

UNIVERSIDADE FEDERAL DE SANTA CATARINA
PÓS-GRADUAÇÃO EM LETRAS/ INGLÊS E LITERATURA CORRESPONDENTE

PROFESSIONAL vs NOVICE TRANSLATORS: A STUDY OF EFFORT AND
EXPERIENCE IN TRANSLATION

por

PÉRICLES DE SOUZA PINTO

Dissertação submetida à Universidade Federal de Santa Catarina em cumprimento parcial
dos requisitos para obtenção do grau de
MESTRE EM LETRAS

FLORIANÓPOLIS

Fevereiro de 2004

Esta Dissertação de Péricles de Souza Pinto, intitulada *Professional vs Novice Translators: A Study of Effort and Experience in Translation*, foi julgada adequada e aprovada em sua forma final, pelo Programa de Pós-Graduação em Letras/Inglês e Literatura Correspondente, da Universidade Federal de Santa Catarina, para fins de obtenção do grau de

MESTRE EM LETRAS

Área de concentração: Inglês e Literatura Correspondente
Opção: Língua Inglesa e Lingüística Aplicada

.....
Dra. Mailce Borges Mota Fortkamp
Coordenadora

BANCA EXAMINADORA:

.....
Dr. Fábio Alves da Silva Junior
Orientador

.....
Dra. Maria Lúcia Barbosa de Vasconcellos
Co-orientadora e Presidente

.....
Dra. Lêda Maria Braga Tomitch
Examinadora

.....
Dra. Adriana Silvina Pagano
Examinadora

Florianópolis, 27 de fevereiro de 2004.

ACKNOWLEDGMENTS

First and foremost, I would like to express my gratitude to my advisors Fábio Alves and Maria Lúcia Vasconcellos, whose critical reading and enriching suggestions were fundamental to the conclusion of this work. Another point that was equally important to me was their kindness, encouragement, permanent support and concern with my general welfare.

I should also thank the members of my defense committee, professors Adriana Pagano and Lêda Tomitch, for kindly accepting the invitation and being so patient in reading my work so as to provide enlightening suggestions.

I am especially grateful for the financial support of CAPES and the PROCAD project, without which the carrying out of this project would certainly have been hampered. The opportunity provided by the PROCAD project to send me on a study mission of one term at UFMG, in Belo Horizonte, was decisive to the very beginning of this work, for which I have no words to thank.

I am thankful to UNIPAN, for having facilitated the contact with their students and allowed me to use their language lab for data collection.

My deepest thankfulness should be expressed to the novice and professional translators who took part in this research. They were all very obliging and without their willingness this research would have been reduced to a mass of blank sheets.

The research and writing of this thesis owes a great deal to the unconditional love, care and the emotional and financial support of my parents *Jonas* and *Etel*, to whom I should say *muitíssimo obrigado*.

Equally important was the interference of my friends Andreia, Marcos, Maria Luiza, and Silvana for the distinct ways each one has contributed: by proof-reading my text, helping with reference material and my technological illiteracy, or just listening to me. Thank you ever so much.

Finally, I would like to warmly thank all the professors at PGI and POSLIN, who uncovered my eyes to a new world that lies beyond language teaching, which is my other abiding passion.

Florianópolis, 27 de fevereiro de 2004.

ABSTRACT

Professional vs Novice Translators: A Study of Effort and Experience in Translation.

Péricles de Souza Pinto

Universidade Federal de Santa Catarina
2004

Supervising Professors: Dr. Fábio Alves da Silva Júnior – UFMG
Dr. Maria Lúcia Barbosa de Vasconcellos – UFSC

At the interface between process- and product-oriented Translation Studies, the present research focuses on the notion of *effort* within a cognitive context. *Effort* is therefore regarded as the mental activity applied upon the construction of the translated text, either within its micro or macro textual scope. The literature in the sub-area of process-oriented studies in translation gives the idea that novice translators make more effort than professionals because their processes are less automated. This study attempts to investigate this problem and measure the variable of *effort* between novices and professionals by interfacing a process oriented approach to translation--using the computer software Translog and TAPs (Think-Aloud Protocols)--with a product oriented approach, applying Halliday's Functional Grammar--more specifically the notion of cohesion--to the analysis of the translated texts deriving from the translation processes investigated. The corpus of this research consists of the participants' Translog representations, TAPs, translated texts and questionnaires. The number of participants in this research has been limited to five novice and five professional translators (six professionals were used for the qualitative analysis). The findings obtained reveal that the novice translators appear to have applied more effort to the drafting phase, while the professional translators allocated more of their effort to the orientation and the revision phases. They also reveal that both groups did not vary significantly as for the attention devoted to the micro units of the text, but that the professional translators seem to have concentrated more on the macro units of the text than the novices did. Lastly, the overall results suggest that variation in time with regards to orientation, drafting, and revision patterns between novices and professionals, the level of textual awareness and the impact of all of the above upon the final product will *not always* be positive ones.

Number of pages: 124

Number of words: 35,669

RESUMO

Tradutores Profissionais x Novatos: Um Estudo do Esforço e Experiência na Tradução.

Péricles de Souza Pinto

Universidade Federal de Santa Catarina
2004

Professores Orientadores: Dr. Fábio Alves da Silva Júnior - UFMG
Dra. Maria Lúcia Barbosa de Vasconcellos - UFSC

Na interface entre processo e produto nos Estudos da Tradução, o presente estudo enfoca a noção do *esforço* dentro de um contexto cognitivo. Portanto, *esforço* é considerado como sendo a atividade mental despendida na construção do texto traduzido, seja em seu âmbito micro ou macro textual. A literatura na sub-área de estudos processuais da tradução traz a idéia de que tradutores novatos despendem maior esforço do que profissionais porque seus processos são menos automatizados. Este estudo busca examinar tal problema e medir a variável *esforço* entre novatos e profissionais através da interface da abordagem processual da tradução--usando o software Translog e TAPs (Protocolos de Pensamento em Voz Alta)--com uma abordagem do produto, aplicando-se a Gramática Funcional de Halliday--mais especificamente a noção de coesão--para a análise dos textos traduzidos oriundos dos processos tradutórios investigados. O corpus desta pesquisa consiste das representações do Translog dos sujeitos, TAPs, textos traduzidos e questionários. O número de sujeitos nesta pesquisa foi limitado em cinco tradutores novatos e cinco profissionais (seis profissionais foram usados para a análise qualitativa). Os resultados obtidos revelam que os tradutores novatos parecem ter despendido maior esforço na fase de redação, enquanto os tradutores profissionais alocaram maior esforço nas fases de orientação e revisão. Revelam ainda que ambos os grupos não variaram significativamente com relação à atenção dedicada às unidades micro textuais, mas que os tradutores profissionais parecem ter concentrado mais nas unidades macrotextuais do que os novatos. Por último, os resultados gerais sugerem que a variação em tempo no que diz respeito aos padrões de orientação, redação e revisão entre novatos e profissionais, o nível de consciência textual e o impacto de todos estes itens sobre o produto final não serão *sempre* positivos.

Número de páginas: 124

Número de palavras: 35.669

TABLE OF CONTENTS

1. Introduction	1
1.1 Initial remarks	1
1.2 The process/product interface and the research hypotheses	3
1.3 Corpus	5
1.4 Definition of concepts	5
1.5 Organisation of the thesis	7
2. Review of the literature	8
2.1 The notion of effort in translation	8
2.2 Think-aloud protocols (TAPs)	11
2.2.1 The validity of TAPs	13
2.2.1.1 Concurrent or retrospective TAPs?	15
2.2.1.2 Triangulating TAPs	17
2.2.1.3 Pedagogical implications of TAPs	18
2.3 Translog	20
2.4 The use of TAPs and/or Translog in other case studies	25
2.5 Defining the profile of novice translators.. ..	35
2.6 Defining the profile of professional translators	38
2.7 The process/product interface	43
2.7.1 The validity of small corpora in this interface	44
2.8 Functional grammar	46
3. Method	49
3.1 Research hypotheses	49
3.2 Instruments	50
3.3 Procedure	50
3.4 Participants	51
3.4.1 The profile of the novice translators	51
3.4.2 The profile of the professional translators	53

3.4.2.1 The PTs' self definition of professional translation	56
4. Results and discussion	60
4.1 Questionnaire about the text	60
4.1.1 General comments	60
4.1.2 On understanding the source text	61
4.1.3 On liking or disliking the source text	61
4.1.4 On being the source text well written	62
4.1.5 On the difficulty of the translation	62
4.1.6 On what they liked best in/about the text	63
4.1.7 On what they liked least in/about the text	63
4.2 Translog representations and TAPs	65
4.2.1 Orientation phase	65
4.2.2 Pause patterns and the drafting phase	69
4.2.3 Revision phase	77
4.2.4 The cognitive rhythms of the NTs and PTs	84
4.2.5 Micro vs macro textual awareness features	86
4.2.5.1 Micro textual features	86
4.2.5.2 Macro textual features	90
4.3 Functional grammar	95
4.3.1 Lexical cohesion	100
4.3.1.1 Reiteration and collocation	100
4.3.2 Reference words, substitution, connectives and ellipsis....	106
5. Conclusion.....	111
5.1 Theoretical implications	111
5.2 Pedagogical implications	116
5.3 Limitations of the research	117
5.4 Further research	118

Bibliography	120
Appendices	125
Appendix A: Instructions to participant	125
Appendix B: Source text	125
Appendix C: Translated texts	126
Appendix D: Profile questionnaire	132
Appendix E: Professional translator questionnaire	133
Appendix F: Transcriptions of TAPs	133
Appendix G: Pilot study	164

LIST OF FIGURES

Figure 01: The process/product interface	4
Figure 02: Translog use screen with source (top) and target (bottom) text windows	22
Figure 03: Translog replay screen (left) and linear representation of keyboard movements (right)	24
Figure 04: Ratio of orientation time to translation time (NTs)	68
Figure 05: Ratio of orientation time to translation time (PTs).....	68
Figure 06: Ratio of paused to non-paused time (NTs)	71
Figure 07: Ratio of paused to non-paused time (PTs)	71
Figure 08: Ratio of drafting time to revision time (NTs)	83
Figure 09: Ratio of drafting time to revision time (PTs)	83
Figure 10: Mean distribution of the cognitive rhythm of NTs	85
Figure 11: Mean distribution of the cognitive rhythm of PTs	85

LIST OF TABLES

Table 01: Mean distribution for PTs according to Jakobsen (2002)	37
Table 02: Mean distribution for NTs according to Jakobsen (2002)	37
Table 03: Novice translators' profile	52
Table 4a: Professional translators' profile	53
Table 4b: Professional translators' profile	55
Table 05: Participants' evaluation of the source text	61
Table 06: Participants' orientation phase time	67
Table 07: Participants' total translation and pause times	70
Table 08: Participants' pause time (in %) and drafting time	72
Table 09: Participants' translation, orientation/drafting and revision times	82
Table 10: NTs' translation renderings	97
Table 11: PTs' translation renderings	98
Table 12: Length of TTs (in words).....	104

CHAPTER 1

INTRODUCTION

1.1 INITIAL REMARKS

As pointed out in Shuttleworth and Cowie's *Dictionary of Translation Studies*, the sub-area known as process-oriented Translation Studies is preoccupied with examining "the mental processes involved in the act of translating. Clearly, such processes are highly complex, yet it is hoped that *the systematic application of sophisticated psychological techniques will lead to advances in this area*" (1999, pp. 131-132; my emphasis). As Shuttleworth and Cowie's assertion makes clear, further investigation with the aid of more sophisticated tools is needed. Along the lines suggested in the quote, the present research aims at furthering the conversation in the area by contributing a specific piece of research concerning the complexities involved in the translating process of both professional and novice translators.

A brief look at the historical scenario in process-oriented translation studies shows the evolution of research in the field. In the 1980s researchers used the metaphor of the *black box* (like the black box in an aeroplane) to refer to the mysteries underlying the mental processes going on during the execution of a translation task. Process-oriented research in translation was mainly aimed at illuminating the contents of the black box, that is, at finding how the translator's black box could be looked into and understood. Nowadays the concept of a black box has faded away and the idea of *patterns* has taken over, thus shifting the paradigm in process-oriented translation studies. Such paradigmatic change has been deemed necessary since the early approaches sought to account for the hidden cognitive processes of translation by means of using qualitative methods alone. As

already proposed by Alves (2003), better grounded conclusions can be achieved regarding translation patterns if the traditional qualitative approach can be coupled with a quantitative method, thereby introducing the metaphor of *triangulation* to process oriented studies in translation. Without doubt, one of the main interests nowadays is identifying the different patterns that distinguish novice from professional translators. The first issue we are faced with is that of accepting or not the existence of such patterns among professional translators and what they are. The problem is that process-oriented research using large corpora would not be methodologically feasible to be carried out, so more and more research using small corpora ought to be egged on by research entities. The findings of all research using small corpora could altogether shed considerable light into the studies of mental processes in translation and open up new avenues that could lead us to the actual comprehension of the complex nature of mental activity. If we are able to comprehend and map out such complexity we will be able to use this knowledge to apply to the training of novice translators and thereby bridge the gap between the academic/practitioner divide. That means that the expertise gained with years and years of experience could be maximised and considerably shortened if we can induce translation students to build up patterns in terms of mental process that could replicate as close as possible those of professional translators, however complex they might be. The complex nature of such processes has driven me to concentrate on the variable of the cognitive effort¹ put by professional and novice translators into the translation process. I started off by reviewing some works in the area, which revealed the common belief that professional translators make less cognitive effort than novice translators during the translation process, allegedly because professionals

¹ The notion of cognitive effort within the translation process is presented in the Review of the Literature, Chapter 2.

would have developed automated processes resulted from their years of translation experience. In this context, some crucial questions regarding this issue surfaced during my readings: In what ways can cognitive effort influence the translation process and product? What patterns differentiate the cognitive effort applied by novice and professional translators in the course of the translation process? Can one's cognitive effort actually lead to expertise? If so, how can such effort and experience bridge the gap between novices and professionals? And the most important of all, how can an abstract notion such as one's cognitive effort be measured or quantified?

1.2 THE PROCESS / PRODUCT INTERFACE AND THE RESEARCH HYPOTHESES

The research hypotheses deriving from the questions above are presented in chapter 3 of this study. Firstly, they are meant to give rise to the investigation of the patterns that distance professional from novice translators during the execution of the translation task, to wit: the phases known as orientation, drafting and revision of the translated text. Secondly, to investigate whether awareness of the micro and/or macro textual features would be taken into account in the process of decision-making and if awareness of one type (micro or macro) would overshadow the other and found to be a pattern within any of the groups. Lastly, the hypotheses are meant to give rise to the investigation of the resulting product from the effort applied: the translated texts.

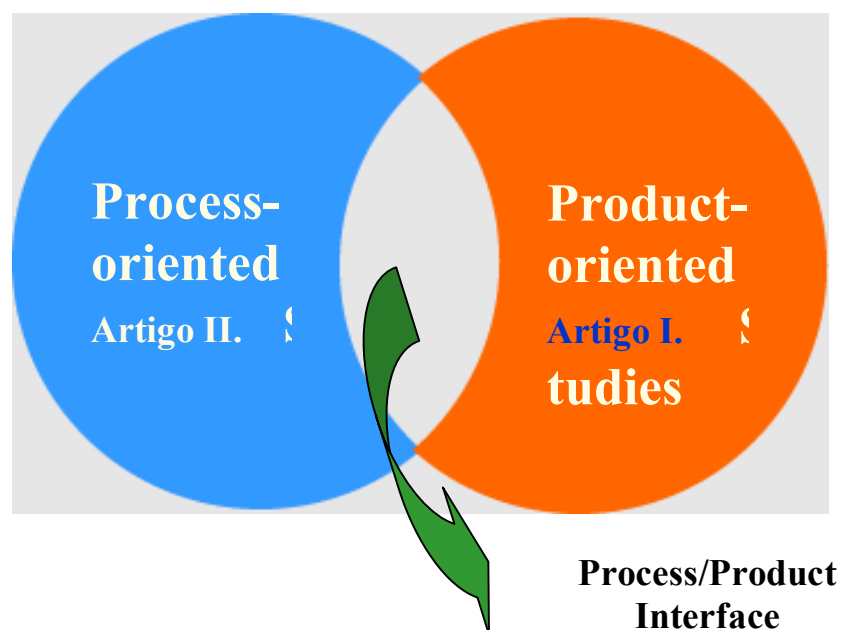


Figure 01: The Process/Product Interface

As seen above, the field of Translation Studies encompasses two sub-areas traditionally worked out separately, because they followed different avenues and therefore, would not intermingle. The first sub-area, known as *Process-oriented Studies*, is concerned mainly with what goes on in the translator's mind during the actual translation task. The second, known as *Product-oriented Studies*, is concerned with the textual relations of translated and source texts. As already proposed by Alves, Magalhães and Pagano (2003), this work brings a third perspective into the limelight: that of the *Process/Product Interface*. Basically, as the product brings evidence from the process and vice versa, the translated texts should be treated as mirrors reflecting the choices made during the process. Therefore, this integrated approach is sought to account for a more solid analysis of translation as a cognitive phenomenon.

However, in this study, attention is not divided as neatly as the clear-cut figure above suggests. In fact, there is a concentration on process issues, product concern being

brought into the scene as a way of demonstrating textual evidence of processual information.

1.3 CORPUS

The corpus of this study (see appendices) consists of (i) participants' translated texts from English (339 words) into Portuguese, (ii) profile questionnaires completed by all participants, containing questions concerning the participants' personal information and impressions on the text, (iii) professional translator questionnaires completed by the professionals only, containing questions concerning their self definition of professional translation, their professional experience, formal training and details of published materials, (iv) dialogic² think-aloud protocols (TAPs) collected from participants and (v) individual Translog representations.

1.4 DEFINITION OF CONCEPTS

Most of the definitions below are scattered around in the text. However, they are put together in this section so as to ease the comprehension of the average reader.

Cohesion: According to Halliday (1994), the organisation of a text is bound to its grammatical structure, but “in order to construct discourse we need to be able to establish additional relations within the text that are not subject to these limitations” (p. 309). This non-structural organisation of discourse is what is referred to by the term *cohesion*: reference words, ellipsis, conjunction and lexical organisation.

² With the interference of the experimenter, who conducts the conversation by asking questions so as to guide the participant's verbalisations.

Effort: The notion of *effort* in this study is not of a mechanical, but of a cognitive nature. It is therefore regarded as the mental activity applied upon the construction of the translated text, either within its micro or macro textual scope. This study has therefore aimed at identifying instances of effortful processing during the construction of the translated texts. This is made possible by means of identifying the subjects' decreasing in efficiency and reduction in the ability to perform the translation task, observable mainly via their pauses along the text and/or their own verbalisations. Apart from this, I have also looked at the strategies derived from the effortful processing of NTs and PTs, and how such effortful processing patterns and strategies have differed between both groups.

Novice Translator: The Novice Translators in this study are students who are either still taking undergraduate studies in Translation and Interpreting or have recently graduated from that course.

Professional Translator: The professional translators in this study are translators working on their own, with a reputation established in the market, either in terms of publications of translated material or in terms of a tradition of service renderings.

The micro/macro dichotomy: In this study, *micro* textual features refer to the word or below the word level of the text. Micro textual awareness is evidenced by dictionary look-ups and verbalisations concerning the translation of individual or isolated lexical items. *Macro* textual features, on the other hand, refers to what is extra textual, such as awareness of the translation brief provided, target readership or understanding and recognising the cultural milieu where the text is embedded.

Working Memory: As pointed out by Fortkamp (2000), it refers to "the system--or mechanism--responsible for the temporary storage and processing of information required

for the performance of everyday cognitive tasks such as learning, language comprehension, language production, reasoning, thinking, *problem solving*, and *decision making*” (p. 20; my emphases).

1.5 ORGANISATION OF THE THESIS

This thesis is organised in five chapters. The present chapter, of an introductory nature, presents, very briefly, the context of the investigation, the research problem to be looked at, the corpus and methodological procedures for the study. Chapter 2 introduces the notion of effort within the translation process and presents overall comments on the tools (TAPs and Translog) used for data collection and the validity of using TAPs in process-oriented research in translation. This is to be followed by a review of the use of TAPs and/or Translog in other case studies. After that, the profile of professional as well as novice translators is built up. In order to account for the joint use of process and product analysis, the process/product interface and the validity of using small corpora in Translation Studies are discussed. Finally, the functional paradigm, which is used for the product analysis of the corpus in my research, is commented on. Chapter 3 describes the hypotheses elaborated for this research and the method adopted to collect and analyse the data. It also presents the profile of the participants involved in this study as well as the professional translators’ self-definitions of professional translation. Chapter 4 provides the analysis of the data collected. Chapter 5 gives the conclusions drawn from this study and discusses some pedagogical implications, limitations and suggestions for future research.

CHAPTER 2

REVIEW OF THE LITERATURE

In this chapter I first introduce the notion of cognitive effort within the translation process, drawing on the work of Shreve and Diamond (1997) and Rothe-Neves (2002). Subsequently I briefly comment on the tools (TAPs and Translog) used for data collection and the validity of using TAPs in process-oriented research in translation³. This is to be followed by a review of the use of TAPs and/or Translog in other case studies⁴. After that I draw upon the work of some translation scholars³ in order to build up the profile of professional as well as novice translators. In order to account for the joint use of process and product analysis, I also discuss the process/product interface and the validity of using small corpora in Translation Studies⁴. Finally, the functional paradigm (Dik, 1989; Halliday, 1994), which has been used for the textual analysis of the corpus in my research, is commented on.

2.1 THE NOTION OF EFFORT IN TRANSLATION

The *Macmillan English Dictionary for Advanced Learners* (2002) defines *mental effort* as the “mental energy needed to do something.” (p. 445). A similar definition can be found in the *Cambridge International Dictionary of English* (2002), which puts it as the “great (...) mental activity needed to achieve something.” (p. 444). It is important to highlight that the notion of *effort* in this study is not of a mechanical, but of a cognitive

³ Alves (2003); Alves & Gonçalves (2003); Alves & Magalhães (forthcoming); Alves, Magalhães & Pagano, (2003); Jääskeläinen (2000); Kiraly (1995); Séguinot (1996).

⁴ Alves (2003); Fraser (1996); Jääskeläinen (1996); Kiraly (1995); Séguinot (1996); Alves & Gonçalves (2003); Alves & Magalhães (forthcoming); Alves et al. (2003).

³ Alves & Magalhães (forthcoming), Alves et al. (2003), Fraser (2000); Kiraly (1995); Séguinot (1996); Shreve (1997).

⁴ Alves (2003); Alves & Magalhães (forthcoming); Alves et al. (2003).

nature. It is therefore regarded as the mental activity applied upon the construction of the translated text, either within its micro or macro textual scope. When we translate, we access information from different long-term memory (LTM) sources, one in L1 and another in L2. However, input in L1 and L2 are processed by the same working memory (WM) system (Shreve & Diamond, 1997). When we do not find a translation problem, the information retrieval process from the LTM sources in L1 and L2 is unconscious, that is, automated. However, it is when a problem comes up that the translator's conscious (non-automated) strategy comes into action. It is at this point that we initiate a more effortful processing in an attempt to solve the incoming problem. For example, I can render the Portuguese translation of "house" as "casa" with no conscious effort, even though this does not mean that processing is not going on in WM. According to Tomitch, there are levels of activation and "the fact that something is not available to consciousness does not mean that it is not part of the contents of WM. It is just not in a degree of activation which can be verbalisable" (personal communication, February 27, 2004). The same would not occur if I were to translate "House of Lords". If I am thinking on how to translate this unit, it is because an effortful processing is going on. To solve this problem, I will try to apply some (now conscious) strategy, which might include dictionary look ups, inference, the reading of parallel texts or just asking a colleague what "House of Lords" might mean in Portuguese. Although, as many other translators, I can be extremely conscious even when I do not have problems, the point I am bringing up here has nothing to do with my being aware (or conscious) of my own translation process as a whole. It refers to consciousness within the micro processing level of the text instead.

As Shreve and Diamond point out, the decreasing in efficiency and reduction in the ability to perform the translation task can identify this effortful processing. One of the ways to observe the traces left by effortful processing is via the subject's TAPs:

Indications of effortful processing could manifest as reductions in the efficiency with which a particular task is performed or as a reduced ability to perform concurrent tasks because greater amounts of attention and resources have to be allocated to the effort in a finite resource system. Of course, there may be quite tangible manifestations of effortful processing, such as the verbalizations of subjects in translation and interpreting think-aloud protocols (TAPs). (Shreve & Diamond, 1997, p. 243)

The literature in the sub-area of translation process studies suggests that novice translators (henceforth, NTs) make more effort than professionals (henceforth, PTs), because their processes are less automated. This idea is supported, for instance, by Shreve and Diamond, who argue that “when the number of automatic mechanisms for mediating L1 and L2 is small, as in novice language students, more effortful processing is required.” (1997, p. 244). When it comes to PTs' processing, on the other hand, they believe that “processing problems may have less to do with lack of L2 lexical items than with other processing problems such as complex syntactic structures in the target language, propositional complexity, ambiguity, lack of subject domain knowledge, and other situations that require effortful processing.” (p. 244). Rothe-Neves highlights the important role played by *effort* within the translation process in his doctoral dissertation:

Translation can be better conceived as a problem-solving task (...). That is, further beyond the magic moment in which an excerpt in a given language is turned into an excerpt in another by means of the operation of a specific mental mode, research in translation ought to be engaged in the operation of construction of the translated text under certain conditions. In this point, “effort” is a key word. There is, in the literature, the idea that translating requires less effort from professionals than from beginners⁵ (Rothe-Neves, 2002, pp. 177-178; my translation).

⁵ A tarefa de traduzir pode ser melhor concebida como uma tarefa de solução de problemas (...). Ou seja, para além do instante mágico em que um trecho numa língua se transforma num trecho noutra por meio da operação de um módulo mental específico, a pesquisa em tradução melhor se ocupará da operação de construção do texto traduzido sob determinadas condições. Nesse ponto, uma palavra-chave é “esforço”. Há, na literatura, a ideia de que o traduzir exige menor esforço de profissionais do que de iniciantes.

As the quote suggests, the best way to investigate the effort applied during the process is by examining how the translated texts are constructed. The result of such effort should, in turn, be evidenced in the final products. In his own study, Rothe-Neves could not find any significant differentiation between PTs and NTs with regards to the efficiency of the translation process, such as the fluency of the translations, which should mirror the result of the cognitive effort applied during the process, since the quality of the final product should be the reflection of the underlying hard work applied upon its construction.

In conclusion to this section I would like to point out that cognitive effort as applied to my study refers to the identification of instances of effortful processing during the construction of the translated texts (henceforth, TTs). This is made possible by means of identifying the subjects' decreasing in efficiency and reduction in the ability to perform the translation task, observable mainly via their pauses along the text and/or their own verbalisations. Apart from this, this work is also concerned with the strategies derived from the effortful processing of NTs and PTs, and how such effortful processing patterns and strategies will differ between both groups. In what follows I will briefly comment on the tools used for data collection.

2.2 THINK ALOUD PROTOCOLS (TAPs)

TAP (Think Aloud Protocol) is a methodology introduced in the 1980s in cognitive psychology, which has made use of think-aloud verbalisations to investigate problem-solving and decision-making processes of several types (Jääskeläinen, 2000). According to Alves and Magalhães (forthcoming), “since the mid-1980s research in the sub-area known

as translation process analysis has drawn extensively on think-aloud protocols (...) to tap into the translator's mind and, as such, has attempted to map the process of translation” (p. 01). The reason why empirical studies⁶ into the sub-area of translation process took this long to sprout “is partially owing to the fact that, until recently, there were no research methods available with which one could observe psycholinguistic processing phenomena” (Kiraly, 1995, p. 39). The scope of the pioneering works of scholars such as Königs (1987), Krings (1986), Séguinot (1989), and Tirkkonen-Condit (1991) among others (as cited in Alves & Magalhães, forthcoming, p. 01) have ranged “from practical aspects concerning translators’ training programs to attempts to establish cognitive profiles observed in the performance patterns of novice and expert translators” (p. 01).

Translation studies have borrowed the data elicitation method of think-aloud to investigate the translation process, collecting verbal protocols from (i) foreign language learners (Krings 1986; Lörcher, 1991⁷), (ii) NTs (Jääskeläinen, 1987, 1989a, 1989b; Nagy, 1989; Tirkkonen-Condit, 1989⁹; Alves, 2003; Alves & Magalhães, forthcoming; Alves et al., 2003), (iii) PTs (Laukkanen, 1993; Séguinot, 1989a⁹), and (iv) both NTs and PTs (Königs, 1987; Krings, 1988⁹).

Séguinot (1996) points out that studies such as the ones cited above have used TAPs so as “to provide a window into the mental activity which is not directly observable” (p. 75), recalling that empirical studies in translation have relied heavily on the use of TAPs “since some unpublished work by Brian Harris and widely understood as a possible methodology largely thanks to the study by Hans P. Krings” (p. 75), carried out in 1986.

⁶ Séguinot refers to *empirical research* as “the study of the translation process through observation or experimentation” (1996, p. 76).

⁷ As cited in Jääskeläinen (1996, p. 60).

In the experiments with TAPs, participants are asked to verbalise the problems encountered in the translation process. Such verbalisations can be made during the process itself (concurrent TAP) or commented after the translation is finished (retrospective TAP). The latter is the one that I have chosen to carry out my research since the former may be conducive of cognitive overload, as discussed in section 2.2.1 below.

