steps taken to solve these problems.

2.3.9 Novice versus expert decision-making behaviour

Haro-Soler (2017:199) defines self-efficiency in translation as "the confidence that a translator or translation student has in their abilities to translate". In postulate (j), Pym claims that expert translators display more realism, confidence, and critical attitudes in their decision-making.

Angelone (Angelone & Shreve, 2010) investigated uncertainty, uncertainty management and metacognitive problem-solving. The participants included one experienced professional translator and three student translators, and data was collected through TAPs and screen-recording. He found that the experienced professional translator displayed a high level of problem recognition, indicating a greater capacity for recognising the nature and scope of problems. He also believes that expert problem-solvers spend more time recognising the problems whereas students engaged more in solution evaluation. "The effective determination of the nature and scope of problems sets the stage for more efficacious subsequent solution proposals and solution evaluation" (Angelone & Shreve, 2010:32). Angelone further argues that students lack self-confidence in their problem-solving ability.

Borg (2017) investigated an experienced professional translator's decision making and alternative translation solutions in the literary translation process. Data was collected through TAPs, translator observation and analysis of drafts pertaining to decision-making processes behind four sets of written alternative translation solutions concerning a similar lexical item. The researcher found that the translator produced written alternative translation solutions for strategic reasons such as distributing tasks throughout the production process.

In summary, experts have been found to identify translation problems better and are more strategic when dealing with them. Hence, it enables them to solve the problems more efficiently. In contrast, novices struggle to identify translation problems owing to issues such as comprehension of the ST, transference of ST information or changing information in an appropriate manner. Hence, they are not confident with making decisions when having to deal with translation problems.

2.4 Conclusion

In conclusion, translation involves both a product and a process. On the one hand, it is about dealing with languages, function and cultures, and, on the other hand, having the necessary skills or translation competence to complete the task successfully.

In this chapter, the relevant background for my theoretical framework, namely product-oriented TA and TPR was given. With regard to TA, translation-related problems and factors pertaining to the translator make translation difficult. Second, the problem of equivalence was discussed from a linguistic as well as a systematic model. Third, an overview of shifts and norms in translation, as well as the latest translation methods and strategies used to analyse translation choices were outlined. In Chapter 3, these form the basis for my analysis of the translations done by the participants.

Regarding TPR, a historical overview of how TPR was presented. Recent comparative empirical studies on translation unit processing, revision behaviour, attention to the ST and TT, top-down processing, use of resources, awareness of theories, problem-solving and decision-making processes within TPR support Pym's postulates. However, the literature reveals contradictory evidence for postulates (a) as there are no significant findings regarding the strategies used by both groups. Moreover, for postulate (e), only one experiment has been conducted. In addition, sample groups for these isolated experiments are small, meaning the findings, while supporting Pym's postulates, cannot confirm them.

In the following chapter, the methodology for this study is discussed. Firstly, the theoretical framework for the product analysis and the process analysis is explained. Secondly, a review of the research questions is given. Finally, I discuss the analytical framework.

CHAPTER 3 METHODOLOGY

3.1 Introduction

The aim of this study is to investigate how the problem-solving strategies of expert translators differ from those of novices during the translation process. Pym's postulates are used as a framework for this study. The focus area of the study is translation studies and the application areas are product-oriented Translation Analysis (TA) and Translation Process Research (TPR). This study contributes toward more informed translator training.

The purpose of this chapter is to construct the theoretical framework for the study and describe the method and procedures followed in the research design. For all evaluative research, it is essential to have a coherent methodology and evaluative criteria. The analytical framework of the present study is based on mixed-method principles.

As discussed in Chapter 1.3, the main research question is:

What are the differences between third-year students of Language Practice and expert translators in the South African context in terms of Pym's postulates?

I also proposed the following secondary objectives based on Pym's (2011) postulates:

- RQ1: What kind of translation choices do participants make? (Postulate a)
- RQ2: Is there a difference in the processing of translation units between the groups? (Postulate b)
- RQ3: What is the average time each group spent on the revision task? (Postulate c)
- RQ4: How much changes were made during this particular task? (Postulate c)
- RQ5: How does the attention to both the source text (ST) and target text (TT) differ between the groups? (Postulate d)
- RQ6: To what extent does each group evidence top-down processing (beyond individual words)? (Postulate e)
- RQ7: To what extent does each group rely on external sources? (Postulate f)
- RQ8: To what extent does each group consciously relate theory to practice? (Postulate g)
- RQ9: To what extent does each group evidence conscious problem-solving strategies? (Postulate i)
- RQ10: To what extent does each group verbalise uncertainty/difficulty? (Postulate j)

In section 3.2, I discuss the theoretical framework regarding translation analysis and TPR. Section 3.3 presents the analytical research framework, and section 3.4 concludes the chapter.

3.2 Theoretical frameworks

The theoretical frameworks underpinning this study comprise, on the one hand, product-oriented translation analysis, for investigating RQ1 (postulate (a)), and on the other hand, process-oriented analysis (Carl & Schaeffer, 2016; Schwieter & Ferreira, 2017; Lacruz & Jääskeläinen, 2018) for investigating RQ2-RQ10 (postulates (b)-(g), (i) and (j)).

The theoretical framework for RQ1 is grounded in linguistic theories of translation equivalence. By following the linguistic approach, I am not abandoning descriptive theories. As discussed in Chapter 2.2, the descriptive approach aims to determine how translators actually translate. However, to determine whether the experts do use more paraphrase than literalism as Pym postulates, it is necessary to analyse the lexical items of the ST, looking at their TT equivalents, and to classify the participants' translation strategies accordingly. Furthermore, I also believe that translation requires making shifts, which is done by using strategies. From hereon, to avoid any confusion regarding terminology, I refer to *strategies* as the decisions translators make to solve translation problems, as opposed to *techniques*. I disagree with Molina and Hurtado Albir's (2002) distinction between *techniques* and *strategies* (as discussed in Chapter 2.2.4), as they fail to specify a difference between the two terms.

The theoretical framework for RQ2 to RQ10 is grounded in TPR. Three of the central elements of TPR are keylogging and eye-tracking instruments, the laboratory-experiments orientation, and the conceptualisation of cognitive processing as information processing (Jakobsen, 2017:39). The central hypothesis behind TPR is that analysis of behavioural user activity data (UAD) can facilitate “understanding of the cognitive processes of translating (reading ST, mapping ST meaning onto TT text, typing and visually monitoring TT production; coordinating reading, typing, and monitoring activity) and allow computational modelling of translation” (Hurtado Albir et al., 2015:12). For this study, the principal research instruments to study the cognitive processes are eye tracking and Retrospective Think-Aloud Techniques (RTAPs)¹⁶.

3.3 Analytical framework

In this section the analytical framework for this study is outlined, namely the participants used, the research procedure, data collection and data analysis.

In a mixed-method approach both qualitative and quantitative methods are used to collect and analyse data, and the data derived from the different methods are triangulated. Saldanha and O'Brien (2013:23) state that triangulation is “when two or more methods are used to collect and analyse data on the same research question”. According to Nightingale (2020:477) there are three

¹⁶ The abbreviation is based on the older term Retrospective Think-Aloud Protocols, which has since been deemed inaccurate. However, the abbreviation persists in the literature.

types of triangulation, namely convergence, complementary and divergence. The first type focuses on areas of overlap and accuracy between data sets collected using different methods. The second type builds a composite result from the results from different methods. The last type “can either indicate the methods or the results are flawed, or to be treated as new data and analysed to look for new insights.” In this study, I aim for convergence triangulation.

3.3.1 Participants

The participants for this study comprise two groups. The first group consists of 19 expert translators who were recruited by consulting SATI’s online database. The second group of 11 novice translators consists of students in their third year of Language Practice studies at the NWU. I aimed for 20 participants in each group but owing to Covid-19 lockdown restrictions, I only managed to collect data from 19 expert and 11 novice translators. The experts were tested at the following locations – at home (8), their workplace (5), the eye-tracking lab (2), a restaurant (2), and at the library (2). Ten out of the 11 novices were tested in the eye-tracking lab at the Vaal Campus, while one was tested in the library at the Potchefstroom Campus. All participants translate from their L2 (English) into their L1 (Afrikaans, Sesotho, isiZulu, German, French). This is to limit issues of translation direction, since it is generally believed that translation is better if done into one’s L1 (Pokorn, 2005; Bassnett, 2014; Rodriguez, 2016). The distinction between the two groups is mainly based on their translation experience.

3.3.2 Research procedure

For the experiment, participants were asked to complete the consent form (Appendix D) and a short questionnaire in order to collect their demographical information (Appendix E). Thereafter, they were given the English text for translation (Appendix F), for which time was given to 1) read through the text (orientation), 2) translate the text (drafting) and 3) revise their work and make changes if needed (revision). To prevent loss of the eye-tracking signal by their eyes leaving the screen, participants were asked to leave word(s) untranslated if they could not find an appropriate translation equivalent and would have consulted a dictionary. For the same reason, no online or offline translation aids were made available to participants. The text took approximately 20 minutes to translate and translators were asked to stop should they go over 30 minutes, because of memory limitations of the SMI data collection laptop. The task was recorded on SMI Experiment Centre computer software and by means of the SMI RED250mobile eye tracker. Finally, a RTAP followed, in which the participants were invited to view their translations and comment on their decisions or actions. Unfortunately, owing to not having access to the SMI BeGaze software after participants finished their tasks, I was unable to view the playback of their recorded session with them, which might have prompted them to speak more.

3.3.3 Data collection

The data was collected through demographical questionnaires, translation products, eye tracking, manual logging participants' changes, screen recording and RTAPs. The majority of methods chosen to investigate each postulate are used for the first time, as the methods for the studies on which Pym based his postulates have not yet existed or were not used.

Demographical questionnaire

A demographical questionnaire (Appendix E) was used to gather data of the expert participants' years of experience as a translator, employment status (freelance or company), highest level of qualifications, and the language combination(s) they work in. In the case of the novices, it was already known that they were third-year undergraduate students, and had not yet engaged in any on-the-job training. However, they did need to indicate their language combinations.

Text for translation

I chose an English text on the topic of gardening (see Appendix F) that appeared in *Home* magazine in 2014. I chose the text because it is not too difficult to read, nor too technical, nor too oriented toward a specific cultural viewpoint. The text does, however, include jargon relating to gardening, and contains descriptive adjectives and phrases, as well as other words that potentially pose problems to translators.

In order to obtain data to answer RQ1, I collected the participants' translations, in particular their choices for 13 preselected ST lexical items that could potentially cause problems. These were identified and categorised using Baker's (2018) list of translation problems (presented in Chapter 2.2.1). The 13 preselected items include *Peerless Primulas, cultivars, long-lasting blooms, bedding plants, stunning, terracotta pots, gorgeous, frail and fragile, semi-shade or partial sun, fuss-free, showiest, vibrant, rose*. Eight words presented problems at word level, which include difference in frequency and form, source language word is semantically complex, use of loan words, and differences in expressive meaning. Five words presents problems above word level, which include problems of alliteration and anglicism.

Table 3-1 presents the 13 selected ST lexical items that potentially pose problems for translators and my categorisation in terms of Baker's (2018) categories. By way of illustration, Afrikaans dictionary or closest linguistic equivalents (taken from PharosOnline) are presented.

Table 3-1: Translation problems in the ST

ST words	Dictionary equivalents (PharosOnline)	Translation problem (Baker, 2018)
Peerless Primulas	Peerless: weergaloos Primula: primula; sleutelblom	Difference in frequency and form (-less) (Baker, 2018:22) Above word level: alliteration
cultivars	kultivars; kweekvariëteite	Anglicism (Carstens, 2011:317) – it relates to Baker’s problem of the use of loan words (Baker, 2018:22)
long-lasting blooms	long-lasting: langdurige blooms: bloeisels; blomme	Difference in purpose and frequency of using a specific form (Baker, 2018:22). Above word level: collocation that needs to be paraphrased in Afrikaans (Baker, 2018:52)
bedding plants	beddingplant	Above word level: Anglicism (unnatural collocation) (Carstens, 2011:317)
stunning	bedwelmend; geweldig	Source language word is semantically complex (Baker, 2018:19) Differences in expressive meaning (Baker, 2018:20)
terracotta pots	terracotta: terracotta pots: potte	Use of loan words in the text (Baker, 2018:22)
gorgeous	pragtig, skitterend	Differences in expressive meaning (Baker, 2018:20) Lacks hyponym (Baker, 2018:20)
frail and fragile	frail: teer; tinger(ig) fragile: teer; tinger(ig)	Above word level: (1) alliteration, (2) target language words interchangeable
semi-shade or partial sun	semi- shade: skaduwee; skadu * need some relief from intense heat of late afternoon sun (<i>The Spruce</i> , 2021) partial: gedeetelik sun: son; sonlig	Gardening term – the two terms look similar, but refer to different hours of sun per day and the intensity of the sun during the day (<i>The Spruce</i> , 2021)

	* need 4-6 hours sun p/day (<i>The Spruce</i> , 2021)	
fuss-free	fuss; bohaai	ST word not lexicalised in the target language (Baker, 2018:19)
showiest	windmakerig, spoggerig	Differences in expressive meaning (Baker, 2018:20)
vibrant	trillend; vibrerent	Source and target languages make different distinctions in meaning (Baker, 2018:19)
rose	roos; rooskleur	Roses come in various colours, which makes it difficult for all languages to translate. This word especially poses a translation problem to African languages as most of these languages distinguish only between basic colours such as black, white, red, green, yellow, and blue (<i>Omniglot</i> , 2021).

In summary, the lexical items that pose problems to Afrikaans participants are at and above word level, and include: differences in frequency and form; the ST word is semantically complex; differences in expressive meaning; the use of loan words; the target language lacks a hyponym; the ST word is not lexicalised in the target language; source and target languages make different distinctions in meaning; and alliteration (problems above word level). One of the biggest problems that participants translating into African languages have is that many of the ST words are not lexicalised in their languages, which may result in using loan words or by paraphrasing (see Wallmach & Kruger, 1999; Van Huyssteen, 2012), which might potentially impact their translation choices.

Participants' translation choices for these items were transferred to an Excel worksheet and categorised according to the underlying strategy. The analysis of the other languages is presented in Appendix H. My own language repertoire allowed me to analyse the German, French, and Afrikaans translations myself. For isiZulu and Sesotho, I consulted language experts and Google Translate. I also used PharosOnline to check where I was unsure whether the meaning of the TT segment was the best equivalent for the ST segment.

Eye tracking

In order to obtain data for RQ2 and RQ5, the SMI RED250mobile eye tracker was used. The SMI software is a program that "enables researchers to record and study human reading and writing processes on a computer, and an instrument to acquire objective, digital data of human translation processes" (Carl et al., 2016:5). The main objective in using SMI Experiment Suite and SMI BeGaze in the present study is the program's ability to obtain eye-tracking data, in this case

saccade count and average saccade amplitude, average dwell time, revisits, fixation count and fixation time and average fixation duration, as discussed in Chapter 1.6.2.

One of the biggest advantages of eye tracking is that it records an array of rich data such as gaze data, fixation data, saccadic data, and heatmaps. Eye tracking has three main disadvantages. Firstly, most eye trackers are too heavy to carry, and therefore the setting is limited (Saldanha & O'Brien, 2013:138). Secondly, some are too invasive for a naturalistic task, forcing participants to keep their heads unnaturally still, which may have an effect on the ecological validity of the data. Another disadvantage is that the computer on which the software is installed must be used, which can make it impractical. Additionally, there are some disadvantages regarding analysis relating to poor data quality. This is due to the fact that eye trackers are not consistently 100% accurate. This is caused by factors such as freedom of head movement, and if participants are allowed to use hard-copy resources, some of the gaze data are lost (Hvelplund, 2014:206).

The SMI eye tracker that I used is portable and connects to a laptop with a once-off license. It provides very accurate data and allows moderate head movements. However, the laptop has very limited RAM capacity, which affected my research design. Firstly, experiments could not exceed 30 minutes or the system would hang. Secondly, the system could not cope with both the SMI eye tracking software and a key-logging program, so I had to analyse keyboard activity manually which was very time-consuming.

For RQ2, I investigated the saccadic data, including how many saccades (defined in Chapter 1.6.2 as saccade counts) participants made and the distance (in degrees) (defined in Chapter 1.6.2 as average saccade amplitude) travelled by the eye gaze between fixation points, known as the saccade amplitude. The average saccade amplitude is measured by taking the “distance from start to end point of a saccade (average velocity * saccade duration)” (SMI, 2017:292). This data is collected by the SMI software and exported through SMI BeGaze, and can be extracted under the menu “Event Statistics”. As noted in Chapter 1.6.2, we proposed that saccadic data indicates the length of the segment (translation unit) that the participant is focussing on.

For RQ5, firstly, I created Areas of Interest (AOIs) for both the ST and the TT in SMI BeGaze during two phases of the translation task, namely the drafting phase and the revision phase. In other words, I created two AOIs, namely a translation phase and a revision phase. In order to explore activity during these phases, I first collected the dwell times (presented in milliseconds), number of revisits, fixation counts, fixation times and the average fixation durations (presented in milliseconds) on the ST and TT of each group for both phases.

Secondly, I collected the transition counts between the ST and TT AOIs. Within SMI BeGaze, researchers can collect transition matrix data. With this data, I can see how participants distributed their gaze from the ST to the TT and from the TT to the ST in each phase.

Both sets of data enable me to see how participants' attention was distributed between the ST and TT, first during the translation phase and second during the revision phase.

Screen recording

Screen recordings records an avi.-file of all on-screen activity during the course of a task. According to Angelone (2012:47), screen recording "enables researchers, trainers and trainees to directly observe several activities performed during the translation task such as the typing behaviour."

In the present study, screen recordings were collected by SMI Experiment and used to collect data for RQ3 regarding the time spent on the revision process. The beginning of the revision phase is marked by writing the last word and full stop in their translations (if participants completed the task, otherwise where they stopped translating). The end of the revision phase is marked by the end of the screen recording video. The three phases of the translation process can clearly be distinguished in the footage. The time-stamps of the events are also available from the screen recording. Thus, the time spent in revision by each participant could be calculated by subtracting the start time from the end time.

The screen recordings were also used to construct the type and number of changes for RQ4 (Appendix J). Ideally, a keylogging program would have provided richer data. The NWU has access to a keylogging program, *Translog*. However, *Translog* only allows the user to work within the keylogging environment and any activity outside of it does not get recorded. Secondly, and more important for the present study, *Translog* stops recording after 20 minutes. Because of these limitations, in order to collect the keylogging data, I manually logged the changes by watching the participants' screen recordings. During each phase (translation and revision), I marked insertions when a word was inserted in the TT that was not there before. Deletions were also marked during each phase. Both insertions and deletions were marked when participants started typing a word, and deleted it again, and sometimes inserted it again. When participants substituted another word, this was marked as a substitution in order not to confuse it with insertions and deletions. I did not include typos that were corrected.

RTAPs

Data for RQ6 to RQ10 were obtained through RTAPs with each participant while reviewing their translations with them. As discussed in Chapter 2.3.1, RTAPs are verbal reports recorded after the translation process that aims to provide information regarding translation problems and strategies used to solve these problems. These interviews were then transcribed and data concerning evidence of top down-processing, use of external resources, translation theories, conscious problem-solving, and expression of difficulties/uncertainties are collected. The data was captured on a Microsoft Excel sheet and presented as narratives. Within the protocol, I did not ask them structured questions as I was hoping that they would voluntarily speak about the translation task.

However, when they fell silent, I did ask participants questions regarding the difficulty of the translation as well as whether there were words or phrases that they would have liked to look up in the dictionary, and what these words or phrases were. I also asked them where they most likely would have found the text (e.g. in a magazine, handbook, etc.), and who the target audience would be (see Appendix I).

As discussed in Chapter 2.3.1, RTAPs are more suitable than TAP when dealing with novices, who are not always able to verbalise their decisions while translating. Englund Dimitrova and Tiselius's (2009) discovered that when participants were given the chance to observe a replay of their keystrokes as they were being interviewed, they immediately and very exactly recalled what had been on their mind at a certain point in time during a translation task. The advantage of RTAPs, as opposed to TAPs, is that there is no interference during the translation task such as slowing down the translator or the translator having to divide their attention between competing cognitive demands. However, a disadvantage of RTAPs is that participants can fail to comment, or be selective about what they comment on, e.g. their thoughts and actions during the process (Englund Dimitrova & Tiselius, 2012), leading to inaccurate or incomplete information.

An outline of how the data are collected for each research sub-question is presented in Table 3-2:

Table 3-2: Outline of data collection

Research sub-question	Postulate	Instrument	Data
–	–	Demographical questionnaire	Years of experience, SATI accreditation, employment status, highest degree obtained, language combination
RQ1	a	Text for translation	Translation product
RQ2	b	Eye tracking	Saccade count, average saccade amplitude
RQ3	c	Screen recordings	Time duration of revision phase
RQ4	c	Screen recordings (manual change log)	Insertions, deletions, changes made in the drafting and revision phase.
RQ5	d	Eye tracking	Average dwell time, revisits, fixation count, fixation time, average fixation duration, transition counts
RQ6	e	RTAPs	Verbalisation of top-down processing

RQ7	f	RTAPs	Verbalisation of use of external resources
RQ8	g	RTAPs	Verbalisation of principles or theories
RQ9	i	RTAPs	Verbalisation of conscious problem-solving
RQ10	j	RTAPs	Verbalisation of difficulties/uncertainties

As displayed in Table 3-2, data for RQ1 is collected by means of the translation products, specifically looking at potentially problematic lexical units. Data to answer RQ2 is obtained through eye tracking, namely saccade count and average saccade amplitude. Data for RQ3 is obtained through the screen recordings, namely the time duration of the revision phase. Data for RQ4 is obtained through the change log data collected by means of the screen recordings, specifically insertions, deletions and substitutions made. Data for RQ5 is obtained through eye tracking, namely the dwell time, revisits, fixation count, fixation time, the average fixation duration for each AOI for each phase, and participants' transition counts for each phase. Finally, the data for RQ6 to RQ10 are obtained through annotating transcriptions obtained through RTAPs.

3.3.4 Data analysis

The demographical questionnaires of expert translators were analysed to obtain information regarding the experts' average years of experience, employment status, highest degree obtained, and the spectrum of their language combinations, and the student group's spectrum of language combinations.

In order to answer **RQ1**, I identified participants' translated segments for the selected ST items, and categorised the shifts reflected in terms of the potential strategies from which they originated, based on the literature (see Chapter 2.2.4 for an overview). I relied mainly on Molina and Hurtado Albir (2002) and Baker's (2018) lists of strategies. Furthermore, I followed Wehrmeyer and Antunes (2020) (see Chapter 2.2.4) and Pym's (2011) broad idea of literal versus paraphrase (Pym's personal communication)¹⁷, and grouped the different strategies into three main groups, namely i) direct (literal, L) translation and (ii) more creative translation (paraphrase, P), and (iii) other (O):

¹⁷ Pym himself did not try to experimentally verify his postulate. In personal correspondence with the researcher, he noted that he based his notion of strategies on three dated publications, namely Lörscher (1991), Kussmaul (1995) and Jensen (1999), and not on the more recent strategies proposed by Baker (2018) and Molina and Hurtado Albir (2002), but that he kept the term "paraphrase" deliberately wide, inviting researchers to conceptualise the concept themselves.

- Strategies were categorised as literal (L) if they entailed borrowing, calque, and literal translation (Molina and Hurtado Albir, 2002; see also e.g. Vinay & Darbelnet, 1995)
- Strategies were categorised as paraphrase (P) if they entailed adaptation, amplification, compensation, description, discursive creation, generalisation, linguistic amplification, particularisation and variation (Molina and Hurtado Albir, 2002; see also e.g. Vinay & Darbelnet, 1995; Vazquez Ayora, 1977);
- Transposition and modulation were classified as literal if they entailed an obligatory shift, otherwise as paraphrase (Molina and Hurtado Albir, 2002; see also Vinay & Darbelnet, 1995, Vazquez Ayora, 1977);
- Particularisation and generalisation were classified as literal if the target language lacked a full linguistic equivalent (Molina and Hurtado Albir, 2002; see also e.g. Vinay & Darbelnet, 1995);
- The use of a close but not full equivalent was classified as literal if the target language lacks a full linguistic equivalent and the word was the closest in meaning to the source language word – i.e. the first entry after the headword in a bilingual dictionary.
- Strategies of 'Other (O)' comprise Baker's (2018) strategy of deliberate omission, as well as instances where participants left the word untranslated.

Thereafter, I calculated the totals for the literal and paraphrase strategies for each group. The number of translation choices in the text (13) means that in total there were $13 \times 11 = 143$ strategies for the student group of 11 participants and $13 \times 19 = 247$ for the expert group of 19 participants. I then calculated the percentages for each category for each group based on the totals for that particular group. These percentages were then compared to see what strategies were used most by which group. A two-tailed unequal variance test was done for the paraphrase strategies as well as the literal strategies to determine whether the differences between the two groups are significant.

In order to meet objective **RQ2**, I compared the averages of the saccadic data for each group, specifically the saccade count (variable S), and the average saccade amplitude (variable A). I then used the two-tailed unequal variance t-test (since the sample numbers for each participant group differed) to determine whether the differences between the two groups are significant.

As for **RQ3**, the time spent by each participant on revision was calculated (in minutes) and the average time spent on revision was then calculated for each group and compared. As above, I then used the two-tailed unequal variance t-test to determine whether the differences between the two groups are significant.

In relation to **RQ4**, I calculated the average total activity for each participant. This was done by adding up all the insertions, deletions and changes made by each participant. Thereafter, I calculated and compared the averages for each group. As above, I then used the two-tailed

unequal variance t-test to determine whether the differences between the two groups are significant.

In order to meet **RQ5**, for each AOI (ST1, ST2, TT1, TT2) I obtained from the SMI BeGaze application the total dwell times, revisits, fixation counts, fixation times, average fixation durations, and transition counts for each participant. I then calculated for each participant the totals of each variable for the ST (ST1 total + ST2 total) on the one hand, and TT (TT1 total + TT2 total) on the other. From these calculations I could calculate the percentage distribution i) over the ST and ii) over the TT, e.g.

$$\%ST \text{ dwell time} = (\text{ST1 total} + \text{ST2 total}) / (\text{ST1 total} + \text{ST2 total} + \text{TT1 total} + \text{TT2 total}).$$

SMI BeGaze also allowed me to determine the transitions, which was easily exportable from the transition matrix function. I calculated the average transitions made during the two phases (translation task and the revision task) to see in which phase the most transitions were made, and by comparing the two groups. Thereafter, I used the two-tailed unequal variance t-test to determine whether the differences between the two groups are significant.

In response to **RQ6 to O10**, the transcriptions of each participant's RTAPs were analysed by annotating each time a participant made a comment that indicated whether they displayed top-down processing (RQ6), commented on their dependence on external resources (RQ7), whether they base their decisions on principles and theories (RQ8), whether they evidenced conscious problem solving (RQ9), and whether they commented on uncertainties/difficulties (RQ10). As I was only interested in seeing whether the participants demonstrated awareness, and not in the actual frequencies, the data was simplified by tabling YES when participants commented on these issues, and NO when no comments were made on these issues. The data was then quantified by totalling the number of participants in each group who generated YES, and those who generated NO, and then calculating the percentages of participants in each group for each answer for each research question. These percentages were then compared across the two groups. Because of the small sample sizes and the presence of zeros in the data, it was not possible to use inferential statistics (e.g. the chi-squared test of independence) to confirm whether there were significant differences between the two groups.

3.4 Conclusion

This chapter presents the theoretical and analytical frameworks of the study. The product analysis entails identifying translation problems in the ST using Baker's (2018) list of translation problems, and then identifying and categorising the strategies used by the participants as Literal (L), Paraphrase (P) or Other (O), using Wehrmeyer and Antunes' (2020) categorisations (which in turn are based on Molina and Hurtado Albir's (2002) and Baker's (2018) list of strategies). The process analysis is done through eye-tracking (specifically by obtaining saccade counts, average saccade

amplitudes, dwell times, revisits, fixation counts, fixation times, and average fixation durations), screen recordings, and RTAPs, with the aim of calculating and comparing the results for the two groups.

In the next chapter, the findings of the study are presented in order to construct a composite picture of the difference in problem-solving processes of novices and experts.

CHAPTER 4 RESULTS

4.1 Introduction

In this chapter, I present the data collected from the demographical questionnaires, translation products, eye tracking, screen recordings, and RTAPs.

4.2 Demographical questionnaire

The students were all in their third year of study in the programme Language Practice, and none of them had work experience in the field. Regarding their L1, seven (64%) of the students are Afrikaans, three (27%) are Sesotho and one (9%) is isiZulu. All the novices translated from English into their L1s.

Table 4-1: Student participants' L1

Student participants	L1
7 (64%)	Afrikaans
3 (27%)	Sesotho
1 (9%)	isiZulu

Figures 4-1 to 4-5 present the experts' biographical data, namely their years of experience working as a translator, their accreditation status, their employment status (company, freelance or both), their highest degree obtained (undergraduate, honours, masters or PhD) and the language combination(s) they work in.

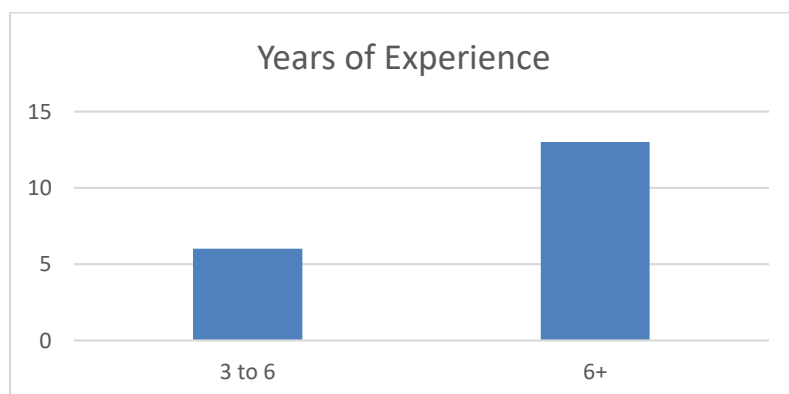


Figure 4-1: Experts' years of experience

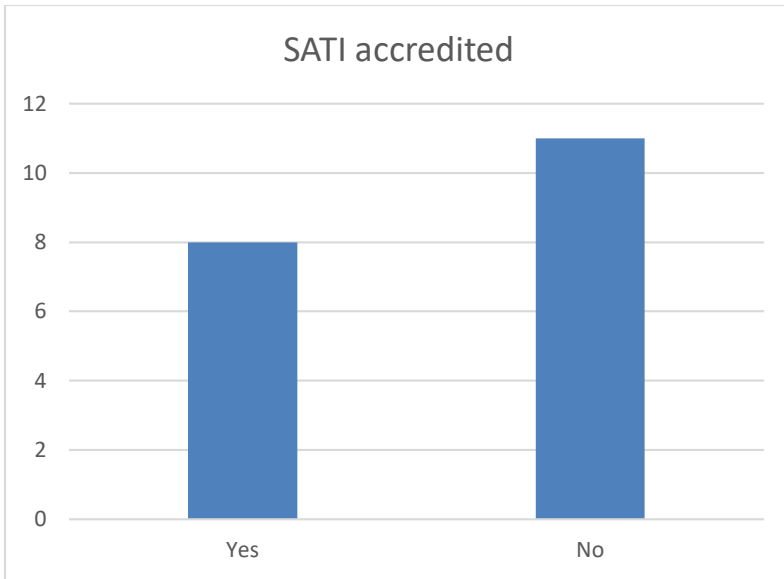


Figure 4-2: Experts' accreditation status

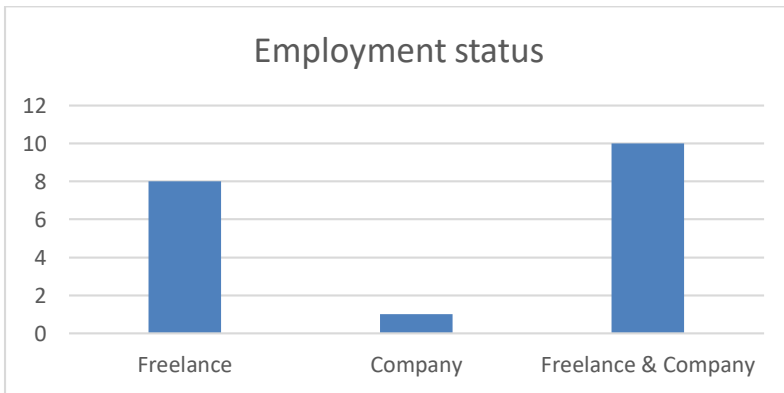


Figure 4-3: Experts' employment status

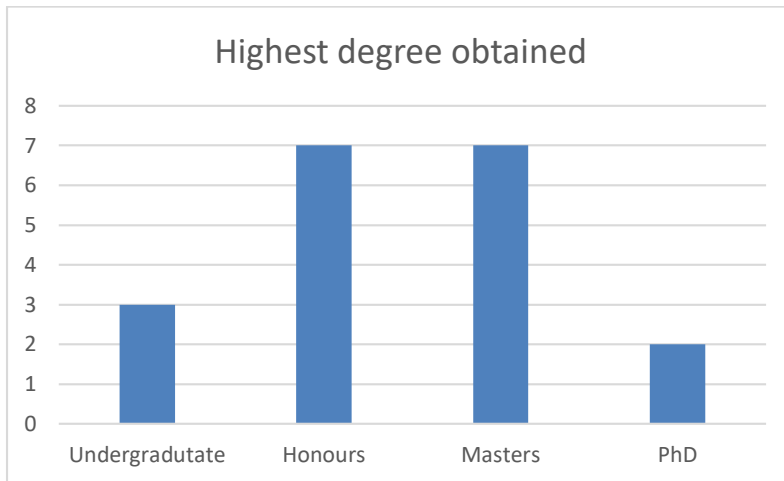


Figure 4-4: Experts' highest degree obtained

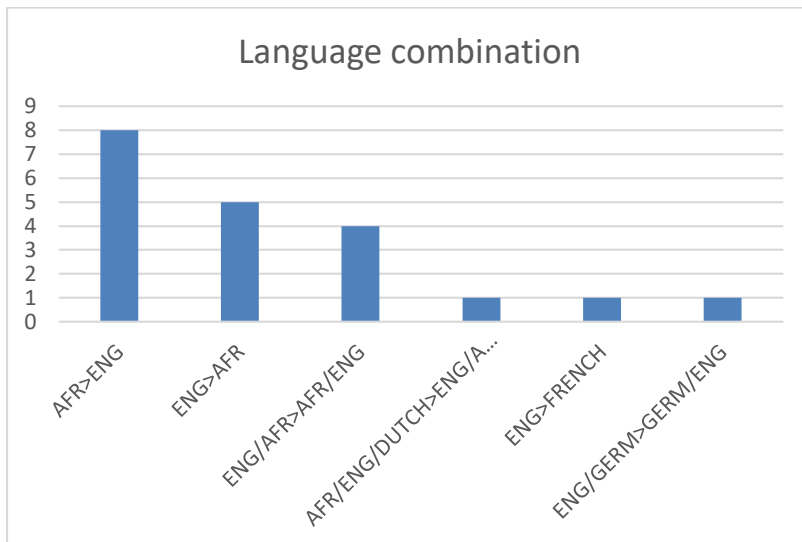


Figure 4-5: Experts' language combination

At the time of data collection, thirteen (68%) of the experts had more than six years' experience, and six (32%) had between three and six years' experience. Eleven (58%) was not SATI accredited opposed to eight (42%) who was. Eight (42%) have worked primarily as freelancers, one (5%) have experience working for a company, and ten (53%) have experience both as a freelancer and working for a company. All had obtained university degrees: four (21%) possessed an undergraduate qualification, six (32%) an honours degree, seven (36%) a master's degree, and two (11%) participants had a PhD. The experts' L1s are Afrikaans (90%), German (5%), and French (5%). Five (26%) experts work mainly from English to Afrikaans, one participant (5%) works from English to French, seven (37%) participants work mainly from Afrikaans into English, four (21%)

translate between English and Afrikaans, one (5%) participant translates between Afrikaans, English and Dutch, and another participant (5%) translates mainly between English and German.