2.2.1 THE VALIDITY OF TAPs

Not every scholar sympathises with the use of TAPs as methodology for cognitive studies. According to Séguinot, “some objections to think-aloud protocols are in fact objections to *any* kind of introspection” (1996, p. 76; italicisation in the original), as not everyone agrees that someone’s mental process can actually be mapped out.

Current opposition to TAPs⁸ argues that:

i) *Think-aloud protocols may not really reflect the processes underlying the task*, that is, information provided by the protocol may be inaccurate and there may be thoughts that will not be reported. A great deal of what goes on in the translator’s mind might be subconscious and therefore unavailable for verbalisation. What we are consciously aware is of the products of our mental processes, and not of the processes themselves. As Séguinot (1996) points out, this could be due to the fact that the verbalisation of thoughts might involve short-term memory (henceforth, STM) capacity:

The theory associated with think-aloud protocols (...) says that the only thoughts that are available for verbalization are those in short-term memory [and that remain there long enough to be verbalised]. But for skills that have been automated, it may be possible to bypass short-term memory. That in itself poses a problem for translation research if we want to study the processes of expert translators (...) using this methodology. (Séguinot, 1996, pp. 76-77).

⁸ Nisbett & Wilson (1977); Seliger (1983); Russo et al (1989). As cited in Séguinot (1996, p. 76); and Kiraly, (1995, pp. 39-40).

I would partially disagree with Séguinot's statement above, since my own data using TAPs have revealed NTs that are much more uncertain and forgetful in accounting for their translation choices than PTs⁹. Notably, most NTs denied having had a translation problem where their choices of rendering and Translog (see section 2.3 below) representations revealed the evidence of a problem. If they denied having had a problem to solve a specific unit, but the problem was there, then they could not recall how they dealt with this problem. Such forgetfulness has not been due to automated skills, since automation comes with experience, which is something novices do not hold yet. Therefore, the fact that the thoughts available for verbalisation might be only those in STM (as pointed out by Séguinot) seems to pose a problem in the study of the mental processes of NTs rather than of PTs. Or, at most, of NTs and PTs alike. As another counter-argument to the discussion presented in this item, it is contended that "the problem is that no satisfactory definitions of product and process in terms of mental events exist" (White, 1980¹⁰), and therefore, "no distinction can be made between process and the interim products of those processes." (Smith & Miller, 1978¹²). Furthermore, even though verbal protocols might be incomplete, the ability to report on how a problem was dealt with does reveal something that was happening during the on-going process and, as already highlighted by Kiraly (1995), what they do reveal is without doubt of high importance.

ii) *We cannot be sure of the extent to which protocol data can reflect processing*, or whether what they reflect are only the results from subjects' guessing or inferencing after the translation is done. This represents the traditional quantitative position in language

⁹ Séguinot (1996) has favoured the term *expert translator*.

¹⁰ As cited in Kiraly, 1995, pp. 39-40.

research, in which it is believed that only directly and quantifiable investigated source can be object of empirical investigation.

iii) *The requirement to verbalise thoughts may interfere with the object of study*, that is, the experimental situation may affect the results of the observation. As pointed out by Jääskeläinen (1990; as cited in Séguinot, 1996, p. 77), “there is also an indication that moving translators into an experimental situation affects their motivation”. Also, because the data collected using TAPs are always qualitative due to their subjective nature, “in fact, what we obtain, either through concurrent or retrospective verbalisations, are subjective reflections on what the subjects believe they do or have done.”¹¹ (Alves, 2003, p. 74; my translation). Each participant will verbalise in a different way, even when accounting for the same translation problem.

Despite the frequent criticisms about the negative effects of this type of elicitation method, “TAPs have been considered a major source of empirical data gathering within the process-oriented research in translation” (Alves et al., 2003, p. 165), mainly because they provide indirect access to the translator’s strategic planning and inferential processing during the construction of the TT (Alves & Gonçalves, 2003).

2.2.1.1 CONCURRENT OR RETROSPECTIVE TAPs ?

As for the type of TAPs to be used as data elicitation method in process-oriented studies in translation, Alves and Magalhães (forthcoming) posit that “there is still no consensus as to what extent one should favour the use of concurrent or retrospective TAPs” (p. 02). Opinion among scholars varies, but as Alves (2003) points out, some scholars seem

¹¹ De fato, o que se obtém, seja através de relatos concomitantes ou retrospectivos, são reflexões subjetivas sobre aquilo que os sujeitos pensam fazer ou ter feito.

to prefer to use concurrent TAPs for a more segmented analysis of the translation process and retrospective TAPs for those studies which will view process analysis from a broader perspective. However, what his studies utilising verbal protocols have indicated is that

retrospective verbalisations are capable of outlining in a more detailed manner those processual accounts that reflect inferential and contextual aspects which are relevant to the solution of problems and decision making in translation. These results seem to indicate that the use of retrospective protocols is more productive in the investigation of inferential and better structured accounts made by the informant translators.¹² (Alves, 2003, p. 76; my translation).

Toury (1995; as cited in Jääskeläinen, 2000) suspects that “the need to verbalise aloud [concurrently] forces the subjects to produce not just *mental*, but *spoken* translation before the required written one; and there is a real possibility that spoken and written translation do not involve the exact same strategies” (p.78; italicisations in the original). Such interference would definitely impact on the resulting final product, a hypothesis that can be dismissed with the use of immediate retrospection since verbalisations will be made once the translation is concluded.

Although retrospective TAPs seem to bring less cognitive overload, they also present some drawbacks, such as (i) gaps for omission of what happened during the process due to forgetfulness, (ii) the risk of providing false supplementary observations to what really happened in the process, and (iii) change of focus, with participants verbalising about the product rather than the process.

Alves and Gonçalves (2003) and Alves et al (2003) have attempted to account for and minimise these drawbacks when using retrospective TAPs in their case study with NTs, by applying the following strategy: “in order to avoid instances of false inferencing and/or acute forgetfulness, retrospective protocols were recorded right after the translation tasks

¹² As verbalizações retrospectivas são capazes de destacar de forma mais detalhada relatos processuais que refletem aspectos inferenciais e contextuais relevantes para a solução de problemas e tomadas de decisão em tradução. Esses resultados parecem sugerir que o uso de protocolos retrospectivos é mais produtivo para fins da investigação de relatos inferenciais e mais estruturados por parte dos tradutores informantes.

had been completed and, as a result, maximised the potential for late information retrieval and minimised the effects of memory loss” (Alves et al., 2003, p. 165). According to the authors, the fact that they collected the verbal protocols right after the translation tasks had been finished, enabled them to retrieve process-oriented information that was still fresh in the subjects’ minds and therefore vividly available for verbalisation. Alves and Gonçalves still address other issues to back up their choice of favouring retrospective TAPs in their case study: “considering the alleged artificiality of speaking during translating, our concern for ecological validity¹³, and the need to arrive at instances of intersubjectivity among our subjects, we have decided to use retrospective TAPs in our investigations”. (2003, p. 11)

2.2.1.2 TRIANGULATING TAPs

Alves and Magalhães (forthcoming) have highlighted the need to triangulate TAPs with other types of data elicitation techniques, since “the use of TAPs alone have, so far, failed to account in fullest for the myriad of factors that constitute that intricate cognitive network known as the translation process and should be supplemented by other data elicitation procedures” (p. 02), such as the computer software Translog (see section 2.3 below) and Wordsmith Tools.

Jakobsen (2002) agrees that “analysis of quantitative data may only give a very incomplete picture of the superior performance of professional translators in comparison with that of novice translators. However, such analyses help to determine important aspects of professional translators’ performance” (as cited in Alves & Magalhães, forthcoming, p. 04). Regarding the triangulation between TAPs/Translog, Jakobsen (2003) claims that “the

¹³ *Ecological validity* refers to what extent the environment can interfere in the results (e.g., interruptions to the experiment, external noises, participant’s apprehensiveness or nervousness, etc.). It validates data according to real life situation.

influence of think aloud on processing in translation is quite considerable. Though this forces us to review assumptions about the think-aloud procedure for translation research purposes, it in no way invalidates the think-aloud method” (p. 93). Jakobsen goes on to suggest that the best way to try to answer the questions raised in process-oriented studies in translation seems to be via the building of “hypotheses based both on quantitative computer-logged data and on qualitative think-aloud data.” (p. 93). Besides that, as suggested by Alves, “investigating the same object by means of using data collected and interpreted through different methods increases, by analogy, the researcher’s chances of success in her/his attempt to observe, comprehend and account for a certain phenomenon.”¹⁴ (2003, p. 78).

2.2.1.3 PEDAGOGICAL IMPLICATIONS OF TAPs

In terms of pedagogical implications, the use of TAPs has recently overgrown the boundaries of mapping the mental processes of translators, as they had traditionally been bound to, to be applied into the practical training of NTs. Scholars such as Alves et al. (2003) advocate introducing process-oriented studies of translation into the education of NTs, emphasising that the use of verbal protocols--particularly retrospective TAPs, which the authors argue can be used to inform the discourse shaping of texts--are “a rich methodological option to gain access to the translation process not only as diagnostic instrument for researchers to draw on in order to grasp its complexity but also as a resource to be used in translators’ education” (p. 162). According to the authors, empirical

¹⁴ investigar um mesmo objeto por meio de dados coletados e interpretados através de métodos diferentes aumenta, por analogia, as chances de sucesso do pesquisador em sua tentativa de observação, compreensão e explicação de um determinado fenômeno.

approaches to translation processing could be a viable alternative to be introduced into translator education curricula, since such approaches will make NTs aware of their own cognitive traits. Thereby, NTs could make use of their own protocols “to reflect upon their decision making processes and, as a result, become more aware of how they translate and of the target texts they produce” (pp. 179-180). Therefore, what Alves et al. advocate is “a process-oriented approach to translators' education which fosters the development of discourse strategies and critical reading skills” (2003, p. 179). In that sense, verbal protocols are crucial in providing data to develop such strategies and skills, since they can “lead translators to observe how they process discourse and which elements they draw on as they co-construct their translations” (p. 181). Verbal protocols can guide NTs to ponder on their micro-textual processing, and also provide evidence of how they deal with cognitive overload when a translation problem comes up. Concurrently with TAPs, “novice translators can be introduced to theoretical notions in order to learn how to deal with the macro-textual categories of genre, text and discourse” (p. 181). Alves et al. contend that it is by increasing their level of awareness that NTs will become acquainted with “the cognitive and discourse-oriented characteristics of the translation task and end up processing language, and texts (...) in a way that may lead them to more successful translations.” (2003, p. 183).

As seen in this section, TAPs have been associated with empirical studies in the translation process for some twenty years, and are still largely used as the torch that will shed some light into the “black box” (as researchers in the 1980s would say) of the translator. I would like to point out that dialogic retrospective verbal protocols are the torch I used in this study to shed some light *onto* eleven black boxes I peered into. Data have

been collected from PTs as well as NTs, and supplemented by another data elicitation procedure described below.

2.3 TRANSLOG

Many of the constraints commented on in section 2.2.1 above--apart from others such as number of pauses during the process, number of returns within the text, time spent with revision or all the steps taken during the construction of the text--can be explained and quantified with the use of Translog, thereby improving what is known about the mental processes, providing quantitative data that could bring additional information to the traditional qualitative approach. This software program was developed in 1998 by the translation scholar Arnt Lykke Jakobsen (Copenhagen Business School) and by the computer expert Lasse Schou. The program logs all keyboard movements that occur during the translation process (keystrokes, spacebar, backspace, mouse, arrows, etc.), as well as the time spent in decision-making and in the translation as a whole, thus allowing for the analysis of translation both as process and product. Furthermore, “material collected during actually occurring data and simultaneously with several subjects allows for an observation of the translation process in the way it actually occurs and not only through observations of an intersubjective nature, as it occurs with verbal protocols, either concurrent or retrospective”¹⁵ (Alves, 2003, p. 77; my translation). Apart from that, participants normally forget that their movements are being logged by the software, which provides the experiments with Translog with great ecological validity.

¹⁵ a coleta de dados efetuada em tempo real e de forma simultânea com vários sujeitos possibilita uma observação do processo de tradução na forma como ele efetivamente ocorre e não apenas através de observações de natureza intersubjetiva como acontece com o uso de protocolos verbais, sejam eles concomitantes ou retrospectivos.

As can be seen from the above, with the joint use of Translog/TAPs greater refinement and precision in the analysis of collected data can be obtained, thereby resulting in stronger and better grounded suppositions concerning the translation process. It is for these reasons that I have chosen the triangulation of Translog and retrospective TAPs as the methodology of this research.

In the remainder of this section I will briefly introduce the two interactive programs that are part of Translog: *Translog User* and *Translog Supervisor*. The user interface is the program used to collect data about the writing/translation process and it is what the participant of the research actually sees. It looks like an ordinary text editor and creates a [.log] file of all the keyboard activity that goes into writing a text. The program also has a dictionary file to accompany the source text, whose entries must be fed by the researcher if s/he decides to use it. The dictionary can be activated by pressing F3, and the program will record every look up. At the time of the actual data collection, participants will, at the command of the researcher, press the “go” button on the top left-hand corner of the user interface. The source text will then appear on the upper screen and the subject will be able to commence the translation task in the lower screen of Translog User.

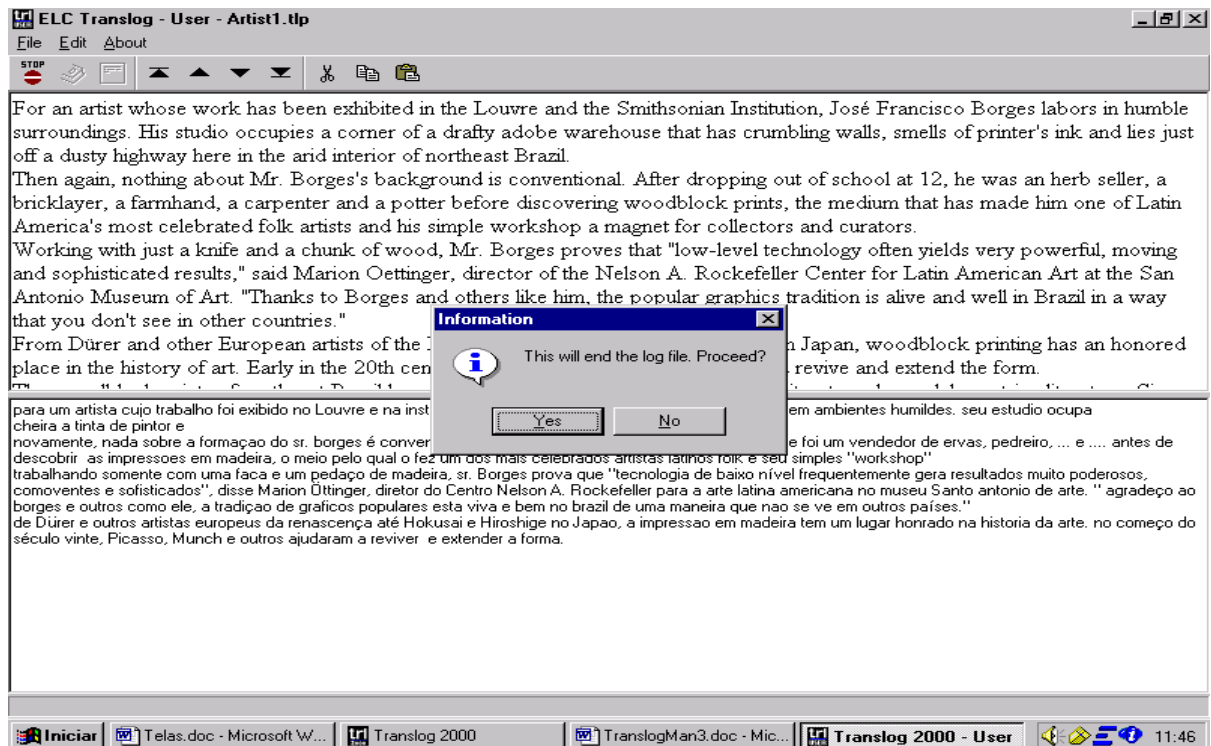


Figure 2 – Translog User screen with source (top) and target (bottom) text windows.

As seen in Figure 2 above, Translog User is split into two horizontal screens (although the lower screen can be set up as a text editor that takes up the whole screen). The upper screen displays the source text (ST) and the lower screen, the translated text (TT). There are five options available to display the ST:

- 1) Displaying the text in full;
- 2) Displaying the text paragraph by paragraph;
- 3) Displaying the text sentence by sentence;
- 4) Displaying the text in user-defined units;
- 5) Allowing subjects to determine when a new text unit is to appear on the screen and the length of time it will be displayed.

The display time, i.e. the intervals between the display of one text segment and another, can also be selected by the researcher, and can be free or fixed (varying from 5 to

600 seconds). After end of display time, the old text can remain on display, be dimmed or disappear from the screen.

Most commonly used writing and editing functions are available to use with Translog User, such as Arrow keys, Home key, Esc key, Ctrl arrows, Delete key and the Backspace key. Some other keys are not active, such as Tab, Page Up, Page Down, Insert key. Additionally, the text cannot be bolded or italicised. When the experiment is finished, the researcher will press the stop button on the top left-hand corner of the screen, and click “yes” on the pop-up box in Figure 1. This will create the [.log] file that will be later on used for process analysis.

Figure 3 below shows the Translog replay screen and its linear representation of keyboard movements (supervisor interface). Either function can be enlarged to full screen, so as to allow for better visualisation of the replay. In the replay log file (first half of the screen) it is possible to select the time speed for replay at a faster or slower pace. The time speed selected in Figure 3 is 100%, which means reproduction at normal (actually occurring) speed. As the different buttons on the top of the screen indicate, you can replay, pause, stop and move back and forth along bits of the translated text by pressing the appropriate buttons. The linear representation (second half of the screen) of the TT will allow the researcher to pinpoint traits of the translator’s strategies used during the construction of the TTs, via the interpretation of the different symbols. On the top of the screen, there is the option of selecting the elapsed time for pauses. The asterisk (★) represents the pause unit for the pauses to be displayed. The pause unit selected in Figure 3 is of one second.

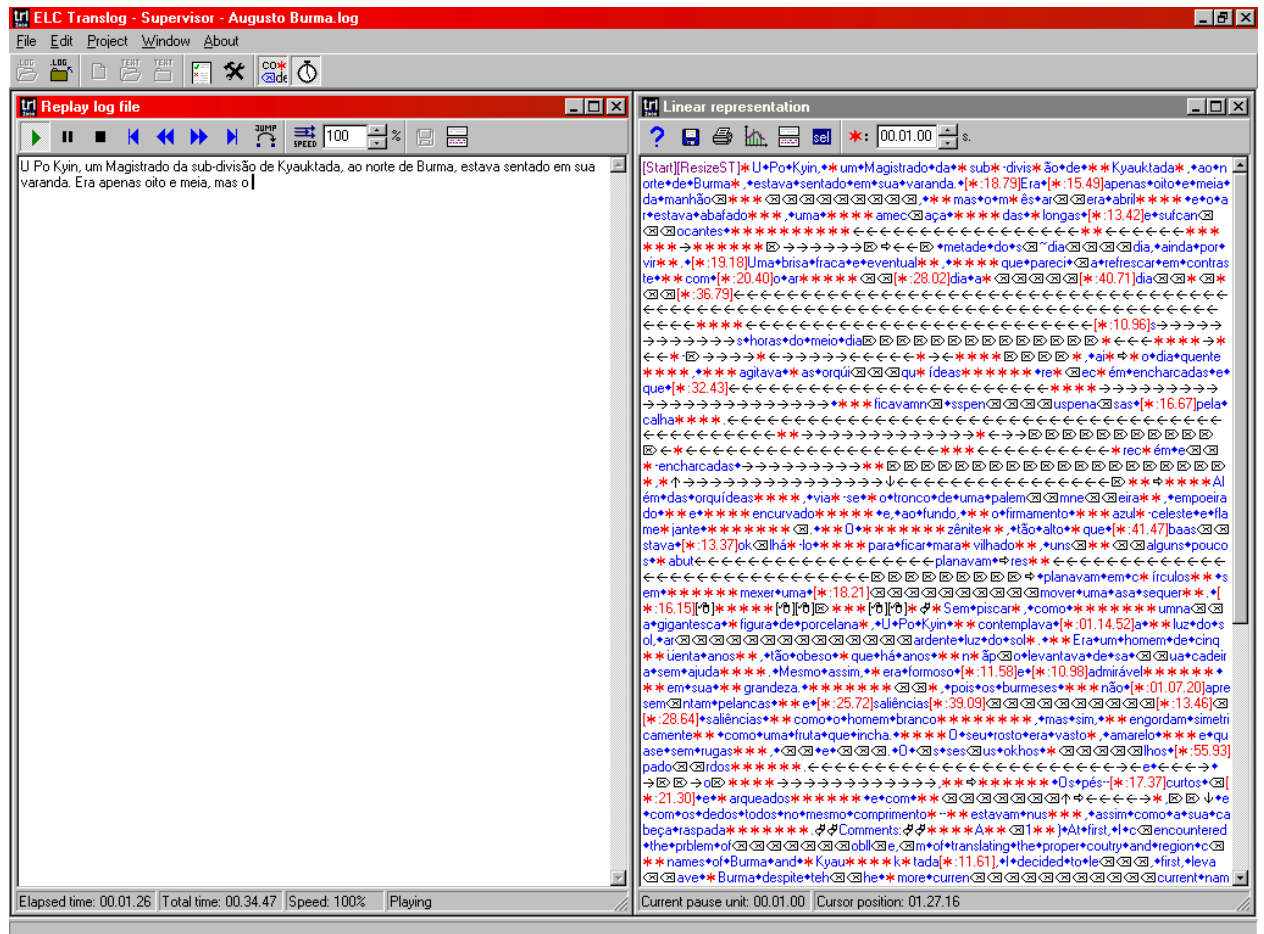


Figure 3 – Translog replay screen (left) and linear representation of keyboard movements (right).

For the analysis in this study, I have applied a pause unit of 5 seconds, since pauses below that time would not represent a translation problem, but probably simply the variations in typing speed (Rothe-Neves, 2002). Along the linear representation in figure 3 several symbols of the pause unit applied (★) can be seen. If we add them up, we will come up with the elapsed time the translator paused to think over a translation problem. If, for instance, a pause unit of 5 seconds (the current asterisk value) has been applied and the writing of the word “house” is represented as “hous★e★★”, it means that the subject stopped for 5 seconds before typing the final “e” and then stopped again for an additional

10 seconds before proceeding with the translation task. Translog will never print more than 9 asterisks (*). For longer pauses, the program adds it up automatically. A pause of 1 minute and 14.52 seconds, for example, would be represented as [*:01.14.52]. As some of the other symbols indicate by themselves, they will show the number of spacebar [♦], backspace [⊞], delete [⊗], arrows [→↑↓←], enter [↵], home/end [↵↶], pg up / pg down [↑↓], and mouse [⌘] movements within the text.

2.4 THE USE OF TAPs AND/OR TRANSLOG IN OTHER CASE STUDIES

When revisiting the literature for his recent article, Alves (2003) reviews and discusses the achievements and shortcomings observed in the literature of translation process studies over the last fifteen years. He highlights that works which are considered the most representative in the area of process-oriented research in translation share little else than the fact that they have all made use of TAPs to collect data, and even though they have used the same methodology, this has been done in different manners. Additionally, almost all of the early studies used subjects who were neither PTs nor translation students (NTs). Most of them were undergraduates or graduate students studying other disciplines, not translation. These are some of the representative works mapped out in Alves (2003) and also Kiraly (1995):

Dechert and Sandrock (1984): Before this study, no empirical data were available on mental processing during translation. The researchers had only one university student of English philology as participant. The subject was given a time limit of fifteen minutes for the task and was allowed the use of dictionaries. Apart from taping the subject's

verbalisations, Dechert and Sandrock also recorded the time spent thinking and talking about each TU (which can now be more precisely quantified with Translog).

Krings (1986a): Used TAPs in a psycholinguistic approach, providing a detailed psycholinguistic description of the subjects' performance. His subjects were eight German students taking their master's level teaching degrees in English. Four of the subjects translated into English and the other four into German. Krings investigated the translation strategies used by them and came up with one hundred and seventeen strategies. Krings selected a text with many translation problems, in an attempt to elicit more processing data than an easier translation task would.

Krings (1986b): In this systematic study of the cognitive translation processes of a PT, Krings compared these results to the results of his original work stated above, involving eight German students. He found out that, as opposed to the NTs, the PT used a bilingual dictionary more often, developed a process that was non-linear and concentrated on the macro level of the text.

Königs (1987): Used TAPs in a psycholinguistic approach, investigating the translation strategies used by five German participants (two university students of Spanish philology, two master's students in Spanish and one PT into German). Königs chose not to interfere in the process of data collection and did not provide any previous instructions to the subjects, who were also videotaped while back translating two texts from Spanish into German. Königs was later on heavily criticised for having chosen a previously translated text for his study.

Gerloff (1987, 1988): Used TAPs to observe the similarities and differences between groups presenting distinct levels of previous experience in translation, investigating the identification of TUs. She compared the performance of three groups: bilinguals, NTs and

PTs. In Gerloff (1988) previous instructions concerning the context and target readership of the TTs were provided to participants.

Séguinot (1989): Used TAPs to observe some practical aspects concerning the education of translators and in the analysis of the academic/vocational interface. She investigated the performance of NTs.

Tirkkonen-Condit (1989): Used TAPs to observe some practical aspects in the education of translators and in the analysis of the academic/vocational divide. Tirkkonen-Condit analysed the performance of NTs in contrast to the detailed analysis of only one PT to investigate the differences in the performance of PTs and NTs.

Lörscher (1991, 1992): Used TAPs in a psycholinguistic approach, investigating the translation strategies used by the subjects. In Lörscher (1992) the performance of three groups was compared: bilinguals, NTs and PTs.

Jääskeläinen (1992, 1993): Investigated the performance of NTs. In 1987 she had already investigated the differences in the performance of PTs and NTs.

Fraser (1993): Used TAPs to observe some practical aspects concerning translator education, investigating the characteristics related to professional practice, and in the analysis of the academic/vocational interface. Fraser did not provide her participants with any previous instructions concerning the task.

Fraser (1994): Used TAPs to investigate some socio-cultural aspects correlated with the translation process. Fraser decided to intervene in the data collection, by stimulating her participants to verbalise whenever they would go quiet for a couple of seconds. She provided them with previous instructions concerning the context and target readership of the TTs.

In the article entitled *Hard Work Will Bear Beautiful Fruit. A Comparison of Two Think-Aloud Studies*, Jääskeläinen (1996) compares some of the results presented in her licentiate thesis defended in 1990 with those from the doctoral dissertation of Gerloff, defended in 1988. Based on the verbal protocols collected, Jääskeläinen came up with the conclusion that translation does not get easier with the increase of professional experience. Through the use of TAPs she could observe (i) that experienced translators¹⁶ do not necessarily use less time and effort than inexperienced translators¹⁸ during the execution of a task and (ii) that the time and effort dedicated in the process will result in the quality of the product, regardless of the experience of the translator. What remains to be seen is the validity of Jääskeläinen's assertion above that *Hard Work Will Bear Beautiful Fruit* **regardless of** the experience of the translator. I disagree with such assertion on the grounds that my own findings from the data collected for this research cannot corroborate Jääskeläinen's claim. As will be shown later, what my findings have revealed is that the greater total translation time spent by the NTs did not necessarily result in final products that could successfully recreate the lexical chain of the ST. Some re-textualisation problems were also found among the PTs, whose effortful processing was more evident during orientation and revision. Their greater effort during those phases did not always impact positively in terms of re-textualisation of the ST. Furthermore, those subjects who spent longer time carrying out the task were not found to be those with best performance, in the sense that they did not have fewer problems with re-textualisation than those who were faster. It cannot be argued, therefore, that NTs will perform better if they spend more time and effort during the process. In metaphorical terms, it is like asserting that a novice

¹⁶ Jääskeläinen has favoured the term experienced/inexperienced translators to what I refer as professional / novice translators. Regardless the terminology, the two can be correlated.

swimmer will have the same performance as a professional swimmer to cross the pool if s/he makes the same amount of effort, i.e., the result will be the same, regardless of the experience of the swimmer. It is quite expectable that the performance of the professional swimmer will differ from that of the novice swimmer. The former will be faster and glide through water rhythmically. The latter, on the other hand, will certainly be slower and plod through water between strokes. This by no chance means that the professional swimmer will have made less effort than the plodder novice swimmer. They will both have exerted themselves to complete the task, but the *hard work* of the novice swimmer will not *have borne as beautiful a fruit*, i.e., will not have resulted in a final achievement of the same quality of that of the more experienced swimmer. This is possibly due to the fact that while the novice swimmer will be concentrated on motor co-ordination (micro level), the experienced one will be more worried about the strategies to gain time and distance (macro level) at the same time at which s/he should also concentrate on his/her motor co-ordination, even though this might have been automated due to his/her larger experience.