In essence, more than a third of the experts had more than six years' experience, worked both as a freelancer and at a company, obtained a postgraduate degree, and have experience in translating. Most choose to translate from or into their L1s.

4.3 RQ1: Translation strategies

The purpose of investigating the two groups' translation choices is to determine whether experts use more paraphrase as a means to solve translation problems as Pym postulates. As discussed in Chapter 3.3.4, participants' translation choices are categorised as literal (L), paraphrase (P) and other (O). The data is presented in its entirety in Appendix G, and what follows is an examination of overall trends per ST item.

- Peerless primulas

Most of the novices (63,6%) did not translate the heading. Two novices under-translated the phrase, e.g. *Primulas sonder 'n maat* ('Primulas without a partner'); *Primulas tse senang di thotsi* ('Primulas that aren't stupid'), and one novice translator successfully used paraphrase and kept the alliteration, e.g. *Portuurlose primulas*.

Most of the experts (36,8%) used paraphrase, of which two participants kept the alliteration, e.g. *Pragtige primulas* ('Beautiful primulas'). Furthermore, 26% did not translate the heading, and 21% translated it literally, e.g. *Weergalose primulas*.

- cultivars

Most of the novices (45%) did not translate this word, while 27% used paraphrase, e.g. *izitshalo ezahlukene* ('different plants'), and 18,2% translated it literally, e.g. *kultivars*.

Most of the experts (73,7%) translated this word literally, e.g. *kultivars*, and 21% used acceptable paraphrase strategies, e.g. *soorte, espèces* ('species').

- long-lasting blooms

Most of the novices (81,8%) used paraphrase, whereas 18,2% did not do so. Some of the novices who used paraphrase mistranslated this unit, e.g. *ewigdurende bloeisels* and *makala a asa feleng* ('everlasting flowers'), *lang blomtyd blomme* ('long bloom time flowers'), *nokuqhakaza okuthatha isikhathi* ('time-consuming flowering').

Most of the experts (52,6%) used paraphrase, e.g. *blomme wat lank hou* ('flowers that last long'), *blomme wat lank mooi bly* ('flowers that stays beautiful'), whereas 47,4% translated it literally, e.g. *langdurige blomme*.

- bedding plants

Most of the novices (72,7%) used paraphrase and omitted 'bedding', e.g. *dipalesa* ('flowers'), *jalo*, *dimela*, *zjalo*, *plante* ('plants'), and 27,2% translated it literally.

Most of the experts (57,9%) translated this item literally, e.g. *beddingplante*, whereas 31,6% used paraphrase, e.g. *plante wat gewoonlik in beddings geplant word* ('plants that are usually planted in beddings').

- stunning

All of the novices used paraphrase, e.g. *merkwaardig* ('remarkable'), *pragtig* ('beautiful'), *spoggerig* ('fancy'), *beeldskoon* ('beautiful'), *asemrowend* ('breathtaking'), however, 45,5% under-translated this item, e.g. *mooi*, *ntle* ('pretty').

Most of the experts (94,7%) paraphrased this item, e.g. *treffend* ('striking'), *fantasties* ('fantastic'), *asemrowend* ('breathtaking'), and only one participant omitted this item.

- terracotta pots

All the Afrikaans novices (64%) translated this ST item literally (*terracottapotte*), whereas all the African language students (36%) used paraphrase, e.g. *poto tsa dipalesa*, *dipoto tsa malomo*, *poto tsa dipalesa* ('flowerpots'), *kwamabodwe wezitjhalo* ('pot plants').

The majority of the experts translated this item literally, e.g. *terracottapotte*, whereas 15,8% of the participants used paraphrase, e.g. *kleipotte* ('clay pots').

- gorgeous

Most of the novices translated this unit literally, e.g. *motle*, *metle*, *pragtig* ('beautiful'), whereas 36,4% used paraphrase, e.g. *khahlise* ('pleasing'), *eqhakazayo*, ('vibrant').

Most of the experts (52,6%) translated this item literally, e.g. *pragtig* ('beautiful'), whereas 42,1% used paraphrase, e.g. *wonderlike* ('wonderful'), *asemrowende* ('breathtaking'), *treffende* ('striking').

- frail and fragile

None of the novices were able to maintain the alliteration in their translations. The majority of the novices mistranslated or under-translated this item, e.g. *hase hangata a leng bonojwana* ('not usually soft'), *hadishwe ha bobebe ebile hadi robehe feela* ('easily breakable'), *swak* ('weak'), *bros* ('brittle'), *breekbaar* ('breakable').

Most of the experts used paraphrase; however, they also under-translated this item, e.g. *swak en breekbaar* ('weak and breakable'), *breekbaar of fyn* ('breakable or fine'). Only 15,8% preserved the alliteration, e.g. *fyn en fragiel*, *zart und zerbrechlich*, *broos en breekbaar*.

- semi-shade or partial sun

Most of the novices translated this item literally, e.g. *semi-koelte of gedeeltelike son*, and 27,2% used paraphrase, e.g. *kunomthunzi omncane or elangeni kancane nje* ('little shade or little sun'). Some novices also mistranslated this item, e.g. *meriting kapa letsatsing lesa cheseng haholo* ('in the shade or in very hot sun'); *moo honang le merithinyana kapa letsatsi lesa tjabang haholo* ('with little or no sunshine').

All the experts translated this item literally, e.g. *semi-skaduwee of gedeeltelike son*, *halfskadu* of *gedeeltelike son*.

- fuss-free

Most of the experts used paraphrase, e.g. *sa thlokeng mosebetsi haholo* ('not too much work'), *maklike*. However, several novices under-translated the item, e.g. *nodig nie baie nie* ('doesn't need much'), *fuss-vrye*, *min fuss* ('not a lot of fuss').

All the experts translated this item by using paraphrase, e.g. *sonder fieterjasies*, *moeitevrye*, *geen fiemies nie*.

- showiest

Most of the novices used paraphrase, e.g. *een van die mooiste* ('one of the most beautiful'), *skouagtigste* ('most spectacular'), one student translated literally, e.g. *spoggerige* ('showy'), and one under-translated the item, e.g. *'n blom wat afshow* ('a flower that shows off').

Most of the experts paraphrased this word. Two participants did not attempt to translate the word, and owing to time constraints, another two also did not translate the word.

- vibrant

Three of the novices did not translate this item and one translated it to a non-existent Afrikaans word, e.g. *vibrante*.

Most of the experts paraphrased it, e.g. *helder* ('bright'), *lewendige* ('lively'), *lewenslustige* ('cheerful'), *kräftigen* ('strong'), and three did not translate this unit owing to time constraints.

- rose

All the novices translating into Afrikaans translated this item literally, e.g. *roos*, *rooskleurig* ('rose-coloured') whereas the African language students either translated it as 'red' or they did not translate the item owing to the time constraint.

Most of the experts (47,4%) translated literally, e.g. *rooskleurig*, whereas 36,8% used paraphrase, e.g. *roospienk* ('rose pink'), *ligpers* ('light purple').

In summary, the experts did not paraphrase more than the novices. However, although the novices used more paraphrase than literalism, they mistranslated, under-translated and mostly did not translate some of the ST items at all. An overview of participants' use of strategy can be seen in Figure 4-2 below.

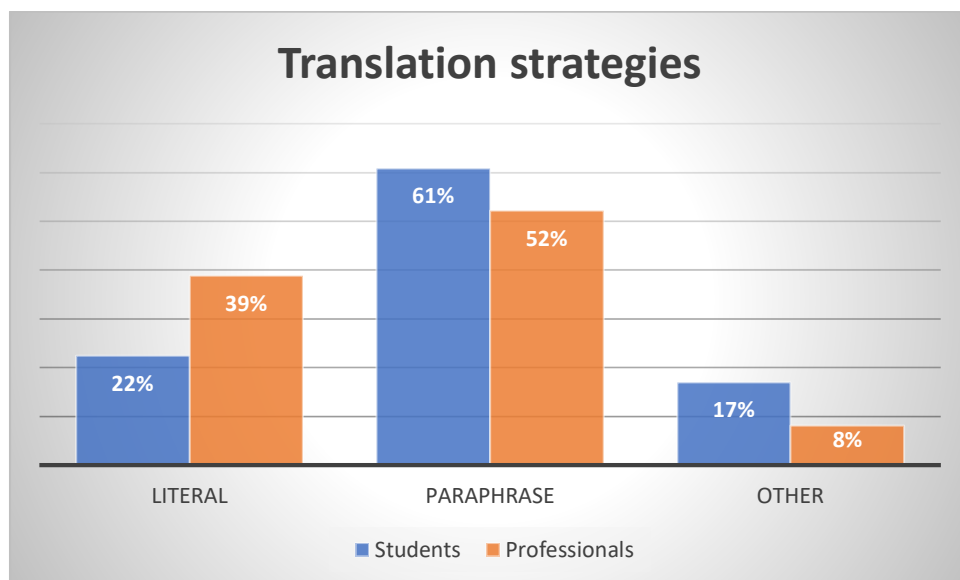


Figure 4-6: Translation strategies of novices and experts

In order to see if the findings are significant, a t-test for the use of literal strategies (Table 4-2) as well as paraphrase strategies is done (Table 4-3).

Table 4-2: T-test: two-sample assuming unequal variances (literal strategies)

	<i>Literal strategies (Novices)</i>	<i>Literal strategies (Experts)</i>
Mean	2.818181818	5.105263158
Variance	5.563636364	2.877192982
Observations	11	19
df	16	
t Stat	-2.821158173	
P(T<=t) two-tail	0.012292579	

t Critical two-tail	2.119905299	
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In Table 4-2, the t-test (two-tailed; unequal variances) for literal strategies used is presented. The mean refers to the average paraphrase strategies used by each group. The variance reports a confidence interval for the difference between the groups, the observations refer to the student group (consisting of 11 participants) and the experts' group (consisting of 19 participants). The degree of freedom (16) refers to the values in the study that has the freedom to vary. The t-value (-2,82) is the ratio of the difference between the mean amongst the two sample sets and the variation that exists within the sample sets. The critical value (2,12) divides the scale of the t-test statistic into the rejection region and non-rejection region, where p-value (0,01) is the level of marginal significance.

The findings of the t-test show significant findings in the use of literal translation strategies. Experts used this strategy considerably more than student participants and with more success. This also indicates that using a literal translation strategy is not necessarily the wrong choice.

Table 4-3: T-test: two-sample assuming unequal variances (paraphrase strategies)

	<i>Paraphrase strategies (Novices)</i>	<i>Paraphrase strategies (Experts)</i>
Mean	7.909090909	6.842105263
Variance	4.890909091	1.807017544
Observations	11	19
df	14	
t Stat	1.452340919	
P(T<=t) two-tail	0.1684492	
t Critical two-tail	2.144786688	

In Table 4-3, the t-test (two-tailed; unequal variances) for paraphrase strategies used is presented. There is a no significant difference in the use of paraphrase between the two groups (df = 14; t-value = 1,45; critical value = 2,14; p = 0,17). However, the findings show that novices made more

mistranslations or simply did not translate the words at all; in other words they were not as equipped as the experts when it came to making informed decisions by themselves.

4.4 RQ2: Processing of translation units

Postulate (b) claims that experts process larger translation units. In order to investigate this postulate, I compared the average saccade count (variable S) and the average saccade amplitude (variable A) for each group. Eye-tracking data of two participants (S09 and P05) were discarded owing to one participant having poor eyesight and the other for having a poor eye-tracking signal.

4.4.1 Saccade count

Table 4-4 shows that, on average, experts made (12%) fewer saccades than novices, which is an indication that they did not have many jumps between fixation points and therefore processed larger units of text at a time.

Table 4-4: Average saccade counts of novices and experts

Novices	Saccade count	Experts	Saccade Count
S01	817	P01	360
S02	1455	P02	972
S03	1352	P03	1066
S04	1161	P04	636
S05	735	P06	1400
S06	489	P07	1109
S07	935	P08	250
S08	1503	P09	569
S10	738	P10	92
S11	1169	P11	1134
		P12	1563
		P13	407
		P14	669
		P15	1425
		P16	861
		P17	866
		P18	749
		P19	541
Mean	1035.4	Mean	814.94
Highest value	1503	Highest value	1563
Lowest value	735	Lowest value	92
Standard deviation	343.77	Standard deviation	417.50

However, in the t-test (two-tailed, unequal variance), there was no significant difference in the number of saccades between the two groups (df = 22; t-value = 1,50; critical value = 2,07; p = 0,15). The lack of statistical significance therefore means that although the findings support Pym's postulate, they cannot confirm it.

4.4.2 Average saccade amplitude

The experts' average saccade amplitude is 78% more than that of the novices (Table 4-5). This result complements the findings of the saccade count because it shows that the experts' jumps were much longer than those of the novices, i.e. they processed more text in one fixation than did the novices. By contrast, the novices made shorter jumps and thus more saccades to the next fixation point, indicating that they processed shorter units at a time.

Table 4-5: Average saccade amplitude of novices and experts

Novices	Average Saccade Amplitude [°]	Experts	Average Saccade Amplitude [°]
S01	2.8	P01	18
S02	4.2	P02	2.5
S03	5.6	P03	3.6
S04	6.2	P04	6.3
S05	5.4	P06	2.5
S06	5.5	P07	7
S07	4.8	P08	34.4
S08	5.3	P09	21.1
S10	4.1	P10	9.8
S11	3.9	P11	10.4
		P12	4.3
		P13	5.9
		P14	19.6
		P15	10.2
		P16	2.6
		P17	5.7
		P18	4.2
		P19	7.1
Mean	4.78	Mean	9.73
Highest value	6.2	Highest value	34.4
Lowest value	2.8	Lowest value	2.6
Standard deviation	1.02	Standard deviation	8.45

The t-test shows a significant difference in the average saccade amplitude (df = 18; t-value = -2,45; critical value = 2,10; p = 0,02). Hence, the experts' distance between fixation points are further

away from that of the novices, which indicates that they process larger translation units. This confirms Pym's postulate (b) (RQ2).

However, it is also evident that the average saccade amplitude varies among experts, indicating that not all experts process larger units of text in one go,

4.5 RQ3: Time spent on revision

By looking at the scan path videos, I calculated the average time (presented in minutes in Table 4-6) each participant spent on the revision task. On average, the experts spent 1,61 minutes longer on revision than the novices.

Table 4-6: Average time spent on revision between novices and experts

Novices	Total time (min)	Experts	Total time (min)
S01	4.55	P01	7.53
S02	3.08	P02	2.45
S03	0.25	P03	4.75
S04	3.00	P04	1.82
S05	0.17	P05	1.00
S06	1.72	P06	2.38
S07	1.25	P07	4.05
S08	4.28	P08	3.08
S09	0.85	P09	6.43
S10	2.22	P10	2.58
S11	3.13	P11	2.55
		P12	6.07
		P13	3.55
		P14	6.92
		P15	7.17
		P16	2.88
		P17	3.15
		P18	0.17
		P19	4.42
Total time on revision (min)	24.5	Total time on revision (min)	72.95
Average time spent on revision (min)	2.23	Average time spent on revision (min)	3.84

From the t-test, the results confirmed a significant difference in the average time spent on revision between the two groups (df = 28; t-value = -2,22; critical value = 2,05; p = 0,03). Thus, the experts focused more on revising the TT than did the novices. This confirms Pym's postulate (c) (RQ3).

4.6 RQ4: Average changes made during revision

The number of changes made by each group is presented in Table 4-7.

Table 4-7: Novices and experts' number of changes.

Novices	Translation task	Revision task	Experts	Translation task	Revision task
S01	43	6	P01	32	21
S02	29	8	P02	23	5
S03	42	0	P03	30	12
S04	17	5	P04	10	3
S05	18	0	P05	18	0
S06	22	5	P06	60	10
S07	25	0	P07	21	10
S08	7	11	P08	32	8
S09	5	1	P09	34	25
S10	11	9	P10	17	11
S11	13	11	P11	15	5
			P12	16	17
			P13	10	6
			P14	14	4
			P15	31	24
			P16	19	5
			P17	41	9
			P18	19	0
			P19	18	11
Total activity	232	56	Total activity	460	186
Average total activity	21.09	5.09	Average total activity	24.21	9.79

The t-test also showed a significant difference in the two groups' average changes made during the revision task ($df = 28$; $t\text{-value} = -2,19$; $\text{critical value} = 2,05$; $p = 0,03$). The results therefore show that experts make relatively more changes than novices, thereby contradicting Pym's postulate (d) (RQ4). This correlates with the findings for RQ3, where the experts spent more time revision.

Another interesting finding is that all participants made more revisions during the translation task compared to the revision stage. Thus, although the translation process occurs in three phases (orientation, drafting, and revision), the revision potentially forms part of the drafting phase.

4.7 RQ5: Attention to source and target text

As discussed in Chapter 3.3.4, in order to answer RQ5, I first used the SMI BeGaze software to obtain fixation data for each participant, namely dwell time, revisits, fixation count, fixation time and average fixation duration for each of the four AOIs (ST1, ST2, TT2, TT2). This allowed me to calculate the percentage distributions on the ST and TT for each participant (e.g. relatively how much time a participant spent on the ST and how much on the TT as percentages of the total dwell time). From these data, I calculated the averages for each group.

I then calculated participants' transitions (i.e. the jumps from one fixation point to another, which is located in the different AOIs) on both the source and target texts. Finally, I calculated the average transition count for both groups during the translation and revision tasks. Eye-tracking data for P05 and S09 had to be discarded owing to poor eyesight and poor eye-tracking signal.

4.7.1 Fixation data

The raw fixation data for each group is presented in Appendix I, and in Table 4-8, I present the final average percentages of distribution.

The **average dwell times** for the novices were 257270,4 milliseconds on the ST, and 227396,6 milliseconds on the TT. Calculated as percentages, this means that the novices spent on average 55% time on the ST and 45% time on the TT. By contrast, the experts spent on average 139883,3 milliseconds on the ST, and 204063,2 milliseconds on the TT, i.e. on average 41% on the ST and 59% on the TT.

In terms of the **revisits**, the novices had 104,4 counts for the ST, and 92,7 counts on the TT. Calculated as percentages, this means that the novices spent on average 57% time on the ST and 51% time on the TT. By contrast, the experts had on average 79,2 counts on the ST, and 88,4 counts on the TT, i.e. on average 47% on the ST and 53% on the TT.

In terms of the **fixation counts**, the novices had 579,6 counts for the ST, and 429,8 counts on the TT. Calculated as percentages, this means that the novices spent on average 43% time on the ST and 57% time on the TT. By contrast, the experts made on average 79,2 counts on the ST, and 88,4 counts on the TT, i.e. on average 41% on the ST and 56% on the TT.

The **fixation times** for the novices were 243345,1 milliseconds for the ST, and 214942,3 milliseconds on the TT. Calculated as percentages, this means that the novices spent on average 55% time on the ST and 45% time on the TT. By contrast, the experts spent on average 131928,5 milliseconds on the ST, and 189127,8 milliseconds on the TT, i.e. on average 42% on the ST and 58% on the TT.

The **average fixation duration** for the novices was 689,3 milliseconds for the ST, and 987,6 milliseconds on the TT. Calculated as percentages, this means that the novices spent on average 43% time on the ST and 57% time on the TT. By contrast, the experts spent on average 490,6 milliseconds on the ST, and 655,5 milliseconds on the TT, i.e. on average 44% on the ST and 56% on the TT.

Table 4-8: Novices and experts' attention to text

	ST		TT	
	S	P	S	P
Total dwell time [ms]	55%	41%	45%	59%
Total revisits	57%	47%	51%	53%
Total fixation counts	43%	41%	57%	56%
Total fixation time [ms]	55%	42%	45%	58%
Average fixation duration [ms]	43%	44%	57%	56%
Average	55%	41%	48%	59%

In conclusion, on average, the novices spent 14 percent more time on the ST than the experts (55 minus 41), whereas the experts spent 11 percent more on the TT (59 minus 48). This confirms Pym's postulate (d).

4.7.2 Transitions

The transitions (counts) between the ST and TT were analysed by breaking up the experiment in two parts: the translation task (ST1 and TT1) and the revision task (ST2 and TT2). The totals for each participant per task were calculated. Thereafter, the averages per task were calculated and t-tests were done to see whether there is a significant difference between the groups.

Table 4-9: Novice and expert transitions per task

Translation task		Revision task	
Novices	Experts	Novices	Experts
155	58	8	5
200	194	15	16
235	107	5	27

93	109	2	1
78	167	3	0
81	170	0	10
117	26	1	0
238	39	58	15
102	10	4	0
163	131	8	8
	203		29
	12		6
	17		3
	148		21
	129		23
	143		16
	111		0
	11		6
146.2	99.2	10.4	10.3

As shown in Table 4-9, on average both groups made more transitions during the translation task than the revision task (novices = 146,2; experts = 99,2). However, the t-test does not show a significant difference in the two groups' transitions made during this task (df = 20; t-value = 1.87; critical value = 2,09; p = 0,08).

4.8 RQ6 to RQ10: Retrospective Think-Aloud Protocol (RTAP) data

In Table 4-10, the RTAP data for the novices are presented. As discussed in Chapter 3.3.4, if the participants evidenced top-down processing (RQ6), expressed their need to use external resources

(RQ7), verbalised whether they incorporated theory into their translations (RQ8), solved problems consciously (RQ9) or commented on the difficulties they encountered during the translation task (RQ10), then they scored a YES, otherwise NO.

Table 4-10: Novices' responses for RQ6 to RQ10

Novices	RQ6	RQ7	RQ8	RQ9	RQ10
S01	No	Yes	No	No	Yes
S02	No	Yes	No	No	Yes
S03	No	Yes	No	No	Yes
S04	No	Yes	No	No	Yes
S05	No	Yes	No	Yes	Yes
S06	No	Yes	No	No	Yes
S07	No	Yes	No	No	Yes
S08	No	Yes	No	No	Yes
S09	Yes	Yes	No	Yes	Yes
S10	No	Yes	No	No	Yes
S11	No	Yes	No	No	Yes
Total NO	10	0	11	9	11
Total YES	1	11	0	2	0

Regarding RQ6, ten novices (91%) did not evidence top-down processing, i.e. mode = NO. The one student who did, remarked

Toe ek die oorspronklike teks deurgelees het, het ek gedink aan wie die teikenmark sal wees en dan ook die register en dan waar dit gepubliseer sal word¹⁸. (S09)

Regarding RQ7, all the novices (100%, mode = YES) mentioned words that they would have looked up in the dictionary such as *peerless*, *cultivars*, *gorgeous*, *fairy primulas*, *tough*, *frail and fragile*, *fuss*, and *showiest*. Participant S11 commented:

Daar was hier en daar 'n woord wat ek voel ek in 'n woordeboek sou moes opsoek, soos byvoorbeeld "peerless", "cultivars", "gorgeous"; "tough"; "frail and fragile"¹⁹. (S11)

Regarding RQ8, none of the novices were able to comment on theories concerning translation methods to use, even though the methods are taught during their course in Language Practice, i.e. mode = NO (100%).

¹⁸When I read through the original text, I thought about who the target audience will be and the register as well as where it will be published. (my translation)

¹⁹Sometimes I felt the need to look up a word in the dictionary such as 'Peerless', 'cultivars', 'gorgeous', 'tough', 'frail and fragile'. (my translation)

Regarding RQ9, only two novices (18%) showed evidence that they were able to solve problems consciously, i.e. mode = NO (82%). For example, participant S05 said,

'Frail and fragile' in my language has one direct equivalent so I just ticked frail 'cause I have a direct one for 'fragile'."

Participant S09 said,

Veral omrede 'primulas' 'n algemene naam is, mense sê nie sommer die Afrikaanse naam daarvoor nie. So, ek moes 'n bietjie gaan dink het wat die Afrikaanse naam is.²⁰

Regarding RQ10, all the novices (100%; mode = YES) expressed that they encountered difficulties, which included acquaintance with, and meaning of, certain words, and their translation equivalents.

There were words that I don't know the meaning of. (S01)

There were certain words that don't have direct equivalents in Sesotho, so it was a bit tricky. (S05)

The experts' reponses are presented in Table 4-11.

Table 4-11: Experts' responses for RQ6 to RQ10

Experts	RQ6	RQ7	RQ8	RQ9	RQ10
P01	Yes	Yes	Yes	Yes	Yes
P02	Yes	Yes	No	Yes	Yes
P03	Yes	Yes	Yes	Yes	Yes
P04	No	Yes	No	Yes	Yes
P05	No	Yes	No	Yes	Yes
P06	Yes	Yes	No	Yes	Yes
P07	No	Yes	No	Yes	Yes
P08	No	Yes	Yes	Yes	Yes
P09	No	Yes	Yes	Yes	Yes
P10	No	Yes	No	No	Yes
P11	No	Yes	No	No	Yes
P12	Yes	Yes	No	No	Yes
P13	Yes	Yes	No	No	Yes
P14	No	Yes	No	No	Yes
P15	No	Yes	No	No	Yes
P16	Yes	Yes	No	Yes	Yes
P17	No	Yes	No	No	Yes
P18	No	Yes	No	No	Yes
P19	No	Yes	No	No	Yes
Total NO	12	0	15	9	0
Total YES	7	19	4	10	19

²⁰Especially because 'primulas' is a common name, it doesn't usually get translated in Afrikaans. So, I had to think about what the Afrikaans name is. (my translation)

For RQ6, 12 experts did not evidence top-down processing (63%; mode = NO). Only seven (37%) participants gave some indication that they followed a top-down approach. For example,

... want die idee is nie heeltemal om inligting oor te dra nie, maar eerder om die blom te adverteer; om te sê hierdie is 'n goeie keuse. So, ek dink solank dit net die emosie en sin oordra.²¹ (P01)

Die tegniese goed is vir my partykeer 'n groter krisis as om te vertaal... bladuitleg en sulke dinge.²² (P03)

...maar vir 'n literêre teks is dit nie net die term nie en 'n mens moet bietjie wyer gaan. Nader aan wat hulle wil sê as die woorde wat daar is.²³ (P13)

Regarding RQ7, all 19 experts (100%; mode = YES) indicated that they would have looked up words in the dictionary, such as *peerless*, *primulas*, *cultivars*, *showiest*, *miserable*, *vibrant*. One participant commented:

Ek sou 'n woordeboek 'n paar keer gebruik het. Nie noodwendig om die vertalings op te soek nie, maar om seker te maak of die woord wat ek geselekteer het om te gebruik wel die korrekte, mees geskikte woord is.²⁴ (P03)

Another participant also mentioned that they would have used the Internet for more information regarding a concept:

I would have probably checked on a website as well as a gardening website in German how they phrased the "semi-shade or partial sun" as one term. (P12)

Participant P06 said that she would have liked to read up on the flower:

Ek dink ek sou oor die algemeen heelwaarskynlik na Google toe gegaan het en gaan kyk het hoe lyk primulas en bietjie oor die blommetjies opgelees het voordat ek die vertaling gedoen het, net om die prentjie in my kop te kry.²⁵

Regarding RQ8, only four participants (21%; mode = NO) related theory to practice. For example:

²¹...because the idea is not to translate the information, but rather to advertise the flower; to say this is a good choice. So, I think as long as the emotion and sense are translated. (my translation)

²²The technical things are sometimes more of a problem than to translate... layout and other things. (my translation)

²³... but for a literary text, it's not only the word, and you have to think a bit wider. Closer to what they want to say rather than the mere words. (my translation)

²⁴I would have used a dictionary a few times. Not necessarily to look up the translations, but to make sure whether the word I chose is correct, and the most suitable. (my translation)

²⁵In general, I would Googled primulas to read up on the flowers before I started to translate, just to get a clearer picture. (my translation)

Ek het ook nie verskriklik ekwivalent vertaal nie, nie vormlik nie, nie presies dieselfde woorde nie, maar eerder net die betekenis.²⁶ (P01)

Ek sou waarskynlik nie iewers in die opskrif nie, maar in die teks, waar primulas die eerste genoem word, gesê het 'ook bekend as 'n sleutelblom'. Ek sou dit daar bygevoeg het net om dit meer toeganklik in Afrikaans te maak.²⁷ (P03)

Hierdie was vir my moeiliker as akademiese tekste, bloot as gevolg van die feit dat ek nie gewoonnd daaraan is nie. As 'n mens akademiese goed vertaal, bou jy 'n repertoire op van frases en geheue. Ek is baie gewoonnd aan die tipe styl wat ek moet gebruik.²⁸ (P09)

Regarding RQ9, ten participants (53%; mode = YES) consciously solved some of the translation problems.

Ek weet daar gaan 'n mooi woord daarvoor wees, maar ek kon net nie op hierdie stadium daaraan dink nie. So, toe het ek hom met 'n baie meer algemene woord vertaal.²⁹ (P02)

Ek het "with masses of colourful long-lasting" vertaal met "met massas helderkleurige blomme wat baie lank hou."³⁰ (P16)

Regarding RQ10, all 19 experts (100%; mode = YES) were able to comment on difficulties they encountered, which in summary, relates to the words they would have looked up, and the type of text.

Die benamings was vir my uitdagend. Ek het nou maar 'n "fairy primula" met "feëtjieprimula" vertaal, en "English primrose" met "Engelse primula" vertaal.³¹ (P05)

Dit was moeilik in die sin van dat ek baie lanklaas kreatiewe vertalings gedoen het.³² (P08)

The percentages of how each group evidenced the research questions is compared in Table 4-12.

Table 4-12: Participants' responses on RQ6 to RQ10.

Research questions	Novices	Experts
RQ6	NO 91%; YES 9%	NO 63%; YES 37%
RQ7	NO 0%; YES 100%	NO 0%; YES 100%
RQ8	NO 100%; YES 0%	NO 79%; YES 21%

²⁶I also didn't translate very literally, not in form, not the same words, but rather the meaning. (my translation)

²⁷I would have added 'ook bekend as 'n sleutelblom', not in the heading, but in the text. I would have added it just to make it more accessible in Afrikaans. (my translation)

²⁸This was more difficult than academic texts because I'm not use to it. When you translate academical texts you build up a repertoire of phrases and memory. I am very used to the style of academical writing. (my translation)

²⁹I know there will be a pretty word for it, but at that stage it didn't come to me. So, I translated it with a more general word. (my translation)

³⁰I translated 'with masses of colourful long-lasting' with "met helderkleurige blomme wat baie lank hou". (my translation)

³¹The names were challenging. I translated 'Fairy primula' to "Feëtjieprimula" and 'English primrose' to "Engelse primula". (my translation)

³²It was challenging because I don't really translate creative texts. (my translation)

RQ9	NO 82%; YES 18%	NO 53%; YES 47%
RQ10	NO 0%; YES 100%	NO 0%; YES 100%

For RQ6, relatively more experts than novices evidenced top-down processing. However, since most experts also did not evidence top-down processing, Pym's postulate is only partially supported. Experts are more likely to evidence top-down processing than novices, but this is not typical of either group.

For RQ7, both groups equally rely equally on external resources. Thus, there is no difference between novices and experts in relying on resources.

For RQ8, relatively more experts than novices relate theory to practice. However, since most of the experts, like the novices, do not relate theory to practice, Pym's postulate is only partially supported.

For RQ9, relatively more experts than novices solve problems consciously. However, since most of the experts, like the novices, do not consciously solve problems, Pym's postulate is only partially supported.

Finally, for RQ10, all participants were able to comment on difficulties and uncertainties they encountered. Thus, there is no difference between novices and experts in being able to verbalise translation problems.

As noted in Chapter 3.3.4, the data were not suitable for inferential statistical analysis.

4.9 Conclusion

In this chapter, I presented the findings of the study. For my sample of participants, the results indicate that the novices paraphrased more than experts (RQ1), experts evidenced a top-down approach more than novices (RQ6), and related theory to practice more than novices (RQ8), and consciously solved problems more than the novices (RQ9). However, these findings are only partially validated and significance could not be confirmed. There were also similarities in how participants would have used external resources (RQ7), and how they express difficulties (RQ10).

On the other hand, significant differences were found for the average saccade amplitude and the fixation data (RQ2), and the revision behaviour (RQ3 and RQ4). The findings for RQ2 show that, on average, the experts made significantly larger jumps to the next fixation points than the novices. For RQ3, the experts spent significantly more time in the revision phase than in the drafting phase. For RQ4, the experts also made significantly more changes during the revision phase. Finally, for RQ5, experts also spend significantly more time on the TT than on the ST.

In the following chapter, the findings and interpretation of the results are presented. Furthermore, the final conclusions, limitations and recommendations for future research on this topic are discussed.

CHAPTER 5 INTERPRETATION OF RESULTS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this study my main aim was to explore the differences between novice and expert translators. My secondary aim was to find out if the findings in terms of Pym's (2011) postulates, the outcomes taken from the Language Practice programme at the North-West University (NWU) as well as the competence models proposed by PACTE (2003), Albir (2007) and EMT (2009) can assist in defining graduate attributes for students of translation.

In this chapter, I present the findings in section 5.2, contributions in section 5.3, recommendations for translator training in section 5.4, limitations of the study and recommendations for future research in section 5.5, and conclusion in section 5.6.

5.2 Findings

Regarding **RQ1**, Pym's postulate (a) is not confirmed. It was found that the novices used more paraphrase than experts. It is important to take into account that 36% of the participants translated into African languages (Sesotho and isiZulu), and using paraphrase was necessary, as they do not have direct equivalents in these respective languages (as was found by Kruger and Wallmach, 1999). However, an unexpected finding was that without access to dictionaries, novices were ill-equipped to offer equivalents – most novices provided mistranslations or under-translations, or simply left some lexical units untranslated. This finding therefore indicates a gap in that third-year Language Practice students – without access to dictionaries they do not possess sufficient translation skills, specifically language competence. This deficiency in the training process therefore needs urgent attention.