Fraser (1996) has also used TAPs in another case study with only PTs. She looked at the suppositions made by the participants regarding the target readership of the TT and the specific differences in style between texts in the source language and target language. Both groups (commercial and community translators) felt that a key part of their role was to be aware of the target language readership. “The commercial translators had an explicit brief¹⁷ which in many cases influenced their translation strategies” and although the community translators “were not given any such brief, they did often assume one in the way they tackled certain translation difficulties” (Fraser, 1996, pp. 88-89). This

¹⁷ In Translation Studies, the notion of the term *brief* was introduced in the context of functionalist approaches to translation (see, for example, Nord 1997) to mean the set of instructions containing contextual information and informing participants about the translation task to be performed.

shows that PTs' strategies are not so much centred in form but concerned with the extent to which the reader in the receptor language and culture will understand and react to the text in the same way as the reader in the source language and culture.

The translation scholar Candace Séguinot is interested in how PTs cope with high volumes of work and meet the deadlines, as well as the ways they make use of translators' aids, such as technology. In her 1996 article *Some Thoughts About Think-Aloud Protocols*, she reports on a protocol study involving two PTs, translating from English into French, who were videotaped while carrying out a real translation assignment. Séguinot calls this a natural discourse situation, since the translators were not given any brief or instructions for verbalisations, and the task was carried out in the participants' own working environment. The participants would speak whenever a thought came into their minds during the translation process. She transcribed the videotape and analysed "the placement and the length of pauses and hesitations, the length and grammatical status of units that were tackled in one go, to look at recurring strategies, possible sources of discrepancies with the source text, and the interplay between the two translators" (p. 78). Her findings give evidence of PTs' strategies and even though these strategies should not be taken as a pattern of every translator, Séguinot observed that her participants "stayed close to the English syntax, privileged the search for exact terms, and then reformulated the translation to conform to French syntax and stylistic norms" (p. 79). The main difference between a standard protocol analysis and that carried out by Séguinot in this study is that, according to her, in the former "subjects are constrained to think, but not justify their thinking" (p. 88), whereas in the latter "translation is negotiated, sometimes with overt reasoning" (p. 88).

The case study presented in Alves (2003) concentrates on the analysis of the process /product interface of 04 NTs selected out of 17 participants, using the methodological triangulation of TAPs, and the software programs Translog and Wordsmith Tools. Drawing on the hypothesis that NTs will present difficulties in dealing with the implicit aspects underlying the source text¹⁸, Alves observed that:

i) The average time spent by his participants reading or reflecting prior to the commencement of the task was of 6% of the total time. Analysis of the protocols revealed that the most rapid translators were the ones who devoted less time to reflection and, consequently, achieved the lowest levels of contextualisation.

ii) The average revision time was of approximately 7% of the total time. Again, the most rapid translators turned out to be those who devoted less time to the revision process and, consequently, achieved the lowest levels of contextualisation.

iii) Most subjects had problems realising the text as part of a textual chain and to notice the cohesive implications related to such chain.

iv) The Translog representations have revealed processes that are mostly linear, containing low levels of recursiveness and revision. The representations have also shown a very short pause pattern among subjects, revealing that decisions are made immediately after a translation problem pops up, followed by very little reflection.

Alves and Gonçalves (2003) have used retrospective TAPs and Translog in conjunction with the theoretical framework proposed by the Relevance Theory¹⁹ of Sperber

¹⁸ Due to the high degree of implicit remarks within the historic-cultural references of the given ST, Alves hypothesised that his subjects would have problems to retrieve the irony embedded in the text, coming up with literal renderings.

¹⁹ It is not my intention to discourse upon the Relevance Theory in this thesis, since it is not going to be tested in my study. For further information on this topic see, for instance, Gutt, E. (1992). *Relevance theory. A guide to successful communication in translation* (pp.21-22). Dallas, TX and New York, NY: Summer Institute of Linguistics, Inc.

and Wilson to investigate the patterns of problem solving and decision-making processes in translation of four NTs. No time constraint was imposed upon the task, and once their translations using Translog were completed, subjects were interviewed individually while watching the program's replay function so as to elicit retrospective verbalisations on their own performances. Alves and Gonçalves used Translog to identify segmentation strategies, pause intervals and the establishment of TUs (translation units). As defined by Alves, Magalhães and Pagano (2000), TUs refer to those segments of the ST (irrespective of their size or form) to which the attention of the translator is focused during a specific moment. Among other findings, Alves and Gonçalves observed that the subjects were unable to retrieve the communicative cues conveyed in the text and process the subtleties in the selected TU. Also, due to the text selected for the experiment have been related to a catastrophic issue that had been heavily discussed by the media, the subjects' verbalisations were heavily biased "on their contextual assumptions and neglect[ed] more explicit forms of linguistic encoding" (2003, p. 20).

Alves and Magalhães (forthcoming) have set out to investigate the process of NTs only. In their article entitled *Using Small Corpora to Tap and Map the Process-Product Interface in Translation*, the authors present a cross-analysis of both process and product driven data, using small corpora. Alves and Magalhães selected 17 NTs to take part in the experiment, which aimed at identifying their cognitive rhythms. The procedure used for data collection was identical to the one used in this research:

After completing and saving their respective target texts, subjects were interviewed on an individual basis and used the *Translog* replay function to watch and comment on their own performances by means of retrospective TAPs. Their utterances were recorded on audiocassette and transcripts were later made of their audio recordings. Using retrospective TAPs and online *Translog* protocols, we have scrutinized the data to examine to what extent the seventeen subjects showed evidence of a systematic approach to translation in their orientation, drafting,

and revision patterns, or whether this occurred randomly on the basis of rather subjective patterns. (p. 05)

After analysing the data, Alves and Magalhães came up with the following conclusions:

- i) “The emergence of different cognitive rhythms is, in itself, no evidence of qualitatively distinct translation products” (p. 16), that is, a pattern of balanced or unbalanced cognitive rhythm among NTs does not indicate that there is a variation as for the quality of their final products;
- ii) “Strict linear processing, the lack of adequate cognitive management, and of (critical) language awareness seem to hinder novice translators from making effective improvements on their target texts and arrive at more stable, more *durable*, target *texts*” (p. 16; italicisation is mine). Alves (forthcoming) provides the following definition for *durable text*:

Within the perspective of process studies in translation, it is regarded as durable the text produced at the end of the drafting phase by a translator whose level of critical awareness and operational (cognitive rhythm) as well as discursive management of the translation process, will enable her/him to achieve a final, that is, more durable, product. In other words, it refers to the production of textual material with adequate levels of cohesion and coherence, even if this material will happen to suffer substantial changes during the revision phase. However, such changes shall not withdraw the cohesion and coherence of the translated text. Therefore, the concept of durable text presupposes that the revision phase may include suggestions of improvement that will come to better the product already achieved during the drafting phase.²⁰ (my translation).

In their article *Autonomy in Translation: Approaching Translators' Education Through Awareness of Discourse Processing*, Alves et al. (2003) have used TAPs to

²⁰ Desde a perspectiva do processo de tradução, se considera durável o texto produzido por um sujeito tradutor ao final da fase de redação cujo nível de consciência crítica e de gerenciamento operativo (ritmo cognitivo) e discursivo do processo de tradução lhe permita chegar a um produto acabado, ou seja, mais durável. Em outras palavras, trata-se da produção de material textual com níveis adequados de coesão e coerência mesmo que esse material venha a ser substancialmente modificado durante a fase de revisão. Estas modificações, contudo, não poderão retirar do texto traduzido sua coesão e coerência; Portanto, o conceito de texto durável pressupõe que a fase de revisão poderá incluir sugestões de aperfeiçoamento que venham a melhorar o produto já alcançado na fase de redação.

investigate how much their informant translators “would draw on their contextual assumptions to segment the target text into TUs and translate them on the basis of their experiences and backgrounds, revealing [that] their degree of awareness of discourse implicated problems for the construction of the target text” (p. 164). In other words, the authors wanted to find out whether or not NTs would reveal an “awareness of ideological issues at play in their co-construction of the original text in translation” (p. 168) and examined their protocols to verify if they showed “evidence of conscious perceptions of discourse construction” (p. 168). Their findings show that the subject’s renditions “indicate a strong influence of contextual assumptions in their translations, and also a concern with fluency in the target language” (p.172).

As seen in this section, TAPs have been used over the past two decades to unravel a range of unexplored issues related to the translation process. These include (i) the investigation of translation strategies (Kring, 1986a; Lörcher, 1991, 1992) and (ii) their recurrence, as well as the sources of discrepancies with the ST (Séguinot, 1996), (iii) the identification of TUs (Gerloff, 1987, 1988), (iv) the relation of contextual assumptions and TU segmentation (Alves et al., 2003), (v) the suppositions made regarding the target readership of the TT (Fraser, 1996), (vi) translator education (Séguinot, 1989; Tirkkonen-Condit, 1989; Fraser, 1993), (vii) the socio-cultural aspects correlated to the process (Fraser, 1994), and (viii) the patterns of problem solving and decision-making processes (Alves & Gonçalves, 2003), to cite just a few. Some of the researchers have chosen to interfere in the process of data collection, others have not. Some have provided participants with instructions on the task, whereas others have not given any type of translation brief. The type of participants and their backgrounds have also varied considerably.

For the purpose of investigating the variable of cognitive effort within the translation process, I have selected participants for this study who are either PTs or NTs. I have chosen to interfere in the process of data collection, by asking them questions about their own processes so as to elicit verbalisation. I have also provided them with the instructions to carry out the task and the necessary contextualisation prior to the commencement of the task. One of the hindrances I have encountered was the lack of a clear-cut definition in the available literature of the term *professional translation*. In order to account for that gap I have decided to build up the profile of not only professional, but also novice translators (see sections 2.5 and 2.6 below), by drawing on the clues and evidence from the available literature, and later on attempted to come up with a definition of *professional translation*, provided by the PTs in my own study.

2.5 DEFINING THE PROFILE OF NOVICE TRANSLATORS

When commenting on the findings of their experiments, Alves and Magalhães (forthcoming) raise important issues which could guide us to the comprehension of the characteristics of NTs:

i) *NTs are guided by individual assumptions of the ST*, possibly due to their uncritical reading strategy: “what we observe throughout the corpus is a high incidence of translation decisions made on the sole basis of individual assumptions” (p. 11). Further on they state that NTs “produce renditions (...) based less on textual clues than on their presuppositions” (p. 15).

ii) *NTs produce less durable texts*: “after cross-analysing process-driven and product-driven data gathered among the seventeen subjects, it becomes evident that their drafting phases have produced texts which are less durable and, consequently, in dire need of further revision” (pp. 15-16). Moreover, regarding the cognitive rhythms of the 17 participants,

they posit that “the cognitive rhythms of all subjects are erratic, imbalanced, unevenly distributed among the group” (p. 16).

As discussed in section 2.6 below, apparently, non-linearity is a pattern more commonly found among PTs. Likewise, linear processing seems to prevail as a common feature of NTs. When reviewing Krings’ early empirical study involving eight non-PTs carried out in 1986, Kiraly notes that “the models proposed by Krings suggest that his subjects’ translation procedures were applied linearly, moving in systematic progression from one strategy to the next” (1995, p. 46). Similarly, when commenting on the findings from their recent experiment involving 17 NTs, Alves and Magalhães observed some clear instances of linear processing. Their subjects’ processed the ST “in a linear fashion with immediate online decisions and very few changes in the revision phase. (...) [For some of the subjects] the drafting phase begins with the translation of the title, a clear indication of linear processing” (forthcoming, p. 11). According to the authors, all the 17 subjects in their study have revealed a pattern “which evolves linearly, with little or no recursiveness, along the drafting phase” (p. 16).

Alves et al. (2003) have also observed a common pattern of reflection when analysing their subjects’ reports. They have noticed that NTs tend to work first on cohesion and later on contextual assumptions:

(...) most subjects aimed at an integration of linguistically encoded structures with pragmatically constrained structures which are culturally embedded. (...) we observe the search for integration between linguistically encoded and pragmatically constrained meaning in a dynamic process of context construction. However, concern for linguistic decoding of terms seems to prevail. (p. 174).

According to the authors, the subjects’ verbalisations seem to corroborate the idea that NTs “are prone to abrupt decisions taken either deductively or inductively. They also indicate that the subjects see themselves as ‘architects’, as ‘context builders’, and, as such,

become more confident to handle the complexities of the translation task” (p. 176). Further on, the authors posit that NTs will only gradually learn that they should take the embedded context into consideration, “blending in this process strategies which (...) allow them to supplement their inner resources, to use adequate external resources, and, therefore, to increase their capacity for inferences and resolution of problems” (p. 177).

As cited in Alves and Magalhães (forthcoming, p. 08), the tables below show Jakobsen’s mean distribution of the cognitive rhythm for PTs and NTs:

Seção Ts	(a) ORIEN TATIO N	(b) DRAFTING	Artigo II. Artigo III. EVISSION	%
	2.5%	73.5%	24.0%	

Table 1: Mean distribution for PTs according to Jakobsen (2002)

(a)	(b) ORIEN TATIO N	(i) DRAFTING	Seção 3.02 R EVISSION	%
	1.7%	79.3%	19.0%	100%

Table 2: Mean distribution for NTs according to Jakobsen (2002)

In order to enable NTs to produce more durable texts, and thereby achieve performance levels closer to those of PTs, as proposed by Jakobsen (2002) above, Alves and Magalhães suggest that NTs “should be guided to improve their cognitive management levels on the basis of a metacognitive monitoring of their own processes” (p. 16). They argue that, by doing so, NTs will feel more comfortable to allow for the discursive features embedded in the ST to be emerged and incorporated into their TTs.

In summary to what has been presented in this section, it could be argued that NTs (i) are guided by their individual assumptions of the ST, (ii) produce less durable texts, (iii) evolve a processing feature which is mostly linear, (iv) tend to work first on cohesion and

later on contextual assumptions, (v) are prone to taking either deductive or inductive abrupt decisions, and (vi) look upon themselves as the context builders of the text because they have no bird's eye view, that is, they seem to find it difficult to detach themselves from the text.

2.6 DEFINING THE PROFILE OF PROFESSIONAL TRANSLATORS

The available literature brings no clear-cut definition to the concept of professional translation. Shreve (1997) highlights the fact that professional translation is not to be confused with having had formal instruction or being inserted in the translation market, but comes with working experience:

I'd like at this point to dispel the notion that professional translation is synonymous with either graduation from translation schools or the selling of translation services on the open market. In the literature, there is some significant confusion about what professional translation means. I'd like to introduce a definition that clarifies the use of the word *professional* and say that professional translation is a form of constructed translation that can be acquired by only undergoing certain kinds of deliberately sought out communicative experiences. (pp. 124-125; italicisation in the original)

Since I cannot provide a ready-made definition, this section attempts to raise the consciousness and thereby build the notion of what it means to translate professionally, by drawing on the empirical observations of some translation scholars.

According to Jakobsen (2002²¹), the process of translation is segmented in three main phases: orientation, drafting, and revision:

i) *Orientation*: refers to the time taken between the appearance of the ST on the screen (see section 2.3 above for details on the Translog screens) and the first keystroke.

²¹ As cited in Alves & Magalhães, forthcoming, p. 06.

ii) *Drafting*: this is when the text is actually being constructed. It starts with the first keystroke and ends with the final punctuation mark or equivalent keystroke.

iii) *Revision*: refers to the time taken between the final keystroke in the drafting phase and lasts until the “stop” button is pressed and the log file is saved (see section 2.3 above for details on this procedure).

When commenting on the findings of his experiments with NTs and PTs, Jakobsen (2002) comes up with interesting observations concerning the characteristics of PTs:

Overall, a difference could be observed in the general allocation of time and cognitive effort to the three translation phases. Relatively (and absolutely) more time was devoted to the initial orientation and relatively (but not absolutely) more time to end revision. The one phase in which the professional translators most clearly demonstrated their expertise was in the drafting phase. Not only did the professional translators produce target texts faster than student translators, but the text they produced was more durable. (As cited in Alves & Magalhães, forthcoming, p. 04)

As the quote shows, Jakobsen claims that PTs seem to devote more time to the orientation as well as the revision phases, and less time in the actual production, i.e., the drafting of the text.

Furthermore, it seems that non-linearity is a pattern more commonly found among PTs. According to Séguinot’s observations, “the progress of the translation is much more complex than a linear progression” (1996, p. 83) and, although it does not mean that it always has to be that way, her study provides some evidence that translation can be non-linear, i.e., “though a translation is arrived at the mind [the translator] continues to look for alternatives and comes back to the same item or structure” (p. 83). Moreover, the translator can be focusing on more than one item or structure at the same time, what Séguinot calls *parallel processing*. This can be corroborated in Alves and Magalhães’ (forthcoming) study

involving NTs, in which they realise that novices tend to do quite the opposite (see section 2.5 above), by developing processing features that are quite linear. Interesting enough, Kiraly's (1995) case study involving nine NTs and nine PTs has revealed that his subjects--and that includes the PTs--have progressed linearly through the text, presenting no major differences between the processes and quality of the products produced by the two groups. The verbal protocols analysis indicated that "there is no difference in the translation competence of the subjects for translations done into English. (...) Neither group produced particularly good translations" (p. 90). Kiraly's subjects were nine second-semester students in the translator training programme of a West German university (NTs) and nine graduates of the same programme (PTs). All he mentions about his professionals' working experience is that they were working as PTs at the time of the experiment or had done at least some professional translation work since graduation. Taking into account that his data did not reveal any relevant distinction between PTs and NTs, it might be argued that Kiraly's observations are apparently erratic and do not represent a true pattern of PTs' cognitive profile. Taking from Kiraly's comments that "perhaps the level of translator confidence, presumably associated with long professional experience is more important factor that can be revealed only by longitudinal studies" (p. 95), it can be assumed that his PTs were, in fact, still NTs on the process of acquiring a professional-like cognitive profile to be achieved via working experience.

In another article where the findings of researches in the field of translation process presented at the AILA World Congress in Jyväskylä, Finland, in August 1996 are commented on, Fraser (2000) affirms that "professional translators are more likely than learners to be guided by a translation brief or assignment, whether explicitly specified or

assumed by the translator, in their decision making” (p. 112); the result of which will be a TT not solely based on lexical or semantic acceptability criteria, as typically produced by less experienced translators. Also, “while many professional translators (...) have not undergone systematic academic training, all have a series of implicit or explicit theories or assumptions about translation and have devised strategies from the highly pragmatic need to be efficient and effective” (p. 112). Although this is not always visible in the final product, “translators devise strategies for dealing with unfamiliar vocabulary, for making overall sense of a source text, and for bridging any cultural gap between the source and target-language readers” (p. 118). However, it should be borne in mind that what constitutes a value to one society may constitute an anti-value to another, and the translation should account for that.

Séguinot (1996) contends that, in metaphoric terms, “translation is a toolbox rather than an algorithmic skill” (p. 77), through which she means that the translator has a range of strategies to be chosen from her/his toolbox. The big issue is whether or not it would be possible to make generalisations as for the applicability of such strategies to different situations and/or translators.

Nevertheless, the successful use of strategies does not leave PTs free from making mistakes. When discoursing upon the transfer of meaning at a talk given on July 22nd 2002, at FALE - UFMG, Candace Séguinot wittily defined translation as a *vehicle* for meaning, because cars have accidents. Nonetheless, “errors [or accidents] in the production of experts are more likely to be errors of process than lack of language skills or knowledge, and errors of process are a way of testing hypotheses (...) about translation strategies” (Séguinot, 1996, p. 77).

Drawing back on Fraser, she posits that “unsurprisingly, professional translators demonstrate greater task confidence, reflected in less need (or greater reluctance) to use dictionaries” (2000, pp. 111-112). I personally agree with Fraser that PTs will allow meaning to emerge from the text more easily and naturally than NTs would do, and also that they would use dictionaries to refine their choices rather than to establish meaning. Yet, I still would not classify such behaviour, i.e. less dictionary look-ups, as unsurprising, since the search for the best rendering at times requires from the translator the need to look up a word in several different dictionaries and contexts, which would possibly result in even more dictionary look-ups from the part of a PT. This assertion has already been corroborated by Krings’ findings from his 1986 systematic study of the cognitive processing of a PT. He found out that his PT “used a bilingual dictionary far more often than the students did (student use was averaged)” (As cited in Kiraly, 1995, p. 48).

Summing up what has been presented in this section, it could be argued that PTs (i) demonstrate greater task confidence, (ii) devote more time to orientation and revision, and less time to the drafting phase of the text, (iii) evolve a processing feature which is mostly non-linear, (iv) can focus on more than one item / structure at the same time (parallel processing), (v) tend to be guided by a translation brief / assignment in their decision making, and (vi) have not necessarily been formally trained.

The fact that there is a gap between what trainees learn at school and what is encountered in practice is unquestionable, especially because many translators do not attend courses. Thus, if the aforesaid empirical theories or assumptions made and also strategies used by successful translators can be mapped out and understood, they might eventually be able to be successfully applied in the designing of training programmes for translators.

2.7 THE PROCESS / PRODUCT INTERFACE

Before the outcome of process-oriented research in translation, the studies in the area had mainly been either product- or competence-oriented. As a result of that, little attention was devoted to the translation process itself and to the translator's performance during that process. This gap has “only recently been realized to be a deficit. As a result, a new process-oriented, performance-analytical discipline within translation studies has developed” (Lörscher, 1992, p. 426).

As from the mid eighties, process-oriented research in translation started to come under the limelight. Researchers in the area were vehement in their position that the only way to really understand translation as a phenomenon capable of being scientifically investigated was through process-oriented studies. Nonetheless, Alves believes that it “seems difficult to affirm so vehemently that only through process-oriented studies in translation will be ever possible to come to a real dimension of translation as a cognitive phenomenon”²² (2003, p. 80; my translation).

Therefore, what Alves advocates is the introduction of corpora studies applied to translation into process-oriented research, since the methodological characteristics of corpora studies to approach the product are fairly similar to those of process-oriented research. The interface process/product will allow for the qualitative and quantitative analysis of the TT, aiming at the empirical investigation of hypotheses regarding the translation process and product. According to Alves, “attention should also be drawn to the

²² (...) parece-me difícil afirmar com tamanha veemência que apenas através dos estudos sobre o processo tradutório será possível chegar a uma real dimensão da tradução enquanto fenômeno cognitivo.

textual relations in the respective target texts, that is, we should not neglect the actual product of the translation process: the target texts²³ (2003, p. 79; my translation).

As reminded by Alves et al. (2003), exploring the product through process-oriented data is a way of reconciling “two perspectives traditionally worked out separately” (p. 183), as it had been taken for granted that process and product-oriented research would follow different avenues, and therefore could not intermingle. Nevertheless, what the authors have observed in their study with NTs is that “the correlation of data [TAPs and TTs] (...) offers an integrated view of process and product that can be used for the purposes of exploring novice translators’ paths of decision making and of promoting translators’ self assessment of their own performance” (p. 178). Moreover, if the final product is the result of the decisions and strategies used by translators as they solve the incoming problems, it should somehow contain residues and indications of such processes.

To round off this section, I would like to point out that the integrated view of process and product as presented above is the methodology proposed for the present study, by combining the process-oriented approach of Translog/TAPs with a product-oriented analysis, applying Halliday’s Functional Grammar, particularly in terms of cohesion.

2.7.1 THE VALIDITY OF SMALL CORPORA IN THIS INTERFACE

Most corpora studies involve *large corpora* (large amounts of data), because some researchers such as Baker (1998, as cited in Alves & Magalhães, forthcoming) believe that only large samples will enable us to validate hypotheses of a higher generalisation power. A more recent school of thought, on the other hand, has favoured the use of *small corpora*

²³ Parece-me relevante que se atente também às marcas textuais registradas nos respectivos textos de chegada, ou seja, não relegar a um segundo plano o produto efetivo do processo de tradução: os textos de chegada.

(small amounts of data) when dealing with specific research questions (e.g., Ghadessy et al, 2001; as cited in Alves & Magalhães, forthcoming), arguing that “corpora do not necessarily have to contain large amounts of text to be relevant”²⁴ (Alves & Magalhães, forthcoming, p. 03; Alves, 2003, p. 81; my translation). According to Alves (2003), and Alves and Magalhães (forthcoming), it is actually due to its comparatively small size that small corpora can be more easily dealt with to investigate “specific encoding, annotation and alignment procedures” (Alves & Magalhães, forthcoming, p. 03). Alves emphasises that small corpora can be “(i) *codified*, so that extra textual information can be added and read by computer software; (ii) *annotated*, so that linguistic and interpretative information about the texts can be added; and (iii) *aligned*, so that extra correlated information from parallel corpora can be extracted”²⁵ (p. 81; translation and emphases are mine).

As a final advantage to the use of small corpora, the authors argue that they can provide relevant evidence in (i) the identification of orientation, drafting, and revision patterns, in (ii) the identification of problem solving and decision making strategies, in (iii) the emergence of cognitive rhythm²⁶ in the performance of translators, and also in (iv) the identification of cognitive and discursive features in respect to issues of (critical) language awareness.

For those reasons, Alves advocates the use of small corpora “to investigate the translation products and contrast them with process-driven data obtained through

²⁴ *corpora* não precisam conter necessariamente grandes quantidades de texto para que sejam utilizáveis.

²⁵ É possível codificá-los para que sejam adicionadas informações textuais extras capazes de serem lidas pelos sistemas informáticos; anotá-los para que sejam acrescentadas informações lingüísticas e interpretativas sobre os textos; e alinhá-los para que sejam extraídas informações correlatas de *corpora* paralelos.

²⁶ This is defined by Alves & Malhães as the “rhythmical patterns observed in the production of textual material” (forthcoming, p. 03). In other words, cognitive rhythm refers to all the activities made during text production, such as the correction of typing errors, deletion and re-typing, number of returns within the text, temporary pauses to look up words in the dictionary or to search parallel texts, etc.

retrospective protocols and Translog representations”²⁷ (2003, p. 81; my translation), thereby complementing product-driven with process-driven data, and vice versa.

In this way, we would be stimulating “a correlated investigation by means of using several case studies with similar methodological approaches concerning data collection and analysis”²⁸ (Alves, 2003, p. 82; my translation), what would then involve a large number of participants and variables. It is believed that we would then be able to obtain enough data to come up with more ample, better-grounded generalisations with respect to the cognitive processes of PTs and NTs.

The small corpora analysed in this study consist of the TAPs, Translog representations, TTs and questionnaires of 11 translators. The process- and product-driven data obtained have been cross-analysed in a complementary perspective, the results of which are presented in the next chapter.

2.8 FUNCTIONAL GRAMMAR

Functional Grammar (henceforth FG) as explored in this study, mainly draws upon Halliday’s proposal of the functional component of the linguistic system, which he puts forward in the 1960’s and 1970’s. See, for example, Halliday (1967, 1968 and 1970) for further information on this issue.

According to Dik (1989), “there are many more ‘higher’ human functions involved in the communicative use of language than just the linguistic function” (p. 01). Hence, apart

²⁷ ... para investigar o produto de traduções e contrastá-los a dados processuais obtidos através de protocolos retrospectivos e de representações do programa TRANSLOG[®].

²⁸ a investigação correlata através de vários estudos de caso que sigam desenhos metodológicos semelhantes no processo de coleta e análise de dados.

from the linguistic capacity, the epistemic, logical, perceptual and social capacities also play essential roles in the linguistic communication of Natural Language users.

Natural languages²⁹ are distinguishable according to their structure (formal paradigm) and functioning (functional paradigm). In the *formal paradigm* language is viewed as an abstract formal object characterised by the formal syntax of grammar, independently of their meanings and uses. In the *functional paradigm*, however, language is looked upon as an instrument of social interaction in the first place, aiming at establishing communication in a structured (governed by rules, norms and conventions) and co-operative (with at least two participants) activity. The binary formal / functional paradigm of natural languages can be realised in Dik's statement that "the highest aim of a functional grammar of a particular language is to give a complete and adequate account of the grammatical organization of connected discourse in that language" (1989, p. 12).

From the functional point of view, then, linguistics has to deal with two types of rule systems, both ratified by social convention: (i) the rules which govern the constitution of linguistic expressions (semantic, syntactic, morphological rules); [and] (ii) the rules which govern the patterns of verbal interaction in which these linguistic expressions are used (pragmatic rules) (Dik, 1989, p. 03).

FG is therefore preoccupied with accounting for the rules and principles of the formal paradigm of natural languages in terms of their functional paradigm. Regarding the functional paradigm in relation to writing, which is the case of translation, the addressee "is not overtly present in the situation, but will be activated later when the written text is read" (Dik 1989, p. 05).

²⁹ Natural Language is "language which has developed in the usual way as a method of communicating between people" (Cambridge International Dictionary of English, 2002, p. 943). It is an instrument of social interaction and its main function "is the establishment of communication between NLUs [Natural Language Users]" (Dik, 1989, p. 04)

According to Halliday (1994), the organisation of a text is bound to its grammatical structure, but “in order to construct discourse we need to be able to establish additional relations within the text that are not subject to these limitations” (p. 309). This non-structural organisation of discourse is what is referred to by the term *cohesion*: reference words, ellipsis, conjunction and lexical organisation. In Halliday’s own words, “it is important to think of text dynamically, as an ongoing process of meaning; and of textual cohesion as an aspect of this process” (1994, p. 311), whereby meaning is constructed within a traceable current of discourse. For the purpose of this study, some cohesive devices in the ST have been identified and their re-textualisations scrutinised. By re-textualisation I mean “the selection of meanings already textualised in a source language and in their translation into linguistic substance in a target language” (Vasconcellos, 1997, p. 32). Therefore, it is exactly the organisation of the product (TT) in terms of the establishment of textual relations that has been investigated in this study with the tools made available by FG.