Another significant finding is the extent to which the experts used literal strategies (see Chapter 4.3). It is assumed that by using paraphrase as a strategy, translators provide a more natural and fluent translation, as opposed to translating literally. Because novices tend to translate literally it is viewed as an entry-level strategy to be used. However, as Tirkonnen-Condit (2005:407) reported in her monitor model, all translators tend to use literal translation as a default strategy.

Regarding **RQ2**, Pym's postulate (b) is partially confirmed. In the findings, there is no significant difference in the saccade counts made between the groups, which shows that there is no significant difference in the amount of eye movements made. However, there is a significant difference in the average saccade amplitude – the experts made longer jumps to the next fixation point, which indicates that they processed larger linguistic units compared to the novices.

Regarding **RQ3**, Pym's postulate (c) is confirmed. The results show a significant difference in the average time spent on revision between the two groups. The experts spent considerably more time on revision than the novices. This finding can be attributed to the experts wanting to maintain a high standard in order to retain their clients, secure their position in the work place, and perhaps also obtain incentives for the quality of their work.

Regarding **RQ4**, Pym's postulate (c) is not confirmed. The number of changes made by the experts during the revision phase were significantly more than those made by the novices. This correlates with RQ3, in that experts need to ensure that their translations meet the standards of the client and the company they work for. Thus, quality is key, and they spend more time making sure that they render the message correctly. Another interesting finding is that all participants made more changes during the drafting phase compared to the revision phase. In the screen recordings, revision during the drafting phase are done on larger segments (sentence level), whereas in the revision phase, revision is done on smaller segments (word level).

Regarding **RQ5**, Pym's postulate (d) is confirmed. The experts spent more time on the TT than on the ST, whereas the novices spent more time on the ST than on the TT. This finding complements, and is justified by, RQ3 and RQ4 regarding the experts' revision behaviour (time spent on revision and the average number of changes made). Furthermore, findings regarding the transition data also reveal that more transitions were made by both groups during the translation phase, and that there was no significant difference in the amount of transitions made by either of the groups.

Regarding **RQ6**, Pym's postulate (e) is partially confirmed. Although the experts evidenced relatively more top-down processing than the novices, the majority in both groups did not use top-down processing.

Regarding **RQ7**, Pym's postulate (f) is not confirmed, as all participants indicated that they would have liked to use dictionaries. However, it appears from the findings of RQ1 that students would probably have accessed them indiscriminately. Based on the sub-competencies discussed in Chapter 1.2.3, the use of resources is an essential sub-competence to master. However, it does not mean consulting the first best word in a bilingual dictionary, but choosing the right word for the given context in the right dictionary.

Regarding **RQ8**, Pym's postulate (g) is partially confirmed, as relatively more experts related theory to practice than did the students. However, most of the participants in both groups did not relate theory to practice. According to Toury (2012), parts of the translation process become automated with experience. Based on the demographical questionnaire data presented in Chapter 4.2, most of the experts have more than six years' experience and therefore although have possibly built up repertoires of personal theories and strategies for certain text types, the process might be automated to the point that they no longer consciously think about the theories or strategies they

are applying. On the other hand, the novices, who have recently been taught translation theory, do not necessarily apply the knowledge gained.

Regarding **RQ9**, Pym's postulate (i) is partially confirmed, as the experts did evidence conscious problem solving more than the novices. However, the majority in both groups did not evidence conscious problem-solving. Again, in the case of the experts, this might be ascribed to automatised problem-solving processes.

Finally, regarding **RQ10**, Pym's postulate is not confirmed, as all of the participants in both groups were able to comment on difficulties and uncertainties. Even though the novices did not come up with optimal solutions, they could identify the problems. This indicates that problem-recognition skills are gained early on in the process of becoming a translator, but that problem-resolution skills need time to develop.

5.3 Contributions of this study

This study is the first study done within the African, and in particular the South African, context to investigate differences between the problem-solving processes of student and expert translators using Pym's postulates, and thereby contributes both to translator training and to empirical research in the African context. The study also fills a local gap in teaching and learning Language Practice modules at the NWU, in that I also propose graduate attributes, which were previously lacking, and the attaining of which will better prepare students for the workplace and perhaps a new model of translation competence. Furthermore, this study also contributes to an understanding of the translation process and the complexity of becoming an expert translator (keeping in mind the different phases a person in any field or discipline has to go through to reach the expert stage), thereby contributing to the training of translators generally. Finally, this study also contributes to the NWU project Mediated Communication facilitated by Dr Wehrmeyer.

5.4 Recommendations for translator training

Based on my findings discussed in section 5.2, and in view of Pym's postulates, the LPRA programme outcomes and the sub-competence models discussed in the literature (PACTE, 2003; Hurtado Albir, 2007; and EMT, 2009), I propose the following recommendations for training translators:

In answering RQ1, it was found that the student participants' translation ability is too weak to compare to that of the professional participants. This indicates that novices' bilingual competences might be underdeveloped – they mostly followed a bottom-up approach by not viewing the text as a whole, and by translating words out of context, especially without the use of resources. Reviewing the translation competence models discussed in Chapter 1.2.3, the following competences play a crucial role when deciding on translation strategies: language competence (bilingual, contrastive,

language), cultural competence (extralinguistic, intercultural), strategic competence (strategic, methodological, translation service provision) and resource competence (instrumental, information mining) (PACTE, 2003; Hurtado Albir, 2007; and EMT, 2009). The LPRA outcomes do not actually address these competencies, but only partially touch on translator competence in the outcome that students should produce a fluent TT. Hence, I propose these three sub-competencies as graduate attributes. I also recommend that the translation assignments given to students should include a wide range of text types, so that they can learn to identify when literal translation or paraphrase strategies are appropriate, and require students to research words, concepts and/or topics. They should also be taught to analyse the ST thoroughly before translating the task, identify the difficulties at hand, and write down possible solutions in order to evaluate the choices they make when encountering difficulties.

In answering RQ2, it was partially confirmed that the professional participants processed larger translation units than students. A competency that plays a key role here, and that is not addressed in the LPRA outcomes or the competence models, is reading competence. With regular translation practice, translators become more efficient readers, which leads to language competence, cultural competence as well as textual competence. Becoming more competent in these sub-competencies, in turn, enhances translators' strategic abilities to solve problems.

Regarding the findings for RQ3 to RQ5, which focus specifically on the revision process and the time spent on the TT, there are no LPRA outcomes that relate to the revision process. In view of the literature, I recommend the graduate attribute of revision competence, which is also a competence that is only recently being investigated, and does not form part of previous models (Robert et al., 2017). Revision is an important part of the translation process with the aim to provide quality work. Robert et al. (2017:2) contends that institutions teaching translation should integrate revision courses "if they want to prepare their graduates for translation-related careers." Hence, students should also be trained in revision so that they do not fall into the trap of over-revising and introducing errors in the process.

In meeting RQ6, I propose reading competence. I recommend that students should be taught how to read and analyse the entire text first before they translate. Even before they start translating, they should be taught to read the brief (where applicable) thoroughly so that they know what is expected of them, and how they should translate the text. If there is no brief, they should familiarise themselves with the text and focus on aspects such as terminology, text type, register, target audience, expectations and cultural knowledge, and the topic of the text. These skills involve strategic sub-competence, which is related to LPRA outcomes (b), (c) and (d), namely that students should understand key terminology, concepts, principles and theories (outcome b), understand the role of translation in the multilingual and multicultural South African and global society (outcome c), and apply essential methods and strategies effectively (outcome d).

In meeting RQ7, it is essential to teach students the importance of the various types of resources and how to use them. However, they should also be advised not to merely rely on the resources as context plays a crucial role when translating as well as the flow of the TT. This skill relates to outcomes (e) and (f) of the LPRA programme, namely that students should use the latest CAT tools and other computer-related resources to work effectively and responsibly (outcome e) and that students must apply practical and theoretical knowledge and skills in solving translation problems (outcomes f). It also relates to research competence (PACTE, 2003; Hurtado Albir, 2007; EMT, 2009). Furthermore, I propose information mining competence as a graduate outcome. This skill can be very beneficial for South African students as translation technology is becoming more useful for several industries (Van Huyssteen & Griesel, 2014).

In meeting RQ8, students should be taught to pay more attention to theory in their practical translations so that they know how to apply appropriate translation methods and strategies. This skill relates to PACTE's (2003) knowledge of translation competency and Hurtado Albir's (2007) occupational sub-competences, which I propose as graduate attributes. Furthermore, it also relates to outcomes (b), (d), and (f) of the LPRA programme, namely that students are expected to understand key terminology, concepts, principles and theories (outcome b), apply essential methods and strategies effectively (outcome d), and apply practical and theoretical knowledge and skills taught in Language Practice in solving familiar and unfamiliar problems (outcome f).

In relation to RQ9, problem solving in translation happens unknowingly; however, it does help to consciously evaluate translation choices and to eliminate them so that the best possible translation is chosen. I recommend that students be given translation tasks where they should record themselves, and verbalise their decision-making out loud. In such a way, students become more aware of, and more confident in how they solve translation problems. These objectives include all the sub-competences mentioned above, because in order to provide the best possible translation strategy, one needs to be an expert and you need to be confident in your problem-solving and decision-making abilities. This skill also relates to LPRA outcome (f), which states that students should use resources responsibly and effectively (thus evaluating all the entries given by the resources in order to choose the best possible option. My recommendations for graduate attributes include strategic competence and revision competence.

In relation to RQ10, I recommend that students should be given translation tasks on a regular basis, as this will enable them to deal with an array of translation problems at undergraduate level. This postulate relates to outcomes d and f of the LPRA programme, namely that students should be able to apply essential methods and strategies effectively, as well as practical knowledge and skills taught in Language Practice in solving familiar and unfamiliar problems. My recommendation for graduate attributes, again, include strategic competence and revision competence.

5.5 Limitations of this study and recommendations for future research

The biggest challenge of this study was to recruit enough participants. Because of the impact of Covid-19 lockdown on universities, I was unable to gather 20 student participants, as initially planned. Additionally, the scope of the project (this was only a master's project with no funding besides bursaries that covered my tuition fees), limited the study to participants living within a 200 km radius of my location, i.e. in North West and Gauteng provinces, and I could only recruit experts willing to participate without remuneration. A larger study with a more representative sample (across SA, with funded participants) is therefore recommended for future research.

A second limitation was in the study design. In order to maintain a good signal in the eye tracking, participants were not given access to hard-copy resources, which might have impacted the findings for RQ7. Because of the limited RAM of the remote SMI laptop dedicated to data collection, I could also not include online resources and keylogging software, which would have been more accurate. Additionally, owing to the lack of funding, the categorisation of the translation strategies was done by myself and only checked by my supervisor, and it would have possibly been better to incorporate more language experts, had funding been available, in order to eliminate subjectivity. Furthermore, the effective use of intrinsic knowledge, as postulated by Pym (f), was not assessed, and more in-depth qualitative analysis of the RTAPs was not done, as these activities would have disproportionately expanded the study well beyond an MA. Such comprehensive study is therefore recommended for a PhD project. Moreover, there should have been a more structured protocol for dealing with participants' (especially the novices) reticence to talk during the RTAPs, as I did not expect that the participants would just keep silent. I was also unable to watch a playback of the whole task with the participants as this requires immediate access to SMI BeGaze (which because of costs and licensing issues is only installed on the laboratory computer and not on the laptop). Therefore, I could only look at the translated text with the participant, which may have impacted the RTAPs. Overcoming these structural and design limitations is recommended for future research.

This study therefore gives impetus to many future potential studies, especially at PhD level. Based on the limitations of eye tracking, it would be interesting to conduct a study that does not necessarily use eye tracking, and where participants are allowed to access any resources of their choice.

Reliability and validity address the quality of data and the appropriateness of the methods used to carry out the research. According to Dörnyei (2007:50), reliability indicates "the extent to which measurement instruments and procedures produce consistent results in a given population in different circumstances", and validity involves "determining that the research instruments measure what they are constructed to measure". In view of the fact that this was only a master's the scope limited reliability in that only a small sample size was aimed at, notwithstanding the Covid-related limitations. In terms of validity, there is a certain amount of evaluator subjectivity in how one relates a particular translation choice with a particular strategy (a thought in a translator's head): in a larger

study, a number of raters would ideally be used. Additionally, the validity of saccade data as an indicator of translation unit processing needs testing. Should it prove a robust means of measuring this variable, the present study offers a novel method to TPR studies.

Finally, regarding the manual keylogging, it is possible to make mistakes whereas a keylogging program would have been more accurate. As for this, I had to check the screen recordings twice, and even so, mistakes can still be made.

5.6 Conclusion

In conclusion, this study investigated the differences between novice and expert translators in the light of Pym's (2011) postulates, in order to explore how translation competence is developed and attained as well as to identify suitable graduate attributes for the South African context.

From the literature, it was evident that even in the European/Global North context, Pym's postulates were not always validated. Literature on product-oriented TA revealed that differing perceptions on equivalence, norms, and the kinds of methods potentially impact translator strategies and therefore choices. However, literature on TPR revealed that novices usually underperformed (in terms of Pym's postulates) when compared with expert translators.

In this study, Pym's postulates were confirmed to a certain extent. However, the findings also revealed additional deficits in South African students' current translation competence skills. In this chapter, I therefore propose graduate attributes for students of Language Practice in the South African context to address these deficiencies. These language, cultural, textual, strategic and resource competence. Additional competencies that should be focused on include revision competence and reading competence.

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APPENDIX A: ETHICAL CLEARANCE



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29 November 2019

Dear Ms Lemmer and Dr Wehrmeyer,

This letter serves to inform you that your ethics application was approved by the Ethics Committee for Language Matters (ECLM) of the NWU.

ETHICS APPLICATION NUMBER: NWU-01501-19-S7
STUDY SUPERVISOR: Dr JE Wehrmeyer
APPLICANT: Ms A Lemmer
PROJECT TITLE: A critical comparison between the problem solving processes of novice and expert translators.
DURATION: 29 November 2019 to 29 November 2022. An annual monitoring report is required.

ETHICS APPROVAL DATE: 18 November 2019

Your acceptance of the reviewers' recommendations is appreciated and your research will be conducted in line with such recommendations. Your application for ethics approval was approved by ECLM on the 18th November 2019 and this REC wishes you well with your study.

Yours sincerely

Prof C Van Eeden
Chair: ECLM

APPENDIX B: PROGRAMME OUTCOMES FOR LPRA

In the South African context, after finishing an undergraduate degree in Language Practice at the North-West University, a student is expected to reach the following outcomes (NWU, 2019:239):

- a) “possess a systematic and thorough knowledge of translation (including computer-assisted translation), editing, subtitling, audio-description and interpreting as subdisciplines within Language Practice;
- b) possess an informed understanding of key terminology, concepts, principles and theories in the various subdisciplines in Language Practice, and demonstrate the ability to relate developments in the various subdisciplines to one another;
- c) understand the role and position of translation, editing, subtitling, audio-description and interpreting in the multilingual and multicultural South African, African and global society, with particular emphasis on the dimension of ethics;
- d) apply the essential methods, techniques and procedures in Language Practice effectively in the practical translation and editing of selected real-life spoken, written and audio-visual texts, with particular emphasis on linguistic, cultural, entrepreneurial and technological skills;
- e) use the latest computer-assisted translation (CAT) tools, and other computer-related resources relevant to different types of professional language, work effectively and responsibly;
- f) apply practical and theoretical Language Practice knowledge and skills in solving familiar and unfamiliar, concrete and abstract language-practice problems in a familiar context, by using resources responsibly and effectively, and assess and adapt solutions to particular contexts;
- g) collect, analyse, synthesise and evaluate information on various topics in Language Practice effectively and responsibly; and
- h) communicate information coherently by applying the basic conventions of academic discourse (in essay writing) and professional conventions (in translation annotations), and by making use of appropriate technological aids be committed to a process of life-long learning, specifically regarding social, economic, political, and technological developments in the language professions”.

APPENDIX C: ASSIGNMENT OUTCOMES FOR LPRA

Regarding students' translation products, the following outcomes (Law, 2018:iv) should be achieved:

- “make no major errors³³ or minor errors³⁴ and to transfer information completely accurate;
- language use and register are appropriate to the subject and the intention of the original;
- reads fluently and naturally in the target language and is well organised with a very logical structure and a high degree of coherence; and
- presentation, grammar, spelling and punctuation are excellent and faultless.”

³³ “Major errors include misinterpretations or gross mistranslations in which the meaning of a part of the text is lost completely, the omission of essential words or other information from the text, and the addition of information that does not exist in the original” (Law, 2018:iv).

³⁴ “Minor errors include mistranslations in which the meaning of a word is lost, the omission of words that contribute only slightly to the meaning and the inclusion of translation alternatives when the translator should have made a choice” (Law, 2018:iv)

APPENDIX D: PARTICIPANT CONSENT FORM

Dear Participant,

Thank you for consenting to participate in the eye-tracking experiment which forms part of my master's study research.

General project information

This section serves to provide you, the participant, with more information, in order for you to make an informed decision about whether or not you want to participate in the experiment.

Title of the project

A CRITICAL COMPARISON BETWEEN THE PROBLEM-SOLVING PROCESSES OF NOVICE AND EXPERT TRANSLATORS

Institution: Focus area UPSET at the NWU.

Researchers: Dr. JE Wehrmeyer and Mrs. Annerie Lemmer

Contact number: 082 875 4955

Description: The purpose of this project is to determine how problem-solving processes differ between novice and expert translators. The requirements for participating in this study is that either i) you are a third-year student who studies Language Practice or ii) you are a professional translator with at least three years' experience. Participation involves attending an individual session where you will be asked to 1) complete a demographics form, 2) translate an English text while your eye movements are recorded, and 3) partake in a retrospective interview regarding difficulties experienced while translating. The experiment will only require 20 minutes of your time.

General principles

1. Participation in this research project is voluntary, i.e. no pressure will be put on you to take part.
2. You are free to withdraw from the project at any time, without stating reasons, and you will not be harmed in any way by doing so.
3. If you are a student, participation in the project will not influence your academic performance and marks in any way.
4. You will receive a token of appreciation for your time at the end of the session.
5. The project will contribute to translator education in the South African context and thus help future students of translation.
6. By agreeing to take part in this project, you also give consent for the data to be used by the researchers in the thesis and in subsequent articles. In return, we commit to keep the data confidential and anonymous.
7. There are no risks anticipated in this project. The eye-tracking equipment that will be used is a remote system, and the only requirement is that you should not move too much during the screening, but this should not cause any discomfort as the video clips are short.
8. If at any stage you have questions regarding the project, feel free to ask the researcher. She will gladly answer your queries.
9. Your well-being is important and actions will be taken to protect your interests.
10. The data will be stored in the secure eye-tracking laboratory in Building 7 Room 220 on the Vaal Triangle Campus of the NWU.

As researcher, I confirm to participants that the information is complete and correct.

Signature of researcher

Date: _____

Signed at: _____
(Place of signature)

APPENDIX E: DEMOGRAPHICAL QUESTIONNAIRE

1. Years of experience

0 - 3

3 - 6

6+

2. Type of experience:

Company

Freelance

Other Specify: _____

3. Highest level of translation qualifications:

Third-year undergraduate

Honours

Masters

Higher

None

4. Language direction

I usually translate from _____ (language) to _____ (language).

APPENDIX F: SOURCE TEXT (153 WORDS)

Peerless primulas

For bright winter gardens, primulas are a must. Of the various cultivars, the two most notable are the Fairy primula (*Primula malacoides*) and the English Primrose (*Primula acaulis*). With masses of brightly coloured, long-lasting blooms, these bedding plants are also stunning in terracotta pots or in tight groups where their gorgeous colours can be fully appreciated.

Fairy primulas are, despite their names, hardly frail and fragile: they are tough little flowers that grow quickly and easily in semi shade or partial sun, they fuss-free plants that are quite happy with any normal, good garden soil.

The English primrose is, undoubtedly, one of the showiest of the 400 or so members of the *Primula* family, with vibrant colours that will brighten the most miserable winter's day. Barely 15cm high, it will grow happily in light shade or partial sun and comes in dark blue, light blue, cream, pink, white, yellow and rose.

Text and image: Home Magazine (5 May, 2014)

APPENDIX G: TRANSLATIONS

Novices

S01: dipoloto tsa maria a phodileng, primula di tlamehile ho ba teng. tse ding tsa tsona tse pedi ke tsa makgasi le tsa sekgowa. ka mebala e fapaneng, makala a asa feleng, dipalesa tse di ntle ka hara le bolompoto kapa hadi bokane ka dihlopha hore mebala ya teng e khahlise. makgasi a primula, hosa tsotelle mabitso a tsona, hase ha hangata a leng bonojwana: ke dipalesa tse tiileng tse holang ka pele le ha bonolo moriting kapa letsatsing lesa cheseng haholo, ke dijalo tse thabelang mobu o feng kapa ofe. dipalesa tsa senyese mane, ntle le tshepo, ke tse ding ya tse bonahalang ho tse 400 kapa ye tse ding tsa maloko a primula, ka mebala e hlakiling e kgantsang...

S02: Peerless Primulas

Vir helder winter tuine, is primulas n moet. Van die verskillende kultivars wat daar is, is twee mees noteerbare een die fee primula (Primula malacoides) en die Engelse primrose (Primula Acaulis). Met massas helder kleure en ewigdurende bloeisels is hierdie plante merkwaardig in terracotta potte, of in stywe groepe waar hul merkwaardige kleure ten volle waardeer kan word.

Fee primulas, ten spyte van hul naam, is glad nie delikaat nie: hulle is taai klein blommetjies wat vinnig groei en maklik in semi-koelte of gedeeltelike son groei. Hulle is moeiteloos plante wat heel gelukkig is met enige normale of goeie grond.

Die Engelse primrose is, ongetwyfeld, een van die mooiste lede van die 400 plante in die Primula familie, met helder kleure wat selfs die aakligste winter dag, helder sal maak. Skaars 15cm hoog, groei dit prettig in ligte skadu of gedeeltelike son en kom die blomme in donker blou, lig blou, roomkleurig, pienk, wit, geel en rooskleurig.

S03: * tse senang di thotsi

Bakeng sa ditone tse kganyang mariha, o tlameha hoba le di*. ho tse ding tse ngata tsa di*. tse pedi tse elwang hloko haholo ke di* tsa di feri le tsa senyese mane eleng di*. ho tse ding tsa ngata tse mmala o kganyang, tse blomang nako e telele, di jalo tsena tse ikadleng di ntle ka dipoto tsa * tsa malomo kapa ha di teteane moo mmala wa tsona o motle o ka behehang ka teboho.

di* tsa di feri, hosa kgathallatsehe mabitso a tsona, pone fela fela: ke malongwana a manyane a tiileng a holang ka potlako le ha bobebe moriting kapa hanyane letsatsing. Ke dijalo tse senang mofereferere tse thabileng ka mobu o tlaelehileng o motle.

di* tsa sekgowa tsona, ntle le pelaelo, ke tsona tse bonahalang haholo hara tse 400 kapa maloko a *, ka mmala e phatsimang etlo kgantsang letsatsi le lebe le mariha. hadi 15cm ka botelele, ditlo hola di thabile moriting o bobebekapa letsatsing mme ditla dile mmala o tibileng wa mmala wa lehodimo, kerimi, pinki, tshweu, sela le bofubedu.

S04: *peerless Primulus

Hore temo ya hao ebe ntle ka nako ya mariha, di *primulas di a hlokeha. Di temong tse fapaneng, di pedi tse eleng hore ha hona hore oka seke wa dibona, ke *fairy primula (Primula malacoides) le English primrose. Ka mmala e mengata e kgahlang, di palesa sebaka se setelele, dimela tsena hape di ntle ka hara dipitsa tsa *terracota kapa mekgahlong e teteaneeng moo mmala ya teng e metle etla amohelwa ka botlalo.

*Fairy primulas hadishwe ha bobebe ebile hadi robehe feela, le ha lebitso la teng le bolela ho hong: ke dipalesa tse nyenyane tse tihleng tse holang ka pele ebile le habobebe moo honang le merithinyana kapa letsatsi lesa tshabang haholo, kedi mela tse nang le kgotso ebile tse thabileng moo mobu teng wa temo o tswaelahileng ebile ole motle.

Le kantle ho pelaelo, *English primrose ke tsona tse hlahellang,...

S05: Peerless Primulas

Matsatsi a tshabileng a mariha, palesa ena ke tshawanelo. Ho tswa ho a mangata a tsebisahalang, ana a mabedi e leng Fairy primula le English primrose. Ka mmala ya tsina e hlabang mahlo, ka makala a phatsimang, dipalesa tsena dintle haholo ebile di tshawanelwa ke di potlo tsa dipalesa, moo ditlang hoo ananelwa haholo.

Fairy primulas ke palesa tsa tshwaneng le lebitso la teng, ha le frail* le bonolo: ke di palesa tse nyane tse tiileng tse holang ha bobebe ebile ka potlako tulong e sa tshabelweng ke letsatsi haholo. ke dipalesa tse sa hlokgeng mosebetsi haholo, di thabela maemo afe kapa afe, English primrose ke palesa e tsebisahalang hara tse hare tse 400 hotswa molokng wa tsona.

S06: ama Primulus a peerless

uma ufuna ingadi eqhakazile ngesikhathi sobusika, ama primulus kumele abekhona. kuzozonke izitshalo ezahlukene, ezimbili eziphuma phambili i fairy primula kanye ne primula yesingisi. ngokuqhakaza obune mibalabala eyahlukene eminingi, nokuqhakaza okuthatha isikhathi, lezi zizhalo zintle kakhulukazi phakathi kwamabodwe wezizhalo noma emaqenjini lapho khona imibala yazo eqhakazayo ibonakala kahle.

ama fairy primula wona, nokho nje amagama azo ingathi alula nje , kodwa zona izimballi eziqinile ezikhula msinyane lapho khona kunomthunzi omncane or elangeni kancane nje, azihluphi zona zihlala zijabulile noma ungazifaka kunoma yiluphi uhlobo lwe nhlabathi yokwenza ingadi.

i primrose yesingisi , enye yamaqembu kumndenani wama primula angu 400 athanda ukubukisa, ngemibala yakhona eqhakazile engaqhakazisa nanoma yilanga elidangele lase busika. nokho lilinganiselwa kubede obungama centimeter angu 15, lizokhula lijabulilelangeni kancane noma emthunzini kancane liphinde libuye linombala oluhlaza kwesibakabaka, olo*creami, oluphuzi kanye *nembali ebomvu...

S07: Primulas sonder 'n maat

Vir 'n helder tuin in die winter, is 'n Primula die regte blom. Van die cultivars, die twee wat uit staan, is die "Fairy Primula" (Primula malacoides) en die Engelse Primrose (Primula acaulis). Met so baie helder kleur, en blomme wat lank laas, hierdie plante lyk mooi in terracotta potte, of in stuiwe groepe, waarom die pragtige kleure kan waardeer word.

Fairy Primulas, ten spyte hulle naam, raak baie min frail en swak, hulle is klein, sterk blomme wat vinnig en baie maklik groei in 'n bietjie skaduwee of in 'n bietjie son. Hulle (die plante) nodig nie baie nie, en is gelukkig met enige normaal, goeie tuin sand.

Die Engelse Primrose, is sonder 'n twuifel 'n blom wat afshow en mooi is, teen een van 400 van die Primula gesin, die helder kleure sal enige bemoeite winter's dag helder maak. Nie eers 15cm lank nie, dit sal gelukkig in ligte skaduwee of 'n bietjie son groei. Dit kom in donker blou, ligte blou, cream, pienk, wit, geel en roos.

S08: Portuurlose Primulas

Vir helder winter tuine is Primulas 'n moet. Van die verskeie kultivars is die Feetje primula (primula malacoides) en die Engelse primrose (Primula acaulis) die twee mees erkenbare soorte. Met massas helder gekleurde, lang blomtyd blomme, is hierdie bedding-plante ook pragtig in terracotta potte of in digte groepe waar hul pragtige kleure ten volle waardeer kan word.

Feetje primulas is, ten spyte van hul naam, glad nie tingerig nie: hulle is sterk klein blommetjies wat vinnig en maklik in semi-koelte of gedeeltelike son groei, hulle is "fuss"-vrye plante wat gelukkig is met enige normale, goeie tuingrond is.

Die Engelse primrose is, sonder twyfel, een van die mees "showiest" van die ongeveer 400 lede van die Primula familie, met helder kleure wat die slegste wintersdag sal ophelder. Skaars 15 cm hoog, sal dit gelukkig in die ligte koelte of gedeeltelike son groei, en kom voor in donkerblou, ligblou, room, pienk, wit, geel en rooskleur.

S09: Peerless Primulas

Vir helder winter tuine is primulas n moet. Van die verskeidenheid is die twee mees herkenbaar die Fairy primula (*Primula malacoides*) en die Engelse primrose. Met massa helder kleurige, lang lewendige bloeisel, hierdie plante lyk ook spoggerig in terracotta potte of in naby geleë groepe waar hulle pragtige kleure waardeer kan word.

Fairy primulas is, afgesien van hulle naam, nie pieperige blomme nie: hulle is tawwe klein blommetjies wat vinnig groei en maklik in semi-skaduwee of semi-sonlig kan groei, hulle is maklike plante wat redelike gelukkig is met goeie tuingrond.

Die Engelse primrose is ongetwyfeld een van die skouagtigste lede van die 400 Primula familie, met vibrante kleure wat die mees aakligste wintersdag sal ophelder. Skaars 15 cm hoog, sal dit gelukkig groei in sagte skaduwee of gedeeltelike son en kom in donkerblou, ligte blou, room pienk, wit geel en roos kleure.

S10: Peerless Primulas

Vir helder winter tuine is primula n moet. Van die varieteite cultivars, twee van die bekendstes is die Fairy primula (*Primula malacoides*) ook die Engelse primrose (*Primula acaulis*). Met massas van helder kleurvolle, langlewende bloeisel is die bedding plante ook beeldskoon in terracotta potte of selfs in versamelde groepe, waar hulle asemrowende kleure ten volle waargeneem en waardeer kan word.

Fairy primula is, tenspyte van hulle naam glad nie frail of bros nie: hulle is sterk klein blommetjies wat vinnig groei asook maklik in die semi-skaduwee of gedeeltelike son groei. Hierdie blomme is fimies vrye plante wat dolgelukkig is met die normale, goeie grond.

Die English primrose is ontyvelbaar een van die skouagtigste van die 400 of so memebres van die Primula familie, met vibrant kleure wat die aakligste winters dag sal ophelder. Skaars 15cm in lengte sal hulle gelukkig groei in die ligte skaduwee of gedeeltelike son en kom ook donkerblou, ligblou, room, pink, wit, geel en roos.

P11: Peerless Primulas

Primulas is 'n moet vir enige helder winter tuin. Daar is verskeie cultivars, maar die Feetje Primula (*Primula malacoides*), asook die Engelse Primula (*Primula acaulis*) is meer bekend as ander. Hierdie bedding plante is asemrowend met hulle helder, long-lasting blomme, maar vertoon net so mooi in terracotta potte of in klein groepe waar hulle mooi kleure ten volle waardeer kan word.

Feetje Primulas is nie frail of breekbaar nie, ongeag wat hulle name mag voorstel: hulle is tough klein blomme wat vinning en maklik in gedeeltelike skaduwee of in gegedeeltelike son kan groei. Hierdie plante vereis min fuss en hulle is gewoonlik redelik gelukkig in enige goeie, normale tuin grond.

Die Engelse Primula is, sonder twyfel, een van die spoggerige tipes uit die omtrent 400 lede van die Primula familie, met sy helder kleure wat enige miserable winter dag sal verbeter. Die blomme staan skaars 15 cm hoog, maar sal maklik groei in ligte skaduwee of gedeeltelike son. Hulle kom ook in 'n wye verskeidenheid van kleure soos donker en ligte blou, room-kleurig, pienk, wit, geel en roos-kleurig.

Experts**P01: Pragtige primulas**

Primulas is onontbeerlik wanneer mens wintertuine wil ophelder. Van die verskeie cultivars is die vernaamste twee die feepimula (*primula malacoides*) en die Engelse primroos (*Primula acaulis*). Met massas helderkleurige, langdurige bloeisel is hierdie tuinplante ook treffend in terracottapotte of in digte groepies wat hul pragtige kleure die beste ten toon stel.

Hul naam nieteenstaande is feepimulas kwalik swak en weerbaar: hulle is geharde klein blomme wat vinning in gedeeltelike skadu of gedeeltelike son groei. Hulle is plante sonder sukkel, en is heeltemal gelukkig met enige normale, goeie tuingrond. Die Engelse primroos is ongetwyfeld een van die flambojantste van die ongeveer 400 lede van die primulafamilie, met helder kleure wat selfs die triestigste wintersdag sal opkikker. Skaars 15 cm hoog, sal hulle doodgelukkig in ligte skadu of gedeeltelike son groei, en kom die kleure donker blou, roomkleurig, pienk, wit, geel en roos voor.

P02: Weergalose Primulas

Primula is 'n moet vir 'n helder winterstuin. Van die verskeie cultivars, is die bekendste die Feetje primula (*Primula malacoides*) en die Engelse primula (*Primula acaulis*). Met hul massas helderkleurige, langdurige blomme, lyk hierdie beddingplant ook fantasties in terracotta potte of in hegte groepe waar hul ongelooflike kleur ten volle waardeer kan word.

Ten spyte van hul naam, is Feetje primulas glad nie swak of broos nie: hulle is sterk blommetjies wat vinnig en maklik in semi-skadu of vol son groei, hulle is moeitvrye plante wat baie gelukkig is met enige normale, goeie tuingrond.

Die Engelse primula is by uitstek een van die mooiste van die ongeveer 400 lede van die Primula-familie met helder kleure wat selfs die droewigste wintersdag sal ophelder. Met 'n hoogte van skaars 15 cm, sal dit dolgelukkig in ligte skadu of gedeeltelike son groei en kom in kleure van donkerblou, ligte blou, room, pienk, wit, geel of roos, voor.

P03: Pragtigste Primulas

Primulas is 'n moet vir enige helder wintertuin. Van al die verskillende kultivars is daar twee wat nogal bekend is: die Fee Primula (*Primula malacoides*) en die Engelse selonsroos (*Primula acaulis*). Hierdie plante, met hulle massas helder blomme wat lank hou, is uiters geskik vir beddings, maar hulle pas ook baie goed aan in terracotta potte, en hulle lyk selfs mooi as hulle saam geplant word in digte groepe, waar hulle pragtige kleure behoorlik waardeer kan word.

Ten spyte van die naam, Fee primulas, is hierdie kultivar hoegenaamd nie fyn of gevoelig nie. Hulle is geharde klein blomplantjies wat vinnig groei en maklik in semi-skadu of halfson groei. Hulle vra min moeite en is baie gelukkig in enige gewone, goeie tuingrond.

Die Engelse selonsroos is sonder twyfel die kroon van die Primula-plantgroep, met meer as 400 kultivars. Die helder kleure van hierdie plant se blomme sal enige wintertuin kan opkikker - selfs op 'n mistroostige wintersdag! Die plante word nie hoër as 15 cm nie, en dit groei mooi in ligte koelte of halfson. Bekende kleure van dié plante is donker blou, lig blou, room, pienk, geel en rooskleurig.

P04: Onverbeterlike Primulas

Vir helder wintertuine is primulas 'n moet. Van die verskeie cultivars is die twee opvallendste die Feetje Primula (*Primula malacoides*) en die Engelse primrose (*Primula acaulis*). Met massas helderkleurige, langlewende blomme, is hierdie beddingplante ook asemrowend in terracotta-potte of in groot groepe waar hulle pragtige kleure ten volle waardeer kan word.

Feetje Primulas is, ten spyte van hulle naam, glad nie tingerig en fragiel nie: hulle is taai klein blommetjies wat vinnig en maklik in semiskadu of gedeeltelike son groei, hulle is sonder fieterjasies en is heeltemal gelukkig in enige normale, goeie tuingrond.

Die Engelse primrose is ongetwyfeld een van die aanskoulikste van die 400 of so lede van die Primula-familie, met lewendige kleure wat die mees misrabele wintersdag sal ophelder. Skaars 15cm hoog, sal hulle gelukkig in ligte skadu of gedeeltelike son groei en is beskikbaar in donkerblou, ligblou, room, pienk, wit, geel en roospienk.

P05: Peerless* Primulas

Vir 'n kleurvolle wintertuin is primulas onontbeerlik. Onder die verskillende cultivars [k sp] is die bekendste* die die "Fairy primula" (*Primula malacoides*) en die Engelse primrose*(*Primula acaulis*). Met hulle massas helderkleurige, blomme wat lank hou, lyk hierdie plante wat gewoonlik in beddings geplant word, ook pragtig in kleipotte of in digte groepies waar hulle uitbundige kleure ten volle gewaardeer kan word.

Fairy primulas* is, ten spyte van hulle naam, glad nie pieperig en broos nie: hulle is geharde klein blommetjies wat vinnig en maklik groei in semi-skaduwee of gedeeltelike son. Hulle is plante sonder moeite [k: fuss free] wat doodgelukkig is met normale, goeie tuingrond.

P06: Weergalose Primulas

Vir 'n kleurvolle winterstuin is primulas 'n moet. Van die verskillende kultivars is die twee bekendste die feëttjie-primula (*Primula malacoides*) en die Engelse primula (*Primula acaulis*). Hierdie beddingplante se helderkleurige, langdurige blomme is ewe treffend in kleipotte of in knus groeiperings waar die pragtige kleure op hul beste vertoon.

Naam ten spyte is feëttjie-primulas geensins broos en delikaat nie: die klein bommetjies is taai en groei vinnig en maklik in semi-skaduwee of gedeeltelike son. Die plantjies is sonder fieterjasies en is doodgelukkig in goeie, gewone tuingrond.

Die Engelse primula is sonder twyfel een van die pronkerigste van die meer as 400 lede van die primula-familie; die pragtige kleure sal selfs die vaalste winterdag opkikker. Die plantjies is skaars 15 cm hoog, en groei vrolik in effense skaduwee of effense son. Hulle kom in donker- en ligteblou, room, pienk, wit, geel en roospienk voor.

P07: Primulas Sonder Eweknieë

Vir helder wintertuine, is primulas 'n moet. Van die verskeie kultivars, is die twee belangrikste die Fee primula (*Primula malacoides*, Fairy primula) en die Engelse primrose (*Primula acaulis*). Met massas helderkleurige blomme, wat lank leef, is die plante ook geskik vir terrakotta potte of in hegte groepies waar hulle wonderlike kleure ten volle waardeer kan word.

Fee Primulas is, ten spyte van hulle naam, alles behalwe swak en breekbaar: hulle is taai klein blommetjies wat vinnig en maklik groei in semi-skaduwee of gedeeltelike son, hulle het geen fiemies nie en is heel gelukkig met enige gewone, goeie tuingrond.

Die Engelse primrose is, ongetwyfeld, een van spoggerigste soorte van...

P08: Vriendelose Primulas

Vir helder winter tuine, is primulas 'n moet. Van die verskeie kultivars, is die twee mees kenbare die Veettjie-primula (*Primula malacoides*) en die Engelse-primrose (*Primula acaulis*). Met massas helderkleurige blomme wat lank hou, is hierdie beddingsplante ook pragtig in terrakotta potte of in digte groepe waar asemrowende kleure ten volle waardeer kan word.

Veettjie-primulas is, derhalwe hulle name, skaars tingerig en broos: hulle is sterk klein blommetjies wat vinnig groei en maklik in semi-skadu of gedeeltelike son groei, hulle is nie moeilike plante nie en is heel tevrede met enige normale, goeie tuingrond.

Die Engelse-primrose is, sonder twyfel, een van die spoggerigste van die 400 of so lede van die Primula-familie, met helder kleure wat die mees aakligste wintersdag sal opkikker. Skaars 15 cm hoog, sal dit goed in ligte skadu of gedeeltelike son groei en kom in donkerblou, ligblou, room, pienk, wit, geel en roospienk na vore.

P09: Onvergelykbare Primulas

Primulas is 'n moet vir helder wintertuine. Die Fairy primula (*primula malacoides*) en Engelse stokkroos (*primula acaulis*) is die twee bekendste van die verskeidenheid kultivars. Hierdie blombeddingplante, met hulle trosse helderkleurige en langdurende bloeisel, lyk ook asemrowend in terrakottapotte of in hegte groepies waar hulle pragtige kleure ten volle waardeer kan word.

Fairy primulas is ten spyte van hulle benaming glad nie swak of pieperig nie: dit dra geharde klein blommetjies wat vinnig en maklik groei in halfskadu of -sonlig, dit is sorgvrye plante wat gelukkig is met enige goeie, gewone tuingrond.

Die Engelse rankroos, met haar lewenslustige kleure wat enige mistroostige wintersdag kan ophelder, is sonder twyfel een van die spoggerigste van die 400 of so lede van die Primula-familie. Dit groei tevrede tot hoogstens 15 cm in effense skadu of gedeeltelike sonlig en kan donkerblou, ligblou, romerig, pienk, wit, geel, of rooskleurig wees.

P10: Weergalose primulas

Primulas is 'n moet vir helder wintertuine. Van die verskeie kultivars is die twee vernaamstes die Feettjieprimula (*Primula malacoides*) en die Engelse aandblom (*Primula acaulis*). Hierdie beddingplante het massas helderkleurige, langdurige blomme is ook pragtig in terrakottapotte of in digte groepe waar hul pragtige kleure ten volle waardeer kan word.

Feettjieprimulas is, anders van hul naam, allermens swak en breekbaar; hulle is tawwe klein blommetjies wat vinnig en maklik in halfskadu of gedeeltelike son groei, en hulle is *sukkellose plante wat heeltemal gelukkig is met enige normale, goeie tuingrond.

Die Engelse aandblom is ongetwyfeld een van die *showiest van die 400 of so lede van die primulafamilie, met *skitterende kleure wat die mistroostigste wintersdag sal ophelder. Hulle is skaars 15 cm hoog en groei gelukkig in ligte skadu of gedeeltelike son en kom in donkerblou, ligte blou, room, pienk, wit, geel en rooskleurig.

P11: Vir helder wintertuine, is primulas 'n moet. Van die verskeie soorte, is die twee mees noemenswaardig die Fee primula (*Primula malacoides*) en die Engelse primrose (*Primula acaulis*). Met masses helderkleurige en langdurende blomme, is hierdie bedding-plante ook pragtig in terrakotta potte of in stywe groepies waar hulle asemrowende kleure ten volle waardeer kan word.

Fee primulas is, ten spyte van hul naam, beswaarlik fyn en fragiel: hulle is geharde klein blommetjies wat vinnig groei beide in semi-skadu of gedeeltelike sonlig. Hulle is sonder fiemies en is gelukkig in enige normale, goeie grond.

Die Engelse primrose is, sonder twyfel, een van die showiest van die 400 lede van die Primula-familie, met helder kleure wat enige wintersdag sal opkikker. Skaars 15cm hoog, groei hulle heel gelukkig in ligte skadu of gedeeltelike son and kom in kleure soos donkerblou, ligblou, room, pienk, wit, geel en roos.

P12: Primeln - einfach unvergleichlich

Für farbenfrohe Wintergärten sind Primeln einfach unerlässlich. Von den zahlreichen Sorten sind die bekanntesten wohl die Feenprimel* (*Primula malacoides*) und die Englische Primel* (*Primula acaulis*). Mit ihrer üppigen, farbenfrohen und langlebigen Blütenpracht sind diese Pflanzen nicht nur als Beetpflanzen, sondern auch in Terracotta-Töpfen bezaubernd oder können dicht an dicht gepflanzt werden, damit ihre wunderbaren Farben voll zur Geltung kommen.

Feenprimeln* sind trotz ihres Namens keineswegs zart und zerbrechlich: es sind starke, kleine Blümchen, die schnell und leicht im Halbschatten oder in teilweiser Sonne wachsen; es sind pflegeleichte Pflanzen, die sich mit nahezu jeder normalen, guten Gartenerde zufrieden geben.

Die Englische Primel* ist zweifellos eine der prunkvollsten der ca. 400 Mitglieder der Primelfamilie und kann mit ihren kräftigen Farben auch den trübsten Wintertag aufhellen. Nur knappe 15 cm hoch wächst sie gerne im leichten Schatten oder in teilweiser Sonne und ist in dunkelblau, hellblau, cremefarben, pink, weiß, gelb und rosa erhältlich.

P13 : l'incomparable primerose

La primerose est incontournable pour un beau jardin. De toutes les différentes espèces les deux plus remarquables sont la primerose des fées (*Primula malacoides*) et la primerose anglaise (*Primula acaulis*). Avec des grappes de fleurs aux couleurs vives qui fleurissent longtemps, ces fleurs de plates-bandes sont aussi magnifiques dans des pots de terre cuite ou en groupes où l'on peut admirer leurs magnifiques couleurs.

Les primeroses des fées ne sont, malgré leur nom, ni malingres ni fragiles: ce sont de petites fleurs robustes qui poussent vite et facilement dans la mi-ombre ou au soleil, ce sont des plantes sans problème qui se contentent d'un sol normal de jardin.

P14: Ongekende Primulas

Primulas is 'n absolute moet vir wintertuine. Van al die verskillende kultivars is die Fairy-primula (*Primula malacoides*) en die Engelse primrose (*Primula acaulis*) die twee bekendstes. Met massas kleurvolle, langdurige blomme, is hierdie plante asemrowend in terrakottapotte of in digte

groepe waar hulle pragtige kleure ten volle waardeer kan word.

Primulas is, ten spyte van hulle naam, glad nie broos en pieperig nie; hulle is taai klein blommetjies wat vinnig groei, veral in semi-skadu of gedeeltelike son, hulle benodig nie baie moeite nie en is gelukkig met enige normale, goeie bemesting.

Die Engelse primrose is ongetwyfeld een van die mooiste van die nagenoeg 400 lede van die Primula-familie, met pragtige kleure wat selfs die vaalste wintersdag sal opkikker. Dit is skaars 15 cm hoog en sal maklik groei in ligte skadu of gedeeltelike sonlig en kom voor in donkerblou, ligteblou, roomkleur, pienk, wit, geel en roos.

P15: Primulas

As jy van 'n kleurvolle wintertuin hou, is primulas een van die plante wat jy beslis in jou tuin moet hê. Die twee belangrikste kultivars is die Fairy primula (*Primula malacoides*) en die Engelse primrose (*Primula acaulis*). Met hul massas helder, kleurvolle blomme wat 'n lang groeisyklus het, lyk hierdie beddingplante ook pragtig as hulle naby mekaar geplant word waar hul pragtige kleure ten volle waardeer kan word.

Ten spyte van die naam, is Fairy primulas allesbehalwe broos of weerloos: hulle is geharde klein blommetjies wat maklik en vinnig in semi-skadu of gedeeltelike sonlig kan groei en is moeitevrye plantjies wat genoegsame groei sal toon in enige goeie normale tuingrond.

Die Engelse primrose is sonder twyfel een van die mooiste van die 400 of so plante in die Primula-familie, met helder kleure wat selfs die vaalste wintersdag sal opvrolik. Die blomme groei 15 cm hoog, aard goed in ligte skadu of gedeeltelike sonlig en kom in verskeie kleure voor - donkerblou, ligblou, room, pienk, wit, geel en pienk.

P16: Weergalose primulas

Primulas is 'n móet vir enige wintertuin. Van die verskeie variëteite is die feetjieprimula (*Primula malacoides*) en die Engelse primula (*Primula acaulis*) die merkwaardigste. Die massas helderleurige blomme, wat baie lank hou, maak hierdie tuinplante ook ideaal vir terracotapotte of in digte groepe waar hulle pragtige blomme ten volle waardeer kan word.

Feetjieprimulas is, die naam ten spyte, kwalik fyn en broos: Hulle is sterk klein blommetjies wat vinnig in halfskadu of gedeeltelike sonskyn groei, hulle is moeitelose plante wat heel gelukkig is in enige normale, goeie tuingrond.

Die Engelse primrose is sonder twyfel een van die skouspelagtigste van die sowat 400 spesies in die primula-familie, met helder kleure wat die guurste wintersdag sal ophelder. Dit is skaars 15 cm hoog en groei heel gelukkig in ligte skaduwee of gedeeltelike sonskyn, en is in donkerblou, ligteblou, room, pienk, wit, geel en ligpers beskikbaar.

P17: Peerless Primulas*

Vir helder wintertuine, is primulas 'n moet. Uit die verskillende kultivars, is die twee noemenswaardigstes die Feetjie Primula (*Primula malacoides*) en die Engelse Primrose* (*Primula acaulis*). Met massas helderleurige, langdurige bloeisels, is hierdie beddingplante ook pragtig in terracotta* potte of in groepe teenaan mekaar waar 'n mens hul pragtige kleure ten volle kan waardeer.

Ten spyte van hul naam, is Feetjie Primulas glad nie *swak en breekbaar nie: hulle is geharde, klein blommetjies wat vinnig en maklik in halfskaduwee of gedeeltelike sonlig groei, hulle is moeitevrye plante wat heel gelukkig is met enige gewone, goeie tuingrond.

Die Engelse primrose is sonder twyfel een van die skouspelagtigste blomme uit die ongeveer 400 lede van die primula-familie, met lewendige kleure wat die vaalste wintersdag kan ophelder. Hulle is skaars 15 cm hoog en sal graag in ligte skaduwee of gedeeltelike sonlig groei, en kom in donkerblou, ligblou, room, pienk, wit, geel en rooskleur.

P18: *Peerless Primulas

Primulas is onontbeerlik vir kleurvolle wintertuine. Die twee bekendste kultivars is die feetjieprimula (*Primula malacoides*) en die Engelse *primrose (*Primula acaulis*). Dié helderleurige tuinplante dra massa helder blomme wat lank mooi bly en lyk ook pragtig in terracotapotte of in groot groepe waar hulle kleure ten volle waardeer kan word.

Feetjieprimulas is ten spyte van hulle naam nie breekbaar of fy nie: hulle is geharde, vinniggroeiende blommetjies wat goed aard in halfskadu of gedeeltelike son; hulle het min fiemies en is gelukkig in enige gewone goeie tuingrond.

Die Engelse *primrose is ongetwyfeld een van die mooiste van die meer as 400 lede van die primulafamilie. Hulle helder kleure sal enige triestige wintersdag ophelder. Hulle word skaars 15 cm hoog en aard goed in ligte skadu of gedeeltelike son en is beskikbaar in donkerblou, ligblou, roomkleur, wit, geel en pienk.

P19: Weergalose Primulas

Vir helderleurige wintertuine is primulas 'n moet. Van die verskeie kultivars is die twee opvallendstes die Fairy primula (*Primula Malacoides*) en die English primrose (*Primula acaulis*). Met massas helderleurige langlewende blomme, is hierdie beddingplante ook treffend in terracotta-potte/kleipotte of in digte groepe waar die treffende kleure ten volle waardeer kan word.

Fairy primulas is, ondanks hulle name, nie werklik broos en breekbaar nie: hulle is sterk klein blommetjies wat vinnig en maklik in gedeeltelike skadu of gedeeltelike son groei, hulle is moeitevrye plante wat heel gelukkig is in enige gewone, goeie tuingrond.

Die English (Engelse) primrose is ongetwyfeld een van die aanskoulikste van die ongeveer 400 lede van die Primula-familie, met helder kleure wat die mistroostigste wintersdag sal ophelder. Skaars 15 cm hoog, sal dit gelukkig groei in effense skadu of gedeeltelike son en kom voor in donkerblou, ligblou, roomkleur, pienk, wit, geel en roospienk.

APPENDIX H: TRANSLATION CHOICE ANALYSES

Novice translation choices

Participant	ST word	TT word	Code
S01	Peerless Primulas	Did not translate	O
S02		Did not translate	O
S03		* tse senang di thotsi (they aren't stupid)	P
S04		Did not translate	O
S05		ama Primulus a peerless	O
S06		Did not translate	O
S07		Primulas sonder 'n maat	P
S08		Portuurlose Primulas	P
S09		Did not translate	O
S10		Did not translate	O
S11		Did not translate	O
Participant	ST word	TT word	Code
S01	cultivars	Did not translate	O
S02		kultivars	L
S03		Did not translate	O
S04		temong (agriculture)	P
S05		a mangata a tsebisahalang (many well-known)	P
S06		izitshalo ezahlukene (different plants)	P
S07		Did not translate	O
S08		kultiwars	L
S09		verskeidenheid	P
S10		Did not translate	O
S11		Did not translate	O
Participant	ST word	TT word	Code
S01	long-lasting blooms	makala a asa feleng (everlasting branches)	P
S02		ewigdurende bloeisels	P
S03		tse blomang nako e telele (which bloom for a long time)	P
S04		di palesa sebaka se setelele (flowers that bloom for a long time)	P
S05		Did not translate	O
S06		nokuqhakaza okuthatha isikhathi (time-consuming flowering)	P
S07		blomme wat lank laas	P
S08		lang blomtyd blomme	P
S09		lang lewende bloeisels	P
S10		langlewende bloeisels	P
S11		Did not translate	O
Participant	ST word	TT word	Code
S01	bedding plants	dipalesa (flowers)	P

S02		plante	P
S03		jalo (plants)	P
S04		dimela (plants)	P
S05		dipalesa (flowers)	P
S06		zithalo (plants)	P
S07		plante	P
S08		bedding-plante	L
S09		plante	P
S10		bedding plante	L
S11		bedding plante	L
Participant	ST word	TT word	Code
S01	stunning	ntle (beautiful)	P
S02		merkwaardig	P
S03		ntle (beautiful)	P
S04		ntle (beautiful)	P
S05		ntle (beautiful)	P
S06		zintle kakhulukazi (very beautiful)	P
S07		mooi	P
S08		pragtig	P
S09		spoggerig	P
S10		beeldskoon	P
S11		asemrowend	P
Participant	ST word	TT word	Code
S01	terracotta pots	bolompoto (flower pots)	P
S02		terracotta potte	L
S03		dipoto tsa * tsa malomo (flower pots)	P
S04		dipitsa tsa *terracota (pots of terracotta)	L
S05		poto tsa dipalesa (flower pots)	P
S06		kwamabodwe wezithalo (pot plants)	P
S07		terracotta potte	L
S08		terracotta potte	L
S09		terracotta potte	L
S10		terracotta potte	L
S11		terracotta potte	L
Participant		TT word	Code
S01	gorgeous	khahlise (pleasing/attractive)	P
S02		merkwaardige	P
S03		motle (beautiful)	L
S04		metle (beautiful)	L
S05		Did not translate	O
S06		imibala yazo eqhakazayo (vibrant)	P
S07		pragtig	L
S08		pragtige	L

S09		pragtige	L
S10		asemrowende	P
S11		mooi	P
Participant	ST word	TT word	Code
S01	frail and fragile	hase hangata a leng bonojwana (not usually soft)	P
S02		delikaat	P
S03		pona fela fela (wither)	P
S04		hadishwe ha bobebe ebile hadi robehe feela (easily breakable)	P
S05		bonolo (simple)	P
S06		alula (thin)	P
S07		swak	P
S08		tingerig	L
S09		pieperige	P
S10		bros	P
S11		breekbaar	P
Participant	ST word	TT word	Code
S01	semi-shade or partial sun	moriting kapa letsatsing lesa cheseng haholo (in the shade or in a very hot sun)	P
S02		semi-koelte of gedeeltelike son	L
S03		morithing kapa hanyane letsatsing (in the shade or slightly in the sun)	P
S04		moo honang le merithinyana kapa letsatsi lesa tjabang haholo (with little or no sunshine)	P
S05		tulong e sa tshabelweng ke letsatsi haholo (a place that is not too exposed to the sun)	P
S06		kunomthunzi omncane or elangeni kancane nje (little shade or little sun)	P
S07		'n bietjie skaduwee of in 'n bietjie son	L
S08		semi-koelte of gedeeltelike son	L
S09		in semi-skaduwee of semi- sonlig	L
S10		semi-skaduwee of gedeeltelike son	L
S11		gedeeltelike skaduwee of in gedeeltelike son	L
Participant	ST word	TT word	Code
S01	fuss-free	Did not translate	O
S02		moeiteloose	P
S03		dijalo tse senang moferefere (plants without turmoil)	P
S04		Did not translate	O
S05		sa thlokeng mosebetsi haholo (not too much work)	P
S06		azihlupphi zona zihlala zijabulile noma (they don't bother and are always happy)	P
S07		nodig nie baie nie	P
S08		"fuss"-vrye	P
S09		maklike	P
S10		fimies vrye	P
S11		min fuss	P
Participant	ST word	TT word	Code
S01	showiest	ke tse ding ya tse bonahalang (most visible)	P
S02		een van die mooiste	P
S03		bonahalang haholo (more visible)	P

S04		tsona tse hlahellang (most prominent)	P
S05		ke palesa e tsibisahalang hara tse hare (most common)	P
S06		athanda ukubukisa (like to show off)	P
S07		'n blom wat afshow	P
S08		Did not translate	O
S09		skouagtigste	P
S10		skouagtigste	P
S11		spoggerige	L
Participant	ST word	TT word	Code
S01	vibrant	ka mebala e hlakiling e kgantsang (bright)	P
S02		helder	P
S03		ka mmala e phatsimang (bright)	P
S04		Did not translate	O
S05		Did not translate	O
S06		eqhakazile (bright)	P
S07		helder	P
S08		helder	P
S09		vibrante	P
S10		Did not translate	O
S11		helder	P
Participant	ST word	TT word	Code
S01	rose	Did not translate	O
S02		rooskleurig	L
S03		bofubedu (red)	P
S04		Did not translate	O
S05		Did not translate	O
S06		ebomvu (red)	P
S07		roos	L
S08		rooskleur	L
S09		roos	L
S10		roos	L
S11		roos-kleurig	L

Expert translation choices

Participant	ST word	TT word	Code
P01	Peerless Primulas	Pragtige primulas	P
P02		Weergalose Primulas	L
P03		Pragtigste Primulas	P
P04		Onverbeterlike Primulas	P
P05		Did not translate	O
P06		Weergalose Primulas	L
P07		Primulas sonder eweknieë	P

P08		Vriendelose Primulas	P
P09		Onvergelykbare Primulas	P
P10		Weergalose primulas	L
P11		Did not translate	O
P12		Primeln – einfach unvergleichlich	P
P13		l'incomparable primerose	P
P14		Ongekende Primulas	P
P15		Did not translate	O
P16		Weergalose primulas	L
P17		Did not translate	O
P18		Did not translate	O
P19		Weergalose Primulas	L
Participant	ST word	TT word	Code
P01	cultivars	kultivars	L
P02		kultivars	L
P03		kultivars	L
P04		kultivars	L
P05		Did not translate	O
P06		kultivars	L
P07		kultivars	L
P08		kultivars	L
P09		kultivars	L
P10		kultivars	L
P11		soorte	P
P12		Sorten	P
P13		espèces	P
P14		kultivars	L
P15		kultivars	L
P16		variëteite	P
P17		kultivars	L
P18		kultivars	L
P19		kultivars	L
Participant	ST word	TT word	Code
P01	long-lasting blooms	langdurige bloeisels	L
P02		langdurige blomme	L
P03		blomme wat lank hou	P
P04		langlewende blomme	P
P05		blomme wat lank hou	P
P06		langdurige blomme	L
P07		blomme wat lank leef	P
P08		blomme wat lank hou	P
P09		langdurende bloeisels	L
P10		langdurige blomme	L

P11		langdurende blomme	L
P12		langlebigen Blütenpracht	P
P13		fleurissant longtemps	L
P14		langdurige blomme	L
P15		blomme wat 'n lang groeisiklus het	P
P16		blomme wat baie lank hou	P
P17		langdurige bloeisels	L
P18		blomme wat lank mooi bly	P
P19		langlewende blomme	P
Participant	ST word	TT word	Code
P01	bedding plants	tuinplante	P
P02		beddingplant	L
P03		plante...uiters geskik vir beddings	P
P04		beddingplante	L
P05		plante wat gewoonlik in beddings geplant word	P
P06		beddingplante	L
P07		Did not translate	O
P08		beddingsplante	L
P09		blombeddingplante	P
P10		beddingplante	L
P11		bedding-plante	L
P12		Beetpflanzen	L
P13		ces fleurs de plates-bandes	L
P14		Did not translate	O
P15		beddingplante	L
P16		tuinplante	P
P17		beddingplante	L
P18		tuinplante	P
P19		beddingplante	L
Participant	ST word	TT word	Code
P01	stunning	treffend	P
P02		fantasies	P
P03		uiters geskik	P
P04		asemrowend	P
P05		pragtig	P
P06		treffend	P
P07		geskik	P
P08		pragtig	P
P09		asemrowed	P
P10		pragtig	P
P11		pragtig	P
P12		Omission	O
P13		magnifiques	P

P14		asemrowend	P
P15		pragtig	P
P16		ideaal	P
P17		pragtig	P
P18		pragtig	P
P19		treffend	P
Participant	ST word	TT word	Code
P01	terracotta pots	terracottapotte	L
P02		terracotta potte	L
P03		terracotta potte	L
P04		terrakotta-potte	L
P05		kleipotte	P
P06		kleipotte	P
P07		terrakotta potte	L
P08		terrakotta potte	L
P09		terracotta-potte	L
P10		terracottapotte	L
P11		terracotta potte	L
P12		Terracotta-Töpfen	L
P13		pots de terre cuite	L
P14		terrakottapotte	L
P15		Did not translate	O
P16		terracottapotte	L
P17		terracotta potte	L
P18		terracottapotte	L
P19		kleipotte	P
Participant	ST word	TT word	Code
P01	gorgeous	pragtige	L
P02		ongelooflike	P
P03		pragtige	L
P04		pragtige	L
P05		uitbundige	P
P06		pragtige	L
P07		wonderlike	P
P08		asemrowende	P
P09		pragtige	L
P10		pragtige	L
P11		asemrowende	P
P12		wunderbaren	P
P13		magnifiques	P
P14		pragtige	L
P15		pragtige	L
P16		pragtige	L

P17		pragtige	L
P18		Omission	O
P19		treffende	P
Participant	ST word	TT word	Code
P01	frail and fragile	swak en weerbaar	P
P02		swak of broos	P
P03		fyn of gevoelig	P
P04		tingerig en fragiel	L
P05		pieperig en broos	P
P06		broos en delikaat	P
P07		swak en breekbaar	P
P08		tingerig en broos	L
P09		swak of pieperig	P
P10		swak en breekbaar	P
P11		fyn en fragiel	P
P12		zart und zerbrechlich	P
P13		ni malingres ni fragiles	P
P14		broos en pieperig	P
P15		broos of weerloos	P
P16		fyn en broos	P
P17		swak en breekbaar	P
P18		breekbaar of fyn	P
P19		broos en breekbaar	P
Participant	ST word	TT word	Code
P01	semi-shade or partial sun	gedeeltelike skadu of gedeeltelike son	L
P02		semi-skadu of vol son	L
P03		semi-skadu of halfson	L
P04		semiskadu of gedeeltelike son	L
P05		semi-skaduwee of gedeeltelike son	L
P06		semi-skaduwee of gedeeltelike son	L
P07		semi-skaduwee of gedeeltelike son	L
P08		semi-skadu of gedeeltelike son	L
P09		halfskadu of -sonlig	L
P10		halfskadu of gedeeltelike son	L
P11		semi-skadu of gedeeltelike sonlig	L
P12		Halbschatten oder in teilweiser Sonne	L
P13		mi-ombre ou au soleil	L
P14		semi-skadu of gedeeltelike son	L
P15		semi-skadu of gedeeltelike sonlig	L
P16		halfskadu of gedeeltelike sonskyn	L
P17		halfskaduwee of gedeeltelike sonlig	L
P18		halfskadu of gedeeltelike son	L
P19		gedeeltelike skadu of gedeeltelike son	L

Participant	ST word	TT word	Code
P01	fuss-free	sonder sukkel	P
P02		moeitevrye	P
P03		min moeite	P
P04		sonder fieterjasies	P
P05		sonder moeite	P
P06		sonder fieterjasies	P
P07		geen fiemies nie	P
P08		nie moeilike plante nie	P
P09		sorgvrye	P
P10		sukkellose	P
P11		sonder fiemies	P
P12		pflegeleichte	P
P13		plantes sans problèmes	P
P14		nie baie moeite nie	P
P15		moeitevrye	P
P16		moeitelose	P
P17		moeitevrye	P
P18		min fiemies	P
P19		moeitevrye	P
Participant	ST word	TT word	Code
P01	showiest	flambojantste	P
P02		een van die mooiste	P
P03		die kroon	P
P04		een van die aanskoulikste	P
P05		Did not translate	O
P06		een van die pronkerigste	P
P07		een van die spoggerigste	L
P08		een van die spoggerigste	L
P09		een van die spoggerigste	L
P10		Did not translate	O
P11		Did not translate	O
P12		der prunkvollsten	P
P13		Did not translate	O
P14		een van die mooiste	P
P15		een van die mooiste	P
P16		skouspelagtigste	P
P17		skouspelagtigste	P
P18		een van die mooiste	P
P19		een van die aanskoulikste	P
Participant	ST word	TT word	Code
P01	vibrant	helder	P
P02		helder	P

P03		helder	P
P04		lewendige	P
P05		Did not translate	O
P06		pragtige	P
P07		Did not translate	O
P08		helder	P
P09		lewenslustige	P
P10		skitterende	P
P11		helder	P
P12		kräftigen	P
P13		Did not translate	O
P14		pragtige	P
P15		helder	P
P16		helder	P
P17		lewendige	P
P18		helder	P
P19		helder	P
Participant	ST word	TT word	Code
P01	rose	roos	L
P02		roos	L
P03		rooskleurig	L
P04		roospienk	P
P05		Did not translate	O
P06		roospienk	P
P07		Did not translate	O
P08		roospienk	P
P09		rooskleurig	L
P10		rooskleurig	L
P11		roos	L
P12		rosa	L
P13		Did not translate	O
P14		roos	L
P15		pienk	P
P16		ligpers	P
P17		rooskleur	L
P18		pienk	P
P19		roospienk	P

APPENDIX I: INDIVIDUAL EYE-TRACKING DATA

Novices' saccade count and average saccade amplitude

Novices	Saccade Count	Average saccade amplitude [°]
S01	817	2.8
S02	1455	4.2
S03	1352	5.6
S04	1161	6.2
S05	735	5.4
S06	489	5.5
S07	935	4.8
S08	1503	5.3
S09	282	12.1
S10	738	4.1
S11	1169	3.9
Averages	966.9	5.4

Experts' saccade count and average saccade amplitude

Experts	Saccade count	Average saccade amplitude [°]
P01	360	18.0
P02	972	2.5
P03	1066	3.6
P04	636	6.3
P06	1400	2.5
P07	1109	7.0
P08	250	34.4
P09	569	21.1
P10	92	9.8
P11	1134	10.4
P12	1563	4.3
P13	407	5.9
P14	669	19.6
P15	1425	10.2
P16	861	2.6
P17	866	5.7
P18	749	4.2
P19	541	7.1
Averages	814.9	9.7

Sum of dwell time (ms)

Novices	Total ST	Total TT	Grand Total	Percent ST	Percent TT
S01	318894.9	344185.9	663080.8	48%	52%
S02	529032.8	375576.8	904609.6	58%	42%
S03	417513.2	293847.6	711360.8	59%	41%
S04	156463.8	147459	303922.8	51%	49%
S05	213303.2	65117	278420.2	77%	23%
S06	204032.6	174882.6	378915.2	54%	46%
S07	114080.6	137310.5	251391.1	45%	55%
S08	401053.6	357528.6	758582.2	53%	47%
S09	63383.7	17799.7	81183.4	78%	22%
S10	237017.4	261569.6	498587	48%	52%
S11	175198.9	326085.1	501284	35%	65%
Average				55%	45%

Sum of revisits

Novices	Total ST	Total TT	Grand Total	Percent ST	Percent TT
S01	90	95	185	49%	51%
S02	153	117	270	57%	43%
S03	164	151	315	52%	48%
S04	149	119	268	56%	44%
S05	59	43	102	58%	42%
S06	55	47	102	54%	46%
S07	102	91	193	53%	47%
S08	167	161	328	51%	49%
S09	32	24	56	57%	43%
S10	69	65	134	51%	49%
S11	108	107	114	95%	94%
Average				57%	51%

Sum of fixation count

Novices	Total ST	Total TT	Grand Total	Percent ST	Percent TT
S01	557	473	1030	54%	46%
S02	980	520	1500	65%	35%
S03	888	609	1497	59%	41%
S04	488	431	919	53%	47%
S05	634	252	886	72%	28%
S06	308	221	529	58%	42%
S07	487	386	873	56%	44%
S08	805	708	1513	53%	47%
S09	217	71	288	75%	25%
S10	452	311	763	59%	41%
S11	560	746	1306	43%	57%

Average				59%	41%
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Sum of fixation time (ms)

Novices	Total ST	Total TT	Grand Total	Percent ST	Percent TT
S01	310369.9	338218.8	648588.7	48%	52%
S02	510534	360083.8	870617.8	59%	41%
S03	394502.6	276653.6	671156.2	59%	41%
S04	140117.2	134328.8	274446	51%	49%
S05	196508.7	59697.4	256206.1	77%	23%
S06	198282.7	166196.5	364479.2	54%	46%
S07	99950.8	127016.5	226967.3	44%	56%
S08	386178.4	319843.8	706022.2	55%	45%
S09	49896.6	16770.2	66666.8	75%	25%
S10	228755.8	252435.6	481191.4	48%	52%
S11	161699.6	313120.5	474820.1	34%	66%
Average				55%	45%