It is from the context of the literature reviewed in this section and from the results of the data collected from one PT and one NT in a previous pilot study that the research hypotheses guiding this study are derived.

CHAPTER 3

METHOD

In this chapter I introduce the research hypotheses that inform this study and subsequently, the instruments (Translog, TAPs and Questionnaires) used for data collection. This is to be followed by the procedure adopted to carry out the research and finally, the profile of the participants involved in this study as well as the PTs' self-definitions of professional translation.

3.1 RESEARCH HYPOTHESES

From the data collected in the pilot study (see appendix G) and subsequently expanded in the present study, I could verify the emergence of some possible problems that should be subjected to close scrutiny in an attempt to answer the research topic presented in this master's thesis: **Professional vs. Novice Translators: A Study of Effort and Experience in Translation**. The following hypotheses inform the investigation:

- i) Orientation, pause and revision patterns will differ between novice and professional translators;
- ii) Professional translators will favour the macro units of the text;
- iii) Novice translators will focus more on the micro units of the text;
- iv) The relation between time and effort will *not always* reflect positively on the final product.

3.2 INSTRUMENTS

In order to attempt to investigate the research hypotheses above, I have extended and adapted the procedure used in my pilot study by collecting data using (i) the software program Translog, (ii) retrospective TAPs, and (iii) participants' questionnaires (see appendices D and E), selecting five NTs and six PTs³⁰ as participants. The uneven number of participants (five and six) in the analysis is due to the fact that one of the PTs (PT5) ended up partially invalidating his data collected with Translog. This is because he interrupted the program by pressing the "stop" button when he thought he had finished the translation task, while he was, in fact, only half way through. Yet, because he could not visualise any more text in the upper screen, he deduced the translation task was over, instead of scrolling it down so as to see the rest of the ST. Data collected from this subject will therefore be used qualitatively only, since it will not be possible to have his Translog representations analysed from a quantitative perspective.

3.3 PROCEDURE

Participants were firstly asked to translate a text of 339 words (see Appendix B) from English into Portuguese, bearing in mind its attractiveness for consumers at retail outlets. The ST originally had 622 words, but during the pilot study I found that a text of that length would unnecessarily overtax and demand too much time from the subjects to perform the task. Bearing this in mind I selected only the first part of the text, because it is self-contained regarding its embedded lexical and cohesive chains, to be applied for this study. There was no fixed time limit to complete the task and participants were allowed to

³⁰ The distinction made between NTs and PTs for the purpose of this study is discussed in sections 2.5 and 2.6 of the Review of the Literature.

make use of any dictionaries, internet search tools or extra materials to accomplish the task (see *Instructions to Participant* in Appendix A). Secondly, the software program Translog was used for the translation task and the translation process was then replayed while the experimenter asked questions about possible translation problems to elicit the participant's verbalisation. The dialogic³¹ think-aloud protocols were tape-recorded and then transcribed for later analysis (see transcriptions in Appendix F). Finally, a Profile Questionnaire (see Appendix D) with questions concerning the participant's personal information (participant's profile) and impressions on the text (a retrospective questionnaire, providing the text profile) was handed in for completion. In the case of the PTs, there was also a Professional Translator Questionnaire (see Appendix E) to be completed, with questions concerning their status as PTs.

3.4 PARTICIPANTS

As seen in tables 3 and 4 below, 45% of all participants are male, and 55% are female. The sub-sections below provide detailed information about the NTs and PTs in this research.

3.4.1 THE PROFILE OF THE NOVICE TRANSLATORS

All the five NTs in this research are students who are either still taking a course in Translation and Interpreting Studies or have recently graduated from that course, offered at UNIPAN – União Panamericana de Ensino, a private university in Cascavel – PR. The *novice translator* in this study is understood as someone who might have been

³¹ See footnote 2 in chapter 1, Introduction.

commissioned for some translation work, but has never done it on a professional basis and has compulsorily been engaged in some formal translation studies. In what follows, I will provide some background information about the five NT subjects in this study. My comments will be based on the table below:

NT PT	Seção 3.0 EN DER	AGE	EDUCATION			TIME ABROAD	TAKING ENGLISH CLASSES	OTHER FOREIGN LANGUAGES
			UNDERGRAD STUDIES	COM PLETED	GRADUATE STUDIES			
NT1	Male	20-30	Transl. & Int. Studies	In progress	No	No	No	No
NT2	Female	20-30	Transl. & Int. Studies	Yes (2002)	In progress ³²	No	No	No
NT3	Female	20-30	Transl. & Int. Studies	Yes (2002)	No	No	No	No
NT4	Female	20-30	Transl. & Int. Studies	In progress	Yes ³³	8 months	Yes (CAE)	No
NT5	Male	20-30	Transl. & Int. Studies	Yes (2002)	In progress ³⁴	No	No	No

Table 3: Novice Translators' Profile

All NTs are aged between 20 and 30. Three out of the five NTs have already finished their undergraduate course in Translation and Interpreting, having graduated in 2002 from UNIPAN. The other two (NT1 and NT4) are doing the third and fourth year of the same course, at the same institution. One of them (NT4) has completed a diploma course in Translation Studies at another private institution, even though she has not yet completed her undergraduate studies in translation. Other two NTs (NT2 and NT5), who have already completed their undergraduate studies, are presently taking a diploma course in *Docência no Ensino Superior* at UNIPAN. Only one of the subjects (NT4) has spent some time in an English speaking country (eight months). None of the five NTs are linguistically competent in any other foreign languages and only one of them (NT4) is

³² Diploma Course in *Docência no Ensino Superior* – UNIPAN

³³ Diploma Course in Translation Studies – UNIPAN

³⁴ Diploma Course in *Docência no Ensino Superior* – UNIPAN

taking English classes at present, in a preparatory course for Cambridge CAE (Certificate in Advanced English). The question of whether or not participants were linguistically competent in any other foreign languages has been included in the questionnaire in case the knowledge of any other foreign languages could influence their inferential process.

3.4.2 THE PROFILE OF THE PROFESSIONAL TRANSLATORS

The six PTs in this study are translators working on their own, with a reputation established in the market, either in terms of publications of translated material or in terms of a tradition of service renderings. In what follows, I will provide some background information about the six PTs in this study. The following comments are based on table 4a below:

NT PT	Seção 3.0 EN DER	AGE	EDUCATION			TIME ABROAD	TAKING ENGLISH CLASSES	OTHER FOREIGN LANGUAGES
			UNDERGRAD STUDIES	COM PLETED	GRADUATE STUDIES			
PT1	Female	30-40	Bachelor of Arts	Yes	In progress ³⁵	5 years	No	Spanish ³⁶
PT2	Male	30-40	Agricultural Sciences	Yes	Yes ³⁷	2 months	No	German ³⁸ Spanish ³⁹ French ⁴⁰
PT3	Male	30-40	Bilingual Executive Secretarial Studies	In progress	No	2 years 5 months	No	No
PT4	Female	40-50	Bachelor of Arts	Yes	Yes ⁴¹	1 year 11 months	No	No
PT5	Male	40-50	Biology	Yes	Yes ⁴²	1 year 1 month	No	No
PT6	Female	40-50	Law	Yes	Yes (MA) In Progress (PhD) ⁴³	1 year 4 months	No	Italian ⁴⁴

Table 4a: Professional Translators' Profile

³⁵ Diploma Course in Human Resources Management – UFSC

³⁶ Upper Intermediate

³⁷ M.A. In Applied Linguistics – UFSC

³⁸ Intermediate/Upper Intermediate

³⁹ Intermediate

⁴⁰ Basic

⁴¹ M.A. In Applied Linguistics – UFSC

⁴² PhD in Literature – UFSC

⁴³ PhD in Applied Linguistics – UFSC

⁴⁴ Basic

The translators regarded as *professionals* in this study are in the 30-50 age range and have between 09 and 21 (see table 4b, p. 55) years of working experience in translation, working either for a company or on a free-lance basis. None of them have taken an undergraduate course in Translation Studies. Two of the PTs have graduated in Arts (PT1 and PT4); other three have graduated in different areas, to wit: Agricultural Sciences, Biology and Law; and only one of them (PT3) is still taking undergraduate studies, doing Bilingual Executive Secretarial Studies. Only one of the PTs (PT3) has not yet been engaged in a graduate study programme; one of them (PT1) has got her diploma course in progress; and the other four have already finished a master's program. Apart from this, PT5 has also concluded a PhD course, which is still in progress for PT6. What is also interesting is that none of them have actually been engaged in a postgraduate programme in translation, although the research carried out by PT4 and PT6 had to do with translation. PT4 carried out research on the functionalist approach to translation, analysing a text from an in-flight magazine, and PT6 on the quality assessment of translated contracts. Differently from the NTs, all PTs have spent some time in an English speaking country, which has varied from two months to five years. None of them are still taking English classes. Three of the PTs are not linguistically competent in any other foreign languages. On the other hand, PT1 is competent also in Spanish, PT2 in German, Spanish and French, and PT6 in Italian. However, they are unanimous in saying that their knowledge of other foreign languages did not have any influence on this specific translation task.

Table 4b below presents further insights into the profile of the PTs in this study:

PT	STARTED DOING PROF. TRANSL.	FORMAL TRAINING IN TRANSLATION STUDIES		HAS TRANSLATION BEEN YOUR MAIN OCCUPATION?		BEEN WORKING ON A FREE-LANCE BASIS OR EMPLOYED BY AN AGENCY?
		YES NO	WHAT	YES NO	IF NOT YOUR MAIN OCCUPATION	
PT1	1993 Experience of 10 years	No	--	Yes	--	Employed by a foreign agency up to January 2003.
PT2	1988 Experience of 15 years	Yes	1 discipline in MA Course (4 credits)	No	1988-1990 Occasional Jobs as Translator and Interpreter 1990-1994 English teacher 1995-1998 English teacher and MA Student 1998 – on English Professor	On a free-lance basis
PT3	1994 Experience of 09 years	No	--	No	It's not exactly my main occupation. Let's say 50% [since the beginning]	I have a contract, but I can call myself a free-lancer.
PT4	1982 Experience of 21 years	No	1 discipline in MA Course (4 credits)	No	Secretary, EFL teacher. Spent only two years working exclusively as a professional [free-lancer] translator (1994-1996).	I've worked as a professional translator for a company from 1989-1994. Then started working on a free-lance basis.
PT5	1985 Experience of 18 years	No	--	Yes	--	On a free-lance basis
PT6	1990 Experience of 13 years	Yes	A two-semester training course at IBEU ⁴⁵ /RJ	Yes	--	On a free-lance basis

Table 4b: Professional Translators' Profile

Table 4b shows that the PTs in this study have in average 14 years of working experience in translation. Differently from the NTs, however, they have had very little or no formal training at all to be inserted into the market. Two of them (PT2 and PT4) considered the four-credit discipline of TS taken for their master's course as formal training. Another subject (PT6) mentions a two-semester training course at a private institution in Rio de Janeiro. Three out of the six subjects claim that translation has not been their main occupation since they started working professionally. Their main occupation has varied from language teaching to secretarial work. Only one of the subjects

⁴⁵ Instituto Brasil-Estados Unidos

(PT1) is not doing professional translation at the moment, because she has just arrived from overseas, and therefore is not inserted in the market yet. Another subject (PT4) stresses out that she still does some occasional translation work, but had to take on another profession because translation is very seasonal and it is very hard to survive solely on one's translation work nowadays. The subjects' present occupations include--apart from translation, of course--English teaching (PT1 and PT3) and English professorship (PT2, PT4 and PT5). Only one of the subjects (PT6) is living exclusively on her translation work. While translating professionally, subjects have been either employed by an agency or worked on a free-lance basis. Except for PT1, all subjects claim to have had their translations from international journals, magazines, books, booklets and articles published.

3.4.2.1 THE PTs' SELF DEFINITION OF PROFESSIONAL TRANSLATION

As discussed in chapter 2, section 2.6, the available literature brings no clear-cut definition to the concept of professional translation. In order to minimise this lacuna, I have attempted to come up with a definition provided by those who, better than anyone else, are expected to know from their own practice what professional translation entails. The question posed to participants was "why would you call yourself a PT?". These are their answers:

PT1: Because performing translation tasks is **my profession**; also, translations done are for **professional use** [I don't translate a text just for the sake of understanding it (e.g., songs), but for **professional appliance** (personal communication)].

PT2: Because of the **length of time** I've been doing it and, therefore, **experience**; because of my **clients**; because of the **nature and relevance of the texts** and talks I translate; because of the **purpose of the texts** and talks I translate.

PT3: I guess because I've been working in the area for **quite some time** and I **get paid** for it.

PT4: Because I **pay ISS⁴⁶ as a translator**; I'm a **member of SINTRA⁴⁷ and ABRATES⁴⁸**; I've been **registered as a translator in my CTPS⁴⁹**; and I translate also in order to **earn some money** [She lived off her translation work for two years].

PT5: Because I got my **financial support for over ten years** out of translation, having **translated some 40-50 books and a number of academic papers**.

PT6: My only **source of income** is my work as a translator [she's a sworn translator]. I **call myself a translator in my income tax return**.

As we can see, the PTs' self-definitions of professional translation encompass several concepts. However, there are a number of similar or related concepts in all of the definitions above. Firstly, the extracts transcribed below seem to suggest that PTs do not regard formal training as a factor to professional translation ability. This is obviously because they have not been formally trained themselves to be inserted into the market:

my profession (PT1) / pay ISS as a translator (PT4) / member of SINTRA and ABRATES (PT4) / registered as a translator in my CTPS (PT4) / call myself a translator in my income tax return (PT6).

Instead, these extracts might serve as evidence to the fact that PTs need to find some other types of indicators to formalise their professionalism, for instance, being the member of an association, being hired and registered by a company as a translator, being paying tax as a free-lancer, or being formally classified as such in legal documents such as the government's annual revenue Income Tax Return. Secondly, comes the following extracts:

professional use (PT1) / professional appliance (PT1) / clients (PT2) / nature and relevance of the texts (PT2) / purpose of the texts (PT2).

⁴⁶ Imposto Sobre Serviços.

⁴⁷ Sindicato Nacional dos Tradutores.

⁴⁸ Associação Brasileira de Tradutores.

⁴⁹ Carteira de Trabalho e Previdência Social.

These seem to imply that PTs consider variables such as the commercial use of their translations, and the fact that there is a translator-client relationship, as major factors to account for the professionalism of their job. In fact, it is this translator-client relationship that establishes the commercial use of their translations. As suggested by PT1, a text is being translated because the translator has been commissioned for such work in the first place. Thirdly, still following this line of reasoning, come the extracts below:

get paid (PT3) / earn some money (PT4) / financial support (PT5) / source of income (PT6)

If there is a translator-client relationship, this relationship implies the payment for the service rendered, which, in turn, will be source of income for the translator. The PTs in this study seem to consider the fact that they are getting paid for their work and thereby being financially supported--even if only partially--by their translations, as another factor to add up to their status of PTs.

Fourthly, we bring the following extracts to the fore:

length of time (PT2) / experience (PT2) / quite some time (PT3) / over ten years (PT5).

What they actually indicate is that these PTs seem to be aware that translation competence comes with working experience, and a translator will have to have gone through some years of practice to ever become a professional. Lastly, there is this extract:

translated some 40-50 books and a number of academic papers (PT5)

The above serves as indicator that the amount of translation work produced is of prime importance to the recognition of the professional status of a translator. Apart from

this, this extract also reinforces the previous argumentation, which suggests that professionalism will come with years of practice, since a considerable amount of translation work can only be amassed over a reasonable period of time.

In summary to the self-definitions presented by the PTs in this section, one might attempt to come up with a working definition of what makes a PT:

- i) S/he will have some indicators to formalise her/his professionalism, such as being the member of an association, being hired and registered by a company as a translator, being paying tax as a free-lancer, or being formally classified as such in legal documents such as the government's annual revenue Income Tax Return;
- ii) Her/his text will be the commercial product of a translator-client relationship;
- iii) S/he will be paid for the service rendered and will rely on translation as a source of income;
- iv) S/he will have gone through at least some years of practical work in translation;
- v) S/he will have amassed a considerable amount of translation work done.

The tentative definition above does not include, for instance, the possibility of a translator being doing volunteering work, which might be the case of a translator working for non-profitable organisations, such as churches and NGOs (non-governmental organisations). This is due to the fact that the working definition above has been delivered by PTs who are not involved in this kind of activity.

CHAPTER 4

RESULTS AND DISCUSSION

This chapter is organised into three sections, which report and discuss the results in relation to the four hypotheses being investigated. First, some comments are made as regards the questionnaire about the text. Then, Translog representations and TAPs are discussed. Finally, the products--Translated Texts--are analysed in the light of the concept of cohesion as provided by Functional Grammar.

4.1 QUESTIONNAIRE ABOUT THE TEXT

4.1.1 GENERAL COMMENTS

The Profile Questionnaire (see appendix D) submitted to the participants included a few questions about the text. Questions were rated on a scale from 1 to 5, with 1 being very easy (or not at all) and 5 very difficult (or very much / very well). The questions were arranged in a type of classification scale known as Likert Scale⁵². It normally has five categories of answers which range, for instance, from “totally agree” to “totally disagree”, and that requires participants to indicate their level of agreement or disagreement with each level of a series of statements. Participants were asked to circle the grade they would give to each question according to their opinion. For instance:

very easy 1 2 3 4 5 very difficult.

Understanding the variance among subjects is important in order to rank the degree to which the task appeared to be easy or difficult to them. Such understanding does not aim at providing a categorical rank analysis of difficulty but rather a subjective

⁵² For further information on the Likert Scale, please refer to Gil (1989) ; Malhotra (2001); and Richardson et al. (1999).

impression that may have implications for the degree of effort undertaken. Table 5 below shows the participants' grades concerning their own perception on the ST:

NT PT	ABOUT THE TEXT			
	UNDER - STANDING	LIKE OR DISLIKE	ST WELL WRITTEN	TRANSLATION DIFFICULTY
NT1	2	5	4	3
NT2	3	4	4	3
NT3	4	5	5	4
NT4	2	4	4	3
NT5	2	4	5	3
PT1	3	4	5	3
PT2	1	5	5	2
PT3	1	5	4	2
PT4	1	5	5	2
PT5	1	3	5	1
PT6	2	4	4	2

Table 5: Participants' evaluation of the source text.

4.1.2 ON UNDERSTANDING THE SOURCE TEXT

When asked if the text was easy or difficult to understand, most NTs and PTs rated the question as 1 and 2 respectively (8 out of 11), which shows that they both found it quite easy for comprehension. A close scrutiny, however, reveals that none of the NTs have ranked it as 1 (very easy), whilst 4 out of 6 PTs did so. The average for NTs is 2.6 whereas the average for PTs is 1.5. The difference is, therefore, quite significant and might as well indicate that problems with comprehending the ST might have led the NTs to tax greater cognitive effort upon constructing the TT.

4.1.3 ON LIKING OR DISLIKING THE SOURCE TEXT

Both groups (NTs and PTs) appear to have liked the text a lot or very much, having graded it between 4 and 5 (10 out of 11 participants). The average for NTs is 4.4 and for PTs 4.33, which shows that both groups did not differ greatly in that respect.

The fact that one group might have applied more or less cognitive effort during the task apparently has, therefore, nothing to do with the fact that one group might have liked the text better than the other group.

4.1.4 ON THE SOURCE TEXT BEING WELL WRITTEN

Both groups have unanimously agreed that the ST was well written (grades 4 and 5). The average for NTs is 4.4 and for PTs 4.66. Again, the figures between NTs and PTs did not vary greatly. The fact that one group might have applied more or less cognitive effort during the task apparently has, therefore, nothing to do with the fact that one or the other group might have blamed the ST as not being well written in English.

4.1.5 ON THE DIFFICULTY OF THE TRANSLATION

Most PTs (5 out of 6) found the text relatively easy to translate (grades 1 and 2), being 2 their average score. Most NTs (4 out of 5), on the other hand, considered it neither easy nor difficult to translate, having given it grade 3, being 3.2 their average score. One subject found it relatively difficult (NT3), having graded it level 4. Comparatively, the NTs seemed to have found the text more difficult to translate than the PTs did. As the figures above (and also in 4.1.2) suggest, there are significant differences in the way NTs and PTs perceived the ST, namely when it refers to understanding and translating it. Bearing in mind Jakobsen's phases – which I will touch upon later on in section 4.2.4 – these figures already indicate that orientation and drafting may be influenced by these initial perceptions and/or impressions of the ST.

4.1.6 ON WHAT THEY LIKED BEST IN/ABOUT THE TEXT

As for what they liked best in/about the text, both groups mentioned that the informative nature of the text was appealing:

- (NT1): About the historical information.
- (NT2): The history of delivering milk.
- (NT5): I liked the cultural and historical aspect.
- (PT3): I thought it was an interesting text. I sure know much more about milk now.
- (PT4): The historical aspects of milk drinking, milk delivery, etc.
- (PT6): It provides a lot of information in a very concise manner.

Other subjects highlighted different aspects evoked by the verbal information in the text, such as the imagery reader-friendly language the text relies on, its sense of humour and the fact that the text was well written and structured:

- (PT3): I liked the images this text provides us.
- (PT1): Interesting, clearly written.
- (PT2): It was well written and (macro and micro) structured. They used reader-friendly language.
- (PT5): It's sense of humor.

4.1.7 ON WHAT THEY LIKED LEAST IN/ABOUT THE TEXT

Interestingly enough, when inquired about what they liked least in/about the text, the answers provided by some NTs reinforce the idea that inexperienced translators tend to concentrate on the micro textual problems⁵³:

- (NT1): Some words that are very unusual, that makes you think a lot.
- (NT3): The specific words. What the hell is a “cowshed”?! And (urban) “town cow herds”?!! I just got stucked on that words/expressions [sic] that were really from the “milk industry universe”.
- (NT5): The part that talks about Milk Marketing Board. [He told me later that he did not like this part because he could not find a translation for the unit *Milk Marketing Board*].

The other participants did not make any remarks regarding what they liked least in/about the text. However, the comments made by two participants (PT4 and PT5) reveal important information that supports the idea that more experienced translators tend to focus on the macro problems of the text:⁵³

⁵³ Krings, 1986b, as cited in Alves, 2003.

(PT 4): Perhaps not knowing exactly how to adapt the translation to Brazilian reality, but due to the historical aspects of the text that was not relevant.

At first, PT4 seems to be more concerned with her readership and how the text would fit into a different culture/reality. Then she comes to the decision that she will not attempt to adapt it to the new culture because it is full of historical aspects that are embedded in the source language own reality. Here are PT5's macro textual observations:

(PT5): There was a tricky phrase in the text (*low down*), which could not be translated keeping the joke with the words.

Only PT5 seems to have noticed the pun in *low down*, which was very wittily used in a text providing important facts about milk delivery in the UK. *Low down* means the most important facts about something, but is also the moo of the cow.

As a general overview of the information provided by the questionnaire, the facts and figures presented here reveal that the possible greater effort applied by any of the groups does not seem to have been influenced by the fact that one of the groups liked the text better than the other one (section 4.1.3) or because the ST has not been well written in English (section 4.1.4). The data also reveal that, in average, the NTs found the ST more difficult to understand (section 4.1.2) and also more difficult to translate than the PTs did (section 4.1.5). This might, therefore, raise one's expectation that the NTs will devote greater effort to construct the TT, what will directly impact upon the orientation and drafting phases of the text. The analysis of the Translog representations and verbal protocols (TAPs) below might serve as indicators of the

extent to which the orientation and drafting phases may be influenced and impacted by these initial perceptions and impressions of the ST.

4.2 TRANSLOG REPRESENTATIONS AND TAPs

4.2.1 ORIENTATION PHASE

As Jakobsen (2002⁵⁴) suggests, orientation refers to the time spent by participants doing reading or reflecting prior to the commencement of the translation task. In this study, it started with the appearance of the ST on the Translog User upper screen (see Chapter 2, section 2.3 for details on the Translog screens) and the first keystroke. As we can see in the verbalisations below, the translator will normally read the whole text so as to get the gist of what s/he is bound to translate, look for new words and expressions in the dictionary, and also feel the tone and register of the text:

NT1: I started reading first to see **the context**, to see the **subject**, (...) and see a lot of kinds of **difficult words**.

NT4: First of all I started thinking about the **title**. I didn't know if I was supposed to write **the word** *balde* or... and then... I also thought about **the word** *superior*. So that's the reason that I stopped for several minutes.

NT5: I was reading the [source] text in order to have a **general idea**.

PT1: First of all I read the whole text in the hard copy, and then I looked for **words** in the dictionary. The words that were not familiar to me. Actually, **new words**.

PT2: I decided to read the text through because it was a short text and (...) [I found it] useful to read it through so I could already spot some of the possible problems: **words and expressions**. And also to feel **the register** of the text.

PT6: Well, I was doing what I usually do, that is, to read the whole text, **to have a grasp of the whole thing**, to know what I'm into. So... and I was also checking two **words** in the dictionary that I immediately noticed that I would have problems with. (...) That's why it took me so long to start.

Not all translators work in that manner, however. Some will prefer to skip the orientation phase and get straight down to the drafting phase. This is a pattern which

⁵⁴ As cited in Alves & Magalhães, (forthcoming), p. 06.

could actually be verified in both groups in this study. The verbalisations below show that the reasons for skipping the orientation phase might include (i) the level of anxiety for being in an experimental situation, (ii) done in order to save time, or simply (iii) because the translator might prefer to do the whole lot *quick and dirty* fashion (Rothe-Neves, 2002) and then, later on come back “cleaning” the text:

NT2: Well, **normally I begin** to translate **like this** [straight away], and today I think it was because I was **anxious** [to start the experiment].

NT3: When I translate (...) concomitantly to the reading of the text, I believe I can **have an idea of the text** I’m taking to translate.

PT3: I took a look at the text and then I noticed the title and I thought it would be better for me to read the text before and then I could **come up with an interesting translation for the title**. So I just started doing it right away. I mean, **reading while** I was **translating** the text.

PT4: Well, I don’t think the text was very difficult. I could understand immediately what I was reading, and I then decided **not to waste time**, and **go straight to the point**.

PT5: [Started translating with the elapsed time of 8’] That’s **my usual technique**. I like to start right away... er... with just a few concerns about literality. I think it’s **easier to work with the text to get its final version after I’ve put it into the second language**, the language into which I’m translating.

Table 6 below shows how much time each subject has devoted to orientation.

For the reasons explained in chapter 3, section 3.2, the data collected from PT5 is not included for analysis:

NT / PT	ORIENTATION PHASE
NT1	10' 47''
NT2	17''
NT3	10''
NT4	07' 13''
NT5	05' 16''
AVERAGE TIME NTs	04' 45''
PT1	15' 03''
PT2	04' 33''
PT3	04''
PT4	37''
PT6	06' 13''
AVERAGE TIME PTs	05' 18''

Table 6: Participants' Orientation Phase Time

As the results indicate, the average time spent during the orientation phase has not varied significantly between NTs and PTs in absolute terms. However, when comparing the orientation time to the total translation time (see table 7 below), we notice that the NTs spent in average 1 hr 49' 15'' doing the translation task, out of which 04' 45'' was devoted to orientation. As for the PTs, they spent in average 1 hr 00' 54'' doing the translation task, out of which 05' 18'' was devoted to orientation. That means that, in relative terms, the NTs devoted 4.34% of their time to the orientation phase, whereas the PTs devoted 8.70%. As the qualitative analysis has already indicated, in both groups there were subjects who devoted more time to reflection and also those who started translating almost straight away. The block graphs below show the variation of PTs and NTs with regards to the orientation phase and the proportion of orientation compared to the actual translation time:

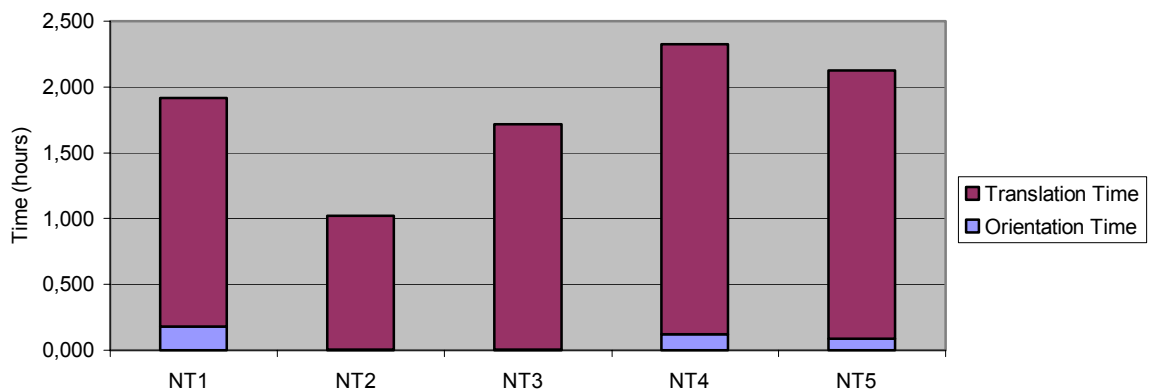


Figure 4: Ratio of Orientation Time to Translation Time (NTs)

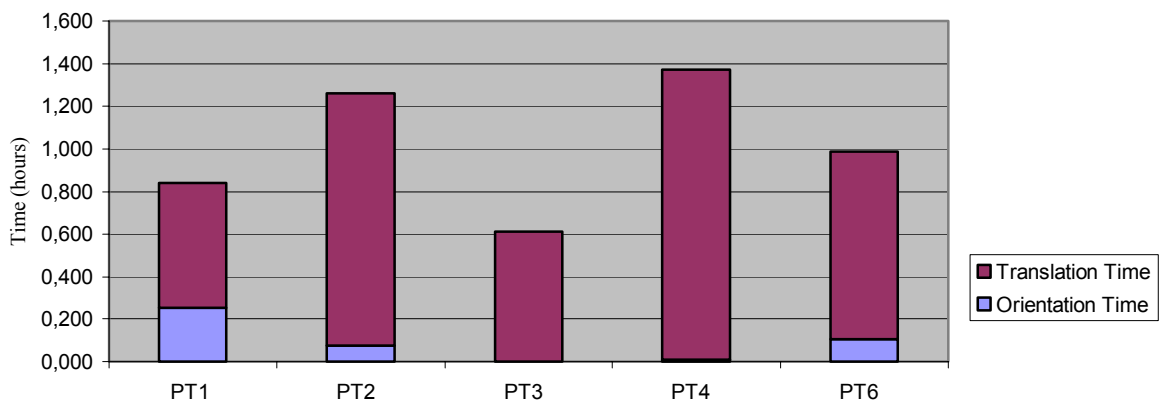


Figure 5: Ratio of Orientation Time to Translation Time (PTs)

The block graphs above display the time spent during the orientation phase in blue and the time spent doing the actual translation, in red. If we add them up, we will come up with the total time spent carrying out the translation task. By comparing the results of the orientation phase to the total time spent doing the translation task (see also table 7 below), we notice that in relative terms, the NTs and PTs did not vary considerably in relation to the time they devoted to the orientation phase. In average, both groups have devoted very little time to the orientation phase. In the NTs group, two

of the subjects (NT2 and NT3) started translating almost straight away, devoting almost no time at all to the orientation phase. In the PTs group, a similar pattern could be observed, where two subjects (PT3 and PT4) also started translating almost straight away. Although the difference between both groups has not been as striking as I had expected, when we compare the average time spent doing orientation with the average time spent doing the actual translation and put this in percentage terms, the results do show some considerable difference. While the NTs devoted, in average, 4.35 % of their time to the orientation phase, the PTs devoted the average of 8.70%. As we can see, the PTs seem to have allocated more effort to the orientation phase than the NTs did. Referring back to the answers to question 1 of the questionnaire (see section 4.1.2 above), none of the NTs have ranked the ST as 1 (very easy to understand), while 4 out of 6 PTs did so. The average score for understanding the ST according to NTs is 2.6 whereas the average for PTs is 1.5. These might be indicative of the different procedural features between both groups. Perhaps understanding the ST more easily (1.5 for PTs) accounted for differences in orientation, as presented here.