Average fixation duration (ms)

Novices	Total ST	Total TT	Grand Total	Percent ST	Percent TT
S01	310369.9	338218.8	648588.7	48%	52%
S02	510534	360083.8	870617.8	59%	41%
S03	394502.6	276653.6	671156.2	59%	41%
S04	140117.2	134328.8	274446	51%	49%
S05	196508.7	59697.4	256206.1	77%	23%
S06	198282.7	166196.5	364479.2	54%	46%
S07	99950.8	127016.5	226967.3	44%	56%
S08	386178.4	319843.8	706022.2	55%	45%
S09	49896.6	16770.2	66666.8	75%	25%
S10	228755.8	252435.6	481191.4	48%	52%
S11	161699.6	313120.5	474820.1	34%	66%
Average				55%	45%

Sum of dwell time (ms)

Experts	Total ST	Total TT	Grand Total	Percent ST	Percent TT
P01	62887.8	30248.65	93136.5	68%	32%
P02	221521.9	298234.8	519756.68	43%	57%
P03	224451.3	222269.7	446720.99	50%	50%
P04	127546.9	136333.9	263880.77	48%	52%
P06	287550.5	420168.3	707718.83	41%	59%
P07	276329.8	265966.4	542296.23	51%	49%
P08	14911.2	29207.72	44118.94	34%	66%
P09	12656.9	203680	216336.89	6%	94%
P10	13704.9	16676.13	30381.01	45%	55%

P11	72129.0	236429.3	308558.28	23%	77%
P12	263796.8	461904.9	725701.74	36%	64%
P13	145109.7	30016.82	175126.55	83%	17%
P14	39358.0	66055.92	105413.91	37%	63%
P15	127669.9	449421.6	577091.5	22%	78%
P16	179596.2	243537	423133.19	42%	58%
P17	175554.9	271263.2	446818.13	39%	61%
P18	259944.1	194272.8	454216.86	57%	43%
P19	13179.4	97451.3	110630.69	12%	88%
Average	139883.3	204063.2		41%	59%

Sum of revisits

Experts	Total ST	Total TT	Grand Total	Percent ST	Percent TT
P01	32	45	77	42%	58%
P02	120	118	238	50%	50%
P03	105	103	208	50%	50%
P04	97	79	176	55%	45%
P06	110	112	222	50%	50%
P07	103	128	231	45%	55%
P08	27	49	76	36%	64%
P09	38	105	143	27%	73%
P10	10	13	23	43%	57%
P11	121	135	256	47%	53%
P12	154	151	305	50%	50%
P13	33	18	51	65%	35%
P14	60	69	129	47%	53%
P15	106	141	247	43%	57%
P16	88	87	175	50%	50%
P17	105	102	207	51%	49%
P18	84	65	149	56%	44%
P19	33	72	105	31%	69%
Average	79.2	88.4		47%	53%

Sum of fixation counts

Experts	Total ST	Total TT	Grand Total	Percent ST	Percent TT
P01	192	131	323	59%	41%
P02	554	471	1025	54%	46%
P03	662	753	1415	47%	53%
P04	408	347	755	54%	46%
P06	731	931	1662	44%	56%
P07	560	638	1198	47%	53%
P08	76	134	210	36%	64%
P09	76	784	860	9%	91%
P10	46	68	114	40%	60%

P11	341	731	1072	32%	68%
P12	847	1164	2011	42%	58%
P13	392	72	464	84%	16%
P14	146	281	427	34%	66%
P15	441	1060	1501	29%	71%
P16	462	506	968	48%	52%
P17	423	567	990	43%	57%
P18	455	265	720	63%	37%
P19	65	323	388	17%	83%
Average				43%	57%

Sum of fixation time (ms)

Experts	Total ST	Total TT	Grand Total	Percent ST	Percent TT
P01	57161.9	26277.7	83439.5	69%	31%
P02	212736.3	290735.4	503471.7	42%	58%
P03	213745.0	210453.3	424198.4	50%	50%
P04	120834.1	126348.8	247183.0	49%	51%
P06	275488.8	404658.9	680147.7	41%	59%
P07	263956.3	244709.1	508665.4	52%	48%
P08	11344.6	19907.0	31251.6	36%	64%
P09	12122.3	183734.2	195856.5	6%	94%
P10	12864.4	14956.0	27820.4	46%	54%
P11	61043.5	198197.3	259240.8	24%	76%
P12	248913.3	439510.7	688424.0	36%	64%
P13	135310.7	27983.2	163293.9	83%	17%
P14	34910.8	46270.2	81180.9	43%	57%
P15	117906.2	403146.6	521052.7	23%	77%
P16	171492.5	234797.8	406290.2	42%	58%
P17	162551.2	259211.6	421762.8	39%	61%
P18	250253.0	182743.9	432996.8	58%	42%
P19	12077.3	90659.3	102736.7	12%	88%
Average				42%	58%

Average fixation duration (ms)

Experts	Total ST	Total TT	Grand Total	Percent ST	Percent TT
P01	624.22	406.43	1030.65	61%	39%
P02	684.52	1185.25	1869.77	37%	63%
P03	598.35	557.6	1155.95	52%	48%
P04	630.06	716.35	1346.41	47%	53%
P06	376.87	434.65	811.52	46%	54%
P07	660.84	751.2	1412.04	47%	53%
P08	149.27	148.56	297.83	50%	50%
P09	325.44	461.27	786.71	41%	59%
P10	279.66	426.86	706.52	40%	60%

P11	360.4	482.34	842.74	43%	57%
P12	534.88	752.98	1287.86	42%	58%
P13	546.05	783.31	1329.36	41%	59%
P14	455.61	331.48	787.09	58%	42%
P15	444.66	767.43	1212.09	37%	63%
P16	667.16	933.02	1600.18	42%	58%
P17	579.96	908.61	1488.57	39%	61%
P18	550.01	1186.65	1736.66	32%	68%
P19	363.35	565.83	929.18	39%	61%
Average				44%	56%

APPENDIX J: CHANGES

Novices

S01

Translation task

inserted mariha a > deleted mariha a > inserted ho maria a phodileng > deleted ho > inserted > dipoloto > deleted a > inserted tsa > inserted primula ke > deleted ke > inserted hase moneyt > deleted hase moneyt > inserted di tlamehile. inserted tse ding tsa tsona tse pedi ke tse makgasi le tsa sekgowa. ka di > deleted di > inserted mebalaneb > deleted -neb > inserted e fapaneng. > *deleted . > inserted , makala a asa feleng, dipalesa tse di ntle ka hara le bolompoto kapa hadi bokane ka she > deleted she > inserted dihlopha hore mebala ya teng e khahlise. makgasi a primulas > deleted s > inserted , hosa tsotelle mabitso a tsona, hase ha hangata a leng no > deleted no > inserted bonojwana: ke dipala > deleted a > inserted -esa tse tiileng tse hosal > deleted sal > inserted -lang ka pele le ha bonomlo > deleted -mlo > inserted -lo meriting kapa letsatsing lesa chesenh > deleted h > inserted g haholo, ke dijalo tse thabileng > deleted -ileng > inserted -elang mobu o feng kapa ofe. di pri > deleted pri > inserted pla > deleted l > inserted -lesa tsa senyesemane, ntle le ho > deleted ntle le ho > inserted ka tsepo, ke tse ding ya tse bonahalang ho tse 400 kapa ye tse ding tsa maloko a primula, ka mebala e hlakiling e kganshamg > deleted -shang > inserted tsang.

Insertions: 23

Deletions: 20

Total activity: 43

Revision task

inserted > ho ba teng > deleted e > inserted a (changed tse to tsa) > deleted ka tsepo > inserted ntle le tshepo

Insertions: 3

Deletions: 2

Changes: 1

Total activity: 6

S02

Translation task

inserted Peerless Pris > deleted -s > inserted -mulas > Enter > Vir helder winter tuine, is primulas n moet. van die verskillende kultivars wat daar is , is twee die mees noteerbare een die fee primula (Primula acaulis\0. Met > deleted \0 > inserted) msddsd helder kleure, lan > deleted lan > inserted ewigdurende bloeisels > deleted -sddsd > inserted > -assas... , hou hierdie bedding plante > deleted ewigdurende bloeisels, hou hierdie bedding plante > inserted ewigdurende bloeisels e > deleted e and , > inserted em > deleted m > inserted n and hou > deleted hou > inserted is b > deleted b > inserted hierdie plante merkwaardig in terracotta potte, of in stywe groepe waar hul merkwaardige kleure ten vi > deleted -i > inserted -olle waardeur kan word. Enter > Enter Fee primulas are > deleted are > inserted , ten spyte van hul naam, is glad nie > deleted nie > inserted nie delikaat nie: hulle is taai klein blommetjies wat vining groei en maklik in semi-koelte of gedeeltelike son groei. hulle is moeiteloos plante wat heel gelukkig is met enige normale of goeie grond is. > Enter > Enter > Die Engelse primrose is, ongetwyfeld, een van die mooiste lede van die 400 of s > deleted of s > inserted plante in die Primula familie, met helder kleure wat die > deleted die > inserted selfs die aakligste winter dag, helder sal maak. Skaars 15cm hoog, groei dit prettig in ligte skadu of gedeeltelike son en kom die blomme in donker blou, lig blou, roomkleurig, pienk, wit, geel en rooskleurig.

Insertions: 15

Deletions: 14

Total activity: 29

Revision task

deleted v > inserted V > deleted space... die (twee ... mees noteerbare) > inserted of die Engelse primrose (Primula Acaulis) > deleted acaulis > inserted malacoides > deleted u > inserted e (waardeur)

Insertions: 4

Deletions: 4

Total activity: 8

S03

Translation task

inserted * tse senang di thotsse > deleted -se > inserted i > Enter > Enter > inserted Baeng > deleted -eng > inserted -keng sa mariha a kganyang > deleted mariha a kganyang > inserted ditone tse kganyang mariha, tseo o tlamehang hoba le sona > deleted tseo o tlamehang hoba le sona > inserted tlamehang hoba le di*. ho tse ding tse ngata tsa di*. tse pedi tse elwang hloko haholo ke tsa di > deleted tsa di > inserted ke di* tsa di feri le tsa sekgowa > deleted sekgowa > inserted senyesemane eleng di*. ho tse ding tsa ngata tse mmala o kganyang, tse blomang nako e telele di tse na tse ikadileng di ntle ka * k > deleted * k > inserted ka dipoto tsa malomo kapa... tsa *... ha di teteane moo mmala wa tsona o motle o ka behehang ka teboho. > Enter > Enter > inserted di* tsa di feri hosa kgathallatsehe mabitso a tsona... [comma between feri and hosa]...pone fela fela: ke malongwana a manyane a tiileng a holang ka poylako > deleted -ylako > inserted -tlako mme ha bonolo > deleted mme ha bonolo > inserted le ha bobebe morithing kapa letsa > delete letsa > inserted hanyane letsatsing. Ke malomo > deleted -lomo > inserted bolomo a senang > deleted bolomo a senang > inserted dipalesatse > deleted -tse > deleted dipalesatse > inserted dime > deleted -me > inserted -jalo tse senang mofereferere tse hol > deleted hol > inserted thabileng ka mobu o tlaelehile o motle. > Enter > Enter > inserted di > deleted di > inserted d > deleted d > inserted di* tsa sekgowa tsona, ntle le pelaelo, ke tsona tse bonahalang haholo hara tse 400 kapa maloko a *, ka mmala e phatsimang etlo kgantshang letsatsi le lebe la mariha. hadi 15cm ka botelele,ditlo hola di thabile kganyeng > deleted kganyeng > inserted morithing ose > deleted -se > inserted bobebekapa letsatsing mme ditla dile mmala o tibileng wa mmala wa lehodimo, kerimi, pinki, tshweu, sela le bofubedu.

Insertions: 23

Deletions: 19

Total activity: 42

* No revision done

S04

Translation task

inserted *peerless Primulus > Enter > Enter > inserted hore > deleted hore > inserted O > deleted O > inserted Hore temo ya hao ebe ntle ka nako ya leh > deleted leh > inserted mariha, di *primulas di a hlokeha. Di temong tse fapaneng, di eleg hore ha hona hore oka seke wa dibona > inserted pedi tse *fairy primula (Primula malacoides) le English primrose. Ka mmala e mengata e kgahlang, di palesa sebaka se setelele, dim ela tse na hape di ntle ka

hara dipitsa tsa *terracotta kapa mekhahlong e teteaneng moo mmala ya teng e metle etla hlahella hantle > **deleted** hlahella hantle > **inserted** amohelwa ka botlalo. > Enter > Enter > **inserted** *Fairy primulas hadishwe ha bobebe ebile hadi robehe feela, le ha lebitso la teng le bolela ho hong: ke dipalesa tse nyenyane tse tihleng tse holang ka pele ebile habobebe moo e > **deleted** e > **inserted** honang le methinyana kapa letsatsi leseng > **deleted** -eng > **inserted** -a tjabang haholo, kedi mela tse nang le kgotso ebile tse thabiling moo mobu teng wa temo o tlwaelahileng ebile ole motle.> Enter > Enter > English primrose > **inserted** Le kantle ho pelaelo, *... ke tsona tse hlahellang

Insertions: 11
Deletions: 6
Total activity: 17

Revision task

deleted h > **inserted** g (mekhahlong) > **inserted** -ri (methinyana) > **deleted** -i > **inserted** e (thabiling>thabileng)

Insertions: 3
Deletions: 2
Total activity: 5

S05

Translation task

inserted Peerles Primulas > Enter > Enter > **inserted** Matsatsi a tjabileng mariha, palesa ena ke tshawanelo. Ho tswa ho a mangata a tsebisahalang, ana a mabedi e leng Fairy primula le English primrose. Ka mmala ya tsina e hlabang mahlo, ka makala a phatsimang, dipalesa tsena dintle haholo ebile di tsw > **deleted** -sw > **inserted** tshawanelwa ke di poto tsa mabolo > **deleted** mabolo > **inserted** dipalesa, moo ditlang hoo ananelwa haholo. > Enter > Enter > **inserted** Fairy primulas ke palesa esa tshwaneg le lebitso la teng, ha le fragile* > **deleted** fragile* > **inserted** bonolo > left cursor to before bonolo > **inserted** frail* le > **inserted** semicolon after bonolo > **inserted** ke di palesa tse tiileng > left cursor to after tse > **inserted** nyane tse > right cursor to after tiileng > **inserted** tse holang ha bobebe ebile ka potlako tulong e sa tshabelweng ke letsatsi haholo. ke dipalesa tse fuss* > **deleted** fuss* > **inserted** tse sa hlokenng mosebetsi haholo, di thabela maemo afe kapa afe a > **deleted** a > **inserted** , > Enter > Enter > English primrose ke palesa e tsebisahalang hara tse hare tse 400 hotswa molokng wa tsona.

Insertions: 13
Deletions: 5
Total activity: 18

* No revision done

S06

Translation task

inserted ama Primulus a peerless > Enter > Enter > **inserted** uma ufuna ingadi eqhakazile ngosikhathi sobusika, ama primulus kumele abakhona. kuzozonke izithshalo ezahlukene, ezimbili eziphuma phambili i fairy primula kanye ne primula yesingisi. ngokuchakaza obunenemibalal > **deleted** -nemibalal > **inserted** mibalabala eyahlukene eminingi, nokuqhakaza okuthatha isikhathi, lezi zizhalo zintle kakhulukazi phakathi kwamabodwe wezizhalo noma emaqenjini lapho khona imibala yazo eqhakazayo izobonakala kahle. > Enter > **inserted** ama fairy primula wona, nokho nje amagama azo ingathi alukhun > **deleted** -khun > **inserted** -la nje ,aqi > **deleted** ,aqi > **inserted** kodwa zona izimbali eziqinile ezikhula msinyane lapho khona uthola > **deleted** uthola > kunomthunzi omncane or elangeni kancane nje, azihlupji zona > **deleted** -ji zona > **inserted** -phi zona zihlala zijabulile noma ungazifaka kunoma yiluphi uhlobo lwe nhlabathi yokwenza ingadi. > Enter > **inserted** i primrose yesengisi ,enye yamaqembu angu 400 athanda ukubukisa > left cursor to before angu > **inserted** kumndeni wama primula > right cursor after ukubukisa > **inserted** , ngemibala yakhona eqhakazile engaqhakazisa nanoma yilanga elidangele lase busika. nokho linge lide > **deleted** -inge lide > **inserted** -lan > **deleted** -lan > **inserted** linganiselwa kubede obungama centimeter angu 15, lizokhula lijabulilelangeni kancane noma emthunzini kancane liphinde libuye linombala oluhlaza kwesibakabaka,olo*creami, oluphuzi kanye nemalai > **deleted** -malai > **inserted** mbali ebomvu* > **deleted** *

Insertions: 13
Deletions: 9
Total activity: 22

Revision task

changed ngosikhathi to ngesikhathi > **changed** abakhona to abekhona > **changed** eziphuma to eziphuma > **changed** ngokuchakaza to ngokuchakaza > **changed** izobonakala to ibonakala

Insertions: 0
Deletions: 0
Changes: 5
Total activity: 5

S07

Translation task

inserted Primulas sonder 'n maat > Enter > Enter > **inserted** Vir 'n helder tuin in die winter, is 'n Primula die regte blom. Van die cultivars, die twee wat uit staan, is die Fairy Primula (Primula malacoides) en die Engelse Primrose (Primula acaulis). Met so baie helder kleur, en blomme wat lank laas, hierdie plante lyk mooi in terracotta potjie > **deleted** -jie > **inserted** -te, of in stuiwe groepe, waarin > **deleted** -in > **inserted** -om die pragtig kleure kan waardeur word. > Enter > Enter > **inserted** Fairy Primulas, ten spuite hulle naam, raak baie min frail en swak, hulle is klein, tough > **deleted** tough > **inserted** sterk blomme wat vinnig groei > left cursor to after vinnig > **inserted** en baie maklik > right cursor to after groei > **inserted** in bietjie skaduwee of in 'n bietjie son. Hulle (die plante) nodig nie baie nie, en is gelukkig met normal, goeie tuin soil > **deleted** -oil > **inserted** -and. > Enter > Enter > **inserted** Die Engelse Primrose, is sonder 'n twiifel een van 400 > left cursor to after twiifel > **inserted** 'n blom wat afshow en mooi is, tussen > **deleted** -ussen > **inserted** -een move cursor after 400 > **inserted** van die Primula gesin, die mooi > **deleted** mooi > **inserted** helder kleure sal enige miserable > **deleted** miserable > **inserted** bemoeite winter's dag beter maak. > **deleted** beter > **inserted** helder > cursor after maak > **inserted** . Nie eers 15cm lank nie, dit sal gelukkig in ligte skaduwee of 'n bietjie son groei. Dit kom in donker blou, ligte blou, cream, pienk, wit, geel en roos.

Insertions: 17
Deletions: 8
Changes: 0
Total activity: 25

* No revision done

S08

Translation task

> Enter > Enter > **inserted** Vir helder winter tuine is Primulas 'n moet. Van die verskeie kultiwars is die Feetjie primula (primula malacoides) en die Engelse primrose (Primula acaulis) die twee mees erkenbare soorte. Met massas helder gekleurde, lang blomtyd blomme, is hierdie bedding-plant ook pragtig in terracotta potte of in digte groepe waar hul pragtige kleure ten volle waardeer kan word. > Enter > Feetjie primulas is, ten spyte van hul naam, glad nie ...: hulle is sterk klein blommetjies wat vinnig en maklik in semi-koelte of gedeeltelike son groei, hulle is ... vrye plante wat gelukkig is met enige normale en goeie > **deleted** en goeie > **inserted**, goeie tuingrond is. > Enter > Die Engelse primrose is, sonder twyfel, een van die mees showiest > **deleted** showiest > **inserted** ... van die ongeveer 400 lede van die Primula familie, met ... kleure wat die slegte wintersdag sal ophelder. Skaar 15 cm hoog, sal dit gel > **deleted** gel > **inserted** gelukkig in die ligte koelte of gedeeltelike son groei, en kom voor in donkerblou, ligblou, room, pienk, wit, geel en rooskleur.

Insertions: 4
Deletions: 3
Changes: 0
Total activity: 7

Revision task

> **deleted** ... (after glad nie) > **inserted** tingerig en > **deleted** en > **inserted** > nie > **deleted** ... (after hulle is) > **inserted** "fuss"- > **deleted** ... (after met) > **inserted** helder > **deleted** (after mees) ... **inserted** "showiest" > **inserted** Portuurlose Primulas

Insertions: 6
Deletions: 5
Changes: 0
Total activity: 11

S09

Translation task

Peerless Primulas > Enter > Vir helder winter tuine is primulas n moet. Van die verskeidenheid is die twee mees herkenbaar die Fairy primula (Primula malacoides) en die Engelse primrose. Met massa helder kleurige blomme > **inserted** (after kleurige), lang lewende > **changes** blomme to bloeisels **inserted**, hierdie plante lyk ook spoggerig in terracotta potte of in naby geleë groepe waar hulle pragtige kleure waardeer kan word. > Enter > Fairy primulas is, afgesien van hulle naam, nie pieperige blomme nie: hulle is tawwe klein blommetjies wat vinnig groei en maklik in semi-skaduwee of semi-sonlig kan groei, hulle is maklike plante wat redelike gelukkig is met enige > **deleted** goeie tuingrond. > Enter > Die Engelse primrose is ongetwyfeld een van die skouagtigste lede van die 400 Primula familie, met vibrante kleure wat die mees aakligste wintersdag sal ophelder. Skaars 15 cm hoog, sal dit gelukkig groei in sagte skaduwee of gedeeltelike son en kom in donkerblou, ligte blou, room pienk, wit, geel en roos.

Insertions: 3
Deletions: 1
Changes: 1
Total activity: 5

Revision task

inserted (after roos) kleure

Insertions: 1
Total activity: 1

S10

Translation task

peerless primulas > Enter > Vir helder winter tuine is primulas n moet. Of die verskill > **deleted** -erskill > **inserted** -arieteite cultivars, twee van die bekensies is die Fairy primula (Primula malacoides) aook die Engelse primrose (Primula acaulis) Massas van helder kleurvolle, langlewende bloeisels > **inserted** (before massas) Met > is die bedding plante is ook beeldskoon in terracotta potte of selfs in groepe > **inserted** (before groepe) versamelde >, waar hulle skoonheid > **deleted** skoonheid > asemrowende kleure waargeneem en waardeer kan word. > **inserted** (before waargeneem) ten volle > Enter > Fairy primula is, despite > **deleted** despite > tenspyte van hulle naam glad nie frail of bros nie: hulle is sterk klein blommetjies wat groei in > **deleted** groei in > vinnig groei en maklik in die semi-skaduwee of deelydse son > **deleted** deelydse son > gedeeltelike son > **changed** en to asook > groei. Hierdie blomme is fimies vrye plante wat dolgelukkig is met die normal, goeie grond. > Enter > Die English primrose is untwyfelbaar een van die skouagtigste van die 400 of so memebns van die Primula familie, met heldre kleure > **deleted** heldre kleure > vibrant kleure wat die aaklige winters dag sal ophelder. Skaars 15cm in lengte sal hulle gelukkig groei in die ligte skaduwee of gedeeltelike son en sal ook donkerblou, ligblou, room, pink, wit, geel en rose

Insertions: 4
Deletions: 6
Changes: 1
Total activity: 11

Revision task

changed (after lengte) sal to kom > **changed** rose to roos > **changed** Of to Van > **deleted** (after bedding plante) is > **changed** normal to normale > **changed** untwyfelbaar to ontwyfelbaar > **changed** aaklige to aakligste > **changed** groeie to groei **changed** peerless primulas to Peerless Primulas

Deletions: 1
Changes: 8
Total activity: 9

S11

Translation task

Peeless Primulas > Enter > Primulas is 'n moet vir enige helder winter tuin. Daar is verskeie cultivars⁴, maar die Feetjie Primula (Primula malacoides) en die Engelse Primula (Primula acaulis) is die twee be > **deleted** die twee be > **inserted** twee > **deleted** twee > **inserted** meer bekend as ander. Hierdie bedding plante is asemrowend met hulle helder, long-lasting blomme, maar vertoon net so mooi in terracotta potte of in klein groepies wa > **deleted** -ies wa > **inserted** -e waar hulle gorgeous kleure ten volle waardeer kan word. > Enter > Feetjie Primulas is nie frail of maklik breekbaar nie, ongeag wat hulle ame wil voorstel: hulle is tough klein blomme wat vinnig en maklik kan groei in gedeeltelike skaduwee of in geedeeltelike son. Hierdie plante vereis min fuss en hulle is gewoonlik redelik gelukkig in enige goeie, normale tuin grond. > Enter > Die Engelse Primula is, sonder twyfel, een van die showiest tipes Primula van die 400 of > **deleted** of > **inserted** (after om) -trent > lede van die Primula familie > **deleted** (after tipes) Primula van > **inserted** uit >, met sy helder kleure wat enige miserable winter dag sal verbeter. Die blomme staan skaars 15 cm hoo, maar sal maklik groei in ligte

skaduwee of gedeeltelike son. Hulle kom in 'n wye verskeidenheid van kleure soos donkerblou, ligte blou > **changed** donkerblou to donker blou > **deleted** (after donker) blou > **inserted** en > , room-kleurig, pienk, wit, geel en roos-kleurig.

Insertions: 6
Deletions: 6
Changes: 1
Total activity: 13

Revision task

deleted (after malacoides) en > **inserted** , asook > **deleted** gorgeous > **inserted** mooi > **deleted** (after frail of) maklik > **inserted** (ongegag wat hulle) n- > **deleted** kan groei > **inserted** (after son) kan groei > **deleted** showiest > **inserted** spoggerige > **inserted** (after hoo) -g

Insertions: 6
Deletions: 5
Total activity: 11

Experts

P01

Translation task

inserted Pragtige primulas > Enter > Enter > **inserted** Om e > **deleted** e > **inserted** held > **deleted** held > **inserted** wintertuine op te helder is > **deleted** is > cursor to before Om > **inserted** Primula is onteerlik > **deleted** om > **inserted** wanneer mens > **deleted** op te > **inserted** wil op-Van die verskeie kultivars is die vernaamste twee die feeprimula (Primula malacoides) en die Engelse primroos (Primula acualis). Met massas helderkleurige bloeisels wat lank hou, is hierdie tuinplante ook treffend in terracottapotte of in digte gr > **deleted** gr > **inserted** versamel > **deleted** versamel > **inserted** groepies waa > **deleted** waa > **inserted** wat mens > **deleted** mens > **inserted** hul pragtige kleure die beste ten toon stel. > Enter > Enter > **inserted** Hul > **deleted** Hul > **inserted** Ongeag hul naam is feeprimulas hoegenaamd > **deleted** hoegenaamd > **inserted** kwalik swak en weerbaar: hulle is geharde klein blomme wat vinning in al > **deleted** al > **inserted** halfskadu > **deleted** halfskadu > **inserted** gedeeltelike skadu of gedeeltelike son groei. Hulle is moeitelose plante wat heeltemal gelukkig is met enige normale. goeie tuingrond. Die Engelse primroos is ongetwyfeld een van die flambojantste van die 400 > **deleted** 400 > **inserted** ongeveer 400 lede van die primulafamilie, met helder kleire wat selfs die triestigste wintersdag sal opkikker. Slegs 15 cm hoog, sal dit doodgelukkig in ligte skadu of gedeeltelike son groei, en kom voor in donker blou, roomkleurig, pienk, wit, geel en roos.

Insertions:17
Deletions: 15
Changes: 0
Total activity: 32

Revision task

inserted -b- at onteerlik > **changed** acualis to acaulis > **inserted** , langdurige [before *bloeisels*] > **deleted** wat lank hou > **deleted** Ongeag hul naam > **inserted** Hul naam niteenstaande > **deleted** moeitelose > **inserted** sonder sukkel, en after plante > **deleted** wat heeltemal gelukkig is > **inserted** is heeltemal gelukkig > **changed** kleire to kleure > **deleted** dit > **inserted** hulle > **deleted** ligte > **inserted** matige > **deleted** matige > **inserted** ligte > **deleted** voor > **inserted** die kleure > **deleted** in > **inserted** voor at the end of the sentence

Insertions: 10
Deletions: 9
Changes: 2
Total activity: 21

P02

Translation task

inserted > Enter > Enter > **inserted** Primula is 'n moet 'n helder winterstuijn. Van die verskeie kultivars, is die twee bekendstes > **deleted** twee bekendstes > **inserted** bekendste die ... primula (Primula malacoides) en die Engelse primula (Primula acaulis). Met hul massas helderkleurige, langdurige blomme, lyk hierdie beddin > beddin **inserted** beddingplant ook fantasies in terracotta potte of in hegte groepies > **deleted** -ies > **inserted** -e waar hulle ongelooflike kleure ten volle waardeer kan word. > **inserted** (Krismisroos) in heading > Enter > Enter > **inserted** --- krismisrose > **deleted** - krismisrose > **inserted** Ten spyte > **deleted** -Ten spyte > **inserted** Ten spyte van hul naam, is feëttjies > **deleted** -s > **inserted** -krismisroos glad nie swak of broos nie: hulle is sterk klein blomme > **deleted** klein blomme > **inserted** blommetjies wat vinnig en maklik in semi-skadu of volson > **changed** volson to vol son > **inserted** groei, hulle is moeitevrye plante wat baie gelukkig is met enige normale, goeie tuingrond. > Enter > Enter > Die Engelse krismisroos > **deleted** krismisroos primula > **deleted** (Krismisroos) > Weergalose Primulas [in heading] > is by uitstek een van die van die 400 lede > **deleted** 400 lede > **inserted** ongeveer 400 lede van die Primula-familie met helder kleure wat selfs die droewigste wintersdag sal ophelder. Met 'n hoogte van skaars 15 cm, sal dit dolgelukkig in ligte skadu of gedeeltelike son groei en kom in kleure van donkerblou, ligte blou, room, pienk, wit, geel of roos, voor.

Insertions:13
Deletions: 9
Changes: 1
Total activity: 23

Revision task

highlighted [final paragraph] > highlighted ... [first paragraph] > **inserted** Feëttjie > **deleted** feëttjie-krismisroos > **inserted** Feëttjie primulas > **deleted** ... [final paragraph] > **inserted** mooiste

Insertions: 3
Deletions: 2
Changes: 0
Total activity: 5

P03

Translation task

inserted Peerless* Primulas > Enter > Enter > **inserted** Primulas is 'n moet vir enige helder winterstuijn. Van al die verskillende kultivars is daar twee wat nogal bekend is: die Fee Primula (Primula malacoides) en die Engelse selonsroos (Primula acaulis). Hierdie plante met hulle massas helder blomme wat lank hou, is uiters geskik vir beddings, maar hulle pas ook baie goed aan in potte > **deleted** potte > **inserted** terracotta potte of in dig geplante groe > **deleted** of in dig geplante groe > **inserted** . [after potte] en hulle lyk selfs mooi as hulle in digte groepe saam geplant word, waar hulle kleure behoorlik waardeer kan word. > Enter > Enter > Fee primulas is, ten spyte van hulle naam, > **deleted** Fee primulas is, ten spyte van hulle naam, > **inserted** Ten spyte wat jy dalk mag dink > **deleted** wat jy dalk mag dink > **inserted** van die naam, Fee primulas, is hierdie plant > **deleted** plant > **inserted** is hierdie kultivar hoegenaamd nie fyngvoelig nie. Hulle is geharde klein blomplantjies wat vinnig groei en maklik in semi-skadu of halfson groei. Hulle is > **deleted** is > **inserted** vra min moeite en is baie gelukkig in enige gewone, goeie tuingrond. > Enter > Enter > **inserted** Die Engelse selonsroos is sonder twyfel die kroon van hierdie kultiva > **deleted** kultiva > **inserted** plantgroep > **deleted** hierdie > **inserted** die Primula-... [before *plantgroep*] , met meer as 400 kultivars.

Dié plant se blomme is > **deleted** Die plant se blomme is > **inserted** Die helder kleure van hierdie plant se blomme sal enige winter tuin > **deleted** space between winter and tuin > **inserted** tot ' > **deleted** tot ' > **inserted** vrolik kan opkikker - selfs op 'n mistroostige wintersdag! Die plante is maar > **deleted** is maar > **inserted** word nie veel groter as 15 cm hoog nie, en dit groei mooi in koelte > **inserted** ligte [before *koelte*]; of halfson. Bekende kleure van dié plante is donkerblou > **inserted** space between donker and blou], ligblou [**inserted** space between lig and blou], room, pienk, geel en rooskleurig.

Insertions: 18
Deletions: 12
Changes: 0
Total activity: 30

Revision task

deleted Peerless* > **inserted** On > **deleted** On > **inserted** Pragtigste > **inserted** saam geplant word [after "en hulle lyk selfs mooi as hulle] > **deleted** saam geplant word > **inserted** pragtige [waar hulle kleure] > **changed** fyn gevoelig to fyn of gevoelig > **deleted** vrolik > **deleted** veel groter > **inserted** hoër > **deleted** hoog

Insertions: 5
Deletions: 6
Changes: 1
Total activity: 12

P04

Translation task

inserted [space] Primulas > Enter > Enter > **inserted** Vir helder wintertuin is primulas 'n moet. Van die verskeie kultivars, is die twee opvallendste die Feetjie Primula (Primula malacoides) en die Engelse primrose (Primula acaulis). Met massas helderkleurige, langlewende blomme, is hierdie asemrowende plante ook > **changed** plante to beddingplante > moved asemrowende to after ... beddingplante ook > **deleted** -e in asemrowende > **inserted** in terrakotta potte of in groot groepe waar hulle pragtige kleure ten volle waardeer kan word. > Enter > Enter > **inserted** Feetjie Primulas is, ten spyte van hulle naam, glad nie tingerig en fragiel nie: hulle is taai klein blommetjies wat vinnig groei en > **inserted** [after *vinnig*] en maklik in semiskadu of gedeeltelike son > **inserted** [after *groei*] ..., hulle is sonder fietjasies en is heeltemal gelukkig in enige normale, goeie tuingrond. > **inserted** [heading] Onverbeterlike > Enter > Enter > **inserted** Die Engelse primrose is ongetwyfeld een van die aanskoulikste van die 400 of so lede van die primula-familie, met lewendige kleure dat die mees misrabele wintersdag sal ophelder. Skaars 15cm hoog, sal hulle gelukkig in ligte skadu of gedeeltelike son groei en is beskikbaar in donkerblou, ligblou, room, pienk, wit, geel en roospienk.