4.2.2 PAUSE PATTERNS AND THE DRAFTING PHASE

Before analysing the Translog representation, I applied a pause unit of five seconds to each translation, and considered that pauses below that time would not represent a translation problem, but probably simply the variations in typing speed (Rothe-Neves, 2002). The program therefore counted and displayed every time the translator interrupted the process and paused for five seconds or longer, which was then understood as indication of a translation problem. Then I added up all the minutes and seconds of pauses during the whole process, so as to find out the total time the participant spent doing something else other than actually drafting or revising his/her

translation: looking up words in the dictionary, searching for parallel texts on the internet or just thinking. Table 7 below displays the results found, where the second column (Translation Time) refers to the total time spent doing the translation task (including orientation, drafting and revision) and the third column (Pause Time) refers to the total time the participant remained paused, i.e. no keystrokes occurred, during the total translation time:

NT / PT	TRANSLATION TIME	PAUSE TIME
NT 1	1 hr 55' 09''	1 hr 28' 18''
NT 2	1 hr 01' 05''	38' 07''
NT 3	1 hr 43' 02''	58' 37''
NT 4	2 hr 19' 28''	1 hr 41' 20''
NT 5	2 hr 07' 33''	1 hr 34' 08''
AVERAGE TIME NTs	1 hr 49' 15''	1 hr 16' 06''
PT 1	50' 29''	28' 53''
PT 2	1 hr 15' 43''	51' 38''
PT 3	36' 46''	13' 08''
PT 4	1 hr 22' 17''	38' 38''
PT 6	59' 15''	34' 17''
AVERAGE TIME PTs	1 hr 00' 54''	33' 19''

Table 7: Participants' Total Translation and Pause Times.

As NTs and PTs Average Translation Time above indicates, the NTs in this study spent relatively 48' 21'' longer, that is, nearly double the time the PTs did, in performing the translation task. That might as well serve as indicator that the NTs spent much more time dealing with the translation problems that came up, and therefore applied a lot more effort (as measured by time) upon the construction of the TT. Consequently, as one would expect, the NTs also have made longer pauses throughout the task, that is, they spent much more time thinking over the translation problems than the PTs did. The NTs and PTs Average Pause Time above shows that, in average, the NTs paused for 42' 47'' longer than the PTs did. The block graphs below show how

much the time subjects remained paused (no keyboard strokes occurred) has varied in comparison to the time they spent typing the translated text:

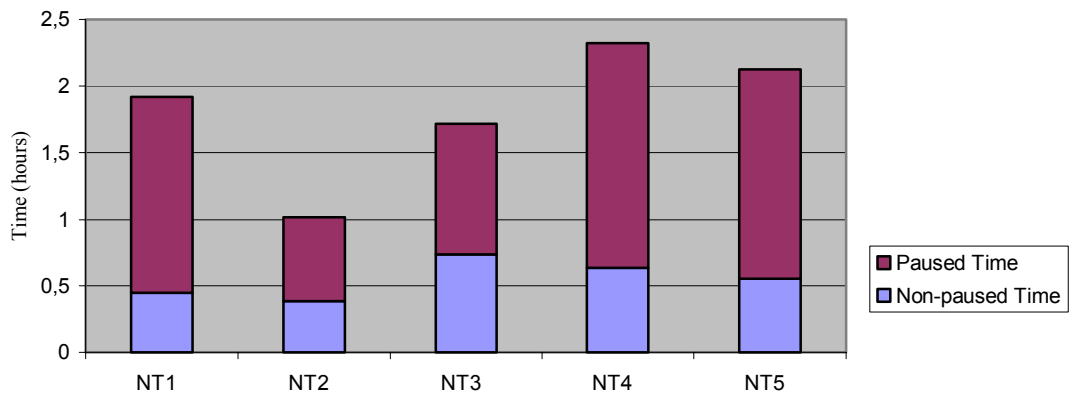


Figure 6: Ratio of Paused to Non-paused Time (NTs)

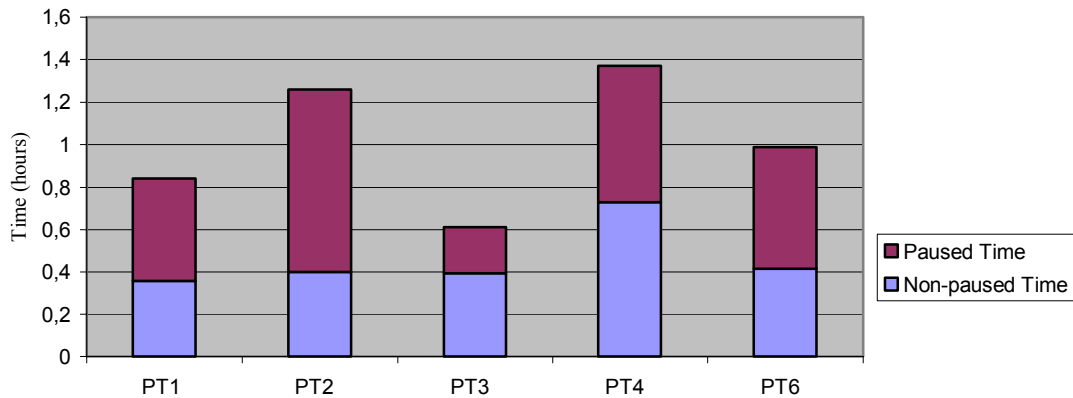


Figure 7: Ratio of Paused to Non-paused Time (PTs)

By adding up the paused and non-paused time--displayed in different colours in the graphs--we will come up with the total amount of time spent doing the translation task. It is clearly observable that, in general, the NTs spent much longer pausing rather than writing. Table 8 shows the time participants remained paused in percentage terms, as well as their drafting times, which will be discussed later on:

NT / PT	PAUSE TIME (%)	DRAFTING TIME
NT1	76.65	1 hr 27' 55''
NT2	62.38	51' 32''
NT3	56.84	27' 01''
NT4	72.63	1 hr 56' 47''
NT5	73.79	1 hr 38' 55''
AVERAGE TIME NTs	69.62	1 hr 16' 26''
PT1	57.19	24' 51''
PT2	68.20	1 hr 01' 36''
PT3	35.62	32' 24''
PT4	46.90	26' 25''
PT6	57.85	29' 03''
AVERAGE TIME PTs	54.64	34' 52''

Table 8: Participants' Pause Time (in %) and Drafting Time

The NTs spent in average 69.62% of their time thinking, whilst the PTs spent 54.64%. The Translog representations have also revealed that longer pauses, i.e. pauses of one minute or longer, were far more frequent among the NTs group. This may indicate that the PTs were faster in carrying out the translation task because they spent less time thinking over their translation problems. In other words, the PTs seem to have taken more solid decisions, and consequently hesitated, or paused less. Additionally, the fact that the NTs spent more time thinking over solutions to their translation problems might also serve as indicator that they applied a greater cognitive effort upon the construction of the TTs.

I was also interested in knowing the different patterns between NTs and PTs with regards to the actual drafting phase of the text. As seen in the Review of the Literature, section 2.6, the drafting phase, which is the actual construction of the translated text, starts with the first keystroke and ends just before the revision phase. For that matter, I had to note down the time just before the beginning of the revision phase

and deduce that from the time spent doing orientation, so that I could come up with the timing for the actual drafting of the text. Table 8 above displays the time spent by NTs and PTs during the drafting phase. It reveals that the PTs spent the average time of 34' 52'' writing the first draft of the text, against 1 hr 16' 26'' of the NTs. The NTs took, therefore, in absolute terms, 41' 34'' longer in the drafting phase, which represents a time twice as long in comparison to that of the PTs. In relative terms the NTs spent 69.94% of their time drafting their translations while this figure corresponded to 57.24% among PTs. This, again, might indicate, as the drafting time was greater in absolute and relative terms, that the NTs applied a lot more cognitive effort in constructing the first draft of the text than the PTs did. Referring back again to the answers to question 1 of the questionnaire (see section 4.1.2 above), none of the NTs have ranked the ST as 1 (very easy to understand), while 4 out of 6 PTs did so. The average score for understanding the ST according to NTs is 2.6 whereas the average for PTs is 1.5. These might be indicative that understanding the ST more easily (1.5 for PTs) accounted for differences not only during orientation, but also in the drafting phase of the translation process.

The fact that the NTs in this study (i) spent a longer time paused (42' 47'') during the execution of the translation task, (ii) the fact that this time represented 69.62% of the total time they spent dealing with the translation task, (iii) and that pauses of one minute or longer were far more frequent among this group, seem to suggest that also pause patterns have an influence in the drafting phase and, consequently, in the cognitive management of these NTs. That might explain why this group took longer to write the first draft of the text, both in relative and absolute terms.

The drafting phase of the NTs has also revealed processes in which the decisions made are guided by individual assumptions (see verbal protocols below) and blanks or

protocols analysed (see samples below) seem to suggest that NTs were more guided by their individual assumptions than PTs were:

NT1: I don't know how to find a... in Portuguese, a word that represents this word in English (...) **I put the thinking** [sic]. [He means, I wrote what I thought it should be].

NT2: Because here is saying that the milk is transported, then **it must be a place**, then I put *indústria*.

NT3: No. **I knew it was a company** (...) because (...) it sounded like the name of a company for me, and... er... I believe I have heard this name before, I don't know. **I just knew it was a company**.

NT5: Because **it's a strange word**. *Balde* is open, and *tonel* is closed, **it's special, I think**. Because [in] **my context**, when I used to receive milk at home, we had little *tonéis*.

PT2: This was referring to dairies activities in general. They put it in the plural. So, **as I understood**, it's not a farm.

PT3: **I think that during this time**, [the] 18th century, I think people had... **it was an occupation to raise cows and then milk the cows, and go around town selling them**.

PT5: I was thinking “well, the text is talking about the 18th century”, so **I tried to figure the context** and I thought “well, **probably town here means something like villages**”. I might be wrong.

Another indicator of textual durability can be identified in the translation of the title *Beyond the Pail*⁵⁵. Among the NTs, only NT3 seemed to be concerned with recapturing an interesting title in Portuguese. Although she could not find one, she left the title to the end of the translation and made several changes during the process:

Start][ResizeST][*:10.03]B*⌘além*d*[Shft⇐]*ALÉM•DA*♦...⌘♦♦♦♦♦♦♦♦* (First attempt)

[Shft→]*O•BALDE...*↓←**)(*⌘⌘(?•VE⌘⌘PENSAR•NUM•TÍTULO•MAIS•ATRATIVO)*↓↓**↓[*:01.33.09][^] (Second attempt)

*****↑↑[*:59.27]NOS♦*⌘•TEMPOS♦DO♦**BAL*DE*⌘⌘⌘⌘⌘⌘⌘⌘⌘⌘⌘⌘⌘⌘⌘⌘ (Third attempt)

[Shft⇐]*⌘⌘⌘↑↑[*:01.19.35]além♦do♦a⌘* [Shft⇐]ALÉM•DO•BALDE*⌘*⌘⌘⌘[*:46.02][End] (Fourth attempt)

⁵⁵ “Beyond the Pail” is a play on idiom evoking *beyond the pale*, which means unacceptable behaviour.

All the other NTs seemed to be solely concerned with their renderings for *beyond* and *pail*, not taking any metalinguistic awareness into consideration. Among the PTs, the renditions showed higher awareness in that sense. PT3 also left the translation of the title to the end, although, like NT3, he could not capture and reconstruct the pun into Portuguese. PT4 also changed her decision about how to translate the title during the process:

Start][ResizeST][*:37.33]a***aLÉ***A**além**do**balde****** (First attempt)

MUITO*MAIS*QUE*UM*BALDE!***↓↓[*:19.99] (Second attempt)

The verbalisations below show the different way NTs and PTs dealt with the title. While most NTs (except for NT3) were simply concerned about lexical translations, the PTs appeared to be taking metalinguistic aspects into consideration:

NT1: Just [had problems with] the word *pail*. I didn't know, but it wasn't so difficult to find.

NT2: The first word, *beyond*, I didn't remember. And then I looked up at the dictionary... and the third word too, *pail*, I didn't know what it means, and I looked up at the dictionary.

NT3: I think the title has to call your attention, has to be attractive to you, so you will feel like reading. It's not just something to identify the text; it's kind of an identity for the text. But I couldn't find a creative, an interesting title for this one (...) So, I just gave it up.

NT4: I didn't know if I was supposed to write the word *balde* or... and then... I also thought about the word *superior*.

PT2: I was not happy with the title, but then I decided to leave it for later. (...) I understood they wanted to show what goes on after you milk the cows. So I decided to make this addition: *Além dos Domínios do Balde*.

PT3: I took a look at the text and then I noticed the title and I thought it would be better for me to read the text before and then I could come up with an interesting translation for the title.

PT4: I thought, “well, *além do balde*...perhaps... *muito mais que um balde*... In terms that there is much more involved, than just a *pail*. And the exclamation mark because I wanted to call the attention, since there was no italics, no bold [available in the Translog software]. So I thought, “well, something has to be done in order to call attention”.

Given the general characteristics of NTs and PTs presented here, it might be argued that the texts produced by NTs during the drafting phase were less durable than those of the PTs, and therefore in need of more substantial improvement during the next step: the revision phase.

4.2.3 REVISION PHASE

Apart from the pause patterns, I have also observed the time spent on the revision phase. As seen in the Review of the Literature, section 2.6, *revision* is regarded here as the time spent doing corrections and alterations after the first draft of the product is done. It is true that revision also happens throughout the whole process, but this pattern of revision, such as number of returns within the text, is not going to be analysed in this study. According to Lorenzo (2003), with the advancement of technology, translators nowadays tend “to evaluate and correct their writing both while they go along constructing the text as well as after its several drafts”⁵⁶ (p. 130; my translation). The verbalisations below support the argumentation that revision also happens during the on-going translation process:

Researcher: Do you also revise while you're actually translating or leave the revision only to the end?

NT1: No, [during the first draft] I was reading and making some changes, but not long changes, just details, small changes. And then [during the final revision phase] at first I saw the whole text and see what I can do to change, to get better to read.

NT3: Sometimes I have an idea just in the middle of the translation, and I go back to the first or second paragraph, you know, and just re-arrange everything.

PT1: There was something I was not comfortable with. I had typed *Bretanha*. It's very strange, so the moment I decided I went back and fixed it. I didn't wait until the end. (...) I think it's quite mechanical. You start typing and doing things, but it stays there in your mind, so you go back the moment it's clear, because maybe (...) you realise (...) what you were thinking... it was right, so (...) I go back immediately. Like, you're doing something, and you carry on thinking about it. Although you're already in the next paragraph.

PT2: Sometimes I stop [translating] to read the text in the target language, trying to detach myself from the source text to see if it sounds natural.

⁵⁶ [El traductor tiende] a evaluar y corregir lo escrito tanto conforme va componiendo el texto como después de las diferentes versiones del mismo.

PT3: Yeah, usually [review while translating]. So when I do the final review I don't have a lot of things that need to be changed... depending on the text, of course.

PT4: Normally, when I think that something is strange, I stop and revise, and then I go on again. Normally I do as I did [in this experiment], I translate everything and then I go back and make the changes... I look up the words in the dictionary...

PT6: Yeah. If I think that something is better [to revise while translating]. I go back and change the other... the other word that I had translated in a different way before.

The strategies used during this phase will vary among translators. As shown in the verbalisations below, some will prefer to revise by reading the TT only, others will read and compare both the TT and ST, and some will do the TT reading, followed by the comparison of both texts and finally another TT reading:

Researcher: Were you reading the text in English and in Portuguese, or just in Portuguese?

NT1: In **English** and in **Portuguese**, only to review.

NT2: Just in **Portuguese**.

NT3: Just the **Portuguese**.

NT4: I was just reading the **Portuguese**.

NT5: **Both** the **English** and the **Portuguese**.

PT1: First I read just **Portuguese**. Then, **English** and **Portuguese**. And then the **Portuguese** for the last time.

PT2: In **Portuguese**.

PT3: Just the **Portuguese** version.

PT4: **I compare** [the ST and TT] when I... Let's see, for instance, there was a word here that I thought, "well, I don't think it's going to make any difference if I translate it or not. It's not going to make a difference". (...) Or when something looks strange or sounds strange, then **I look back** [at the ST], you see, "well, that's it. It's strange, but it's in the [source] text". So it's not me, it's the text.

PT5: I read the extract in Portuguese, just in **Portuguese**, to see if there is any typing mistakes or any repeated words or anything like that. And also if it goes smoothly in Portuguese. And then, again, I go back to the **original text**, to some specific parts of the text which called my attention in the first moment.

PT6: Well, it all depends on the level of difficulty of the text. I can revise it four times, if it's necessary. So, in this first revision, what I do is (...) a **comparative revision**. So I compare the **Portuguese** version with the **English** version, (...) and if I feel that I have changed many things, and I'm not sure about the quality of the text, I do the same process all over again. Start from the beginning, checking, **comparing the Portuguese with the English version**. So, this first revision phase can in fact be done twice.

For those who prefer leaving the ST aside and reading only the TT for the revision phase, the verbalisations below might account for their choice. They claim that the TT should make sense without the original one and thereby sound as a text written originally in the target language:

NT3: I don't like to read a text and (...) notice "well, this is... this sounds strange in Portuguese, because this was a translated text". It seems **unnatural** to Portuguese readers too, you know. And I think it's horrible when you have a text that it **seems that it was translated**.

PT1: It has to be sound, it has to **make sense without...** because whoever is going to read it in Portuguese, they don't have the English part to check if it's right or not. So it has to **make sense just by itself**.

Among those who would rather conduct a comparative revision, there are the NTs below, who support their choice by arguing that by doing so you will not feel tempted to go about changing word orders and expressions and will not distance from the goal of the original text:

NT4: I think it's important to read the English version also, because you can see what is written in English. Because **if you read just the Portuguese translation**, maybe **you're going to change...** er... not the meaning, but **the order of the words**, you know. And... so, you have to try to keep it *da maneira mais fiel* [as close as possible to the source text]. And if you read just in Portuguese, maybe you feel like changing and **you're going to change a sentence**, you're going to write the same (...) message, but you're going to change the... the sentence, the order... I don't know.

NT5: Because **we cannot escape** [from] **the goal** [of the] original text.

There seems to be a common pattern among PTs to detach themselves from the TT and revise it after hours or even days. Five out of the six PTs in this study (PT1, PT2, PT3, PT4, PT6) remarked this in their verbalisations. An interesting observation happened when I was collecting data with PT6, for instance. She finished her first draft with the elapsed time of 35' 16'', when, at that point, she stood up, walked towards the window and looked outside. I asked if the occasional noise coming from the nearby

building site was disturbing her, and she said “no”. What she was doing was trying to detach from the text, to disconnect, so that the TT wouldn’t be so “contaminated” by the ST. After 13” she went back and continued working on the revision of the text. She said that if it were a text for publication, this is something she would do **the following day**:

PT6: [After the comparative revision] I go back to the text to look for problems with the Portuguese language. And this is something I usually **don’t do on the same day** on which I translated the text. I usually leave the text for a while, or if I translate the text in the morning I revise **in the afternoon**... or if I translate in the afternoon I revise **in the other day**... if it is a legal document or something that was difficult I **never deal with the text on the same day** on which I translated it.

PT6: I think you have to forget the [source] text a little, so to speak (...) because otherwise you can read the same thing a hundred times and not notice something obvious. (...) Especially for the Portuguese revision. So, (...) I usually put the text aside, **at least for a few hours**. And then I can forget everything that I wrote and start as if from scratch, as if I were reading a text originally written in Portuguese, so that I can see how this text would sound to the native speaker of Portuguese.

Similar comments have come from other PTs:

PT1: If I have the time, **I’ll do it the next day** even. Because then you’re not thinking of the English text, you don’t remember kind of things... You know, you just read the Portuguese as if were reading a fresh text. And... “Oh, it doesn’t make sense”... Ok, then I go back to the English [text] and I check, and then I read the Portuguese again. When doing the translation, and looking at the English [text], I get very influenced (...) Then, **when you do the revision the next day** (...) you really have to think “Oh, I don’t know what it relates to”. I don’t have any other standard one, the English one, the main one [the source text]. So it has to make sense here and now.

PT2: If I have time, **I prefer to**, perhaps, **read this first draft the next day**, not immediately after I have finished the translation. Because then I won’t remember much of the source text, and I will read this translation as if I was reading a text that (...) was written originally in Portuguese and I will look for signs of translations and try to (...) make the text as natural as possible. [This is done] in order for you to get rid of the influence of the source text. Sometimes, while you are translating, I get in a kind of limbo between the two languages and you cannot tell anymore in your own language whether that collocation is natural or not.

PT3: Usually I do a quick first draft, and then I review and I try to change a little bit. But then **sometime later**, maybe... I don’t know, **maybe a day later or some hours later**, you know, I get it back and I read it again, because I might come up with different versions. (...) I think [leaving the text aside for the next day] it’s a good thing to do. Cause, you know, you’re in a different frame of mind, and you have different things in your head and maybe you can come up with different things in a different state.

PT4: Well, perhaps if I were to revise this text another time, then I would forget the original. But normally not immediately after finishing. (...) if I have time I prefer to do it **the next day**, because then I am not so involved, you see. I have already rested, so... I

don't know... when you are too much involved, then there are things you cannot see anymore.

Researcher: Involved with the original text?

PT4: Yes, with the original, with the translation, etc. So, that's why I prefer to do it--when I have time, of course, because they normally want the translation for yesterday--but when I have time I try to do my last revision **the next morning**, after having slept, and rested, and forgotten all the trouble I had.

These remarks seem to go along the lines of Lorenzo's (2003) claims that revision should be treated as an entirely separate phase of the translation process. She believes that NTs should learn to take over the position of receptors of their own texts and treat them as if written by someone else. The author argues that "this can be done by, among other things, postponing the revision phase, separating it from the process itself, and creating thereby the critical distancing which seems to favour revision as an independent activity"⁵⁷ (Lorenzo, 2003, pp. 159-160; my translation). Most of Lorenzo's subjects did not know how to handle the revision phase adequately, having in fact turned their translations qualitatively poorer after undertaking revision. One of the reasons for this outcome might as well be for the NTs' inability of distancing themselves from the text.

A second feature regarding revision strategies among PTs involves their delivering the TT for someone else to read and comment upon his/her impressions on the text the PTs have worked on:

PT1: I would wait till the following day to revise, but if I could, I would wait *and* give it to **someone else, a Portuguese speaker**, to read. Even if I couldn't wait, I would still give it to the person... for checking.

Researcher: Who do you normally give it to read?

PT1: Either to **my boyfriend**, or **my mum, whoever is near me**. Someone I trust and **someone I know has good Portuguese knowledge**, and someone who would correct me in a nice way.

⁵⁷ Esto puede hacerse, entre otras cosas, posponiendo la fase de revisión, separándola del propio proceso, y creando así la distancia crítica que parece favorecer la revisión como actividad independiente.

PT2: Sometimes I even give it to **people**, let's say **my father, my mother, my brother, whoever is close to me, and has certain level of culture**, to read that and tell me if that sounds Portuguese or not, because there are moments when I'm not able to tell.

It is interesting to notice that the comments above were spontaneously made by almost all the PTs, but not by *any* of the NTs. One might conclude, then, that the revision strategies described above have been developed and successfully applied out of the PTs' own working experience; a feature not yet incorporated by the NTs due to their lack of practice.

I have also analysed how long both groups spent throughout the revision process. In order to come up with the amount of time spent on revision, I noted down the time at which the last keystroke happened (after orientation and drafting) and deduced that from the total translation time for each participant. Table 9 below displays the results found:

NT / PT	TRANSLATION TIME (TT)	ORIENTATION & DRAFTING TIMES (OT/DT)	REVISION TIME (TT – OT/DT)
NT1	1 hr 55' 09''	1 hr 38' 42''	16' 27''
NT2	1 hr 01' 05''	51' 49''	9' 16''
NT3	1 hr 43' 02''	27' 11''	1 hr 15' 51''
NT4	2 hr 19' 28''	2 hr 04' 00''	15' 28''
NT5	2 hr 07' 33''	1 hr 44' 11''	23' 22''
AVERAGE TIME NTs	1 hr 49' 15''	1 hr 21' 11''	28' 05''
PT1	50' 29''	39' 54''	10' 35''
PT2	1 hr 15' 43''	1 hr 06' 09''	09' 34''
PT3	36' 46''	32' 28''	04' 18''
PT4	1 hr 22' 17''	27' 02''	55' 15''
PT6	59' 15''	35' 16''	23' 59''
AVERAGE TIME PTs	1 hr 00' 54''	40' 10''	20' 44''

Table 9: Participants' Translation, Orientation/Drafting and Revision Times

I am not going to discuss the results from the column related to Orientation/Drafting Times here, as they have already been analysed separately. As far

as the Revision Time is concerned, Table 9 indicates that the PTs have devoted, in average and absolute terms, 20' 44'' to revise their work, whereas the NTs used 28' 05''. The difference becomes more relevant in relative terms, with PTs devoting 34.05% of the total translation time to revision in comparison with only 25.71% as an average among the NTs group. The block graphs below show the variation between the drafting time and revision time, for both groups:

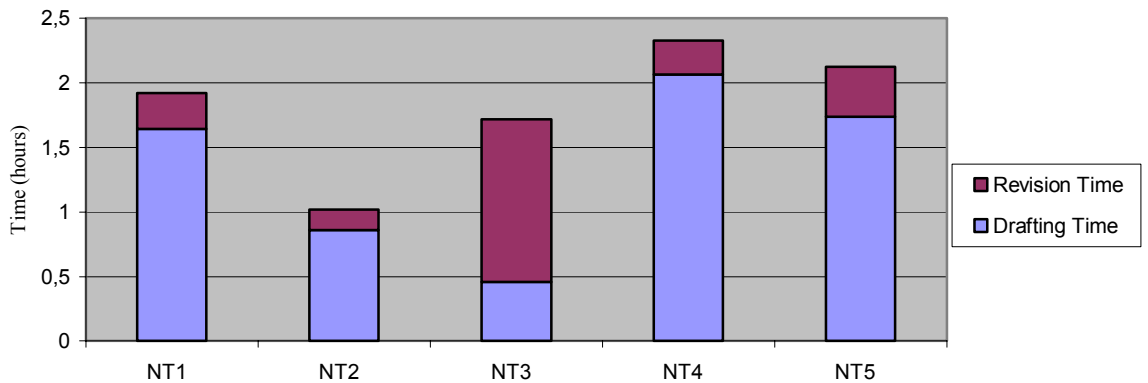


Figure 8: Ratio of Drafting Time to Revision Time (NTs)

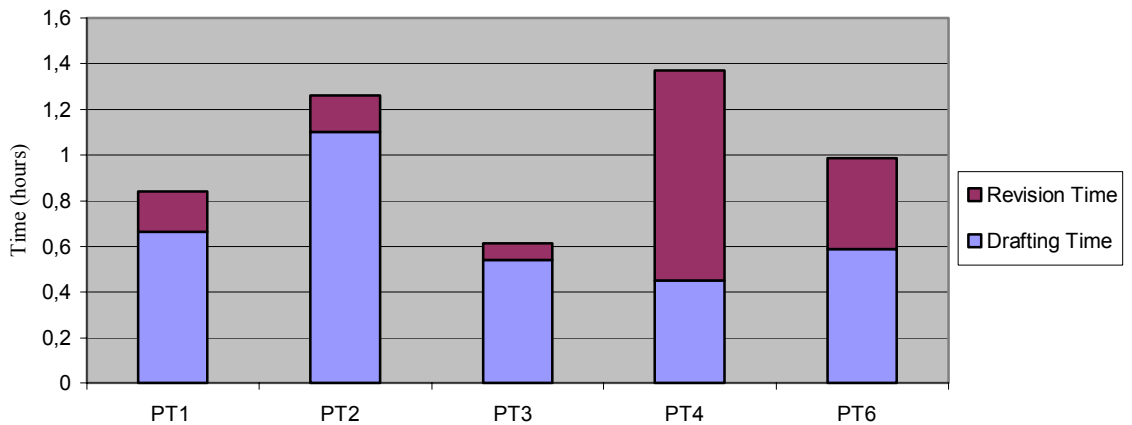


Figure 9: Ratio of Drafting Time to Revision Time (PTs)

As the graphs show, with the exception of NT3, all NTs devoted considerable more time to the drafting phase. Similarly, except for PT4, all PTs have likewise

devoted more time to the drafting phase. The verbalisation below explains why PT4 differed from the group and spent a much longer time in the revision phase:

Researcher: Is it a common practice... you always write the text in a more literal way, leaving the words you don't know in brackets and then you go back, looking up the words in the dictionary?

PT4: Yes. And making the necessary changes, and adaptations and [thinking] “well, this word here is not necessary; this is going to be repeated; let's see if...” [This is] basically what I do.

Still with reference to the average of both groups, in relative terms the PTs used more of their time revising their work than the NTs did (34.05% for PTs against 25.71% for NTs). The results have therefore shown that the PTs have allocated more of their effort to the revision phase. The NTs, on the other hand, have in general allocated more of their effort to the drafting phase.

4.2.4 THE COGNITIVE RHYTHMS OF THE NTs AND PTs

The results obtained regarding the orientation, drafting and revision patterns of NTs and PTs in this study, have provided us with enough data to map out the cognitive rhythms of both groups. Cognitive rhythm refers how the different phases known as orientation, drafting and revision are distributed in relation to time spent in the translation process. By identifying and comparing the variations in the cognitive rhythms of both groups, we can picture how NTs and PTs differed in terms of allocation of their cognitive effort upon the construction of the TT:

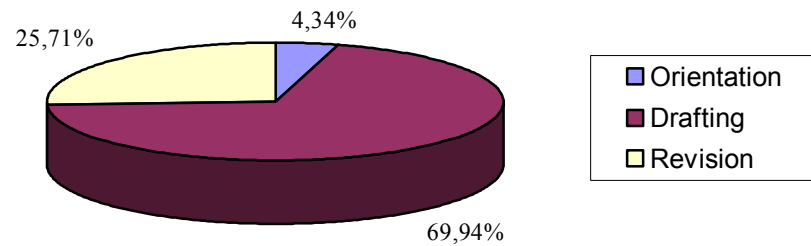


Figure 10: Mean Distribution of the Cognitive Rhythm of NTs

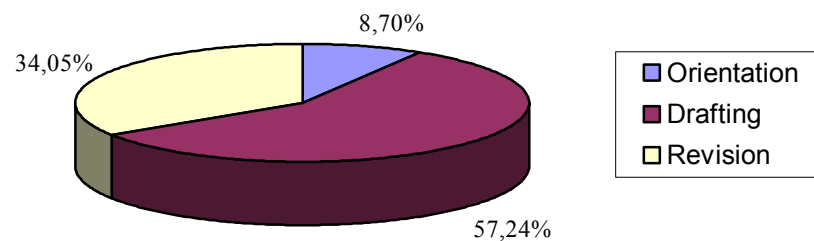


Figure 11: Mean Distribution of the Cognitive Rhythm of PTs

The pie charts above indicate that in absolute terms, both groups have allocated more effort to the drafting phase, followed by the revision phase and then, the orientation phase. In relative terms, however, the NTs appear to have allocated more effort to the drafting phase than the PTs did. The PTs, on the other hand, appear to have allocated significantly more effort to the orientation and revision phases than the NTs did. This indicates that the PTs, have, in relative terms, devoted more time to reflection and making corrections.

Although the results obtained in this study differ in percentage terms from the mean distribution of the cognitive rhythm of PTs and NTs by Jakobsen (2002)⁵⁸, they

⁵⁸ See chapter 2, section 2.5 for details.

do corroborate Jakobsen's findings in the sense that in both studies the NTs have allocated more time to the drafting phase of the text only.

4.2.5 MICRO vs MACRO TEXTUAL AWARENESS FEATURES

One of the features I have set out to investigate was whether or not NTs and PTs would differ with regards to how they allocate their cognitive effort during the construction of the TT. I had hypothesised that NTs would concentrate on the micro units of the text, while the PTs would concentrate their effort on the macro units of the text. This assumption was driven by the belief that PTs would take into account certain aspects supposedly not noticeable by NTs for their lack of experience. These macro textual aspects would include (i) the awareness of target text readership, (ii) use of the brief provided and (iii) the search for parallel texts so as to help with contextualisation. The micro aspects would refer to concern with the translation rendering of individual words or group of words, which can be evidenced, for example, via dictionary look-ups.

4.2.5.1 MICRO TEXTUAL FEATURES

As far as micro textual awareness is concerned, the protocols analysed have revealed translators that are equally preoccupied with the word level of the text. Here are some comments made during the orientation phase:

NT1: I started reading (...) and see a lot of kinds of **difficult words**.

PT1: First of all I read the whole text in the hard copy, and then I **looked for words** in the dictionary. The words that were not familiar to me. Actually, **new words**.

PT2: [I found it] useful to read it through so I could already spot some of the possible problems: **words and expressions**.

As the samples above indicate, both PTs and NTs might be equally preoccupied with the word level during the orientation phase. The same pattern could be verified during the drafting phase of the text. Here are some samples:

NT1: I just try to find the better way to put this in Portuguese (...) *praga* ou *extermínio*, you know. I just tried to make **the correct word**.

NT2: I were thinking [sic] about **the word** *derregulated*.

NT3: I didn't know the meaning of the **word** [pail].

NT4: I didn't know if I was supposed to write **the word** *balde*. (...) I also thought about **the word** *superior*.

NT5: I didn't find **the word** *pinta*.

PT1: I had to think of the [**word**] *Marketing*. (...) then I thought... **I split the three words**. Ok. *Milk, Marketing*. I left the *Board* out. Ok. *Milk Marketing* means *Mercado do Leite*.

PT2: Yeah, this would be ok, but still I spent some time thinking on the **collocation**...

PT3 I guess I write it and then I take a second look at it, and then I see if something should be changed, or **some word**... I tie around **some of the words**.... Just **collocation**.

PT4: Because of **the word** here... *horse-drawn float*. I was concerned about **the word** *float*

PT5: Well, I was trying to choose the best **verb form** in Portuguese for it, like, I was in doubt about *vêm* or *têm*..

PT6: And I was not satisfied with **the word** *introduzindo*. I changed it quite a few times because was not really satisfied with that.

Another evidence of micro textual awareness is provided by the amount of dictionary consultations, which, apparently, did not vary significantly among the subjects. I did not control how many times the subjects resorted to dictionaries, but their verbalisations reveal that none of the groups stands out in that respect. In other words, no subject has called my attention for having made more use of the dictionary in any of the groups. As seen in the samples below, all subjects verbalise having resorted to dictionaries:

NT1: So when **I looked up at the dictionary** *environmentally*, I saw something like *meio ambiente... er... melhor meio ambiente para algo*. So I decided to put *refrigerator*.

NT2: I had seen these words, but I didn't remember. Then **I looked up at the dictionary**.

NT3: **I couldn't find in any of the dictionaries**. I tried, but I couldn't.

NT4: When **I saw in the dictionary**, I saw the meaning was exactly the... not the same as I thought, so I had to stop and look for the meaning of these words.

NT5: Yes [**I looked it up**]. Just to confirm.

PT1: Yes. **I had to look for the word** actually (...) I knew *herds*, from *elephant herds*. But then... So **I looked in the dictionary**.

PT2: I think *habilidades* in this case, in Portuguese, would be kind of artificial so **I looked up** other words for *skills in the dictionary*, and then there was *perícia*, which was the one I chose later.

PT3: I stopped here because **I checked a word in the dictionary**.

PT4: I left as they were, in quotes, and then **I looked them up in the dictionary**.

PT5: Oh, yeah. I had a good hint about what I meant, but I wanted to be sure, so **I checked the dictionary**.

PT6: And then I had a problem with this expression *low down*. And then I had to stop again **to look it up in a dictionary**.

Also during the revision phase, both groups of translators appear to have taken the micro level of the text into consideration. Apart from one subject (NT4), none of the translators have called my attention for having expressed more or less concern regarding micro textual awareness during the revision phase. As seen in the samples below, all translators indicate awareness of micro textual features in the revision phase:

NT1: I started to review my text to see mistakes, **problems about words**, to see the better way to put some kind of expression, some kind of meaning... to see again, everything. **To discover a wrong [word]** or something that passed me [unnoticed]. Something like that.

NT2: I go to the beginning of the text and I start to read. Then **I change some words**.

NT3: I put question marks just after **every word** that I wasn't sure about the meaning, or if I wasn't sure about **the construction**, or if (...) **it** sounded translated or anything.

NT4: I started revising. I read it again, and then I started looking for some Portuguese mistakes, or even a translation that was not so good. And then I decided **changing some words**, maybe **omitting some words**, you know.

NT5: I was reviewing... **changing words**... er... **wrong words** or just **synonyms**.

PT2: I was (...) proof reading it to see if it sounded natural, if there were **print mistakes** or **punctuation, alterations**. While reading I decided to change the title because I thought that (...) only *além* does not convey the same meaning as *Beyond*.

PT3: Well, I simply read the text again (...) and I checked for **some words** that could be changed.

PT4: Then I went to look up *low down, cowshed...* and make the necessary changes, so as to make the text smooth

PT5: Oh, then I read the extract (...) to see if there is any **typing mistakes** or any **repeated words** or anything like that. And also if it goes smoothly in Portuguese.

PT6: [In the first revision phase] I compare the Portuguese version with the English version, (...) to make sure (...) that I haven't forgotten anything, to **change some expressions** that I didn't like when I originally translated the text...

PT1 did not mention anything about going into the micro units of texts during revision, although she does mention comparing both texts and making changes, what one might interpret as comparisons and changes made within the micro level of the text:

PT1: I read the Portuguese [text] first to see if it made sense just in Portuguese, without relating to the English one. Then I went back to English to see if it was really what it meant. Then I read again [in Portuguese] **and I made a few changes**, I believe.

As I mentioned previously, only one subject has called my attention for the fact that she appears to favour the micro in detriment to the macro level of the text, at least during the revision phase:

NT4: If [during the revision phase] you read just the Portuguese translation, maybe you're going to change (...) the **order of the words**. (...) you have to try to keep it da maneira mais fiel [as close as possible to the source text]. And if you read just in Portuguese, maybe you feel like changing and **you're going to change a sentence**, (...) **the order**... I don't know.

I was unable, however, to find the same pattern among the other NTs' verbalisations. Therefore, no generalisations can be made in that respect. As evidenced by the verbal protocols analysed in this sub-section, in terms of awareness of **micro textual features**, no great difference could be observed between NTs and PTs in the

orientation and revision phases, and neither with regards to the number of dictionary consultations. It appears as it stands that both NTs and PTs seem to consider the awareness of micro textual features as a relevant and essential factor to be taken into account when translating. That is possibly the reason why both groups have concentrated rather than neglected their attention to the micro level of the text.

4.2.5.2 MACRO TEXTUAL FEATURES

In terms of awareness of macro textual features, one of the things I was expecting to find was that the PTs would have used the internet to search for parallel texts more often than the NTs would do. The verbal protocols have revealed, however, that the PTs were far more reluctant to use the internet at all than the NTs:

Researcher: Did you use the internet to check anything while you were translating?

NT1: Yes. Just the *Milk Marketing Board*.

NT2: Google [www.google.com].

NT3: [For] some of the words I went to the dictionaries and some others, as *low down*, I went to the internet, to google.

NT4: I tried to read a different text when I was looking for the word *Milk Marketing Board*. So, I read a text, but I saw that I wouldn't find the meaning, because the text was in Portuguese, and the word *Milk Marketing Board* was written in English, but in italics.

NT5: I stopped to think about... er.... electric [milk] float. And then I used the google to search.

PT1: No.

PT2: Not this time. I usually use them as... er... they are usually my last option because I prefer to leaf through books... dictionaries.

PT3: Yeah, once [A parallel text, to check milk float].

PT4: No, no, no.

PT6: I checked twice two expressions on the internet, but I don't remember which words they were...

The experiment with the NTs was carried out at the university language lab where they regularly have their translation practical, which includes the use of the internet. The PTs, on the other hand, have been working professionally for many years but might not have yet incorporated the use of the internet--something considerably recent--to their daily routine. I believe this might explain why the PTs, in general, felt more comfortable to flick through books rather than to search on the net to accomplish the task.

As for the concern with the target readership, another feature of macro textual awareness, only two of the NTs seemed to have taken this into consideration:

NT2: [During the revision phase] I go to the beginning of the text and I start to read. Then I change some words to be clear for... like, **who will read...** er... it makes easy. (...) [I read the text] just in Portuguese, because **I think in the person who will read this** in Portuguese. Just for it to be clear for **this person**.

NT2: [I want to make it simpler] **to people** understand the text better.

NT2: Because **the person who is reading** the text will understand that it's *milk farm*, when they read this.

NT3: [I was] just thinking about the text **as my readers would read** (...) This was my concern. So that's why I was thinking so much about the text.

All of the PTs, on the other hand, have mentioned being concerned with their readers during the construction of the TT:

PT1: **I'm thinking of a person reading**, how it would sound (...) to any other person reading the text. A **Portuguese reader**.

PT2: I had two options [for float]: *carroças* and *carros*, but I don't think that a *carro* pulled by horses is something very... if **the reader... native reader in Portuguese** would read he would find it strange.

PT3: I thought it would be (...) more interesting to have *práticos* there, [more interesting] for the reading, no, **for the readers**, actually. Because (...) you know, **there is a better rhythm for the reading**.

PT4: (...) so as to make the text smooth and... easy to read... **reader-friendly**, right?

PT5: Then I thought that, in the context, it's enough to write *fazenda*, because **the reader** knows we're talking only about milk.

PT5: It's better to put it in a more fluent text, so I decided that *litros*... [it] is not the same as *pint*, but...**readers** would remember the time they would receive the same... er... as in... in Britain... their milk at home in the morning, and they would come in glass litres.

PT5: I thought for a moment that it was a kind of a difficult word for that kind of **reader**, or for **the reader of that kind of magazine**, you know, but then I decided against it and...

PT5: It's always impossible to translate everything from one language to another. You will always miss something. You will always have to give up something in order either to make it more understandable for your **reader**, or to obey to your style, or to obey to your culture, so every moment I have to decide what is going to be left out, what is going to be sacrificed, and what will have to be kept in order to respect the text, the original text.

PT6: [Explaining why she would normally do the revision the next day] Then I can forget everything that I wrote and start as if from scratch, as if I were reading a text originally written in Portuguese, so that I can see how this text would sound to the **native speaker of Portuguese**.

PT6: I considered that it was not important for **the reader** to know that it was half a litre or whatever. So... I chose to ignore the measure.

PT6: I thought that the collocation *habilidades laticínias* sounded... could sound a little awkward to **an average reader**... **an average Brazilian reader**.

PT6: *Bulk* is usually translated as *a granel* (...) but I thought, "Should I use *a granel*? Would [an] **average reader** understand that?"

The verbal protocols analysed have evidenced, therefore, that the PTs appear to have been more concerned with the target readership throughout the translation task. In other words, the PTs are apparently more aware of the impact of their translations upon the receptor of that product, i.e. the reader, and also of how the readers will respond to their translations. This will include the concern with enhancing the reader's comprehension of the text, which, in turn, addresses to issues of contextualisation and target culture reception of the foreign text; but also refers to giving a better flow and rhythm for the reading of the TT. Taking from the PTs' awareness of target readership, it is raised the expectation that the translation renderings provided by the PTs will be more reader-drawn than those of the NTs, and therefore, less erratic.

The last point analysed regarding the macro level of the text refers to the translator's awareness of the brief provided prior to the commencement of the task. The

brief stated that they should translate the article as if for publication in a similar Brazilian magazine or journal, bearing in mind its attractiveness for consumers at retail outlets. Only one of the NTs appears to have taken the brief provided into consideration while carrying out the translation task:

NT4: I didn't how could I translate this part (...) because I thought (...) I would be writing for a **Brazilian magazine**. So, if I had translated *nossos conquistadores*, I would say *the Brazilian, né? Os conquistadores brasileiros*. So, that's why I decided to write *os conquistadores ingleses... transformaram suas raças de gado*. So... er... but then, when I finished translating the text, I came back to the second paragraph (...) and I decided to cross out the word *ingleses* and I translated the way it's written in the text. And I translated... er... *nossos conquistadores trouxeram*, because I perceived that I was... It was a translation, and I was not the person who was writing for **the magazine**. So, (...) this was going... er... [to be] the... the job for the person who was going to edit **the magazine**, you know. (...) **I came back to the instruction** (...) and then I saw that (...) this text is going to be translated to a similar **Brazilian magazine**... is going to be **published in a similar Brazilian magazine or journal**. So, that's the moment that I thought "No, I'm wrong. I have to translate the way it's written. Not the way it's going to be published."

Although her comments about the brief are at times confusing and somewhat vague, NT4 is the only subject who has referred to it as a factor which has influenced her decisions. Regardless of whether or not such influence has resulted in successful decisions, the subject's awareness of the brief provided existed. Among the PTs, a larger number of participants seem to have taken the translation brief into account. Here are the comments made by PT4:

PT4: I remember that in your text [the translation brief] you said that **the text was supposed to be published in a magazine** such as the one... what is it? Your Choice. Then I thought, "well, **it has to have a commercial appealing**"[sic], so I think the word *fresquinho* is more "simpática", more attractive, you see.

Another subject mentioned the brief several times during the recording of his protocols:

PT5: Oh, yeah... because... er... in the instructions I was told that I should try to put into Portuguese the text **as [if] it were for a Brazilian magazine**. So I first used the verb *levaram*, because we're in Brazil and we're talking about Britain. But then I decided that it wouldn't work because the whole text was about what happened in Britain. So I went back to that part already translated and changed it...as, you know, to be in accordance to that.

PT5: I could [have] resort[ed] to translators notes or something like that, but that's not very nice in a **magazine**.

PT5: Because **that kind of magazine** is not so concerned with precise information. It's more for leisure... so a general idea of what is going on is what is expected from that kind of text, or from **that kind of magazine**. So, if it were a more academic text, I would probably put it in Portuguese as I did. Maybe I would take some more time to make the translation of that organisation and then I would add a translator's note with the original and some explanation about it.

Although the verbal protocols from PT6 do not reveal anything about her concern with the translation brief provided, she does show awareness of the brief given when she fills in the Profile Questionnaire, given out just after the translation task had been completed. This is what she writes in answer to question 07, which asks for comments and/or suggestions on the experiment:

PT6: I would suggest that terms **as if for publication** were taken out of the **instruction sheet** or maybe substituted by "a final version". If I were to publish the text I would never translate and revise it on the same day.

The verbal protocols analysed seem to confirm, therefore, that PTs tend to be guided by a translation brief more often than NTs do. In summary to what has been presented in this sub-section, three aspects were taken into account to investigate the subjects' perception of the text as far as awareness of **macro textual features** is concerned:

i) *Parallel texts*: The PTs were far more reluctant to use the internet to search for parallel texts than the NTs. Therefore, the NTs apparently made more parallel texts reading than the PTs. This may have to do with the subject group under scrutiny. Thus, due to the small number of subjects used in this research, no claims of generalisation are made throughout.

ii) *Target readership*: The PTs appear to have been more concerned with the target readership throughout the translation task.

iii) *Translation Brief*: The verbal protocols analysed seem to confirm that PTs tend to be guided by a translation brief more often than the NTs do.

Thus, it can be argued that in general terms, the PTs in this study have paid greater attention to the macro level of the text than the NTs did. Since no great differentiation was found among both groups in terms of micro textual awareness, it appears that the differentiation found in terms of attention to the macro level of the text is of paramount importance to guide the construction of the TT. The appropriate reference to parallel texts and to the translation brief provided, as well as awareness of target readership are with no doubt very important factors to contribute to the successful achievement of the translation task. One might expect, therefore, that the successful management of the micro and macro elements of the text will lead to successful translations. Since awareness of both micro and macro textual elements was found among the PTs group, it is expected that this group will come up with more successful re-textualisations of the ST than the NTs, who supposedly concentrated more on the micro level of the text. This supposition will be verified and evidence sought through the analysis of the TTs, using the concept of cohesion as provided by Functional Grammar.

4.3 FUNCTIONAL GRAMMAR

According to FG, the features which combine to make up the textual component in the English grammar are the *structural* and the *cohesive* ones. The former refers to the thematic and information structures of the text, and will not be dealt with in this study. The latter encompasses the distribution of certain cohesive devices throughout the text: lexical cohesion, reference words, ellipsis, connectives, and substitutes. Such cohesive devices have served as the main tools for this analysis.

Whilst scrutinising the ST, twenty-three TUs have been selected. They form a lexical chain related to *milk* and construct an intervening discourse (i.e., that comes between the main discourse) throughout the text. The NTs and PTs' renderings for the TUs selected are presented in Tables 10 and 11 below. Some of the TUs appear more than once in the ST (e.g., TU 01). In those cases, the Tables will have a number indicating the translation for each of the instances occurred. For example, TU 01 (*milk*) appears five times in the ST. NT1 translated *milk* as *leite* when it appeared for the first, second and third times; and as *o leite* when it appeared for the fourth and fifth times. Therefore, Table 10 displays his translations for *milk* in this way: 1-3. *leite*; 4-5. *o leite*.

Table 10: NTs' Translation Renderings

TUs	NT1	NT2	NT3	NT4	Artigo IV. NT5
01. Milk	1-3. leite; 4-5. o leite	1-3. leite; 4-5. o leite	1. N/T; 2 -3. leite; 4-5. o leite	1-3. leite; 4-5. o leite	1. leite; 2. [do] leite; 3. leite; 4-5. o leite
02. Your milk	seu leite	o seu leite	o seu leite	nosso leite	o seu leite
03. Their milk	seu leite	o leite	Leite	o leite	o leite
04. Sold it	vendiam [θ]*	vendiam [θ]	vendiam [θ]	o [vendiam]	o [vendiam]
05. Milk and cream	leite e nata	leite e nata	leite e nata	leite e nata	leite e creme
06. Milk industry	indústria leiteira	indústria de laticínios	indústria leiteira	indústria do leite	industria de leite
07. Cow's milk	leite de vaca	leite de vaca	leite de vaca	leite de vaca	o leite das vacas
08. Milk Marque	Leiteiros	Milk Marque	Milk Marque	"Milk Marque"	Milk Marque
09. Milk Marketing Board	1-2. cooperativa	1-2. Milk Marketing Board	1-2. Milk Marketing Board	1-2. "Milk Marketing Board"	1-2. "Milk Marketing Board"
10. Milkmaids	Leiteiros	ordenhadeiras	empregadas das leiterias	ordenhadoras	os encarregados da ordenha
11. Milkman	Leiteiro	leiteiro	leiteiro	leiteiro	leiteiro
12. Morning pinta	leite diariamente	[a entrega] diária do leite	litro de leite	leite matinal	o leite
13. Daily pintas	[recebia] diariamente seu litro leite	o leite	litros de leite	leite diariamente	leite diariamente
14. The pinta habit	esse hábito de beber leite	beber leite de vaca	hábito de beber leite	o hábito de tirar leite da vaca.	o hábito de tomar leite
15. Cheese lovers	Amantes do queijo	apaixonados por queijo	amantes dos queijos	apreciadores de queijo	amantes de queijo
16. Dairy	Laticínio	indústria de laticínios	leiteria	fábrica	industrias
17. Dairies	os laticínios	os laticínios	as leiterias	fábricas de laticínio	as produtoras de laticínio
18. Individual dairies	laticínios particulares	laticínios individuais	leiterias individuais	fábricas de laticínio particulares	industrias particulares
19. Dairy cows	vacas leiteiras	as vacas de leite	vacas leiteiras	vacas leiteiras	industrias de laticínio
20. Dairy skills	habilidades com laticínios	habilidades com laticínios	habilidades no fabrico de laticínios	habilidades com o leite	habilidades leiteiras

TUs	NT1	NT2	NT3	Artigo V.	Artigo VI.	NT5
21. Dairy Farms	1-2. fazendas leiteiras	1-2. fazendas [θ]*	1-2. fazendas leiteiras	1. fazendas de gado leiteiro; 2. fazendas [θ]	1-2. fazendas leiteiras	
22. [Handcart or horse-drawn] float	carrinho de mão ou em uma carroça [θ]	carrinho de mão ou à cavalo	carrinho ou carroça puxada por cavalos	carrinho de mão ou [com um] veículo puxado à cavalo	carrinho de mão ou carroça [θ]	
23. [environmentally friendly] electric milk floats	um sistema ideal de refrigeração elétrica	"carros de entrega"	carro elétrico de leite ecologicamente corretos.	veículo elétrico, sem teto e sem laterais conveniente para entrega domiciliar	simpáticos "electric milk floats" (veículos movidos a energia elétrica)	

* [θ]: Not Translated.

Table 11: PTs' Translation Renderings

TUs	PT1	PT2	PT3	PT4	PT5	PT6
01. Milk	1-3. leite; 4-5. o leite	1. o [consumem]; 2. o leite; 3. leite; 4-5. o leite	1. leite; 2. o leite; 3. leite; 4. leite fresco; 5. o leite	1. leite; 2. o leite; 3. leite; 4-5. o leite	1. leite; 2. leite; 3. leite; 4. o leite; 5. o leite	1. essa bebida; 2. o leite; 3. leite; 4-5 o leite
02. Your milk	o leite	o leite	o leite	a ordenha [added info: para garantir o <i>seu leite</i>]	o seu leite	seu leite
03. Their milk	seu leite	o leite	leite	o leite	seu leite	seu leite
04. [Sold] it	[vendiam] o leite	o [vendiam]	Vendido [θ]*	o [vendiam]	[vendê-] lo	o [vendiam]
05. Milk and cream	leite e nata	leite e nata	leite e creme	leite e derivados	leite e nata	leite e nata
06. Milk industry	indústria do leite	indústria de laticínios	[θ]	industria leiteira	indústria do leite	essa indústria
07. Cow's milk	leite de vaca	leite de vaca	leite de vaca	o leite da vaca	leite de vaca	leite de vaca
08. Milk Marque	Milk Marque	"Milk Marque"	cooperativas	Milk Marque	Milk Marque	Milk Marque
09. Milk Marketing Board	1-2. Conselho do Mercado do Leite	1-2. "Milk Marketing Board"	1. Associação dos Comerciantes de Leite; 2. Associação [θ]	1-2. "Milk Marketing Board"	1-2. Comissão de Comercialização do Leite	1-2. Conselho de Comercialização do Leite
10. Milkmaids	as ordenhadoras	moças [θ]	[θ]	as mulheres que faziam a ordenha	as ordenhadeiras	as ordenhadoras

TUs	PT1	PT2	PT3	PT4	PT5	PT6
11. Milkman	leiteiro	entregadores	leiteiro	leiteiro	leiteiro	leiteiro
12. Morning pinta	dose diária de leite	o leite matinal	o leite nosso de cada dia	leite matinal	litro de leite	leite pela manhã
13. Daily pintas	dose diária de leite	o leite, diariamente	todos os dias [recebiam seu] leite	leite diário	litros de leite diários	porção diária de leite
14. The pinta habit	o hábito da dose de leite	o hábito de tomar leite	o hábito de beber leite diariamente	o hábito do meio litro	o hábito de beber leite	nosso hábito de tomar leite
15. Cheese lovers	apreciadores de queijo	apreciadores de queijo	apaixonados por queijos	amantes do queijo	apreciadores de queijo	amantes do queijo
16. Dairy	fábrica de laticínio	usina de laticínios	empresa de laticínios	as leiterias	letteria	indústria de laticínios
17. Dairies	as leiterias	as indústrias de laticínios	empresas de laticínios	os laticínios	as leiterias	a indústria de laticínios
18. Individual dairies	leiteiras individuais	usinas de laticínios individuais	empresas independentes	leiterias autônomas	fazendas individuais	indústrias individuais de laticínios
19. Dairy cows	vacas leiteiras	as vacas	as vacas leiteiras	vacas leiteiras	as vacas leiteiras	o gado leiteiro
20. Dairy skills	habilidades leiteiras	perícia em laticínios	técnicas de produção de derivados do leite	conhecimentos sobre o leite	habilidades no manejo do leite	habilidades para produzir laticínios
21. Dairy Farms	1. fazendas [θ]; 2. fazendas de laticínios	1-2. fazendas [θ]	1-2. fazendas de gado	1. fazendas [θ]; 2. fazendas leiteiras	1-2. fazendas [θ]	1. fazendas de laticínios; 2. fazendas leiteiras.
22. [Handcart or horse-drawn] float	carrinhos de mão ou em carroças puxadas a cavalo	carrinhos de mão ou carroças puxadas por cavalos.	carrinhos de mão ou em carrinhos puxados por cavalos	carro de mão ou carroça [θ]	carrinho de mão ou numa carroça puxada a cavalo	carrinho de mão ou carroça puxada por cavalos
23. [environmentally friendly] electric milk floats	carros elétricos que não agridem o meio-ambiente para a entrega do leite	carros elétricos ecologicamente corretos	(i) carrinhos de leite elétricos [added info] and (ii) carrinhos elétricos que além de práticos são inofensivos ao meio ambiente.	as bombas de leite elétricas e ecológicas	carro elétrico, ecologicamente correto	carrinhos de propulsão elétrica que não agridem o meio ambiente

[θ]: Not translated.