Insertions: 8
Deletions: 1
Changes: 1
Total activity: 10

Revision task

deleted , [after *kultivars*; first paragraph] > **changed** terrakotta potte to terrakotta-potte > **changed** dat to wat [final paragraph]

Insertions: 0
Deletions: 1
Changes: 2
Total activity: 3

P05

Translation task

inserted Peerless* Primulas > Enter > Enter > **inserted** Vir kleurvolle wintertuin > **inserted** 'n [before *kleurvolle*] > **inserted** is primulas onontbeerlik. Onder die verskillende kultivars [k sp] is die bekendste* die "mees > **deleted** "mees" > **inserted** die "Fairy primula" (Primula malacoides) en die Engelse primula* > **deleted** -ula > **inserted** -rose (Primula acaulis) en die Engelse primula* > **deleted** > -ula" > **inserted** -rose*(Primula acaulis). Met hulle massas helderkleurige, blomme wat lank hou, lyk hierdie plante watew > **deleted** -ew > **inserted** gewoonlik in beddings geplant word, ook pragtig in kleipotte of in digte groepies waar hulle uitbundige kleure ten volle gewaardeer kan word. > Enter > Enter > **inserted** Fairy primulas is, ten spyte van hulle naam > **inserted** * [after primulas] > **inserted** [after *naam*] , glad nie pieperig nie > **inserted** [after *pieperig*] en broos > **inserted** [after nie] : hulle is geharde klein blommetjies wat vinnig groei in semi-skaduwee > **inserted** [after *vinnig*] en maklik > **inserted** [after *maklik*] of gedeeltelike son. Hulle is plante sonder moeie [k: fuss free] wat doodgelukkig is met normale, goeie tuingrond.

Insertions: 14
Deletions: 4
Changes: 0
Total activity: 18

* No revision done

P06

Translation task

inserted Peerless Primulas > Enter > Enter > **inserted** Primulas is 'n moet vir enige > **deleted** Primulas is 'n moet vir enige > **inserted** Vir 'n kleurvolle winterstun is primulas 'n m- ... > **inserted** -oet. Van die verskillende kultivars is die twee bekendste die Feëttjie-primula (Primula malacoides) en die Engelse krismisroos > **deleted** krismisroos > **inserted** primrose (Primula acaulis). > **deleted** primrose > **inserted** krismisroos > **inserted** Hierdie beddingplante se helderkleurige, langdurige blomme vertoon ook > **deleted** ook > **inserted** ewe tre > **deleted** vertoon ook ewe tre > **inserted** is ewe treffend in kleipotte of > **deleted** of > **inserted** of in stywe groepeerings > **deleted** stywe > **inserted** knus > **inserted** [after *groepeerings*] waar die pragtige kleure op hul beste vertoon. > Enter > Enter > **inserted** Ten > **deleted** Ten > **inserted** Ten spyte van > **deleted** Ten spyte van > **inserted** Naam ten spyt is feëttjie-primulas geensins fyn en > **deleted** fyn en > **inserted** broos en delikaat nie: dis 'n taai blommetjie > **deleted** -s 'n taai blommetjie > **inserted** -e klein bommetjies is taai en groei vinnig en maklik in semi-skaduwee of gedeeltelike son. Die plantjies is sonder fietjasies > **deleted** fietjasies > **inserted** fietjasies wat > **deleted** wat > **inserted** en is doodgelukkig in goeie, normale tuingrond. > **deleted** goeie, normale tuingrond. > **inserted** doodgewone > **deleted** doodgewone > **inserted** goeie en gewone tuingrond. > Enter > Enter > **inserted** Die Engelse krismisroos > **changed** [first paragraph] Feëttjie-primula to feëttjie-primula > **inserted** [after *krismisroos*] is sonder twyfel een van die pronkerigste van die 400 plus lede van die primula-familie > **deleted** plus > **inserted** of so > **deleted** of so > **inserted** ...-plus > **deleted** -plus > **inserted** [before 400] meer as > **inserted** [after *primula-familie*] , met > **deleted** , met > **inserted** ; die lewendige > **deleted** lewendige > **inserted** helder kleure sal selfs die vaalste winterdag opkikker. > **deleted** [after ; *die*] helder > **inserted** verskillende > **inserted** Die plantjies is skaars 15 cm hoog, en groei dood > **deleted** -i dood > **inserted** -i maklik in > **deleted** maklik in > **inserted** vrolik in effense skaduwee of effense son. Hulle kom in donkerblou, > **deleted** blou, > **inserted** ...- en ligteblou, room, pienk, wit, geel en roospienk. > **inserted** [after *roospienk*] voor

Insertions: 35
Deletions: 24
Changed: 1
Total activity: 60

Revision task

~~deleted~~ Peerless > ~~inserted~~ Weergalose > ~~deleted~~ krismisroos > ~~inserted~~ primula > ~~deleted~~ krismisroos [last paragraph] > ~~inserted~~ primula > ~~deleted~~ en [second paragraph] > ~~inserted~~ , > ~~deleted~~ verskillende > ~~inserted~~ pragtige

Insertions: 5
Deletions: 5
Total activity: 10

P07

Translation task

~~inserted~~ Primulas Sonder gelyke > Enter > Enter > Vir helder wintertuine is primulas beslis > ~~deleted~~ beslis > ~~inserted~~ 'n moet. Van die verskeie kultivars is, > ~~deleted~~ is, > ~~inserted~~ daar twee > ~~deleted~~ daar twee > ~~inserted~~ is die twee belangrikste die Vee primula Primula malacoides) en die Engelse primrose (Primula acaulis). Met massas helderkleurige blomme wat > ~~deleted~~ wat > ~~inserted~~ wat lank leef, is die plante ook geskik vir terrakotta potte of in hegte groepies waar hulle wonderlike kleure ten volle waardeer kan word. > Enter > Enter > ~~inserted~~ Vee Primulas is, ten spyte van hulle naam, alles behalwe swak en breekbaar: hulle is taai klein blommetjies wat vinnig groei > ~~inserted~~ [after *vinnig*] en maklik > ~~inserted~~ in semi-skaduwee of gedeeltelike son, hulle is > ~~deleted~~ is > ~~inserted~~ het nie veel fiemi > ~~deleted~~ het nie veel fiemi > ~~inserted~~ is probleem vry en is heel gelukkig met enige normale, > ~~deleted~~ normale, > ~~inserted~~ gewone, goeie tuingrond. > Enter > Enter > ~~inserted~~ Die Engelse primrose is, > ~~deleted~~ is, > ~~inserted~~ is, ongetwyfeld, een van spoggerigste van...

Insertions:13
Deletions: 8
Changes: 0
Total activity: 21

Revision task

~~inserted~~ [heading] -s > ~~changed~~ gelykes to Gelykes > ~~inserted~~ [after *malacoides*] , Fairy primula > ~~deleted~~ is moeite vry > ~~inserted~~ het geen fiemies nie > ~~inserted~~ [after *spoggerigste*] soorte > ~~deleted~~ Gelykes [heading] > ~~inserted~~ Eweknieë > changed Vee to Vree > changed Vree back to Vee > ~~changed~~ Vee to Fiee > ~~changed~~ Fiee back to Fee > ~~changed~~ Vee [second paragraph] to Fee

Insertions:5
Deletions: 1
Changes: 4
Total activity: 10

P08

Translation task

~~inserted~~ Peerless Primulas > Enter > Enter > ~~inserted~~ Vir helder winter tuine, is primulas 'n moet. Van die verskeie kultivars, is die twee mees kenbare die Fairy -primula > ~~deleted~~ Fairy > ~~inserted~~ Veetjie-... ~~changed~~ Veetjie to Veëtjie-... (Primula malacoides) en die Engelse-primrose (Primula acaulis). met > ~~deleted~~ > ~~inserted~~ Met massas helderkleurige, langlaastende > ~~deleted~~ , langlaastende > ~~inserted~~ blomme wat lank hou, is i > ~~deleted~~ i > ~~inserted~~ hierdie beddingsplante ook pragtig in > ~~deleted~~ -agtig in > ~~inserted~~ -agtig in terracotta potte > ~~changed~~ terracotta to terrakotta ... of in gehegde groepe waar daar asemrowende kleure ten volle waardeer kan word. > ~~deleted~~ daar > Enter > Enter > Veetjie-primulas is, derhalwe hulle name, skaars frail en fragile > ~~deleted~~ fragile > ~~inserted~~ broos: hulle is sterk klein blommetjies wat vinnig groei > ~~inserted~~ [heading] Voogdelo > ~~deleted~~ Voogdelo > ~~inserted~~ Vooglose > ~~deleted~~ Vooglose > ~~inserted~~ [after *vinnig*] en maklik ... > ~~deleted~~ en maklik > ~~inserted~~ [after *groei*] en maklik in die skadu groei > ~~deleted~~ die > ~~inserted~~ semi-... of gedeeltelike son ... , hulle is nie moeilike plante nie en is heel gelukkig om > ~~deleted~~ gelukkig om > ~~inserted~~ tevrede met enige normale, goeie tuingrond. > Enter > Enter > ~~inserted~~ Die Engelse-primrose is, sonder twyfel, een van die showiest van die 400 of so lede van die Primula-familie, met helder kleure wat die mees aakligste wintersdag sal opkikker. Skaars 15 cm hoog, sal dit gelukkig > ~~deleted~~ -elukkig > ~~inserted~~ -oed in ligte skadu of gedeeltelike son groei en kom in donkerblou, ligte blou > ~~changed~~ ligte blou to ligblou, room, pienk, wit, geel en roos na vore. > ~~changed~~ roos to roosrooi to roospienk

Insertions: 15
Deletions: 13
Changes: 4
Total activity: 32

Revision task

~~inserted~~ [heading] Vooglose > ~~deleted~~ Vooglose > ~~inserted~~ Vriendelose > ~~changed~~ gehegde to dig > ~~deleted~~ showiest > ~~inserted~~ spoggerigste > ~~deleted~~ frail > ~~inserted~~ tingerig

Insertions: 4
Deletions: 3
Changes: 1
Total activity: 8

P09

Translation task

~~inserted~~ Onvergelykbare Primulas > Enter > Enter > ~~inserted~~ Primulas is 'n moet vir helder wintertuine. Uit die > ~~deleted~~ Uit die > ~~inserted~~ Van die twee kultivars is die bekendste die Fairy primula (primula malacoides) en die Engelse stokroos (primula acaulis). Hierdie grondbedekkers > ~~deleted~~ grondbedekkers > ~~inserted~~ blombeddingplante, met hulle trosse helderkleurige en langdurende vl > ~~deleted~~ vl > ~~inserted~~ bloeisels, is ook pragtig in > ~~deleted~~ is ook pragtig in > ~~inserted~~ lyk ook pragtig in terracotta-potte of in hegte groepies waar hulle pragtige kleure ten volle waardeer kan word. > ~~deleted~~ pragtig > ~~inserted~~ [after *lyk ook*] asemrowend > Enter > Enter > ~~inserted~~ Fairy primulas is ten spyte van hulle benaming glad nie swak of pieperig nie: hulle is > ~~deleted~~ hulle is > ~~inserted~~ dit is geharde klein blommetjies wat vinnig groei en maklik > ~~deleted~~ groei en maklik > ~~inserted~~ en maklik groei in halfskadu of -son, dit is sorgvrye plante wat gelukkig is met enige gewone > ~~deleted~~ gewone > ~~inserted~~ goeie, gewone tuingrond. > Die Engelse rankroos is sonder twyfel een van die spoggerigste van die 400 of so lede van die Primula-familie. > ~~inserted~~ [after *rankroos*] met haar vibrant kleure wat enige mistroostige wintersdag kan ophelder, > ~~deleted~~ vibrant > ~~inserted~~ lewenslustige > ~~inserted~~ [after *Primula-familie.*] Alhoewel > ~~deleted~~ Alhoewel > ~~inserted~~ Skaar 15-c > ~~deleted~~ -c > ~~inserted~~ cm lank > ~~deleted~~ Skaar 15 cm lank > ~~inserted~~ Dit groei kwalik > ~~deleted~~ kwalik > ~~inserted~~ skaars 15 cm hoog in > ~~deleted~~ in > ~~inserted~~ in ligte skadu gedeeltelike son en kom voor in donkerblou, ligblou, room, pienk, wit, geel, en -rooskleurig.

Insertions: 20
Deletions: 14
Changes: 0
Total activity: 34

Revision task

inserted > Teen > deleted Dit groei > deleted hoog > inserted , > deleted Teen skaars 15 cm hoog , groei dit > inserted Dit groei tevrede tot sk > deleted sk > inserted hoogstens 15 cm > deleted die [before stokroos] > inserted [after (primula acaulis)] is die twee bekendste van die wye > deleted wye > inserted verskeidenheid kultivars > Van die twee kultivars is die bekendste > changed die to Die > deleted is > inserted dra > changed son to sonlig > deleted ligte > inserted effense > changed son to sonlig > inserted [after kom] voor > inserted wees [at end of sentence] > deleted kom voor in > inserted kan > deleted > - [before rooskleurig] > changed en to of > changed room to romerig

Insertions:10
Deletions: 10
Changes: 5
Total activity: 25

P10

Translation task

inserted Weergalose primulas > Enter > Enter > inserted Vir helder wintertuine is primulas 'n moet. Van die verskeie kultivars die twee vernaamstes die Feetjieprimula (Primula malacoides) en die Engelse aandblom (Primula acaulis). Met massas helderleurige, langdurige blomme > inserted Hierdie beddingplante het > deleted Met > inserted is ook pragtig in terracotapotte of in druk > deleted druk > inserted stywe groepe waar hul pragtige kleure ten volle waardeer kan word. > Enter > Enter > inserted Feetjieprimulas is, ten spy > deleted ten spy > inserted ten spyte van hulle name, allermins br > deleted br > inserted swak en breekbaar; hulle is tawwe klein blommetjies wat vinnig groei en ma > deleted groei en ma > inserted en maklik in halfskadu of gedeeltelike son groei, en hulle is sukkellose plante wat heeltemal gelukkig is met enige normale, goeie tuingrond. > Enter > Enter > inserted Die Engelse aandblom is ongetwyfel een van die *showiest van die 400 of so lede van die primulafamilie, met helder kleure wat die mistroostigste wintersdag sal ophelder. Hulle is skaars 15 cm hoog en groei gelukkig in ligte skadu of gedeeltelike son en kom in donkerblou, ligteblou, > changed to ligte blou > inserted pienk, wit, geel en rooskleurig.

Insertions: 11
Deletions: 5
Changes: 1
Total activity: 17

Revision task

inserted Primulas is 'n moet > changed Vir to vir > deleted is primulas 'n moet > deleted stywe > inserted digte > changed name to naam > deleted ten spyte > inserted anders > inserted * [before sukkellose] > deleted helder > inserted *skitterende

Insertions: 5
Deletions: 4
Changes: 2
Total activity: 11

P11

Enter > Enter > inserted Vir helder winter tuine, primulas > deleted primulas > inserted moet jy primulas plant. Van die verskeie soorte, is die twee mees noemenswaardig die Fee primula (Primula malacoides) en die Engelse primula > deleted primula > inserted primrose (Primula acaulis). Met masses helderleurige, > deleted , > inserted ... is hierdie bedding-plante ook pragtig in terracotta potte of in stywe groepies waar hulle asemrowende kleure ten volle waardeer kan word. > Enter > Enter > inserted Fee primulas is, ten spyte van hul naam, nie > deleted nie > inserted beswaarlik fyn en fragiel: hulle is geharde klein blommetjies wat vinnig groei en > deleted groei en > inserted beide in semi-skadu en > deleted en > inserted of gedeeltelike sonlig. Hulle is sonder fiemies en is gelukkig met enige normale, goeie grond. > Enter > Enter > inserted Die Engelse primrose is, sonder twyfel, een van die ... van die 400 lede van die Primula-familie, met helder kleure wat enige wintersdag sal opkikker. Skaars 15cm hoog, groei hulle heel gelukkig in ligte skadu of gedeeltelik son and kom in kleure soos donkerblou, ligblou, room, pienk, wit, geel en roos.

Insertions: 9
Deletions: 6
Changes: 0
Total activity: 15

Revision task

changed ... moet jy primulas plant to is primulas 'n moet. > inserted [at ...] en langdurende blomme, > changed met to in > changed ... to showiest > changed is to in

Insertions: 1
Deletions: 0
Changes: 4
Total activity: 5

P12

Translation task

inserted Primeln > inserted Unvergleichbare before Primeln > deleted Unvergleichbare > inserted einfach unvergleichbar after Primeln > Enter > Enter > inserted Für farbenfrohe Wintergärten sind Primeln einfach unerlässlich. Von den zahlreichen Sorten sind die bekanntesten wohl die Feenprimel* (Primula malacoides) und die Englische Primel (Primrose acaulis). Mit ihrer üppigen Blütenpracht > inserted , farbenfrohen und langlebigen before Blütenpracht > inserted eignen sich dies Beetpflanzen auch als Terracotta-Töpfen bezaubernd oder in engen Gruppen, wo ihre wunderbaren Farben voll zur Geltung kommen. > Enter > inserted Feenprimeln sind trotz ihres Namens keineswegs zart und zerbrechlich: es sind starke, kleine Blümchen, die schnell und leicht im Halbschatten oder teilweiser Sonne wachsen; sie sin > deleted sie sin > inserted es sind pflegeleichte Pflanzen, die sich mit nahezu jeder normalen, guten Gartenerde zufrieden geben. > Enter > Enter > inserted Die Englische Primel* ist zweifellos eine der prunkvollsten der ca. 400 Mitglieder der Primelfamilie und wird mit ihren kräftigen Farben auch den trübsten Wintertag aufhellen. Nur knappe 15 cm hoch wir > deleted -ir > inserted wächst sie gerne im leichten Schatten oder in teilweiser Sonne wachsen und ist in dunkelblau, hellblau, rosa, weiß, gelb und > inserted cremefarben before rosa > deleted rosa > inserted pink after cremefarben > inserted rosa erhältlich at end of sentence.

Insertions: 12

Deletions: 4
Changes: 0
Total activity: 16

Revision task

changed unvergleichbar to unvergleichlich > inserted aterisk after Englische Primel > changed eignen with eignet > changed Beetpflanzen to Beetpflanze > inserted ga after auch > deleted ga > deleted eignet sind > inserted ist > inserted sind diese Pflanzen nicht nur als > deleted ist diese > changed Beetpflanze to Beetpflanzen > inserted , sondern after Beetpflanzen > inserted können dicht an dicht gepflanzt werden, damit > deleted in engen Gruppen wo > deleted wachsen > inserted * after Feenprimeln > deleted wird > inserted kann

Insertions: 7
Deletions: 6
Changes: 4
Total activity: 17

P13

Translation task

inserted l'incomparable primrose > Enter > Enter > inserted La primrose est incontournable dans > inserted pour un jardin before dans > inserted esu before jardin > inserted beau > deleted esu > inserted d'hiver. De toutes nles différentes espècs > deleted n- (nles) > inserted [after espèces] les deux plus remarquables sont la primevère des fées (Primula malacoides) et la primrose anglaise (Primula acaulis). > Avec des grappes de fleurs colouré > inserted aux couleurs vives qui dur > inserted [after qui] fleurissent longtemps, ces fleurs de plate-bandes > inserted -s at plate > inserted sont aussi magnifiques dans des pots de terre cuite ou en groupes serr > inserted (after ou) regroupées > inserted [after ou] en groupes ou leurs magnifiques couleurs > inserted (after ou) l'on peut admirer > inserted . [after couleurs] > Enter > Enter > inserted Les primeveres des fées sont, malgré leur nom, > inserted ne [after fées] > inserted ni malingres ni fragile: ce sont de petites fleurs robustes qui poussent ite et facilement dans la mi-ombre ou au soleil, ce sont des plantes sans problème qui se contentent d'un sol normal de jardin.

Insertions: 18
Deletions: 2
Changes: 0
Total activity: 10

Revision task

deleted d'hiver > inserted -rose > deleted vère (primrose) > inserted -roses > deleted vère > inserted v- (vite)

Insertions: 3
Deletions: 3
Changes: 0
Total activity: 6

P14

Translation task

inserted Primulas > Enter > Enter > Vir > deleted Vir > inserted Primulas is 'n moet vir wintertuin. Van al die verskillende kultivars is die Fairy-primula (Primula malacoides) en die Engelse primrose (Primula acaulis) die twee bekendstes. Met massas kleurige , langdurige blomme, is hierdie plante asemrowend in terrakottapotte of in digte groepe waar hulle pragtige kleure ten volle waardeer kan word. > Enter > Enter > inserted Primulas is, ten spyte van hulle name, glad nie broos en pieperig nie; hulle is taai klein blommetjies wat vinnig groei, veral in semi-skadu of gedeeltelike son, hulle benodig nie baie moeite nie en is gelukkig met enige normale, goeie bemesting. > Enter > Enter > inserted Die Engelse primrose is ongetwyfeld een van die mooiste van die nagenoeg 400 lede van die Primula-familie, met pragtige kleure wat selfs die vaalste wintersdag sal opkikker. Skaars 15 cm hoog > inserted [before Skaars] Dit is > changed Skaars to skaars > inserted en sal maklik groei in ligte ska > deleted ligte ska > inserted gedeeltelike skadu > deleted gedeeltelike skadu > inserted ligte skadu of gedeeltelike sonlig. > deleted . > inserted en kom voor in donkerblou, ligtblou, roomkleur, pienk, wit, geel en roos.

Insertions: 9
Deletions: 4
Changes: 1
Total activity: 14

Revision task

inserted [heading] Ongekende > inserted [before moef] absolute > changed kleurige , to kleurvolle, > changed name to naam

Insertions:2
Deletions: 0
Changes: 2
Total activity: 4

P15

Translation task

Enter > Enter > inserted As jy 'n > deleted jy 'n > inserted jy hou van 'n kleurvolle wintertuin, is Primulas 'n > deleted Primulas 'n moet. Die twee belangrikste kultivars uit die > deleted uit die > inserted is die Fee > deleted Fee > inserted Fairy primula (Primula malacoides) en die English primrose (Primula acaulis). Met hul massas helder, kleurvolle blomme wat 'n lang lewensiklus het, is hierdie beddingplante ook > changed is to lyk > inserted pragtig in > deleted in > inserted as hulle saam > deleted saam > inserted naby mekaar geplant word waar hul pragtige kleure te > deleted te > inserted ten volle waardeer kan word. > Enter > Enter > inserted Fairy > deleted Fairy > inserted Ten spyte van die naam, is Fairy primulas allesbehalwe broos en > deleted en inserted : hulle is klein blommetjies wat maklik en vinnig in semi-skadu of gedeeltelike sonlig kan groei, hulle is moeitvrye plantjies wat heel gelukkig is in normale > deleted normale > inserted goeie normale tuingrond. > Enter > Enter > Die Engelse primose is ongetw > deleted ongetw > inserted sonder twyfel een van die mooiste van die 400 of so plante in die Primula-familie, met helder kleure wat selfs die vaalste wintersdag sal opvrolik. Hulle groei 15 cm hoog en groei > deleted groei > inserted aard goed in ligte skadu of gedeeltelike sonlig. Die blommetjies is > deleted -ie blommetjies is inserted -aar kom verskeie kleure van die blomme voor, soos > deleted , soos > inserted – donkerblou, ligtblou, room, pienk, wit, geel en pienk.

Insertions: 16
Deletions: 14
Changes: 1

Total activity: 31

Revision task

~~deleted~~ en [after *hoog*] > ~~deleted~~ , > ~~deleted~~ . [after *sonlig*] > ~~deleted~~ en kom in > ~~deleted~~ Daar kom ... van die blomme voor > ~~deleted~~ [before *Hulle groei...*] Die blomme > ~~deleted~~ Hulle > ~~deleted~~ , ~~deleted~~ en > ~~deleted~~ hulle > ~~deleted~~ [after *gelukkig*] is > ~~deleted~~ heel gelukkig > ~~deleted~~ genoegsame groei sal toon > ~~deleted~~ [first paragraph ... *is primulas*] een van die plante wat jy beslis in jou tuin > ~~deleted~~ 'n > ~~deleted~~ hê > ~~deleted~~ hou [after *wintertuin*] > ~~deleted~~ hou [after *As jy...*] > ~~deleted~~ -lish > ~~deleted~~ -else > ~~deleted~~ lewensiklus to groeisiklus > ~~deleted~~ geharde [before *klein blommetjies*] > ~~deleted~~ [after *broos*] of weerloos > ~~deleted~~ [heading] Primulas

Insertions: 12
Deletions: 11
Changes: 1
Total activity: 24

P16

Translation task

~~deleted~~ > Weergalose primulas > Enter > Enter > Primulas is 'n móet vir enige wintertuin. Van die verskeie veriëteite is die feetjieprimula (*Primula malacoides*) en die Engelse primula (*Primula acaulis*) die bekendste. > ~~deleted~~ bekendste. > ~~deleted~~ merkwaardigste. Die massas helderkleurige, lang > ~~deleted~~ , lang > ~~deleted~~ blomme, wat baie lank hou, betek > ~~deleted~~ betek > ~~deleted~~ maak hierdie plante ideaal vir > ~~deleted~~ tuin [before *plante*] ... ook [before *ideaal*] ... terracottapotte of in digte groepe waar hulle pragtige blomme ten volle waardeer kan word. > Enter > Enter > ~~deleted~~ Feetjieprimulas is, hul naam > ~~deleted~~ hul naam > ~~deleted~~ die naam ten spyte, kwalik fyn en breekbaar: Hulle is sterk klein blommetjies wat vinnig groei en > ~~deleted~~ groei en > ~~deleted~~ in halfskadu of gedeeltelike sonskyn groei, hulle is moeitelose plante wat heel gelukkig is in enige normale, goeie tuingrond. > Enter > Enter > ~~deleted~~ Die Engelse primrose is sonder twyfel een van die skouspelagtigste van die sowat 400 spesies in die Primula-familie, met helder kleure wat die droewigste > ~~deleted~~ droewigste > ~~deleted~~ guurste wintersdag sal ophelder. Skaars 15 cm lank > ~~deleted~~ Dit is s > ~~deleted~~ S- > ... en groei heel gelukkig in ligte skaduwee of gedeeltelike sonskyn, en is in donkerblou, ligteblou, room, pienk, wit, geel en roos > ~~deleted~~ roos > ~~deleted~~ ligpers beskikbaar.

Insertions: 12
Deletions: 7
Changes: 0
Total activity: 19

Revision task

~~deleted~~ Primula to p > ~~deleted~~ breekbaar > ~~deleted~~ broos > ~~deleted~~ lank > ~~deleted~~ hoog

Insertions: 2
Deletions: 2
Changes: 1
Total activity: 5

P17

Translation task

~~deleted~~ Peerless Primulas* > Enter > Enter > ~~deleted~~ > Vir helder wintertuine is primulas 'n moet. Van die verskillende > ~~deleted~~ Van die verskillende > ~~deleted~~ Uit die verskillende kultivars, is die twee mees noemn > ~~deleted~~ mees noemn > ~~deleted~~ noemenswaardigste die Feetjie Primula (*Primula malacoides*) en die Engelse primrose* (*Primula acaulis*). > ~~deleted~~ -s [after *noemenswaardigste*] > ~~deleted~~ Met die > ~~deleted~~ die > ~~deleted~~ massas helderkleurige, langdurige blomme > ~~deleted~~ blomme > ~~deleted~~ bloeisels, is hierdie tuinplante ook > ~~deleted~~ tuinplante ook > ~~deleted~~ beddingplante ook pragtig in terracotta* potte of nou i > ~~deleted~~ of nou i > ~~deleted~~ in groepe teenaan mekaar waar hul pragtige kleure ten volle > ~~deleted~~ ten volle ~~deleted~~ volkome waardeer > ~~deleted~~ [after *waar*] 'n mens ... [after *volkome*] kan ... > ~~deleted~~ volkome > ~~deleted~~ ten volle > Enter > Enter > ~~deleted~~ Feetjie primulas is glad nie swak en breekbaar nie > ~~deleted~~ [before *Feetjie*] Ten spyte van hul naam, is > ~~deleted~~ Feetjie to feetjie to Feetjie > ~~deleted~~ : hulle is geharde, klein blommetjies wat vinnig groei en maklik in halfskaduwee of gedeeltelike son kan > ~~deleted~~ kan > ~~deleted~~ groei, hulle is moeitevrye plante wat heel gelukkig is met enige normale > ~~deleted~~ normale > ~~deleted~~ gewone, goeie tuingrond. > Enter > Enter > ~~deleted~~ Engelse aandroos > ~~deleted~~ aandroos > ~~deleted~~ primrose is o > ~~deleted~~ o > ~~deleted~~ sonder twyfel een van die skouspelagtigste van die 400 > ~~deleted~~ 400 > ~~deleted~~ ongeveer 400 lede van die Primula-familie, met lewendige kleure wat die mees > ~~deleted~~ mees > ~~deleted~~ o > ~~deleted~~ o > ~~deleted~~ vaalste wintersdag kan ophelder. Dis > ~~deleted~~ Dis > ~~deleted~~ Hulle is skaars 15 cm hoog en sal graag in ligte skaduwee of gedeeltelike sonlig groei, en kom in donkerblou, ligblou, room, pienk, wit, geel en rooskleur.

Insertions: 24
Deletions: 16
Changes: 1
Total activity: 41

Revision task

~~deleted~~ primrose to Primrose > ~~deleted~~ primulas to Primulas > ~~deleted~~ is > ~~deleted~~ groei [after *en vinnig*] > ~~deleted~~ -lig > ~~deleted~~ Die > ~~deleted~~ [after *skouspelagtigste*] blomme > ~~deleted~~ van > ~~deleted~~ uit

Insertions: 4
Deletions: 3
Changes: 2
Total activity: 9

P18

Translation task

~~deleted~~ *Peerless Primulas > Enter > Enter > Primulas is onontbeerlik vir wintertuine. > ~~deleted~~ [after *vir*] vrolike > ~~deleted~~ vrolike > ~~deleted~~ kleurvolle ... Die twee opva ~~deleted~~ opva > ~~deleted~~ bekendstes van die > ~~deleted~~ -s van die > ~~deleted~~ kultivars is die feetjieprimula (*Primula malacoides*) en die Engelse *primrose (*Primula acaulis*). Dié beddi > ~~deleted~~ beddi > ~~deleted~~ tuinplante is > ~~deleted~~ [before *tuinplante*] helderkleurige > ~~deleted~~ is > ~~deleted~~ dra massa helder blomme wat lank mooi bly en lyk ook pragtig in terracottapotte of in of in groot groepe waar hulle kleure ten volle waardeer kan word. > Enter > Enter > ~~deleted~~ Feetjieprimulas is ten spyte van hulle naam nie breekbaar of fy nie: hulle is geharde blommetjies wat vi > ~~deleted~~ vi > ~~deleted~~ [after *geharde*] , vinniggroeiende ... goed aard in halfskadu of gedeeltelike son; hulle het min fiemies en is gelukkig in enige gewone goeie tuingrond. > Enter > Enter > ~~deleted~~ Die Engelse *primrose is ongetwyfeld een van die mooiste van die meer as 400 lede van die primulafamilie. Hulle het helder kleure wat > ~~deleted~~ het > ~~deleted~~ wat > ~~deleted~~ sal enige triestige wintersdag ophelder. Hulle word skaars 15 cm hoog en aard goed in ligte skadu of gedeeltelike son en is beskikbaar in donkerblou, ligblou, roomkleur, wit, geel en pienk.

Insertions: 12
Deletions: 8
Changes: 0
Total activity: 19

* No revision done

P19

Translation task

inserted [long space] Primulas > Enter > Enter > **inserted** Vir helderkleurige wintertuine is primulas 'n moet. Een van die verskeie kultivars > **deleted** Een > **changed** van to Van > **inserted** is die twee opvallendstes die Fairy primulas (Primula Malacoides) en die English primrose, (Primula acaulis). Met massas helderkleurige, lang > **deleted** lang > **inserted** blomme wat lank hou, is hierdie beddingplante ook treffend in terracotta-potte of digte groep waar die treffende kleure ten volle waardeer kan word. Enter > Enter > **inserted** Fairy primulas is, ondanks hulle name, nie werklik broos en breekbaar nie: hulle is sterk klein blommetjies wat vinnig en maklik in gedeeltelike skadu of gedeeltelike son groei, hulle het nie spesiale versorging nodig nie > **deleted** het nie spesiale versorging nodig nie > **inserted** is moeitevrye plante wat heel gelukkig is in enige gewone, goeie tuingrond. > Enter > Enter > **inserted** Die English (Engelse) primrose is ongetwyfeld een van die aanskoulikste van die ongeveer 400 lede van die Primula-familie, met helder kleure wat die mees [long space] wintersdag sal ophelder. > **deleted** die [long space] > **inserted** mistroostigste Skaars 15 cm hoog, sal dit gelukkig groei in effense skadu of gedeeltelike son en kom voor in > **deleted** kom voor in > **inserted** is te > **deleted** te > **inserted** verskrygbaar in > is verskrygbaar in > **inserted** kom voor in donkerblou, ligblou, roomkleur, pienk, wit, geel en roospienk.

Insertions: 11
Deletions: 6
Changes: 1
Total activity: 18

Revision task

deleted long space in heading > **inserted** Weergalose > **deleted** [after *kultivars*] , > **deleted** . [after *English primrose*] > **deleted** [after *helderkleurige*] , > **inserted** langlewende > **deleted** wat lank hou > **inserted** /kleipotte, **inserted** in > **inserted** -e in groepe > **deleted** e in gedeeltelike

Insertions: 5
Deletions: 6
Changes: 0
Total activity: 11

APPENDIX K: TRANSCRIPTIONS OF RTAPS

Novices

S01

R: Was the translation task difficult?

P: It was not that difficult but also not easy because there were words that I don't know the meaning of.

R: If you had to give it a mark out of 10 in terms of how difficult it was, what point would you give it?

P: I will give it a 6.

R: What words would you have looked up in the dictionary?

P: The flowers' names, "terracotta" ... I sort of know what they mean but I would have wanted to know the exact definition for that word.

R: Where would you find this text?

P: In magazines.

S02

R: Goed, so as jy nou 'n punt uit 10 uit moes gee vir hoe moeilik dit was, wat sou jy gee?

P: Dit was nie so moeilik nie, ek sal sê so 5, want daar is woorde wat ek regtig nie weet wat dit is nie, soos die name van die blomme... Ek weet regtig nie wat dit is in Afrikaans nie.

R: Watter woorde sou jy in jou woordeboek opgesoek het?

P: Showiest, frail and fragile.

R: Waar dink jy sal hierdie teks voorkom?

P: In 'n tydskrif soos Garden & Home.

P03

R: Was the translation task difficult?

P: It was challenging in a way. Some words I'm not familiar with in the target language like the names of the flowers and also, I don't know what terracotta pots are in the target language.

R: If you had to give the translation task a mark out of 10 in terms of how difficult it was, where 1 is extremely difficult and 10 extremely easy, what mark would you give?

P: 2.

R: Did you feel like you understood the source text?

P: Yes. It was an easy read.

R: Where will you find this type of text?

P: In a book concerning plants, in pamphlets where you buy flowers and where they explain what type of flowers, maybe the history of it, maybe in textbooks where they describe types of flowers.

R: What words would you have liked to look up in the dictionary?

P: Mainly the names of the flowers and terracotta pots, and some things I didn't know how to put it in the target language like 'semi-shade or partial sun'. I don't know how to translate 'semi' and 'partial'.