4.3.1 LEXICAL COHESION

4.3.1.1 REITERATION AND COLLOCATION

Three main collocational chains that are clearly interwoven can be observed in the text: their nodes are *dairy*, *milk* and *pinta*. According to Halliday's FG, lexical cohesion is divided into the two main categories of *reiteration* and *collocation*. The former involves the repetition of lexical items, as with *dairy*, *milk* and *pinta*. The latter is related to a pair of lexical items that are associated with each other and tend to co-occur, as in *dairy cows*, *dairy farms* and *milk and cream*, for instance. The two main categories of reiteration and collocation can be broken down into other lexical cohesive devices, through the occurrence of word repetition, synonyms, superordinate generals, opposites, and related words throughout the text.

Sometimes the reiteration and collocation in the source language can be translated as non-collocations or even be omitted from the TT. As an example, let's take the translation of *milk industry* (TU 06), which has been translated as *indústria leiteira* (NT1, NT3, PT4), *indústria de laticínios* (NT2, PT2), *indústria do leite* (NT4, PT1, PT5), *indústria de leite* (NT5), *essa indústria* (PT6) and *not translated* (PT3). As can be seen, in order to convey the message, the translators have used different collocations in Portuguese, sometimes choosing not to use a collocation or even omitting the expression altogether. Quite often these shifts in the cohesive profile might occur either due to misinterpretation of the ST or by language constraints. Some examples are the translation renderings found for the following collocations: TU 05 (*milk and cream*) was rendered as *leite e creme* by two of the subjects (NT5 and PT3), which does not collocate in Portuguese. Other collocations, such as in TU 19 (*dairy cows*) that was translated as *indústrias de laticínio* (NT5), TU 20 (*dairy skills*) translated as *habilidades com o leite* (NT4) / *habilidades leiteiras* (NT5, PT1), and TU 21 (*dairy farms*)

translated as *fazendas leiteiras* (NT1, NT3, NT5, PT4, PT6) come to reinforce the problems with re-textualisation of collocations among NTs (which was more often found) and PTs, either because their renderings do not make sense or do not collocate in Portuguese. The choices made by the NTs to re-textualise the collocations in TUs 15 (cheese lovers) and 20 (dairy skills) might reflect their tendency to disregard some macro level features of the text. Most NTs chose to translate *lovers* (TU 15) directly as *amantes*, whereas most PTs tried to find alternative translations that would not carry a sexual connotation in Portuguese. Similarly, all the NTs translated *skills* (TU 20) straight away as *habilidades*, while some of the PTs have shown attempts to re-textualise it with renderings that could express skills in the sense of knowledge, such as *perícia* (PT2), *técnicas de produção* (PT3), *conhecimentos sobre* (PT4) or even *habilidades* itself, but used in conjunction with *no manejo* (PT5) or *para produzir* (PT6). What these choices might indicate is that the NTs were being guided by the word level of the text, whereas the PTs could have taken other aspects (above the word level) into account during the process.

As a general translational procedure, PTs have tended towards a recreation of collocational patterns in the target language--Portuguese--rather than towards a literal rendition of the lexical components of the nominal group.

As for reiteration, let's take the example of *milkmaids* (TU 10), which has been translated as *moças* (PT2), *leiteiros* (NT1), *empregadas das leiterias* (NT3), *ordenhadeiras* (NT2), *as ordenhadeiras* (PT5), *ordenhadoras* (NT4), *as ordenhadoras* (PT1, PT6), *encarregados da ordenha* (NT5), *as mulheres que faziam a ordenha* (PT4), and *not translated* (PT3). As the translations above indicate, in one instance a superordinate (*moças*) has replaced the given TU. Some other times translators have used totally different lexical choices to convey the meaning of *milkmaids*, quite often

changing its meaning (e.g., NT1 and NT5 changed it to the masculine) or disrupting the cohesive chain of the text. The major cause of the changes suffered by the TT in this respect might be due to the cultural specificity of some TUs:

PT3: I don't know if we have this word in Portuguese. What would you call it? The ladies that milk the cows?

Similar examples to the ones presented here can be seen in the renderings of the reiteration of the nodes *milk*, *pinta*, *dairy* and *float* (see tables 10 and 11 above for examples). Lexical repetition seems to be far more tolerated in English than in Portuguese, which can be perceived by the rendition of the lexical chain selected into Portuguese. If we take the example of *dairy* (TUs 16, 19, 20, 21), the lexical item is repeated five times throughout the text (sometimes as the component part of a collocation), but translated by the PTs and NTs in a variety of renderings. The numbers in parentheses show how many times each rendering occurred: *leiteira* (01); *leitaria* (02); *as leiterias* (01); *leiteiras* (10); *leiteiro* (01); *de gado leiteiro* (01); *de gado* (01); *laticínio* (01); *de laticínio* (02); *laticínios* (01); *de laticínios* (07); *em laticínios* (01); *com laticínios* (02); *derivados do leite* (01); *com o leite* (01); *o leite* (01); *do leite* (01); *de leite* (01); *fábrica* (01); *indústrias* (01); and not translated at all (06).

The transcriptions below refer to the subjects' concern with avoiding repetitions in the TT. Three PTs and only one NT mentioned this aspect in their verbalisations:

NT4: **I didn't want to repeat** *fábrica leiteira* or *fábrica de laticínio*, you know. Because **I had written before**. So, I don't think it would be good if I could write again this word. **It would be repeated so many times**.

PT2: **I had already used** *tomar* **somewhere before in the text**, so I decided to put *beber* **just to use a wider range of vocabulary**.

PT2: I could use *entregador de leite*, but I guess *leite* **had been mentioned before** and kind of close to this word as here: *recebiam o leite*.

PT4: [explaining why she came back and made changes in the text] **Not to be repetitive**.

PT4: [explaining why she wrote *gado* and then changed it for *rebanho*] **Not to be repetitive**, you see... *gado, gado, gado*...

PT5: Oh, then I read the extract in Portuguese (...) to see if there is any typing, **any repeated words** mistakes, or anything like that.

PT5: I decide to put just *carrinho* instead of *carrinho de leiteiro*, **not to repeat** *entregues por um leiteiro que vinha num carrinho de leiteiro*.

The inclusion of repeated units of information within the text is what Nida, back in 1964, referred to as redundancy (Shuttleworth & Cowie, 1999, p. 141), which can be phonetical, gramatical, collocational or lexical. Nida calculated that the level of redundancy in natural languages is of about 50%. However, Shuttleworth and Cowie (1999) remind us that such percentage appears to be much lower in the TTs, possibly because the translator will be concerned with increasing the implicit information contained in the ST so as not to overload the reader with information.

The subjects' concern with word repetition in the target language might have reflected upon their choices to use substitution and ellipsis while translating, as seen in section 4.3.2 below. The PTs made more use of substitution than the NTs did (five against two occurrences, respectively). The NTs, on the other hand, used ellipsis more often than the PTs in their translations (three against one, respectively). The translators concern with avoiding repetition will result in choices generating greater concentration of cohesive devices in the TTs, a fact already observed by Blum-Kulka (1986; as cited in Shuttleworth & Cowie, 1999, p. 55). This, in turn, will result in TTs longer than their originals. The Explication Hypothesis posed by Vinay and Darbelnet (1958, 1995; as cited in Shuttleworth & Cowie, 1999, p. 55) accounts for the phenomenon of TTs expansion due to the insertion of semantic redundancy not found in the ST. The Table below shows the length of the TTs produced by the NTs and PTs in this study:

NT / PT	TT (in words)
NT1	342
NT2	358
NT3	449
NT4	379
NT5	375
AVERAGE NTs	381
PT1	399
PT2	390
PT3	393
PT4	394
PT5	376
PT6	390
AVERAGE PTs	390

Table 12: Length of TTs (in words)

The TTs of the NTs had in average 381 words, whereas those of the PTs had in average 390 words. The figures shown in Table 10 show that all the subjects in this study produced TTs that were in absolute terms considerably longer than the ST, which had 339 words. An exception would be that of the TT of NT1, whose TT was just 03 words longer than the ST. This might mean that this subject followed a more literal re-textualisation of the cohesive chain of the ST.

According to Baker (1994, p. 206), “it is impossible to reproduce networks of lexical cohesion in a target text which are identical to those of the source text”, especially in cases such as the title of the ST in this study, or in the constituent *low down* just below the title, which are a play on idiom, significant shifts in the lexical chain do occur. What NTs, in special, apparently seem unaware of is that the random choice of renderings which do not contribute to recognisable lexical chains will intervene and misrepresent the meaning of the ST, as can be observed in the following examples taken from Tables 10 and 11, pp. 97-99. They are all examples of renditions

that due to the subjects' erratic choices would give rise to shifts in the cohesive pattern of the ST and hinder appropriate re-textualisation:

TU 05 (*Milk and cream*): see renditions of NT5 and PT3.

TU 08 (*Milk Marque*): see renditions of NT1 and PT3.

TU 09 (*Milk Marketing Board*): see renditions of all NTs, PT2, and PT4.

TU 10 (*Milkmaids*): see renditions of NT1 and NT5.

TU 14 (*The pinta habit*): see renditions of NT4 and PT4.

TU 16 (*Dairy*): see renditions of NT4 and NT5.

TU 18 (*Individual dairies*): see renditions of NT2, NT3, PT1, PT2, PT5, and PT6.

TU 19 (*Dairy cows*): see rendition of NT5.

TU 22 (*Hardcart or horse-drawn float*): see rendition of NT2.

TU 23 (*Environmentally-friendly electric milk floats*): see renditions of all NTs and PT4.

Taking the example of TU 09 (*Milk Marketing Board*), the re-textualisations failed to come up with an appropriate representation of the ST. While most PTs attempted to retrieve the meaning of *Milk Marketing Board* into Portuguese, all NTs simply resorted to a loan – inserting the ST TU in the TT. Again, what this might indicate is that the NTs have not always taken the macro level features of the text into consideration during their processes.

In general, what the different renderings of the TUs selected for this analysis indicate is that the reiterations and collocations of the ST were not always satisfactorily re-textualised into the target language, sometimes producing renditions that fail to comply with the cohesive profile of the ST. Some collocations have been rendered as non-collocations by NTs and PTs alike, either due to misinterpretation of the ST or language constraints. It has also been found that whereas the PTs have attempted to find alternative translations that could adapt into the target culture (e.g. TUs 09, 15 and 20),

the NTs normally translated directly into the target language or simply left the TU in the original form, paying little attention in terms of macro-textual awareness so as to provide adequate textualisation. Consequently, erratic choices that do not contribute to lexical chains that could truly represent that of the ST were more often found, as expected, among the NTs group. Thus, it seems that as far as reiteration and collocations are concerned, the cognitive effort applied by NTs and PTs in the sense of keeping the cohesive profile of the ST in their re-textualisations did not always impact positively on the final products.

4.3.2 REFERENCE WORDS, SUBSTITUTION, CONNECTIVES AND ELLIPSIS

Three reference words were selected for analysis: the pronouns “their”, “it” and “your”:

Nowadays many people still have **their** milk delivered (...)
 (...) and sold **it** door to door in large pails (...)
 (...) but **your** milk is still collected regularly (...)

Their (TU 03) and *it* (TU 04) are both anaphoric references to *the people's* and *the milk*, respectively. The reference word *their* was at times translated as *seu* (NT1, PT1, PT5, PT6), at times as the particle *o* (NT2, NT4, NT5, PT2, PT4), and sometimes omitted (NT3, PT3). The reference word *it* has been rendered explicitly as *o leite* (PT1), forming substitutes with the particles *o* (NT4, NT5, PT2, PT4, PT6) or *lo* (PT5), and sometimes just omitted, generating an ellipsis in the target language (NT1, NT2, NT3, PT3). The third reference word *your* is addressing the actual reader, and has been translated as *o* (PT1, PT2, PT3), *seu* (NT1, PT6), *o seu* (NT2, NT3, NT5, PT5), and *nosso* (NT4). PT4 has chosen a different rendition from all other subjects:

(PT4) (...) mas **a ordenha** ainda é feita regularmente **para garantir o seu leite**

As can be observed, *your* was translated as *o seu*, but placed by PT4 within the context of the framing information *para garantir o seu leite*, and another reference word *a ordenha*, was inserted into the text to replace the TU *your milk*. When inadequately conveyed into the target language, reference words can cause ambiguity and seriously affect the readability of the text. The choices made by the NTs and PTs brought such ambiguity into evidence in the translation of TU 02 (*your milk*), at which one cannot tell whose milk is still collected regularly, the reader's or the Milk Marketing Board's:

*ST: (...) the Milk Marketing Board has now gone, but **your milk** is still collected regularly.*

(NT1) a **cooperativa** está se acabando. Mas **seu leite** ainda é coletado regularmente.

(NT5) a "**Milk Marketing Board**" fechou, mas **o seu leite** ainda é coletado regularmente.

(PT5) a **Comissão de Comercialização do Leite** não existe mais, mas **o seu leite** ainda é tirado regularmente.

(PT6) não há mais o **Conselho de Comercialização do Leite**, porém **seu leite** ainda é coletado regularmente.

No substitutes were found among the selected TUs in the ST, however, apart from the examples shown in the first paragraph, substitutions could be found in at least two other instances in the TTs: in the first occurrence of the node *milk* (TU 01), PT6 translated it as *essa bebida*; and in the second appearance of *Milk Marketing Board* (TU 09), PT3 translated it as *a Associação*. As discussed in the section above, this choice might have been made so as to avoid repetition in the target language or as a form of explicitation, thus corroborating the Explicitation Hypothesis put forward.

As with substitutes, no connectives were found among the selected TUs in the ST, but some instances of connective use could be spotted in the translation of complex

nominal groups such as *environmentally friendly electric milk floats* (TU 23), rendered by the PTs below:

ST: (...) the environmentally-friendly electric milk floats, which still deliver your morning pinta today.

(PT1): **carros elétricos que não agridem o meio-ambiente** para a entrega do leite.

(PT3): Hoje, recebemos o leite nosso de cada dia em **carrinhos eletricos que além de praticos são inofensivos ao meio ambiente.**

(PT6): **carrinhos de propulsão elétrica que não agridem o meio ambiente**, os quais ainda hoje entregam seu leite pela manhã.

Since *environmentally-friendly* would be untranslatable into Portuguese as it stands in English, the PTs had to find alternative ways to explain its meaning in the target language. They did so by making use of connectives, a problem that could not be solved by the NTs (see their renditions in Table 10, pp. 97-98). PT3 has deliberately added the information *que além de praticos* to the TU because he wanted to give a better reading to the text; and in order to do so he resorted to the use of the connective *que além de* in Portuguese:

(PT3) Because I thought it would be (...) more interesting to have *práticos* there (...). Because it would be *carrinhos elétricos inofensivos ao meio ambiente*. Pum! No, *carrinhos elétricos que além de praticos...*, you know, there is a better rhythm for the reading.

His concern reflects once again a preoccupation with the macro level features of the text, a pattern that could not be evidenced in the NTs products. It seems that the PTs greater concern with the macro textual features of the text, discussed in the process-oriented analysis, can also be evidenced in the choices made to re-textualise the ST, that is, in their products.

No ellipsis were found among the TUs selected in the ST. However, in order to avoid the repetition of the node *milk* in Portuguese, ellipsis was used by some of the translators when re-textualising the extract below: (see TU 04 in Tables 10 and 11):

ST: (...) and sold it [the milk] door to door from large pails.

(NT1): (...) e **vendiam** de porta em porta em grandes baldes.

(NT2): (...) e **vendiam** de porta em porta em grandes baldes.

(NT3): (...) e **vendiam** de porta em porta em grandes baldes.

(PT3): (...) e **vendido** de porta em porta diretamente para o consumidor.

It cannot be argued that their choice of using ellipsis has negatively affected the lexical chain of the ST in the re-textualisation made by these subjects. The NTs above could have used a pronoun, like the others did, but they chose an ellipsis as they might have thought that it would be clear by the context that the actor of the given process had been mentioned a couple of words before the point at which the ellipsis occurred. It is interesting to notice that only one PT against three out of five NTs have used ellipsis in this segment of the text. PT3 had to choose to use an ellipsis here because he had also omitted the translation of *milkmaids*, who is the actor of the process, and changed the sentence from the active to the passive voice. In fact, PT3's translation behaviour appears to be guided by a process that differs from that of the other PTs. For instance, he was the only one to have problems with TU 05, and to have omitted TUs 06 and 10. Curiously enough, he was also the faster translator and the one who devoted less time to orientation and revision.

To sum up, apart from substitution and ellipsis, the different renderings of the TUs selected for this analysis indicate that as far as reference words and connectives are concerned, the choices made by PTs and NTs have sometimes produced lexical chains that would misrepresent the cohesive profile of the ST. Ambiguity could be observed in

some of the renditions using reference words in the TTs of both NTs and PTs. As for the use of connectives, at least in one case (TU 23) the PTs managed to solve a translation problem by resorting to connective use, while none of the NTs could solve the same problem, and produced renditions that were totally misrepresentative of that of the ST. This was probably because the NTs were too wrapped up with producing the translation of each lexical item of the given TU, thereby ignoring the macro-textual processing they should be taking into consideration to unravel the meaning of the TU. Thus, it could be argued that the distribution of the cohesive devices of the lexical chain selected has produced enough evidence to corroborate the assumption that the NTs in this study have focused more of their effort in the micro level features of the text, and that the cognitive effort applied by NTs and PTs upon the construction of the TTs did not always reflect positively upon their final products. However, it should be brought into light that the problems found among the PTs were clearly distinct from those of the NTs group. As discussed in this section, the choices made by the PTs did present some problems in terms of the re-textualisation of the ST. However, the NTs showed more problems in that respect, especially regarding the re-textualisation of collocations. Apart from that, the NTs appear to have been more often guided by the word level of the text, they more often resorted to a loan of the problematic TUs, and made more erratic choices that do not contribute to lexical chains that could truly represent that of the ST.

After the detailed and focused discussion of the data carried out in this chapter, the next and final chapter will present the overall findings of the research, examining them against the background of the hypotheses informing the study. Finally, it will discuss some pedagogical implications, limitations and suggestions for future research.

CHAPTER 5

CONCLUSION

This chapter, which presents some concluding reflections on the piece of research here reported, is organised into subsections, discussing the following issues: theoretical implications of the research; some pedagogical implications; limitations of the research and subsequent recommendation for further investigation along similar avenues. Each issue is tackled separately.

5.1 THEORETICAL IMPLICATIONS

This study set out to investigate the hypothesis that there may be some divergent patterns in the cognitive processes of NTs and PTs. In this sub-section I will comment on the results found in this research by referring back to the Research Hypotheses posed in Chapter 3, section 3.1, to wit:

i) Orientation, pause and revision patterns will differ between novice and professional translators.

Regarding the (i) *Orientation Phase*, section 4.2.1 of Chapter 4 reveals that the NTs spent in absolute terms the average of 04' 45'' doing orientation, against 05' 18'' of the PTs. Although both groups have not varied much with regards to the average time spent in the orientation phase, in relative terms the NTs appear to have devoted 4.34% of their average time to orientation, whilst the PTs devoted in average 8.70%. This indicates that the PTs seem to have allocated more effort in the orientation phase than the NTs did. As for (ii) *Pause Patterns* with respect to drafting, the results presented in Chapter 4, section 4.2.2

reveal that, while the PTs had in absolute terms an average pause time of 33' 19'', the NTs paused for 01 hr 16' 06'', which means that, in average, the NTs paused in absolute terms 42' 47'' longer than the PTs did. In relative terms, the NTs remained 69.62% of the total time paused, against only 54.64% of the PTs. With regards to the (iii) *Revision Phase*, section 4.2.3 of Chapter 4 indicates that the PTs devoted in average 34.05% of their time to revise their work, whereas the NTs used 25.70%. The results obtained in these sections might serve as indicators that the NTs applied more effort in doing research in the drafting phase, while the PTs allocated more of their effort to the orientation and the revision phases. The predictions made concerning the first hypothesis have therefore been confirmed.

ii) Professional translators will favour the macro units of the text

The verbal protocols analysed in Chapter 4, section 4.2.5, demonstrate no significant difference between NTs and PTs with regards to the attention devoted to the micro units of the text. In terms of awareness of macro textual features, the subjects' verbalisations show that the PTs concentrated more on the macro units of the text than the NTs did. This does not mean, however, that the PTs have actually *favoured* the macro units of the text. Instead, they seem to have paid as much attention to both units, that is, micro and macro alike. The predictions made concerning the second hypothesis have therefore **not** been confirmed.

iii) Novice translators will focus more on the micro units of the text.

Similarly, the fact that the NTs made more comments on the micro level of the text, by no means indicate that they have *totally* disregarded the macro units of the text. All NTs

mentioned having searched for parallel texts, which is an indicator of awareness of macro textual features. However, with regards to target readership and translation brief guidance, verbalisations made by the NTs were not as recurrent as those made by the PTs. Only two NTs mention having been concerned with the target readership and just one NT has shown to have thought of the translation brief provided. Even though some NTs have indicated in their verbalisations that they were aware of some macro textual features, it should be borne in mind that their claim of awareness by no means necessarily results in such occurrence. Furthermore, analysis of the product has also shown some textual evidence that the NTs in this study seem to have paid greater attention to the micro units of the text. Although the NTs group has shown some awareness of macro textual features, it can safely be argued that in general terms the NTs have paid greater attention to the micro level of the text. As the third hypothesis above suggests, the NTs were expected to focus more on the micro units of the text, even though they might present some awareness of macro textual features as well. The predictions made concerning the third hypothesis have therefore been confirmed.

iv) The relation between time and effort will *not always* reflect positively on the final product.

The results obtained from this study reveal that the variation in time with regards to orientation, drafting, and revision patterns between NTs and PTs (hypothesis i), the level of textual awareness, that is, micro and/or macro (hypotheses ii and iii), and the impact of all of the above upon the final product (hypothesis iv) will *not always* be a positive one. Specifically about this last hypothesis, FG has served as a tool to analyse the TTs and provide us with enough evidence to indicate that as far as the cohesive devices applied are

concerned, (i) the reiterations and collocations from the ST were not always satisfactorily re-textualised in the target language, sometimes producing renditions that would not fit the context or the pragmatic function of the text, (ii) whereas the PTs have attempted to come up with translations that could adapt into the target culture, the NTs would normally translate directly into the target language or simply left the TU in the original form, paying little attention in terms of macro-textual awareness so as to provide adequate textualisation, (iii) ambiguity could be observed in some of the renditions using reference words in the TTs of both NTs and PTs, (iv) at least in one case the PTs managed to solve a translation problem by resorting to connective use, while none of the NTs could solve the problem in a similar fashion, producing renditions that were totally misrepresentative of the cohesive pattern of the ST. Thus, it could be argued that the distribution of the cohesive devices of the lexical chain selected has produced enough evidence to corroborate the following assumptions:

- The PTs in this study spent a longer time in the orientation and revision phases, and in spite of their balanced attention to both the micro and macro textual features of the text, the time and effort they applied did *not always* reflect positively upon the final product, as the analysis of their products has pointed to some texture problems in their translations.

- The NTs in this study devoted more time to the drafting phase because of their longer pause pattern, and in spite of their over concern with the micro in detriment to the macro units of the text, the analysis of their products has also revealed that the longer time and greater effort applied constructing the TTs have *not always* impacted positively upon

the final product, as many of their renditions have turned out to be erratic and misrepresentative of the lexical chain contained in the ST.

It is worthwhile to point out that although both groups presented problems in their translations, the problems found in the NTs' renditions are of a different nature from those of the PTs'. Firstly, the inadequacies found in some of the PTs' renderings are mainly texture problems, while those of the NTs' were normally found to be erratic and misrepresentative of the lexical chain contained in the ST. Secondly, the PTs showed to be much more aware of macro textual features than the NTs, even if the latter's verbalisations appear to indicate that they also were. Finally, this analysis reveals that the performances of the NTs as well as the durability of their translations appear to leave much to be achieved in comparison to those of the PTs group.

From the comments above, it can be said that the predictions made concerning the fourth hypothesis have been confirmed.

Evidence from the results and discussion show that both the NTs and PTs in this study did exert themselves for the task, although such effort did not always impact positively on their renditions. What remains to be seen is the validity of the assertion by Jääskeläinen (1996) that *Hard Work Will Bear Beautiful Fruit* **regardless of** the experience of the translator (see Review of the Literature section 2.4 for further discussion). In her article, Jääskeläinen claims that those who spend considerable time and effort during the translation task are those who will produce the best translations. I am unsure of the extent to which my findings can corroborate such assertion, since the data collected for this study reveal that the greater time and effort dedicated in the process by the NTs during the drafting phase did not, in general, result in final products that could truly represent the

lexical chain of the ST. Similarly, the greater time and effort dedicated by the PTs during the orientation and revision phases, were not always successful in re-textualising the lexical chain of the ST. Furthermore, those subjects who spent longer carrying out the translation task were--contrary to Jääskeläinen's line of reasoning--not those who presented less instances of problems with re-textualisation of the selected TUs⁵⁹. Quite the contrary, the longer time and greater effort many times resulted in even more erratic renditions rather than more successful solutions.

5.2 PEDAGOGICAL IMPLICATIONS

The results obtained pinpoint what seems to hamper NTs' from performing successfully: they appear to allocate more effort to drafting and less effort to the orientation and revision phases of the process. Since the translators in this study are all graduate or nearly graduate students from a translation course, it is assumed that they should be ready to take the plunge into the market. If their performance is still not successful enough to face the market, it might be argued that something should be reconsidered in terms of how these translators are trained to become professionals.

Hence, since "relatively little work has been done on the link between successful professional practice and the design of training programmes" (Fraser, 2000, p.112), in terms of pedagogical applications I agree with those scholars⁶⁰ who have chosen to focus investigation on PTs and NTs alike. The reason being that by doing so, we will be able to better understand the differences underlying their processes and therefore consider ways

⁵⁹ NT4 (2 hr 19' 28''): problems with TUs 09, 14, 16, 23.
 NT5 (2 hr 07' 33''): problems with TUs 05, 09, 10, 15, 23.
 PT2 (1 hr 15' 43''): problems with TUs 09, 10, 18.
 PT4 (1 hr 22' 17''): problems with TUs 06, 09, 14, 15, 23.

⁶⁰ As seen in chapter 2, Review of the Literature: Königs (1987), Jääskeläinen (1987), Gerloff (1987, 1988), Krings (1988), Tirkkonen-Condit (1989), Lörcher (1992).

and methods to bridge the gap between NTs and PTs' performances, that should be optimised via our translator education courses. As already suggested by Alves (2003) and Alves, Magalhães and Pagano (2000, 2003), the method applied for this research could be used to help NTs become aware of their own individual cognitive rhythms and also to comprehend how their cognitive rhythms differ from those of PTs. Therefore, Translog and TAPs would be useful in the classroom to help NTs better balance their cognitive rhythms by re-educating how they allocate their effort, thereby optimising the communication between theory and practice. Thus, it is by comprehending and enhancing the communication across the academic/practitioner divide that we shall be capable of designing curricula that could truly suit the translation students' needs.

5.3 LIMITATIONS OF THE RESEARCH

One limitation of this study has got to do with the small number of subjects used. I had only two subjects for the pilot study (one NT and one PT) and eleven subjects for this study (five NTs and six PTs). Some of the results obtained with a larger corpus already differed from those with a smaller corpus, such as some answers in the questionnaires, revision patterns, dictionary look-ups, and features of macro textual awareness. However, the methodological design of the research makes it difficult to the use of large corpora, so this drawback should always be taken into account.

A second limitation refers to the difficulty in measuring the level of language proficiency among NTs and PTs themselves and against both groups. I avoided testing the subjects for their language proficiency because I believe this could have caused some discomfort especially among the PTs. It was assumed that, because the PTs had been in the market for a considerable number of years and because the NTs had been technically ready

to gain the market, both groups had the same level of language proficiency. Even though it is known that linguistic competence does not mingle with translational competence⁶¹, perhaps a way to isolate and deal with the variable *language proficiency* could be thought of.