S04

R: So how did you find the source text? Did you fully understand the source text?

P: Not really.

R: Was the translation task difficult?

P: It was a bit challenging because of the names here. I don't know what they are in Sesotho and because I am not familiar with gardens, so it was a bit difficult. It was actually challenging, not difficult.

R: If you could give the translation task a point out of 10 in terms of difficulty, where 1 is very difficult and 10 very easy, what point would you give?

P: I'd say 4. It was not that difficult.

R: What words did you find challenging apart from the flowers' names?

P: 'frail and fragile'. I'm not sure what it means. 'Bedding plants' and 'terracotta pots' as well.

R: Where do you think would you find this text?

P: In a gardening magazine

S05

R: Was the translation task difficult?

P: There were certain words that don't have direct equivalents in Sesotho, so it was a bit tricky. This text is subject-specific – it's about plants. It was not that hard but there were small words that I couldn't quickly find direct translations.

R: What words did you find difficult to translate other than the plants' names?

P: "frail" ... "frail and fragile" in my language has one direct equivalent so I just ticked frail 'cause I have a direct one for fragile. And words like "cultivars", "fuss" and then I didn't get to the last part.

R: If you had to give the translation task a point out of 10 for how hard it was for you, where 1 is very difficult and 10 very easy, how would you rate it?

P: 5 ... 'Cause some words they are subject-specific. They are terms for that field of expertise. So, the task was fair.

S06

R: Was the translation task difficult?

P: It was fairly easy.

R: If you had to rate the task, giving it a point out of 10, 1 very difficult and 10 very easy, how would you rate it?

P: I'd give it an 8.

R: What did you find difficult?

P: Maybe the subject matter 'cause I do not know this kind of plants or flowers. So, it will be very difficult to explain them.

R: Are there any other words in the text that you found difficult or that you would have liked to look up in the dictionary?

P: Yeah, like "terracotta pots" ... I don't know what kind of pots they are and the flowers' names, "bedding plants".

S07

R: Was the translation task difficult?

P: It's relatively easy. There were terms from gardening jargon that I didn't know.

R: If you had to give it a point out of 10, where 1 is very difficult and 10 very easy, how would you rate it?

P: 7. It is mainly the jargon that was difficult.

R: Were there any terms that you would have liked to research or look up in a dictionary?

P: I think it was more the gardening terms but also different adjectives, synonyms for words like "brightly" for example. I felt like I kept repeating myself.

R: Did you find it challenging to translate into Afrikaans?

P: It normally is, but I think because of the nature of how easy this was, it wasn't that bad.

S08

R: Was die vertaalopdrag vir jou moeilik?

P: Ek sal nie sê dit was die moeilikste teks wat ek al gehad het nie, maar van die woorde kan jy nie dadelik opkom nie veral omdat dit spesifieke woorde is soos die blomme. So, jy kan nie alternatiewe daarvoor kry nie. So, ek sal nie sê dit was die moeilikste teks nie, maar daar was 'n paar woorde wat 'n mens bietjie laat dink het.

R: *Noem vir my die woorde waarmee jy gesukkel het.*

P: Frail and fragile... toe het ek op die ou end tingerig gebruik, maar ek het hom eers oopgelos en later na hom toe teruggekom. Verde rook "fuss" in Engels en "showiest" kon ek ook nie vertaal nie, my brein het vasgehaak. Ek neem aan ons praat van kultivars in Afrikaans, want dit is hoe my gesin praat. En 'n ander paar eenvoudige woordjies waarvoor ek moes teruggaan... ek het nie 100% geweet of dit perfek reg is nie, maar ek het probeer om die beste alternatief in Afrikaans te gebruik.

R: *Het enige vertaalteorieë opgeduik terwyl jy vertaal het?*

P: Ek dink nie ek het so erg op so iets gefokus terwyl ek vertaal het nie. Ek het maar 'n sinnetjie gelees en dit dan vertaal. Ek dink nie dis 'n teorie of iets nie, maar ek het as ek nie op die woord kon kom nie het ek vir myself kolletjies gemaak vir iets waarna ek moet terugkom, maar ek sal nie sê ek het nou gedink kom ons doen hierdie een se teorie nie.

S09

R: *Was die vertaalopdrag vir jou moeilik?*

P: Dit was 'n lekker teks om te lees. Ek voel veral as 'n mens van blomme hou dan is dit baie maklik, maar sekere woorde, soos die biologiese name, het my bietjie gevang en veral omrede primulas 'n algemene naam is, mense sê nie sommer die Afrikaanse naam daarvoor nie, so ek moes bietjie gaan dink wat is die Afrikaanse naam.

R: *Watter woorde het jy oor gewonder?*

P: So Peerless het my eerste gevang. Ek weet nie hoekom nie, ek was nie seker of dit 'n naam van 'n plant was nie of dit dat dit dalk beteken dat hul maklik is om aan te pas nie... Fairy primulas het my gevang en vibrant, ek is nie seker of ek hom reg vertaal het nie, maar ek dink dit is OK. En ja, ek dink dit is waarmee ek gesukkel het.

R: *Het daar enige vertaalteorieë of -tegnieke wat jy in jou studies geleer het, by jou opgeduik terwyl jy vertaal het?*

P: Die vertaling het baie natuurlik vir my gekom. So, toe ek die oorspronklike teks deurgelees het, het ek gedink aan wie die teikenmark sal wees en dan ook die register en dan waar dit gepubliseer sal word, maar verder het dit net natuurlik gekom.

S10

R: *Was die vertaalopdrag vir jou moeilik?*

P: Daar was hier en daar vangplekke, maar nie te veel nie.

R: *Watter vangplekke was daar?*

P: Die name, ek het nie geweet of ek die Engelse benamings moes hou en of ek dit moes vertaal het nie. Van die goed word baie algemeen in Afrikaans gebruik soos terracotta, maar toe weet ek nou nie of daar 'n ander Afrikaanse benaming daarvoor is wat ek dalk eerder moes gebruik nie. End an *frail*, wat is *frail*?

R: *Het enige vertaalteorieë by jou opgeduik terwyl jy vertaal het of het jy glad nie eers daaraan gedink nie?*

P: Glad nie.

S11

R: *Was die vertaalopdrag vir jou moeilik?*

P: Dit was nie te moeilik nie. Daar was hier en daar 'n woord wat ek voel ek in 'n woordeboek moes gaan opsoek het.

R: *Watter woorde sou jy wou opsoek?*

P: Peerless... ook *cultivars* om te "check" of daar 'n Afrikaanse weergawe is. Ook dan *gorgeous*. Ek het hom vertaal, maar ek sou 'n beter woord wou hê. Ook *tough* en *frail and fragile*.

R: *Het jy aan enige vertaalteorieë of strategieë gedink wat jy dalk geleer het in jou studies terwyl jy vertaal het of het jy net vertaal?*

P: Ek het maar net gedink aan hoe ek die woordvolgorde moes verander. Ek het nou die name vertaal, maar gewoonlik vertaal ek nie name nie en ek is bewus daarvan dat plantname meer vertaal word na Afrikaans toe as persoonsname.

Experts

P01

R: *Was die vertaalopdrag vir jou moeilik?*

P: Dit voel vir my soos 'n standaard teks wat ek sal ontvang van kliënte om te doen. Die terminologie wat ek nie geken het nie sou my nie laat struikel het as ek toegang tot hulpbronne nie. So, dit sou my nie afskrik nie, maar siende dat ek nie toegang gehad het nie, het ek besluit om net my beste raaiskote te gebruik.

R: *Watter woorde sou jy graag wou naslaan?*

P: *Primulas*. Ek het dit so gehou, want dit sal die genus se spesienaam wees wat Latyns is wat jy in Engels en Afrikaans kan gebruik, maar *primrose* weet ek nie. Ek weet nie wat 'n *Fairy primula* of 'n *English primrose* in Afrikaans is nie. Ek is ook nie seker oor *terracotta* in Afrikaans nie. Ek het ook nie verskriklik ekwivalent vertaal nie, nie vormlik nie, nie presies dieselfde woorde nie, maar eerder net die betekenis, min of meer, want die idee is nie heeltemal om inligting oor te dra nie, maar eerder om die blom te adverteer; om te sê hierdie is 'n goeie keuse. So, ek dink solank dit net die emosie en sin oordra. Sodat dit gemaklik lees, sodat dit nie dalk *stilted* voel in die sin dat of die terminologie buite rekening gelaat word nie.

R: *Hoe sou jy die moeilikheidsgraad van die teks beskryf as jy dit 'n punt uit 10 moes gee?*

P: Met of sonder hulpbronne?

R: *Sonder hulpbronne.*

P: 'n 7.

R: *Watter tipe hulpbronne sou jy gebruik?*

P: Pharos Online, Afrikaanse Wikipedia, plantkunde woordeboeke. Ek weet daar is baie natuurboeke in Afrikaans wat tweetalig is.

R: *Hoekom dink jy is studente nog nie op die vlak van professionele vertalers nie?*

Ek weet nie eintlik hoe groot die verskil is nie, maar enige verskil kan seker aan selfvertroue en ervaring toegeskryf word.

R: *Wat se karaktereienskappe en vaardighede sou jy sê het studente nodig as hulle hierdie veld wil betree?*

Ek dink om te weet waar om die regte hulpbronne te gaan soek is baie belangrik, dan ook voortgesette leer en tydbestuur.

P02

R: *Was die vertaalopdrag vir jou moeilik?*

P: Die teks was vir my lekker om te vertaal. Ek het net regtig gehuiwer oor die naam en mens raak so gewoon dat jy altyd 'n woordeboek het. So, goed soos *showiest*... Ek weet daar gaan 'n mooi woord daarvoor wees, maar ek kon net nie op hierdie stadium daaraan dink nie. So, toe het ek hom met 'n baie meer algemene woord vertaal, net as "mooi", "mooiste". So, ek weet dit is nou nie die perfekte woord vir die situasie nie of vir die teks nie, maar dis voldoende. Maar andersins was dit 'n oulike teks, lekker om te vertaal.

R: *As jy nou 'n punt uit 10 moes gee vir hoe moeilik dit was, wat sou jy gee?*

P: Nee, dit was nie so vreeslik moeilik nie. Ek sal sê 6,5. Veral sonder 'n woordeboek. Met 'n woordeboek sou dit baie makliker gegaan het.

R: *Jy het showiest genoem. Is daar enige ander woorde wat jy dalk ook sou wou opsoek?*

P: Peerless, primrose. Ja, peerless is 'n woord wat jy nie net direk kan vertaal nie. Ek sal graag alliterasie wil gebruik omdat dit so voorkom.

R: *Waar dink jy sal hierdie teks voorkom?*

P: In 'n tydskrif, koerant of selfs die internet vir tuinbou, maar nie noodwendig vir mense wat baie kennis het oor tuinbou nie. Dit is 'n kort inligtingstuk, so dis nie 'n teks wat op 'n tegniese manier vir jou verduidelik hoe om jou plante te plant nie, dit is inligting oor die blommetjie.

R: *Hoekom dink jy is studente nog nie op die vlak van professionele vertalers nie?*

R: *Wat se karaktereienskappe en vaardighede sou jy sê het studente nodig as hulle hierdie veld wil betree?*

P03

P: Ek lees baie oor plante, want ek is baie lief vir tuinmaak.

R: Was die vertaalopdrag vir jou moeilik?

P: Dit was vir my interessant. Ek doen 'n bietjie vryskutvertaling van tyd tot tyd vir tydskrifte en hierdie het vir my gevoel soos 'n Tuinier-tydskrif of so tipe van iets. So ek het dit so half, waarskynlik onwetend, vertaal asof dit vir daai teikengroep. Dit het nie vir my moeilik gevoel nie. Ek dink dit het baie te doen met of jy die plante ken. Ek dink mense wat nie enigiets soos byvoorbeeld as 'n mens kyk na die konsep van half son, *partial sun* – 'n mens kan dit maklik verkeerd vertaal as "gedeeltelike son" wat nie die term is wat gebruik moet word nie. En dit kan nou half moeilik wees... Nie noodwendig verkeerd nie, maar dis nie die jargon wat gebruik word nie. Vir my was dit met ander woorde maklik omdat ek die konteks op 'n manier ken.

R: So as jy dit 'n punt uit 10 moes gee in terme van die moeilikheidsgraad, waar 10 baie maklik en 1 baie moeilik is, hoe sal jy dit bepunt?

P: Ek wil nou nie sê 10 nie... Ek gee so 8,5. Dit was nie 'n tegniese teks nie. Dit was gemaklik om te vertaal omdat ek ook die konteks waarin dit gepubliseer mag word so half in my kop geskets het, het ek dit relatief vry vertaal. Hoe langer 'n mens tyd kry om te broei oor iets... As jy vir my gesê het hier's 'n teks, gaan vertaal hom, jy soek hom more, dan sou jy iets heeltemal anders gekry het as wat jy nou kry, want hy sou broei.

R: Was daar woorde wat jy sou wou opsoek?

P: Ek weet nie hoe om op hierdie *laptop* kursief te maak nie en dit het my verskriklik gevang dat ek nie die woorde tussen hakies kursief kon maak nie. Die tegniese goed is vir my partykeer 'n groter krisis as om te vertaal. Bladuitleg en sulke dinge. Maar verder, daar was nie regtig vreeslike krisisse of iets van die aard nie. Ek weet nie of ek die woorde reg gebruik het oral nie... Ek sou 'n woordeboek 'n paar keer gebruik het. Nie noodwendig om die vertalings op te soek nie, maar om seker te maak of die woord wat ek geselekteer het om te gebruik wel die korrekte, mees geskikte woord is.

R: So miskien dalk eerder 'n eentalige woordeboek wat vir jou die definisie gee en nie noodwendig die vertaling nie, of hoe?

P: Ek werk vreeslik lekker met Pharos Online wat vir my 'n kombinasie van alles gee. So, wat ek doen in so geval is ek sal tipies gaan kyk na die woord wat in die teks vir my gegee is, die Engelse woord, en ek sal gaan kyk is een van die opsies die keuse wat ek gemaak het of 'n soortgelyke woord. En as dit nie is nie, sal ek bietjie speel met die eentalige woordeboeke. Ek ken primulas as primulas; ek weet nie wat is hulle algemene Afrikaanse naam nie. So ek sou waarskynlik as ek 'n woordeboek byderhand gehad het, dit moet opsoek. Dan sou ek waarskynlik nie iewers in die opsie nie, maar in die teks, eerste keer waar hy genoem word sou ek waarskynlik gesê het ook bekend as sleutelblom. Sou ek dit daar ingeskryf het net om dit meer toeganklik te maak en Afrikaans te maak. Ek weet die publikasiebedryf is, veral Afrikaanse mense is nogal erg daarop. So, net om vir die teikengehoor 'n bietjie dit meer toeganklik te maak sou ek dit gedoen het. Maar die res van die goed, soos byvoorbeeld, ek is nie heeltemal seker of ek *cultivars* heeltemal reg gebruik hier nie. Hoewel hy voorkom in die Engels en ek weet dit is die woord, die meer algemene woord, alhoewel dit bietjie anglicisties is, weet ek nie of ek hom altyd reg gebruik het nie. So, dis tipies 'n woord wat ek in 'n eentalige woordeboek sou opsoek, 'n verklarende woordeboek en net gekyk het gebruik ek hom werklik reg.

R: Hoekom dink jy is studente nog nie op die vlak van professionele vertalers nie?

Ek dink werkservaring is seker maar die grootste verskil. Dit is weens my ervaring in verskeie velde waarin ek vryskutwerk doen, wat ek verstaan hoe sekere tekste lyk, behoort te lees en behoort te voel. 'n Student wat pas klaar studeer het, en wat nog min of glad nie in die vertaalbedryf self gewerk het nie, sukkel soms om hierdie verskille in te sien en ek dink hulle vind dit daarom ook soms moeilik om tekste te vertaal vir 'n spesifieke lesersmark of konteks. Ek glo dat 'n mens 'n sekere "vertaal-selfvertroue" ontwikkel namate jy ervaring opbou, en dat jy dikwels as 'n "nuutjie" amper te bang is om soms meer vry te vertaal of sinskonstruksies aan te pas vir die teikentekst.

Bygesê - ek dink daar is soms baie knap studente wat werklik beter vertalers is as ek (of ander ervare vertalers), maar wat onseker is as gevolg van hulle gebrek aan ervaring.

R: Wat se karaktereienskappe en vaardighede sou jy sê het studente nodig as hulle hierdie veld wil betree?

'n Goed ontwikkelde aanvoeling vir die volle konteks - die publikasie waarbinne die teks gaan verskyn, die lesersmark of teikenlesers, en die algemene gevoel van die teks en publikasie is baie belangrik. Dit sluit met ander woorde deeglike konteks- en teksanalise in, wat ongelukkig nie noodwendig altyd baie aandag kry in akademiese opleiding en kurrikula nie.

'n Baie goeie taalbeheersing en kennis van beide tale (taalreëls en grammatikale konvensies; in bron- en teikentaal) is natuurlik ook baie belangrik. 'n Student kan 'n teks met die mooiste woorde vertaal, maar as dit wemmel van taalfoute, is dit eenvoudig onaanvaarbaar.

Goeie tydsbestuur, prioritering en die vermoë om daarmee saam te kan fokus eerder as te "multitask" - it goes without saying in 'n wêreld met soveel spertye.

Vermoë en gretigheid om navorsing te doen oor 'n onderwerp. Sommige vertalings - selfs "lekkerlees-tekste" - vereis baie navorsing. Ek dink daar word glad nie genoeg klem geplaas op vertaalkursusse oor die elemente wat wel behoorlik nagevors behoort te word, tegnieke van sodanige navorsing en wat 'n mens doen as jy nie oplossings kry nie.

Goeie en relatiewe breë algemene kennis en belesenheid - jou bestaande kennis en belangstellings vergemaklik dikwels vertaalwerk en gee vir jou baie belangrike agtergrond in sekere situasies wat jou van wanvertalings kan red.

'n Sekere mate van perfeksionisme is ook vir my nodig - dit grens vir my aan goeie werksietiek om 'n teks wat in alle aspekte goed afgerond is, te stuur. Iets waarop jy trots kan wees. Hierby wil ek dus sê dat vertalers ook goed rekenaarvaardig behoort te wees.

Goeie interpersoonlike vaardighede en professionaliteit is uit die aard van die saak belangrik; veral as die vertaler in kontak is met die kliënt of ander persone in die publikasiebedryf waarin die teks opgeneem sal word.

Goeie (of ten minste toegewyde) administratiewe vaardighede is baie belangrik (sluit in projékbestuur, lêerbestuur en fakturering as dit vryskutwerk is).

P04

R: As jy nou 'n punt uit 10 moes gee, waar 1 baie moeilik is en 10 baie maklik, wat sou tannie gee?

P: Aangesien ek nou sonder 'n woordeboek moes werk, sal ek sê so 8 uit 10. Dis basies nie 'n vreeslike moeilike teks nie... Net dat ek nou daai woordjies wat ek eintlik moes opkyk kan opkyk. Soos *primulas*, *primrose* en *peerless* byvoorbeeld sou ek nou wou nagegaan het.

R: Is daar sekere sinsnedes of gedeeltes wat vir jou laat wonder het, soos byvoorbeeld "longlasting blooms" of "showiest"?

P: Ja, *longlasting* het my bietjie laat dink, maar dan moet 'n ou nou maar aangaan en dan gebruik ek maar die eerste woord, maar dan weet ek ek sou miskien nog bietjie meer tyd daaraan bestee het of opkyk vir 'n alternatief. *Miserable* is ek ook nie baie seker van nie... en daai *vibrant*. Dit kan 'n mens seker ook miskien 'n meer beskrywende Afrikaanse woord gekry het as lewendig.

R: Waar sou jy hierdie teks teëkom?

P: Miskien in 'n tuinbou-boek of in 'n artikel wat oor tuine in 'n tydskrif of 'n koerant voorkom of selfs 'n rubriek oor tuinbou.

R: Hoekom dink jy is studente nog nie op die vlak van professionele vertalers nie?

Ek sou eerder dink soos met enige ander dissipline, gaan studente nog mank aan praktiese ervaring, wat met tyd en toewyding van hulle beter praktisyns sal maak.

R: Wat se karaktereienskappe en vaardighede sou jy sê het studente nodig as hulle hierdie veld wil betree?

Moet goed onderleg wees in die tale waarin hulle praktiseer, dit wil sê nie net beskik oor kennis van grammatika en taalreëls nie, maar ook oor idiomatiese kennis en kultuuragtergrond van die betrokke taal of tale. Daarbenewens moet gedurig en wyd gelees word, aangesien 'n goeie algemene kennis aan 'n praktisyn die nodige insig en begrip verskaf vir enige vakgebied of tema waarmee hy of sy te kampe mag kry en sodoende inhoudelike gehalte aan hulle werk toevoeg. Moet ook weet om 'n kliënt altyd professioneel te benader en hanteer en weet wat is toelaatbaar en wat nie, dit wil sê 'n etiese kode handhaaf.

P05

P: Met die vierkantige hakies kontroleer ek die spelling soos by "kultivar"... Skryf ons dit nou in Afrikaans met 'n -k-? Dit sou ek nou in die woordelys opgesoek het.

R: Was die vertaalopdrag vir jou moeilik?

P: Dis nie so eenvoudige teks nie, want daar is baie tegniese goedjies in. Maar ek het al erger goed vertaal as dit?

R: As jy dit 'n punt uit 10 moes gee in terme van moeilikheidsgraad, met ander woorde 1 baie moeilik en 10 baie maklik.

P: So 7.

R: Wat het dit vir jou moeilik gemaak?

P: Die name wat jy almal moet kontroleer en dan is daar byvoeglike naamwoorde wat, ek kan 'n woord daar insit, maar ek sou nog gaan soek het onder my sinonieme of ek nie 'n beter woord kry nie.

R: Watter woorde het tannie moeilik gevind?

P: Soos ek sê die name soos die "fairy primula" en die "primrose", ek het nie 'n benul wat 'n "primrose in Afrikaans is nie. Maar "primulas" is maar "primulas" sover as wat ek weet.

R: Watter byvoeglike naamwoorde was moeilik?

D: "gorgeous colours" wat ek toe nou maar gemaak het "uitbundige kleure". Ek weet nie of ek 'n beter woord sou gekry het daarvoor nie. Dit was my grootste probleem: die name van die plante en dan party van die byvoeglike naamwoorde.

R: *Waar sou 'n mens hierdie teks vind?*

P: In 'n boek oor tuinbou, 'n redelike populêre boek. Nee, dit is nie 'n tegniese wetenskaplike boek nie, nee. O ja, sien, die "peerlees" moes ek ook nog opgesoek het... "Ongeëwenaard". Ek is baie geneig om 'n bietjie te wil aangaan... soortvan, en dan... Maar ek merk die goed wat nog aandag nodig het. Maar ek moet net eers soortvan die draad kry van die ding.

R: *Hoekom dink jy is studente nog nie op die vlak van professionele vertalers nie?*

R: *Wat se karaktereenskappe en vaardighede sou jy sê het studente nodig as hulle hierdie veld wil betree?*

P06

R: *Was die vertaalopdrag vir jou moeilik?*

P: Ek werk gewoonlik met my bronne oop sodat ek enigetyd kan gaan naslaan. Al double check ek net myself... Dis my "security blanket". Ek sal in Afrikaans meer kere die verskillende opsies oorweeg en heroorweeg. Dis vir my 'n interessante teksie; ek weet niks van plante af nie.

R: *As jy dit nou 'n punt uit 10 moes gee in terme van moeilikheidsgraad, met ander woorde 1 is dan nou baie moeilik en 10 is baie maklik.*

P: Ek dink nie dis 'n baie moeiliker teks nie. 'n 5...veilig neutraal.

R: *Wat het die teks vir jou moeilik gemaak?*

P: Daar is nogal baie beskrywings waar 'n mens dieselfde woorde maklik kon gebruik het, maar wat 'n mens eerder verskillendes sal gebruik soos die kleure. 'n Mens wil nou nie die heelyd sê "helderkeurig/veelkeurig" nie. Die benamings was vir my uitdagend. Ek het nou maar 'n fairy primula na 'n feetjeprimula toe vertaal en "English primrose" met Engelse primula vertaal. Ek het primrose aanvanklik hier gehad en toe het ek dit uitgehaal. Ek sou wou seker maak oor "cultivars" Ek sou wou kyk of ek die spelling van die botaniese benamings moes verander, want ek het hulle dieselfde gelos. "Bedding plants"... Ek het dit met beddingplante vertaal, maar ek dink nie dis die regte term nie... Ek weet nie wat is "bedding plant" nie, so ek sou dit nageslaan het. Ek dink ek sou oor die algemeen heelwaarskynlik na Google toe gegaan het en gaan kyk het hoe lyk primulas en bietjie oor die blommetjies opgelees het voordat ek die vertaling gedoen het, net om die prentjie in my kop te kry en wat hulle bedoel met "in tight groups" of dan in terracotta potte. So, ek sou dit gedoen het. Veral as dit iets is waarmee ek nie bekend is nie hou ek daarvan om dit te gaan Google. Die groot ding vir my was dat daar goed was waar die beskrywing baie voorkom en dat 'n mens nie dieselfde woorde wil gebruik nie.

R: *Waar dink jy sal hierdie tipe teks voorkom?*

P: Dalk in 'n tydskrif of 'n rubriek oor plante of tuinmaak. Ek dink nie dis 'n diep wetenskaplike teks nie so ek sal dit heelwaarskynlik nie in 'n akademiese artikel vind nie. Dalk agter op 'n pakkie saad of die bemarking vir 'n tipe saad.

R: *Hoekom dink jy is studente nog nie op die vlak van professionele vertalers nie?*

R: *Wat se karaktereenskappe en vaardighede sou jy sê het studente nodig as hulle hierdie veld wil betree?*

P07

R: *Hoe het jy die teks ervaar? Was dit vir jou moeilik?... maklik?*

P: Dit was nie te moeilik nie. Dit is net om jousef te oriënteer in 'n veld. Verder was dit heel maklik.

R: *As jy nou 'n punt uit 10 moet gee, waar 1 baie moeilik en 10 baie maklik is, watter punt sou jy gee?*

P: Ek sou sê so rondom 5. Omdat dit 'n redelike tegniese teks is, is dit eintlik grammatikaal redelik maklik. Wat dit bietjie moeiliker maak is, is dat 'n mens na ander bronne sal moet kyk om seker te maak dat jy die regte terme het.

R: *Watter terme sou jy opgesoek het?*

P: Ek sou gaan kyk het na die spesifieke name van die (die Afrikaanse name) Engelse blomme, net om seker te maak dat ek die regte terme het. Iets wat ek in die "editing" sou doen is om die wetenskaplike name in Italics te sit, want ek dink dis die standaard hoe dit gedoen moet word. Ek sal definitief die name opgesoek het. Ek sou "frail" gaan opsoek het om seker te maak wat dit in Afrikaans is. "Blooms" is 'n ander een waarvoor ek sou sekermaak. Sover ek verstaan, praat jy van blomme of die bloeiseis, maar ek dink in die teks praat hulle spesifiek van die blomme.

R: *Waar dink jy sal jy hierdie tipe teks teëkom?*

P: In 'n gids oor blomme of miskien in 'n plantkundige tydskrif of miskien selfs ook Huisgenoot in die tuinmaak-afdeling.

R: *Hoekom dink jy is studente nog nie op die vlak van professionele vertalers nie?*

Ek dink die groot verskil tussen professionele vertalers en studente, wat pas klaar studeer het, is te wyte daaraan dat studente nog geen werkservaring het nie. Hulle het nog nie met die realiteite van vertaling te doen gehad nie. Met ander woorde, hulle het nog nie te doen gehad met kliënte en alles wat daarmee saamgaan nie. Ek dink ook, aansluitend tot ervaring, verstaan professionele vertalers die konteks beter waarin verskillende tipes tekste produseer en gebruik word. Hulle verstaan ook die vakspesifieke terminologie van die spesifieke area of bedryf vir wie hulle werk beter. Ek dink ook hulle raak meer vertrou met die praktiese betekenis van taal reëls en konvensies. En kan dan makliker daarmee omgaan.

Daarmee saam raak professionele vertalers ook meer vaardig in die verskille tussen doeltaal en brontaal(e) waarin hulle werk. Elke bietjie navorsing wat gedoen word vir elke teks wat vertaal word beland, as mens dit so kan noem, in 'n leër in die brein om weer gebruik te word wanneer nodig.

Ek dink met ervaring kom ook meer selfvertroue.

R: *Wat se karaktereenskappe en vaardighede sou jy sê het studente nodig as hulle hierdie veld wil betree?*

Ek sal by karaktereenskappe begin met die tweede vraag. Ek dink die belangrikste eienskap vir enige vertaler en miskien ook enige ander taalpraktisyn, is om nuuskierig te wees. Om te hou van navorsing. Om nuuskierig te wees oor hoe mense in ander velde van kennis praat, in terme van jou brontaal en doeltaal. Om altyd jou vertaal werk so goed te wil doen as moontlik, nie net tot die beste van jou vermoë nie. Jy moet ook nie iemand wees wat soveel tob oor foute dat jy vashaak en nooit aanbeweeg nie. 'n Vertaling kan altyd, altyd verbeter word. Jy moet kan besluit wanneer dit goed genoeg is, anders kom dit nooit klaar nie. Sonder dat dit in werklikheid swak is.

In verband met vaardighede. Jy moet in jou doeltaal kan dink en dit behoorlik kan skryf. Dis vanselfsprekend. Jy moet jou brontaal goed genoeg verstaan dat jy nuanses in betekenis kan optel. Jy moet rekenaarvaardig wees. Dis iets wat jy heelyd aan gaan moet werk. Alle vertaal werk word op rekenaars gedoen. Jy gaan 'n bietjie meer as die gewone mens moet wees om basiese probleme self te kan oplos. Jy gaan aanpasbaar moet wees met die aanleer van masjienvertaalprogramme en miskien alternatiewe tot MS Office. Jy gaan ook onmoontlike ure moet kan werk indien moontlik. En die mees belangrike vaardigheid. Jy moet jousef en jou diens moet kan bemark, want jy gaan heel moontlik op een of ander stadium vir jousef moet werk, met ander woorde direk vir kliënte sonder 'n middelman in die vorm van 'n baas.

Verder is al die vaardighede wat geleer is in Afrikaans en of Engels, taalpraktyk en vertaalkunde baie belangrik.

P08

R: *Was die vertaalopdrag vir jou moeilik?*

P: Dit was moeilik in die sin van dat ek baie lanklaas kreatiewe vertalings gedoen. Dit is vir my baie makliker om 'n tegniese teks te vertaal.

R: *Maak jy gebruik van enige masjienvertalingsprogramme of "CAT tools"?*

P: Ja... Ek gebruik nie baie Trados nie... Wordfast glad nie. Dit is meer localisation tools as wat dit translation tools is.

R: *As jy nou 'n punt uit 10 moes gee vir hoe moeilik die vertaalopdrag vir jou was, waar 1 baie moeilik en 10 baie maklik is, wat sou jy gee?*

P: Ek sou dit 'n 7 gee.

R: *Wat was vir jou die moeilikste van hierdie vertaling?*

P: Woorde soos terracotta, frail... Ek dink die heelyd hoërsorg. Showiest. Ek dink die onderwerp het 'n baie spesifieke terminologie. Peerless, rose... Is dit nou rose red, is dit rose pink, rose yellow... Jy begin dink aan al die sinonieme om dit te kan vertaal. Toe het ek gegaan op roospink, want dit laat my meer dink aan 'n sagte kleur.

R: *Waar dink jy sal hierdie tipe teks voorkom?*

P: 'n Pamflet van 'n kwekery of dalk in 'n tuinbou-tydskrif.

R: *Hoekom dink jy is studente nog nie op die vlak van professionele vertalers nie?*

P: Ek het myself bevraagteken toe ek in die polisie aangestel is, want ek was kwaad vir die universiteit oor hoe het julle my nie opgelei vir die spesifieke veld nie. Die antwoord is hulle kan nie. Daar is nie genoeg geld om die lektors te betaal nie. Jy kan net soveel vakke vat. Ek het finansiële regsvertaling gevat, wat my gehelp het op ons honneursvlak, maar ek kan hulle nie kwalik neem omdat ek byvoorbeeld nie kreatiewe vertaling kan doen nie. So, dit is daar dink ek, maar daar is net nie genoeg tyd om al die vakke te vat nie. So, ek dink hulle doen hulle werk, maar dit verg van die student om dan letterlik 'n mentor te gaan soek in die veld waarin jy wil gaan. Jy moet jou eie leeswerk doen, jy moet soos 'n vissie net swem en swem tot jy groot genoeg is om saam met die groot visse te swem. Uit ervaring uit. En, jy moet mense ken. As jy nie mense in die bedryf ken nie gaan jy nêrens kom nie. Jy kan nie die universiteit daarvoor blameer nie. Taalpraktyk is te groot soos hy is. En die ding is, hulle het nie geld om vir goed soos sagteware nie. Kyk vir Trados... R9000 'n jaar per student... no ways. En die opleiding. Dan kort jy iemand wat rekenaars goed ken, wat die meeste van die lektors nie ken nie.

R: *Wat se karaktereïenskappe en vaardighede sou jy sê het studente nodig as hulle hierdie veld wil betree?*

P: Sluit definitief aan by SAVI. Almal sê ja maar dis nog geld... It doesn't matter, daai is jou mother seat. Hulle kry posts wat inkom, hulle het soveel werkswinkels. I mean dit gaan jou R100 kos en jy ontmoet mense... dis waarom dit gaan – om te netwerk is baie belangrik. Ek sou sê doen kortkursusse, kry vir jou 'n mentor in iets wat jy wil doen... Betaal daai geld onder andere... daar is baie goeie taalversorgers. Kommunik eer, netwerk, dis al waarom dit gaan. 'n Mens kan nie 'n taalpraktisyn wees waar jy sit en jy dink die werk gaan net kom, maar ek is te skaam om ander mense te ontmoet, want baie taalpraktisyns is baie skaam mense, want dis jy en die rekenaar. Jy moet onder druk kan werk. Jy moet verskeie take as taalpraktisyn kan uitvoer. Deeglikheid.

P09

R: *Watter tipe tekste vertaal jy gewoonlik?*

P: Net akademiese tekste.

R: *Was die vertaalopdrag vir jou moeilik?*

P: Om die waarheid te sê was hierdie vir my moeiliker as die akademiese tekste bloot as gevolg van die feit dat ek nie gewoon daaraan is nie. As 'n mens akademiese goed vertaal bou jy 'n repertoire op van frases en geheue... Ek is baie gewoon aan die tipe styl wat ek moet gebruik.

R: *So as jy nou hierdie teks 'n punt uit 10 uit moes gee, waar 1 baie moeilik en 10 baie maklik is, wat sou jy gee?*

P: 8.

R: *Wat was vir jou die mees uitdagende aspek(te)?*

P: Orals waar daar terminologie is waarmee ek nie uit my kop uit mee bekend is nie, so ek sou in 'n woordeboek moes gaan kyk.

R: *Watter woorde sou jy opgesoek het?*

P: Primulas en ek sou wou seker maak wat die korrekte Afrikaans is vir die aanwysings "semi shade"/"partial sun" daai tipe tuinboukundige jargon.

R: *Hoekom dink jy is daar 'n leemte tussen studente en professionele vertalers?*

P: Ek dink omdat vertaling 'n praktiese vaardigheid is. Ek vermoed daai tipe gaping sal by enige praktiese vaardigheid voorkom. Ek dink dit is bloot ervaring... oefening. Jy doen meer, jy oefen om iets te doen. Nie dat ek sê jy hoef geen opleiding te hê nie, menende dat die opleiding behoort jou in staat te stel om meer te put uit wanneer jy 'n vertaling moet doen en daai tipe oefening inky. Ek dink dis maar soos enige ander praktiese beroep, jy moet dit nou maar net begin oefen.

R: *Watter karaktereïenskappe en vaardighede sou jy sê is nodig vir studente as hulle in hierdie beroep wil ingaan?*

P: Ek dink, omdat dit 'n praktiese beroep is, moet studente baie vinnig kan aanleer om 'n dik vel te kweek wanneer dit kom by die feit dat jy baie foute gaan maak aan die begin en dat dit nie jou moet afsit nie. Ek dink nie eintlik jy kan 'n perfeksionis wees as jy in hierdie beroep begin nie omdat jy so baie oefening nodig het. Dis soos om te swem – jy gaan nou maar moet inspring en die eerste paar keer is jy nie goed nie, maar daar is geen ander manier nie. Jy kan nie langs die swembad sit en wag dat jy beter swem nie. So, ek dink jy moet maar daai ingesteldheid hê van dat dit orraait is om eers foute te maak en dat jy uit daai foute leer. Ek dink jy het taalvaardighede nodig; ek dink nie hierdie is 'n beroep wat jy... Jy kan nie glad nie taalvaardig wees en dan nou maar net probeer nie en ek dink in lyn met dit ek dink dit gaan 'n baie moeilike beroep vir jou wees en dit gaan ook nie lekker vir jou wees as jy glad nie van tale hou nie. Lees baie, probeer soveel as moontlik tale onder die knie kry, omring jouself met daai vakwetenskap.

P11

R: *Watter tipe tekste vertaal jy gewoonlik?*

P: Oor die algemeen enigiets van persverklarings tot briewe tot toesprake, basies eintlik maar enigiets. Gewoonlik nie goed wat beëdig moet word nie.

R: *Was die vertaalopdrag vir jou moeilik?*

P: Nogal tegnies. Dis nie regtig 'n veld waarmee ek bekend is nie. So, ek sal byvoorbeeld nie uit my kop uit die vertaling vir primula ken nie. Ek's self nie eers seker of dit dieselfde woord bly in Afrikaans of nie.

R: *As jy 'n punt uit 10 daarvoor moes gee, waar 10 baie maklik en 1 baie moeilik is, wat sou jy gee?*

P: Dit was nie baie moeilik nie, ek sou sê so 5. Ek dink as 'n mens hulpbronne kon gebruik sal dit heel doenbaar wees, maar as jy net so uit jou kop uit meer wetenskaplike goed moet doen dan is dit moeiliker.

R: *Jy sê daar is 'n paar tegniese terme. Watter woorde sou jy in die woordeboek nageslaan het?*

P: Ek sou primula opgesoek het, "primrose", "showiest". Ja, dan sou ek net seker gemaak het of daar 'n spesifieke term vir "light shade or partial sun" word as jy praat oor plante en of jy dit maar net as ligskadu of so iets sal beskryf. En dan "Peerless", ek is nie heeltemal seker wat dit beteken in hierdie sin nie, so ek sou dit ook opgesoek het.

R: *Daar is 'n groot leemte tussen studente wat nounet klaargemaak het met hulle graad in hetsy Taalkunde, Vertaalkunde of iets anders, maar hulle wil graag vertaal en professionele vertalers. Hoekom dink jy is dit so?*

P: Dis 'n tipe werk wat baie ervaring verg. So, jy kan die teoretiese kennis hê en daarvan geleer het in boeke vir 'n klomp jaar, maar dit is maar iets wat kom met tyd wat jy aanleer en ervaring opbou. Dit is maar iets wat jy oefen en moet bly oefen om in goed te wees. Ervaring tel nogal redelik in hierdie veld.

R: *Watter tipe vaardighede en karaktereïenskappe het studente nodig as hulle in die werkplek instap?*

P: 'n Leersame gees is altyd iets wat jy in enige beroep nodig het. Spesifiek in vertaling, kort jy iets soos deeglikheid, geduld, en jy moet welbelese wees sodat jy verskillende tipes tekste redelik maklik kan verstaan en die trant en toon verstaan. So bo en behalwe tersiêre onderrig en die nodige akkreditasie, dink ek jy moet nogal 'n fyn oog vir detail hê en baie deeglik kan werk en presies en vinnig kan werk en jy moet die boodskap kan oordra presies soos wat hy bedoel is in die oorspronklike taal.

R: *Professionele vertalers kry die taak redelik vinnig in 'n eerste poging gedoen teenoor studente wat nou nog nie klaar sou gewees het nie. Dink jy kreatiwiteit speel ook 'n rol?*

P: Jy moet verstand hê van die dokumente waarmee jy werk. So, jy moet woord-vir-woord kan gaan en korrek wees, maar binne 'n raamwerk waar dit steeds sin maak as jy dit as 'n geheelteks sien. So, ek dink as jy kreatief kan wees in daai sin dat dit lees soos 'n teks in die taal waarna dit vertaal is dat dit nie klink soos 'n vertaling uit 'n oorspronklik taal uit nie... As jy dit goed kan doen en jy het uit daai "scope" van woordeskat en maniere van woorde werk in 'n taal, as dit kreatiwiteit is, dan ja is dit baie belangrik.

R: *Moet jy gebruik maak van enige vertaalprogramme?*

P: Nie op die oomblik nie.

R: *Watter bronne sou jy vir hierdie vertaalopdrag geraadpleeg het?*

P: 'n Woordeboek wat jou in staat stel om sekere woorde presies te kan vertaal. Ek het byvoorbeeld "gorgeous" met "asemrowend" vertaal, maar jy kan dalk 'n meer spesifieke woord kry wat die regte betekenis oordra. Of iets soos Word se sinonieme.

P12

R: *What type of texts do you usually translate?*

P: I do lots of legal translations. If I were to say what my field of expertise is I'd probably say legal translations. But I also do touristy things and general texts.

R: *What type of text do you think this is?*

P: I would classify it as a general text.

R: *Where would you most likely find this text?*

P: Maybe on a gardening website... giving you advice on what to do with your dull winter garden or something.

R: *If you had to rate the translation task, giving it a point out of 10 where 1 is very difficult and 10 very easy, how would you rate the translation you just did?*

P: 7. Because the sentence structure was fairly straight forward, there were very few technical terms. As I said I would have researched the proper German name of Fairy primula and English primrose. Now I did a verbatim translation, basically of those two names ... I would have researched it under the Latin name sand it was just a pleasant text to translate. You could write pretty sentences with nice little structures and words and get the feeling of the text across.

R: *Are there any other words that you would have liked to look up in the dictionary?*

P: Possibly the family. I think I'm right with the translation because that's a biological term but I would've double-checked that. "Cultivars" ... I think I am right with "Sorten" because I've done lots of agricultural texts as well but I would have checked that probably. I would have probably checked on a website as well as a gardening website in German how they phrased the "semi-shade or partial sun" as one term. What I did will be correct, but I don't know whether it is the... "im Halbschatten oder teilweiser Sonne". I would have quickly hopped on to a gardening website in German.

R: *There's a huge gap between students and professionals. Why do you think is that?*

P: I need to go one step back. I studied many years ago; did my masters in translation studies after my bachelor and I also taught students at Wits, at TUKS, and I've been an external marker for UNISA for many many years. So, I have been working with students of translation studies for many years, and my experience has been that students when they do their undergraduate language studies are exposed to a lot of language, a lot of literature, to a lot of culture, cultural history as well, which is good, which is enriching for students in general but they are not equipped with the skills they need to become good translators or interpreters. I've taught both because I work as translator and interpreter. What I mean by that is, for example linguistic structures. You need to analyse the linguistic structure of your source text and target text. You need to know how the languages work technically so that you can take your source text and put it into the appropriate target text structure linguistically so that it will work in the target text. And I find that those kinds of technical aspects are non-existent in undergraduate language studies. That very matter of fact technical analysis of the languages that you are working with, and I think that is big shortfall. Then, for example in interpreters training things like memory exercises, those kinds of things that you need in order to interpret are also not taught at all in undergraduate language studies. So, I think those kinds of things are the shortfalls of the undergraduate language studies.

R: *Do you think the scope of translation expertise is too big to be taught at undergraduate level? Because I find it the case or that the curricula need to be revised. There should be some midway because there's a lot of translation competence theories, which indicates that students need certain skills, but those skills are already so broad that it is impossible to be taught at undergraduate level.*

P: I'm a bit in two minds about whether translation should be taught at all at undergraduate level or only at post graduate level. I'm not quite certain what my opinion on that is. On the one hand, I think introducing translation modules at undergraduate level might a way also of exposing students to what translation is all about. Awakening in them perhaps an interest to move into the field of translation. On the other hand, I consider it to be a bit dangerous in the sense that students then might get the feeling they gained a bit of experience at undergraduate level and they can go out, once they get their bachelors and be a translator, which I think a risky thing to do. So, that is the risk involved in teaching translation at undergraduate level. What definitely is also necessary to be able to work as a translator is that you've got a background in law and a background in economics besides the linguistic background, which I mentioned just now, I think. Because those are two huge areas in which many translators find work later on. You need to have a certain amount of background knowledge in those fields as well to be able to translate adequately in those fields. You can't come up with a pretty literary translation for a technical legal term, you just need to know what it is. You don't need to be a lawyer, but you need to know in which legal field you are busy working so that you can then research appropriately and find the correct terminology. And I think with all that, it makes good sense to have students only study languages at undergraduate level so that they have the language skills necessary. I would include at undergraduate level things like linguistics of the languages that you intend translating with later on and then at postgraduate level introducing all the translation theories, a bit of law, a bit of economics and things like that.

R: *OK, you've mentioned now already a few... because it leads into my next question, a few skills that they need to go into the world of translation practice. What other skills as well as characteristics do they need when they walk into the workplace as there are rarely graduate attributes defined for students when they finish their degree in translation studies.*

P: It is very difficult to answer your question because there is hardly such a thing as a workplace that you can walk into as a translator. You have to find work as a translator. There are very few positions for translators in banks or whatever. With German as a language you can apply to be part of their language department where you can do inhouse translations. But there are very few positions like that available for freshly qualified translators. So, what many translators end up doing, and which I did as well, was to go off on your own as a freelance translator and then you need to be equipped with business skills. I actually enrolled for a business course, the School for Business at Wits at one stage to be able to have a few tools in my hand with which to be able to work on your own. So, that is another component which I think is important. Then, being able to do basic things like job interviews, writing CVs... Stuff like that is important because if you want to apply for a job as a translator with any big multinational company or government department in South Africa possibly. You need to strip students of all their romantic ideas of what translation is all about. Translating pretty poems and nice literature is not part of the real world of a translator. If you want to live off translation and not do it as a side-line, a very noble side-line, and doing literary translations and poetry, I mean, what a beautiful way of spending your time. You won't be able to get bread and butter on your table from doing that. So, I think students must be made aware of that from the word go. A lot of your time as a translator will be spent doing really dry work but it needs to be done and it needs to be done professionally and accurately so that your client can use the product that you generate for his/her purposes and these purposes can include court battles and legal applications of whatever sort. So, it is not at all the romantic idea many students have of what translation's all about.

There are schools for translators and interpreters that encourage students to study other degrees at undergraduate level: economics, law, social studies, political sciences at undergraduate level and then only to do translation studies at postgraduate level in order to equip them with that background knowledge that they need. I know of translators in South Africa who studied law, who are fully qualified lawyers, and then only afterwards they've got no formal training in languages and only afterwards did they decide to go into the field of translation, and they've just established themselves as translators without any formal training as translator, they then did their sworn translation exam and they are very successful in the market. I don't entirely like that notion. I do think that a solid foundation in language studies will help you to provide customers with good language services. But I think a solid background in law can also be very useful and helpful. It is really out of the box thinking but I do think that what students are being taught at undergraduate level at South African universities is not sufficient to equip them or to inform them even of what translation is all about and it would be great if we could change that and also if we could change the professional status our profession has in South Africa. SATI is doing excellent work in that regard trying to uplift the overall reputation of the profession but I think the university should follow... and do the same and advertise the profession more at undergraduate level. Then ensure that they've got the courses in place that you need to produce qualified professional translators that would be up for the challenges of the market.

P13

R: *Watter tipes tekste vertaal jy gewoonlik?*

P: Gewoonlik is dit politieke of ekonomiese, regsdokumente, diplomas, geboortsertifikate.

R: *Was die vertaalopdrag vir jou moeilik?*

P: Nee, dis nie moeilik nie, maar vir 'n literêre teks is dit nie net die term nie en mens moet bietjie wyer gaan. Nader aan wat hul wil sê as die woorde wat daar is.

R: *So, as jy dit 'n punt uit 10 moes gee vir hoe moeilik dit was, 1 baie moeilik en 10 baie maklik, wat sou jy gee?*

P: Ek sou sê 8. Afgesien van die tikprobleem wat ek gehad het, sou ek die teks kon klaarmaak.

R: *Jy het wel deur die teks gelees. Wat sou jy sê is die, afgesien van die tegnologiese probleme, wat was moeilik om te vertaal?*

P: Wat moeilik was, was "Fairy primula", ek het hom vertaal soos dit is, maar in Frans kan dit dalk 'n ander woord wees. Meestal die name wat hulle gegee het.

R: *Sou jy 'n woordeboek wou gebruik?*

P: Ek sou daardie terme wou naslaan. Ek sou hier en daar 'n woord nageslaan het om iets beter te kry as wat ek nou gekies het, byvoorbeeld "semi shade or partial sun". Ek is seker daar is iets beter as wat ek nou gebruik het.

R: *Jy het nou self Vertaalkunde studeer. Soos wat ek genoem het is daar 'n groot gaping tussen studente en professionele vertalers. Hoekom dink jy is studente nog nie op die vlak van professionele vertalers nie?*

P: Wel, die student gaan meer woord vir woord vertaal en miskien sal ek sê nie heeltemal die nuanse van die woord reg gebruik nie.

R: *Watter vaardighede en karaktereieenskappe het studente nodig as hulle die veld wil betree?*

P: Hulle moet 'n goeie woordeskat hê, nie net in die brontaal nie, maar ook in die doeltaal. Die taal in diepte ken. Dit hang ook af van die tipe teks, natuurlik. As dit iets is wat tegnies is, dan is dit net die woorde, maar in letterkundige tekste dan is dit moeiliker. Jy moet baie lees in die doeltaal om die gevoel daarvan te hê. Ja, en jy moenie bang wees om 'n woordeboek te gebruik nie en, wat ek sien die studente doen is hulle wat die eerste betekenis as hulle 'n woord soek en kyk nie 'n bietjie verder as dit nie.

R: *As jy vertaal, maak jy van enige tegnologie, soos 'n vertaalprogram, gebruik?*

P: Ek het 'n Wordfast-kursus bygewoon, maar ek het gevind ek kry baie werk en dit is vir my makliker om sommer vinnig op 'n webblad te kyk. As dit baie moeilik is en ek nie baie vertrou is met die woordeskat nie, dan sal ek tekste soek wat daardie terminologie gebruik. Ek gebruik partykeer ook Linguee en Reverso. Ek het vroeë die "Grande Dictionnaire" van Kanada gebruik, maar hulle het die program verander en dit was kompleks, want vroeër het hulle baie voorbeelde gegee en dan kon 'n mens kon sien dit sekere woorde beter sou pas, maar nou is dit nie meer so nie en dit wat net te veel tyd om daarna te kyk.

P14-16

R: *Watter tipe tekste vertaal julle gewoonlik?*

P: Dit is meestal korporatiewe tekste, meestal mediaverklarings. So, dit gaan oor aksies soos slaggete regmaak, veldtogte van die organisasie en verslae.

R: Hierdie vertaalopdrag was dan nou iets anders as waaraan julle gewoon is...

P: Ja, heeltemal uit ons "comfort zone".

R: Was die vertaalopdrag vir julle moeilik?

P14: Dit was nogal bietjie uitdagend omdat ek nie... dis nie 'n stokperdjie van my nie en ek lees nie baie oor daardie tipe onderwerpe nie. Dit was steeds baie interessant om iets nuut te leer, maar dit was nogal uitdagend. Ek sou my hulpbronne nogal baie gebruik het.

P15: Ja, dit was interessant. Dit was nie te moeilik nie, maar 'n mens moes 'n bietjie dink omdat dit nie 'n suiwer korporatiewe of akademiese onderwerp nie.

P16: Dit kan amper as 'n kreatiewe teks gesien word. Dit was vir my nogal lekker gewees omdat ek baie hou van tuinmaak. Ek kan net nie glo dat ek nie sleutelblom kon onthou nie. Ek het dit toe vertaal met primulas.

R: So as julle nou 'n punt uit 10 moes gee vir hoe moeilik dit was, 1 baie moeilik en 10 baie maklik, wat sou julle gee?

P16: 9, want ek ken die woordeskat buiten sleutelblom. Dit was maklik. Hoekom ek dit nie 'n 10 gegee het nie, is die idiomatiese Engelse gebruik, byvoorbeeld "with masses of colourful flowers". Dit was vir my nogal moeilik om 'n idiomatiese Afrikaans te gee sonder om af te wyk van die gevoel en die inhoud van die sin. Kyk, daar is verlies in die vertaling, byvoorbeeld "with masses of colourful long-lasting" moes ek byvoorbeeld gesê het "met helderleurende blomme wat baie lank hou met... Nee, "die massas helderleurende blomme wat baie lank hou", maak hierdie dat... Jy weet jy verander bietjie die Afrikaanse sinskonstruksie moet jy dan aanpas om dit idiomaties te hou. Dit en die byvoeglike naamwoord-gebruik. 'n Mens moet partykeer dink. Ek het probeer om byvoeglike naamwoorde te gebruik wat in 'n blom-konteks gebruik sou word.

P14: So 6. Omdat ek nie bekend is met die terme nie. Die name was maar die primêre ding en ek dink omdat 'n ou nie baie tyd het nie, ek vertaal byvoorbeeld baie langer as my kollega, so ek dink hy vloei nie baie mooi nie.

P15: Ek het dit ook as 'n 6 ervaar. Jy voel dadelik so bietjie geïntimideerd as dit oor 'n onderwerp gaan wat heeltemal buite jou raamwerk is, want jy is al so gewoon aan die tipe werk wat jy kry; jy begin half outomaties en hier moes jy bietjie dink. Behalwe vir die feit dat daar blomme en goed was wat ek nie geweet het nie, het ek dadelik gevoel ek gaan nie so goed wees hiermee soos wat ek sal wees met my eie werk nie. Daar is so een of twee woordjies wat ek sou nasaan soos "Peerless" en "broos" en "weerloos". Ja, want daar was byvoorbeeld "pragtig" en "mooi" of daar was 'n paar sulke Engelse woorde wat ek tesourus nodig sou kry om die regte Afrikaanse woord te kry.

R: So julle al drie voel dat julle definitief 'n hulpbron wou raadpleeg?

P14 & 15: Ja.

P16: Omdat ek oor die woordeskat beskik... Ek is tevrede met my vertaling. Ek sou "primrose" met "sleutelblom" vertaal het as ek my woordeboek kon gebruik, maar ek sou hom kon vertaal daarsonder.

R: Watter hulpbronne gebruik julle gewoonlik?

P16: Meestal Pharos-aanlyn en dan natuurlik die AWS. SARS gebruik ons nogal gereeld en dan die taalwoordeboek, die HAT en die Oxford Engelse woordeboek.

R: Daar is 'n groot gaping tussen studente en professionele vertalers. Hoekom dink julle is dit so?

P16: Ondervinding, en ek dink ook omdat, met alle respek gesê, ek dink ook dit is omdat studente nog nie soveel gelees het as gesoute vertalers nie.

P15: Ek dink lees is een van die grootste faktore. Ek praat nie net van boeke lees en woordeskat nie, ek praat van om te weet wat in die wêreld aangaan... konteks ... daai meer globale goed, die ding van jy lees goed, jy praat oor goed, jou kringe waarin jy beweeg, dink ek, praat oor ander goed as studente.

P14: Ek sou ook sê ervaring as ek moet vergelyk met toe ek my eerste jaar begin werk het... My vertaalvaardigheid toe teenoor hoe ek nou vertaal. Jy kan dit nie eers vergelyk nie. So, ek dink jou lewenservaring, maar jou ervaring... elke dag agter die rekenaar maak 'n groot verskil. Jy raak meer professioneel en dit is nie net meer daardie direkte vertalings nie. Soms is dit bietjie meer idiomaties om die teks beter te laat vloei.

R: Maak julle gebruik van enige vertaalprogramme?

P14: Nee.

P16: Ons het dit al oorweeg, maar wat ek al gesien het onder vertalers wat daarmee werk is hulle doen baie min redigeerwerk na 'n vertaling. Hulle maak soveel staat op die masjien dat daar foute is. En ek hou daarvan om my brein besig te hou.

P15: Ek het nog nooit met so iets gewerk nie, maar soos ek myself ken gaan ek op die ou end dubbeld die werk doen.

R: As iemand nou vir julle sou kom werk hier, watter karaktereenskappe asook vaardighede sou julle sê is kruks?

P16: Deeglikheid.

P14: Professionaliteit.

P15: En jy sal moet onder stres kan funksioneer.

P14: As jy sommige dae hier kom sit, weet ons nie altyd wat die dag gaan inhoud nie. Daar kom werk in en dit moet vanmiddag klaar. So, jy kan nie regtig beplan nie; jy kan nie sê vandag gaan ek dit doen nie.

P16: En omdat ons 'n burgerregte-organisasie is, is ons meer reaktief.

P15: Ja, dit is nie dat jy 'n skedule het en beplanning en alles en jy kan perfek volgens dit hou nie. Jy kan tot 'n mate, maar daar is baie eksterne faktore wat inwerk, waarvoor jy geen beheer het nie. So, as daar vandag 10 goed daarbuite gebeur en daar moet 10 goed daaroor gesê word... alles kom na ons toe.

P14: Ja, en ek dink 'n ou moet redelik konserwatief wees, nie te liberaal nie anders gaan jy nie saamstem nie... die teks wat jy moet redigeer nie. En jy gaan net nie met soveel hart dalk so goed doen soos wat jy moet nie, as jy nie met die inhoud saamstem nie.

P15: Jy moet op dieselfde vlak wees as hoe die mense hier dink.

P16: En jy sal ook beslis 'n Afrikaans-moedertaalspreker moet wees of ten minste dan 'n totale tweetalige in Afrikaans en Engels.

P17

R: Watter tipes tekste vertaal jy gewoonlik?

P: Ek werk vir ABSA so finansiële, insluitende kontrakte, vorms, finansiële resultate en ekonomiese goed.

R: Het jy enige agtergrond wat ekonomie of finansies betref?

P: Nee, ek het nie.

R: So, was dit 'n aanpassing?

P: Ja, want voor dit het ek gewerk by die advertensie-afdeling vir Beeld, so dit was heeltemal 'n ander tipe ding en jou brein is volgens dit georiënteer. So ja, dit was 'n aanpassing aan die begin, want baie finansiële en ekonomiese saketerme, die sakewoordeboek is ons beste maatjie. Ons sit met hom langs ons die hele dag, want maak nie eintlik saak hoe baie jy dit doen nie, jy gaan nooit al die woorde uit jou kop uit ken nie. Dit het my omtrent 'n goeie 6 maande gevat voordat ek gevoel het ek is nou baie gemaklik en ek doen dit elke dag.

R: Was die vertaalopdrag vir jou moeilik?

P: Dit was nou bietjie iets anders, so dit is glad nie iets waaraan ek gewoon is nie, so ja, dit het my bietjie onkant gevang. Die teks was glad nie moeilik nie, dis nie dat ek nie verstaan het wat daar staan nie. Dit is net om die Afrikaanse ekwivalent te kry omdat mens nou in 'n ander manier dink.

R: As jy nou 'n punt uit 10 moes gee, waar 10 baie maklik en 1 baie moeilik is, wat sou jy gee?

P: Ek dink miskien 'n 4 of 'n 5. Dis maar net nie wat ek verwag het nie. Ek sou sê 'n 5. Dit was nie moeilik nie, dis maar net nie iets waaraan ek gewoon is nie en omdat ek nouten gesit en werk het en ook toe afgeskakel het en nou na hierdie toe gegaan het. En natuurlik om nie 'n woordeboek te hê nie.

As 'n mens het dan sal jy dit 100% reg kan doen, maar om net so uit jou kop uit te dink is in die meeste gevalle nie moontlik nie.

R: Is daar ander woorde wat jy sou wou nasaan?

P: "Primulas", ek weet nie of die in Afrikaans en Engels dieselfde is nie. Die name van die plante... "primrose" ook, "terracotta" was ek oor onseker. En dan kon ek net nie "frail" vertaal nie. Die woord was op die punt van my tong, maar ek kon net nie aan een dink waarmee ek gemaklik is nie.

R: Daar is 'n groot gaping tussen studente en professionele vertalers. Hoekom dink jy is dit so?

P: Ek het my voorgraads, honneurs en meestersgraad, en ek dink net ons het nie genoeg praktiese vertaalervaring gehad met 'n groot verskeidenheid tekste nie, want ek bedoel jy leer al die teorie. In my derdejaar het ons baie vertaal, maar toe was dit vir my nou 'n gap, want toe doen ek my honneurs in Frans en toe gaan doen ek my MA en toe het ons nie verskriklik baie praktiese goed gedoen nie. So, teen die tyd wat ek begin werk het, was dit alweer drie jaar nadat ek graad gevang het. Ek dink dit is net om onder druk te werk, om nie heeltyd iemand te kan vra nie, want as jy in die klas sit, is dit baie maklik om jou hand op te steek en die dosent gaan jou antwoord of jy vra vir iemand langs jou, maar as jy by 'n korporatiewe plek werk dan is jy op jou eie. Ek was alleen vir die advertensies vir Beeld, so dit was net ek. Ek moet my eie werk nagaan. Ook natuurlik oor die feit dat jou werk op universiteit

nagesien word vir 'n punt en dan kan jy jou foute sien, maar as jy werk dan word jou werk gebruik. So, jy moet seker maak dat dit reg is. En maar ervaring. Ek bedoel, hoe gemakliker jy raak hoe beter gaan dit.

R: As 'n student nou wil werk waar jy werk, oor watter karaktereenskappe en vaardighede moet hulle beskik?

P: Wel definitief pligsgetrouheid, stiptelikhed, logiese en analitiese denke en jy moet jouself kan toespits op jou werk en nie aandagafleibaar wees nie. Jy moet baie aandag aan detail gee.

R: Maak jy van enige vertaalprogramme gebruik?

P: Nee. Ek het met Wordfast gewerk toe ek studeer het, maar nog nie weer daarna nie.

R: Dink jy met die aard van die tekste wat jy vertaal sou so 'n hulpmiddel nuttig kon wees?

P: Omdat ek nie ervaring het om daarmee te werk nie, dink ek sal dit vir my meer moeite wees om dit aan te leer en nou te inkorporeer.

P18

R: Watter tipes tekste vertaal jy gewoonlik?

P: Ek vertaal vraestelle vir die onderwysdepartement in die meeste gevalle. Die onderwerpe wissel van enigiets wat by Tibet Colleges aangebied word: motorwerktuigkunde, elektriese installasies, kinderopvoeding, sielkunde, wiskunde... Daar is iets van alles, maar omdat dit vraestelle is, daar is selde meer as 'n scenario wat meer as 'n paragraaf lank is. So, al is daar baie tegniese terminologie in, is dit redelik maklik om te vertaal omdat dit sinne-sinne is. Jy hoef nie 'n kenner op elke gebied te wees nie, maar ek kan sê ek het twee ingenieurs in die huis en ek raadpleeg hulle gereeld. Ek doen ook 'n bietjie vertaling vir algemene artikels wat op die internet kom. Daarvoor lees 'n mens maar koerant. As jy min of meer weet wat in die koerant aangaan dan help dit. Ek het al 'n klein bietjie goed gedoen wat regsterme en finansiële terme in het, maar ek sal dit nie as 'n sterkpunt beskou nie.

R: Was die vertaalopdrag vir jou moeilik?

P: Hierdie, dink ek, was darem redelik maklik. Ek dink as ek bietjie meer oor tuine lees dan sou dit vinniger gegaan het.

R: As jy 'n punt uit 10 moes gee vir hoe moeilik dit was, waar 1 baie moeilik en 10 baie maklik is, wat sou jy gee?

P: 8 of 9. Kyk, ek het geen idee wat beteken "Peerless Primulas" nie. So ek sou graag daai woord wou naslaan. "Fairy primula" en "English primrose" is ook twee woorde wat ek regtig sou wou naslaan net om seker te maak, want dit klink weer na tuinbou-terme, so ek is bietjie onseker daarvan. Maar verder dink ek dit is 'n baie maklike leesbare teks.

R: Is daar enige ander woorde wat jy sou wou naslaan?

P: Ek is nie seker hoe om "terracotta" te spel nie. Ek is redelik seker hy word ook in Afrikaans gebruik, maar ek sou hom graag wou naslaan. Die res dink ek was redelik maklik gewees. Ek sou dalk ook in die Engelse woordeboek gaan kyk het wat is die verskil tussen "frail" en "fragile", net omdat my Engels nie op moedertaal-standaard is nie.

R: Daar is 'n groot gaping tussen studente en professionele vertalers. Hoekom is dit so?

P: Ervaring speel 'n groot rol. Buiten dat 'n mens ervaring opdoen terwyl jy werk hang dit baie af van hoe baie lees jy, want jou lees kennis verbeter jou vertaalvermoë. So, hoe jonger jy is, hoe minder leeservaring het jy waarskynlik. Dit kan ook wees dat studente bietjie haastig is. Dit kan met die vakgebied saamhang. Sekere vakgebiede, het ek agtergekom, moet jy nie eers aanvaar dat 'n gewone woord 'n gewone betekenis kan hê nie. So jy dink jy is besig met 'n gewone woord en dan is dit in wese 'n term en jy moet hom gaan naslaan. Dit hang ook af as jy vakkennis van sekere goed het dan sal dit jou help om beter te vertaal. Soos wat ek genoem het, met die vraestelle waarmee ek werk... "Power". Wat is "power"? Drywe, krag, arbeid? Jy moet verstaan wat die konteks is. Na 6 jaar se vertaling sukkel ek steeds. Ek is glad nie seker wat vertaalopleiding behels nie, want ek het self geen vertaalopleiding nie. Ek het bietjie naslaanwerk gedoen en verder gaan ek bloot op my ervaring.

R: Watter vaardighede en karaktereenskappe het 'n nuweling nodig sou hy vertaalwerk 'n beroep wou maak?

P: Jy moet baie hou van lees, bereid wees om op jou eie te sit, want jy kan nie tussen 'n klomp mense werk nie, want dit sal jou aandag aftrek. Jy moet bereid wees om lang ure alleen te kan werk. Jy moet amper fanaties wees om reg te skryf. Sit jy kommas en punte op die regte plekke? Is elke woord reg gespeld? Slaan jy elke woord na om seker te maak dat jy die regte betekenis in gedagte het? Jy moet bereid wees om, nadat jy 'n teks klaar vertaal het hom weer 'n keer oor te lees. Party mense wil dit net afgehandel kry, maar jy moet ingestel wees op gehalte en bereid wees om 'n bietjie tyd te bestee aan 'n ding.

P19

R: Watter tipe tekste vertaal jy gewoonlik?

P: Ek werk oor die algemeen nogal met akademiese tekste, maar het nogal heelwat met gewone narratiewe tekste gewerk.

R: Was die vertaalopdrag vir jou moeilik?

P: Dit was nie 'n moeilike opdrag nie hoewel ek beter sou kon vaar as ek my woordeboek kon gebruik. So ek het 'n bietjie vry vertaal hierso, plek-plek.

R: As jy nou 'n punt uit 10 moes gee vir hoe moeilik dit was, waar 1 baie moeilik en 10 baie maklik is, wat sou jy gee?

P: Dit was eintlik baie maklik as 'n mens na die betekenis daarvan kyk, maar baie maklik as ek 'n woordeboek gehad het, so kom ons gee dit so 2.

R: Watter woorde sou mevrou nog wou naslaan?

P: Ek sou in die opskrif "Peerless" opgesoek het en ek sou die name van die blommetjies opgesoek het om te kyk of daar spesifieke Afrikaanse vertalings is vir die algemene benamings van die blommetjies. Ek sou waarskynlik gekyk het na die woorde "showiest", en "vibrant" sou ek beslis na gekyk het. "terracotta- potte"... Ek het twee moontlikhede daar gegee. En dan die heel laaste kleur "rose" het ek as roospiekenk vertaal, want "rose" is eintlik 'n spesifieke soort pienk.

R: Daar is 'n groot gaping tussen studente en professionele vertalers. Hoekom dink jy is dit so?

P: Ek sou in die eerste plek sê 'n gebrek aan ervaring, want 'n mens leer absoluut soos ek dink in die meeste beroepe, die geval is, wanneer jy regtig begin werk met taal en met tekste. En dit neem 'n paar jaar vir 'n vertaler om te besef hoe om regtig 'n onderskeid te tref tussen verskillende tipes tekste, soos akademiese tekste, feitlike tekste, verhalende tekste, tekste wat gerig is op die algemene publiek of 'n hoërordegroep. Nie noodwendig akademiese nie, maar ingeligte professionele mense binne 'n vakgebied.

R: As daar 'n student is wat na jou toe kom en vra dat hy/sy ook die tipe werk wil doen wat mevrou nou doen, watter karaktereenskappe en vaardighede het hy/sy nodig om betrokke te raak in hierdie bedryf?

P: In die eerste plek dink ek moet 'n mens 'n natuurlike taalvaardigheid hê en jy moet beslis 'n baie goeie begripsleesvaardigheid hê. Dit help nie mens kan vinnig werk, maar jou begripslees is nie korrek nie. 'n Mens moet regtig self krities wees en bereid wees om terug te gaan en geduldig en volhardend te kyk na wat jy beter kon doen. Dit moet 'n persoon wees wat regtig 'n strewende daarna het om gedurig te groei en te verbeter. En 'n persoon moet so wyd as moontlik lees en natuurlik selfdisipline, veral in die vryskutbedryf.