A third limitation has got to do with the risk of having the subjects' verbalisations being incomplete, with participants forgetting details that should be verbalised or with verbalisations being product rather than process-oriented.

A fourth and last limitation of this study would be that of the experimental fallacy, by which participants, even unconsciously, verbalise or do what they believe the researcher is expecting them to do or utter.

5.4 FURTHER RESEARCH

In addition to what has been investigated in this research, issues of linearity and non-linearity among NTs and PTs could also be analysed, and the results confronted with what the literature says, that is, that PTs will evolve a process which is mostly non-linear.

Similar research to this one could be carried out using a larger corpus. As discussed in the section above, I only had two subjects for the pilot study, and ten (eleven for the qualitative analysis) for this research. Some of the results obtained in the pilot study already differed from those in this research, where a larger corpus was used. Perhaps by using an even larger corpus further research could bring about yet more striking differences.

Another point, which would be worth looking at, refers to how the process of NTs and PTs will differ during the on-going revision process. Patterns such as the number of returns within the text could be compared and contrasted. With regards to revision there is

⁶¹ See Toury (1980) for details.

also a very interesting issue that could be approached with the aid of Translog. The software program could be used to analyse if the process evolved in revising translated work differs from the process of revising other texts. In other words, it could be investigated if the patterns evolved by translators when revising their TTs are equal, similar or totally different from the patterns evolved by writers when revising their STs. One suggestion would be to have a group produce a ST which will be later on translated by another group, for instance.

Issues of parallel processing among NTs and PTs could also be worth looking at and the results compared to the literature in the area, which claims that, unlike NTs, PTs will focus on more than one item or structure at the same time.

Lastly, all the hesitations for choices to translate given TUs could be analysed via Translog (and enhanced with TAPs). It would be worth investigating, for instance, how many choices the translator had made before s/he came up with the final and definite rendition; and whether or not one group appeared to be more hesitant than the other.

As a final word, it remains to be said that the investigation carried out in this piece of research aimed to contribute significant reflections to further process-oriented studies, thus responding to Shuttleworth and Cowie's hope that "the systematic application of sophisticated psychological techniques will lead to advances in this area" (1999, pp. 131-132).

BIBLIOGRAPHY

- Alves, F. (2003). *Tradução, cognição e contextualização: triangulando a interface processo-produto no desempenho de tradutores novatos* (pp. 71-108). D.E.L.T.A 19 (Volume especial: trabalhos de tradução).
- Alves, F. (forthcoming). Ritmo cognitivo, meta-reflexão e experiência: parâmetros de análise processual no desempenho de tradutores novatos e experientes. To appear in Alves, Magalhães & Pagano (Orgs.) *Estudos da tradução: abordagens discursivas e processuais*. Belo Horizonte: Editora UFMG.
- Alves, F., & Gonçalves, J.L.V.R. (2003). A relevance theory approach to the investigation of inferential processes in translation. In Alves, F. (Ed.). *Triangulating translation: perspectives in process oriented research*. (pp. 3-24). Benjamins Translation Library 45. Amsterdam: John Benjamins.
- Alves, F., & Magalhães, C. (Forthcoming). *Using small corpora to tap and map the process-product interface in translation* (18 pp.).
- Alves, F., Magalhães, C., & Pagano, A. (2000) *Traduzir com Autonomia: estratégias para o tradutor em formação*. São Paulo: Contexto.
- Alves, F. (Ed.), Magalhães, C., & Pagano, A. (2003). *Autonomy in translation: approaching translators' education through awareness of discourse processing* (pp. 161-185). Cadernos de Tradução 9/1 (volume especial). Florianópolis: NUT/UFSC.
- Baker, M. (1994). Textual equivalence: cohesion. In *In other words* (pp. 180-213). London, NY: Routledge, 2nd edition.
- Cambridge international dictionary of english*. (2002). Cambridge, UK: Cambridge University Press.

- Dik, S. C. (1989). *The theory of functional grammar. Part I: the structure of the clause* (433 pp.). Dordrecht, Netherlands: Foris Publications.
- Fraser, J. (1996). *Mapping the process of translation*. Vol. 41, no 01. Retrieved from the World Wide Web: <http://www.erudit.org/erudit/meta/index.html>.
- Fraser, J. (2000). What do real translators do? Developing the use of TAPs from professional translators. In S. Tirkkonen-Condit, & R. Jääskeläinen (Ed.), *Tapping and mapping the processes of translation and interpreting. Outlooks on empirical research* (pp. 111-120). Amsterdam, Philadelphia: John Benjamins Publishing Co.
- Gil, A. C. (1989). *Métodos e técnicas de pesquisa social* (pp. 142-145). São Paulo: Atlas, 2ª edição.
- Halliday, M. A. K. (1967/1968). *Notes on transitivity and theme in English*. JL, 3. 37-81; 199-244 and JL, 4. 179-215.
- Halliday, M. A. K. (1970). Language structure and language function. In J. Lyons (Ed.), *New horizons in linguistics* (pp. 140-165). NY: Penguin Books.
- Halliday, M. A. K., & Hasan, R. (1976). *Cohesion in English*. London: Longman.
- Halliday, M. A. K. (1994). Around the clause. Cohesion and discourse. In *An introduction to functional grammar* (pp. 308-339). London, NY, Sydney, Auckland: Edward Arnold, 2nd edition.
- Hannay, M., & Vester, E. (1990). *Working with functional grammar: descriptive and computational applications*. Dordrecht, Netherlands: Foris Publications.

- Jääskeläinen, R. (1996). *Hard work will bear beautiful fruit. A comparison of two think-aloud protocol studies*. Vol. 41, no 01. Retrieved from the World Wide Web: <http://www.erudit.org/erudit/meta/index.html>.
- Jääskeläinen, R. (2000). Focus on methodology in think-aloud studies on translating. In S. Tirkkonen-Condit, & R. Jääskeläinen (Eds.), *Tapping and mapping the processes of translation and interpreting. Outlooks on empirical research* (pp. 71-82). Amsterdam, Philadelphia: John Benjamins Publishing Co.
- Jakobsen, A. L. (1999). Logging target text production with translog. In Hansen, G. (Ed.). *Probing the process of translation: methods and results* (pp. 7-20). Copenhagen: Samfundslitteratur.
- Jakobsen, A. L. (2003). Effects of think-aloud on translation speed, revision and segmentation. In Alves, F. (Ed.). *Triangulating translation: perspectives in process oriented research* (pp. 69-95). Benjamins Translation Library 45. Amsterdam: John Benjamins.
- Kiraly, D. (1995). *Pathways to translation. Pedagogy and process*. (175 pp). Kent, Ohio: The Kent State University Press.
- Lorenzo, M. P. (2003). *Competencia revisora y traducción inversa* (pp.129-160). Cadernos de Tradução 9/1. (volume especial). Florianópolis: NUT/UFSC.
- Lörscher, W. (1992). *Investigating the translation process* (pp. 426-439). Meta 37/3. Retrieved January 13th 2004, from the World Wide Web: <http://www.erudit.org/erudit/meta/index.html>
- Macmillan English dictionary for advanced learners*. (2002). Oxford, UK: Bloomsbury Publishing Plc and Macmillan Publishers Ltd.

- Fortkamp, M. B. M. (2000). *Working memory capacity and L2 speech production: an exploratory study* (p. 20). Florianópolis: UFSC; unpublished doctoral dissertation.
- Malhotra, N. (2001). *Pesquisa de marketing: uma orientação aplicada* (pp. 254-255). Tradução de Montingelli Jr., N., & Farias, A. A. Porto Alegre: Bookman, 3ª edição.
- Richardson, R. J., Peres, J. A. S., Wanderley, J. C. V., Correia, L. M., & Peres, M. H. M. (1999). *Pesquisa social: métodos e técnicas* (334 pp.). São Paulo: Editora Atlas, 3ª edição.
- Rothe-Neves, R. (2002). *Características cognitivas e desempenho em tradução: investigação em tempo real* (pp. 177-178). Belo Horizonte: Faculdade de Letras da UFMG; unpublished doctoral dissertation.
- Séguinot, C. (1996). Some thoughts about think-aloud protocols. In *Target* 8:1 (pp. 75-95). Amsterdam: John Benjamins B.V.
- Shreve, G. (1997). Cognition and the evolution of translation competence. In Danks et al (Eds.). *Cognitive processes in translation and interpreting*. (pp. 124-125). USA, UK and India: SAGE Publications, Inc.
- Shreve, G. & Diamond, B. (1997). Cognitive processes in translation and interpreting. Critical Issues. In Danks et al (Eds.). *Cognitive processes in translation and interpreting*. (pp. 233-251). USA, UK and India: SAGE Publications, Inc.
- Shuttleworth, M., & Cowie, M. (1999). *Dictionary of translation studies*. (233 pp.). Manchester, UK: St. Jerome Publishing.
- Toury, G. (1980). *In search of a theory of translation*. Tel Aviv: The Porter Institute for Poetics and Semiotics.

Vasconcellos, M. L. (1997). *Retextualising 'Dubliners': A systemic functional approach to translation quality assessment* (p. 32). Florianópolis: Universidade Federal de Santa Catarina; unpublished doctoral dissertation.

APPENDICES

APPENDIX A: INSTRUCTIONS TO PARTICIPANT

You will be given a source text with 339 words to be translated from English into Portuguese. You will be allowed as much time as you need to complete the task, but once you get started, the experiment cannot be interrupted. You can make use of any dictionaries, internet search tools or extra materials to help you fully accomplish the task. The source text will be displayed in the upper part of the screen and a hard copy will also be provided. As soon as you finish the translation, press the red “stop” button in the top left-hand corner of the screen and call me to save your file.

BACKGROUND INFORMATION

The co-operative movement retains its principles by being owned and controlled by members. It uses its profits for the mutual and individual benefit of members and seeks to give consumers a fair deal. Societies also provide a wide range of educational, social and cultural activities and are widely involved in the community.

Your Choice is a magazine published by the Co-operative Wholesale Society Ltd, based in Manchester – UK. It brings recipes, advice on food & beverage and light-hearted reports such as holiday destinations and health & beauty matters. The several supermarket and superstore members of the Co-op society advertise their special offers and giveaway prize draws in the magazine.

You are to translate the article overleaf as if for publication in a similar Brazilian magazine or journal, bearing in mind its attractiveness for consumers at retail outlets. Three other sheets with relevant contextual information are provided in conjunction with the source text. These are not to be translated.

APPENDIX B: SOURCE TEXT

BEYOND THE PAIL

Dairy cows have been providing us with milk and cream for centuries. Anita Bourne gives us the low down from the cowshed

No one knows exactly when we first got the pinta habit, but people have been drinking milk for at least 5,000 years. It may have been the Celts, one of the first tribes to domesticate cattle, who introduced early Britons to the idea of drinking cows' milk. The Romans were certainly great cheese-lovers, and brought their dairy skills to Britain along with some of their favourite cows.

Every time Britain was invaded, our conquerors brought over their own breeds of cattle. You can still tell where cows originally came from by their colour: native Celtic breeds are black; Anglo Saxon ones are usually red, and Dutch cattle are piebald.

Nowadays many people still have their milk delivered to their doorstep every morning. The UK's doorstep delivery service goes back to the 18th century, when milkmaids collected milk from town cow herds and sold it door to door from large pails, straight into the customer's own jug.

As Britain's population grew, so did the demand for milk. In the mid-1800s, cattle plagues wiped out most of the town cow herds, but the development of the railways meant that milk could then be transported in bulk from rural dairy farms and delivered fresh to the town customer each morning.

By the 1920s, the housewife received her daily pintas in hygienic glass bottles, delivered by a milkman with a handcart or horse-drawn float. It wasn't until after the Second World War that dairies universally adopted the environmentally-friendly electric milk floats which still deliver your morning pinta today.

For more than 60 years, milk was collected from dairy farms each morning by the Milk Marketing Board, and transported to the dairy for bottling and delivery. Now the milk industry has been deregulated and the Milk Marketing Board has now gone, but your milk is still collected regularly, either by Milk Marque (a farmers' co-operative), or by individual dairies.

APPENDIX C: TRANSLATED TEXTS

(NT1) ALÉM DO BALDE

Vacas leiteiras têm nos provido com leite e nata por séculos. Anita Bourne nos mostra um pouco mais deste assunto.

Ninguém sabe exatamente quando nós começamos com esse hábito de beber leite. Porém, as pessoas tem tomado leite por pelo menos cinco mil anos. Talvez tenham sido os Celtas, uma das primeiras tribos a domesticar gados, quem introduziu primeiramente aos Bretões a idéia de beber leite de vaca. Os Romanos foram certamente grandes amantes do queijo, e trouxeram para a Grã-Bretanha suas habilidades com laticínios, juntamente com algumas de suas melhores vacas.

Cada vez que a Grã-Bretanha era invadida, nossos conquistadores traziam sua própria raça de gado. Você pode dizer de onde originaram as vacas pela sua cor. A raça céltica é negra; as anglo-saxônicas são geralmente avermelhadas, e as de origem Alemã são malhadas.

Hoje em dia, muitas pessoas recebem seu leite em suas portas todas as manhãs. O serviço de entrega a domicílio de leite existe desde o século 18 quando leiteiros coletavam leite das vacas dos estábulos e vendiam de porta em porta em grandes baldes, direto para os jarros dos consumidores.

Assim como a população da Grã-Bretanha cresceu, também a demanda por leite. Na metade do século dezenove, as pragas aniquilaram a maioria das vacas das cidades, mas com o desenvolvimento das rodovias significou que o leite poderia ser então transportado ainda fresco, em grande quantidade das fazendas leiteiras direto para o consumidor todas as manhãs.

Por meados de 1920, a dona de casa recebia diariamente seu litro de leite em higiênicas garrafas de vidro, entregue pelo leiteiro em um carrinho de mão ou em uma carroça.

Somente depois da segunda guerra mundial que os Laticínios adotaram um sistema ideal de refrigeração elétrica, e desde então, entrega seu leite diariamente.

Por mais de 60 anos, o leite era coletado das fazendas leiteiras toda manhã pela cooperativa e transportado para o Laticínio para ser engarrafado para a entrega. Hoje a indústria leiteira foi desregularizada e a cooperativa está se acabando. Mas seu leite ainda é coletado regularmente, ou por leiteiros (fazendeiros cooperados) ou por Laticínios particulares.

(NT2) Transbordando o balde

As vacas de leite têm nos fornecido leite e nata há séculos. Anita Bourne nos traz informações confidenciais

Ninguém sabe exatamente quando nós começamos a beber leite de vaca, mas bebemos leite há pelo menos 5000 anos. Este hábito pode ter vindo dos Celtas, uma das primeiras tribos a criarem gado, que trouxeram a idéia de beber leite de vaca aos Britânicos. Os Romanos eram certamente apaixonados por queijo e levaram as suas habilidades com laticínios para a Inglaterra juntamente com algumas de suas vacas prediletas.

A cada vez que a Inglaterra era invadida, os conquistadores aumentavam o seu rebanho. Podemos descobrir a origem das vacas pela sua cor: as dos rebanhos nativos dos Celtas são pretas; as dos Anglo-Saxões são geralmente vermelhas e as dos Holandeses são malhadas.

Hoje em dia muitas pessoas ainda recebem o leite na porta de casa todas as manhãs. O serviço inglês de entrega de leite em casa existe desde o século XVIII, quando as ordenhadeiras tiravam leite dos rebanhos da cidade e vendiam de porta em porta em grandes baldes direto para o jarro do próprio cliente.

A população Inglesa cresceu e a demanda por leite também. Na metade do século XVIII, uma praga nos rebanhos exterminou a maioria dos animais, mas o desenvolvimento das estradas significou que o leite poderia então, ser transportado em grande quantidade das fazendas e entregue fresco para os clientes a cada manhã.

Nos anos 20, a dona-de-casa recebia o leite em higiênicas garrafas de vidro, entregues por um leiteiro com um carrinho de mão ou à cavalo. Não foi até após a Segunda Guerra Mundial que os laticínios em todo o mundo adotaram os "carros de entrega" que ainda são usados para a entrega diária do leite.

Por mais de 60 anos, o leite foi retirado de fazendas a cada manhã pela Milk Marketing Board, e transportado para a indústria de laticínios para engarrafamento e entrega. Hoje, a indústria de laticínios tem esquivado as

regras e a Milk Marketing Board acabou, mas o seu leite ainda é retirado regularmente, também por Milk Marque (uma cooperativa de fazendeiros) ou por laticínios individuais.

(NT3) ALÉM DO BALDE

Durante séculos temos tirado das vacas leiteiras leite e nata. Anita Bourne nos faz um apanhado diretamente do estábulo

Ninguém sabe exatamente quando iniciou nosso hábito de beber leite, mas sabe-se que as pessoas o têm feito por pelo menos 5 mil anos. Podem ter sido os celtas, uma das primeiras tribos a domesticar gado, a introduzir entre os primeiros bretões a idéia de beberem leite de vaca. Os romanos eram, certamente, amantes dos queijos, e trouxeram suas habilidades no fabrico de laticínios para a Bretanha, juntamente com algumas de suas vacas favoritas.

Todas as vezes que a Bretanha foi invadida, nossos conquistadores trouxeram suas próprias raças de gado. Pode-se dizer ainda de onde as vacas eram originárias pela cor: as raças nativas dos celtas eram pretas; as anglo-saxãs eram geralmente vermelhas, e as holandesas eram malhadas.

Atualmente, muitas pessoas ainda recebem leite diretamente na porta de casa todas as manhãs. O serviço de entrega de leite no Reino Unido retorna ao praticado no século dezoito, quando empregadas das leiterias coletavam leite dos rebanhos locais e vendiam de porta em porta em grandes baldes, de onde eram derramados diretamente nos jarros que o cliente deixava em frente à porta de casa.

Na proporção em que a população da Grã Bretanha crescia, crescia também a demanda por leite. Em meados de 1800, pragas liquidaram a maior parte dos rebanhos locais, mas o desenvolvimento de ferrovias significava que o leite poderia ser então transportado em grande quantidade das fazendas leiteiras e ser entregue fresco para o cliente na cidade a todas as manhãs.

Por volta de 1920, a dona de casa recebia seus litros de leite em higiênicos vasilhames de vidro, entregues por um leiteiro usando um carrinho ou carroça puxada por cavalos. Somente depois da Segunda Guerra as leiterias adotaram universalmente o carro elétrico de leite* ecologicamente corretos que entrega seu litro de leite ainda hoje.

Por mais de 60 anos, o leite foi coletado nas fazendas leiteiras todas as manhãs pela Milk Marketing Board*, e transportado para a leiteria para ser engarrafado e entregue aos clientes. Agora a indústria leiteira tem sido privatizada e a Milk Marketing Board** não mais existe, mas o seu leite ainda é coletado regularmente, pela Milk Marque*** (uma cooperativa de fazendeiros) ou por leiterias individuais.

*NdaT: No Reino Unido, o leite é entregue nas casas das pessoas por um carro de leite, geralmente movido a eletricidade (Cambridge Internadional Dictionary of English)

**NdaT: Milk Marketing Board - empresa estatal de leite que atuava no Reino Unido.

***NdaT: Milk Marque - Cooperativa formada por fazendeiros do ramo leiteiro, que passou a funcionar no Reino Unido após a privatização da MMB (Milk Marketing Board).

(NT4) Superior ao Balde

Por séculos, vacas leiteiras têm produzido leite e nata. Anita Bourne nos conta informações confidenciais de um estábulo.

Ninguém sabe exatamente quando iniciou-se o hábito de tirar leite da vaca, mas faz pelo menos 5.000 anos que as pessoas tomam leite. Pode ter sido os Celtas, uma das primeiras tribos a domesticar gado, que apresentaram aos antigos britânicos a idéia de tomar leite de vaca. Sem dúvida, os romanos foram grandes apreciadores de queijo, trazendo suas habilidades com o leite para Grã-Bretanha juntamente com suas vacas favoritas.

Toda vez que a Grã-Bretanha era invadida, nossos conquistadores transformavam suas próprias raças de gado. Pode-se todavia dizer de onde se originaram as vacas pelas suas cores: raças celtas puras são pretas; anglo-saxônicas são geralmente vermelhas, e o gado holandês é preto e branco.

Ainda hoje, muitas pessoas recebem o leite na porta de suas casas toda manhã. Na Inglaterra, o serviço de entrega nas portas data do século 18, no tempo em que ordenhadoras buscavam leite do gado do rebanho da cidade em grandes baldes e o vendia de porta em porta, colocando no jarro do comprador.

Do mesmo modo que a população britânica cresceu, aumentou também a demanda do leite. Em meados de 1800, doenças acabaram com a maioria dos rebanhos de gado da cidade, mas o desenvolvimento das ferrovias propôs que o leite poderia ser transportado das fazendas de gado leiteiro, em grande quantidade, e entregue fresco para o comprador da cidade toda manhã.

Por volta de 1920, as donas de casa recebiam leite diariamente em garrafas higiênicas, de vidro, entregues por um leiteiro com um carrinho de mão ou com um veículo puxado à cavalo. Foi só depois da segunda guerra mundial que fábricas de laticínio adotaram no mundo todo um veículo elétrico, sem teto e sem laterais conveniente para entrega domiciliar, onde ainda é usado para entregar seu leite matinal.

Por mais de 60 anos, o leite era recolhido toda manhã das fazendas de "Milk Marketing Board", e transportado para a fábrica para engarrafamento e entrega. Atualmente a indústria do leiteo "Milk Marketing Board" não está no controle e não é mais controlada pelo leiteiro, mas nosso leite continua sendo coletado regularmente, tanto pela "Milk Marke (uma cooperativa de fazendeiros) ou por fábricas de laticínio particulares.

(NT5) Além do tonel

Há séculos, as indústrias de laticínio têm nos fornecido leite e creme. Anita Bourne nos fala da queda do estábulo.

Ninguém sabe exatamente quando nós adquirimos o hábito de tomar leite, no entanto as pessoas vem tomando leite por no mínimo 5.000 anos. Podem ter sido os Celtas, uma das primeiras tribos a domesticar gado, e que primeiro apresentou aos Britânicos a ideia de beber o leite das vacas. Os Romanos certamente foram os grandes amantes de queijo e trouxeram suas habilidades leiteiras para a Grã-Bretanha juntamente com algumas de suas vacas favoritas.

Durante todo o momento da invasão da Grã- Bretanha, nossos conquistadores trouxeram suas próprias criações de gado. Você pode ainda dizer de onde as vacas vieram originalmente pelas suas cores: as criações nativas Celtas são pretas; as Anglo-Saxônicas costumam ser vermelhas, e as holândesas são malhadas.

Atualmente, muitas pessoas ainda têm o leite entregue nos degraus de suas portas todas as manhãs. Os serviços de entrega do Reino Unido volta ao Século XVIII, quando os encarregados da ordenha faziam a coleta do leite dos rebanhos e o vendiam de porta em porta em grandes tonéis, colocando nas leiteiras (jarras) dos clientes.

Com o aumento da população na Grã- Bretanha, houve uma exigência maior de leite. Em meados do século XVIII, pragas de gado exterminaram a maioria dos rebanhos, no entanto o desenvolvimento de estradas significavam que o leite podia ser transportado em massa das fazendas leiteiras e entregue rapidamente aos clientes todas as manhãs.

Na década de 20, as donas de casa recebiam seu leite diariamente, em vidros higienizados, entregues por um leiteiro com um carrinho de mão ou carroça. Não levou muito tempo para que, logo após a Segunda Guerra Mundial, as produtoras de laticínio adotassem os simpáticos "electric milk floats" (veículos movidos a energia elétrica) e que ainda hoje entregam o leite.

Por mais de 60 anos, o leite foi coletado todas as manhãs das fazendas leiteiras pela "Milk Marketing Board" e transportado para as indústrias a fim de serem engarrafados e entregues posteriormente. Agora a indústria de leite foi desregulada e a "Milk Marketing Board" fechou, mas o seu leite ainda é coletado regularmente, tanto pela Milk Marke (uma cooperativa de fazendeiros) ou por indústrias particulares..

(PT1) ALÉM DO BALDE DE ORDENHA

Vacas leiteiras tem nos fornecido leite e nata durante séculos. Anita Bourne nos conta outros fatos dos estábulos.

Ninguém sabe ao certo quando adquirimos o hábito da dose de leite, mas bebe-se leite há pelo menos 5,000 anos. Podem ter sido os Celtas, uma das primeiras tribos a domesticarem gado, que apresentaram aos primeiros Britânicos a ideia de tomar leite de vaca. O Romanos certamente eram grandes apreciadores de queijo, e trouxeram para a Grã-Bretanha suas habilidades leiteiras juntamente com algumas de suas vacas preferidas.

Cada vez que a Grã-Bretanha era invadida, os conquistadores traziam consigo suas raças de gado. Ainda hoje se pode distinguir a origem das vacas por sua cor: as de raça nativa Celta são pretas; Anglo-Saxônicas são normalmente vermelhas, e as Holandesas são malhadas.

Hoje em dia muitas pessoas ainda tem seu leite entregue à porta de suas casas todas as manhãs. Este serviço de entrega no Reino Unido data do século XVIII, quando as ordenhadoras recolhiam leite dos rebanhos de vaca da cidade e vendiam o leite de porta-a-porta diretamente para a jarra do cliente.

À medida que a população da Grã-Bretanha cresceu, cresceu também a procura do leite. Nos meados de 1800, pragas de gado acabaram com a maior parte dos rebanhos de vacas das cidades, mas o desenvolvimento das linhas ferroviárias significou que o leite poderia ser então transportado em grandes quantidades das fazendas e entregue ainda fresco ao cliente todas as manhãs.

Nos anos 20, a dona de casa recebia sua dose diária de leite em higiênicas garrafas de vidro, entregues pelo leiteiro, que faziam a entrega com carrinhos de mão ou em carroças puxadas a cavalo. Somente depois da II Guerra Mundial que todas as leiterias adoptaram de maneira universal os carros elétricos que não agridem o meio-ambiente para a entrega do leite. É desta forma que até hoje se entrega a dose diária de leite todos os dias.

Durante mais de 60 anos, o leite era recolhido de fazendas de laticínios todas as manhãs pelo Conselho do Mercado do Leite, e transportado à fábrica de laticínio para engarrafamento e entrega. Hoje em dia a indústria do leite já não tem o controle do Governo e o Conselho do Mercado do Leite já não existe, mas o leite continua a ser recolhido regularmente, tanto pela Milk Marque (uma cooperativa de fazendeiros) ou por leiteiras individuais.

(PT2) ALÉM DO DOS DOMÍNIOS DO BALDE

As vacas vêm nos fornecendo leite e nata há séculos. Anita Bourne nos revela todos os segredos do estábulo.

Ninguém sabe ao certo quando adquirimos o hábito de tomar leite, mas as pessoas o consomem há pelo menos 5.000 anos. Podem ter sido os celtas, um dos primeiros povos a domesticar o gado, que apresentaram aos primeiros britânicos a idéia de beber leite de vaca. Os romanos eram, sem dúvida, grandes apreciadores de queijo e levaram a sua perícia em laticínios para a Grã-Bretanha, juntamente com parte dos seus rebanhos preferidos.

A cada invasão da Grã-Bretanha, os conquistadores introduziam suas próprias raças de gado. Ainda pode-se dizer a origem dos rebanhos a partir da sua cor: as raças de origem celta são negras; as aglo-saxãs, geralmente, vermelhas; e o gado holandês é malhado.

Hoje em dia, muitas pessoas ainda recebem o leite na porta de casa, todas as manhãs. O serviço de entrega de leite em domicílio do Reino Unido data do século XVIII, época em que moças recolhiam o leite de rebanhos locais e o vendiam de porta em porta, de grandes baldes diretamente para os jarros dos fregueses.

À medida em que a população da Grã-Bretanha crescia, aumentava também a demanda de leite. Em meados do século XIX, as pestes bovinas dizimaram a maior parte dos rebanhos locais, mas a construção de ferrovias propiciou, então, que o leite fosse transportado a granel, diretamente das fazendas, e entregue ainda fresco aos consumidores nas cidades, todas as manhãs.

Por volta da década de 20, as donas de casa recebiam o leite, diariamente, em garrafas higiênicas de vidro, trazidas por entregadores, em carrinhos de mão ou carroças puxadas por cavalos. Foi somente após a Segunda Guerra Mundial que as indústrias de laticínios passaram a adotar os carros elétricos ecologicamente corretos, que até hoje entregam o leite matinal.

Ao longo de mais de 60 anos, o leite era recolhido nas fazendas, todas as manhãs, pelo "Milk Marketing Board" (uma espécie de "Departamento de Comercialização do Leite"), e transportado para a usina de laticínios, para engarrafamento e entrega. Hoje, a indústria de laticínios não é mais controlada pelo governo e o "Milk Marketing Board" foi extinto, mas o leite ainda é recolhido regularmente, seja pela "Milk Marque" (uma cooperativa de pecuaristas), ou por usinas de laticínios individuais.

(PT3) ALEM DO BALDE

As vacas leiteiras nos tem dado leite e creme por seculos. Anita Bourne nos da as ultimas direto do estabulo.

Ninguem sabe ao certo quando adquirimos pela primeira vez o habito de beber leite diariamente, mas leite e consumido por seres humanos a mais de 5.000 anos. Talvez tenham sido os Celtas , uma das primeiras tribos a domesticar gado, que mostraram para os Britanicos a ideia de se beber leite de vaca. Os Romanas eram notoriamente apaixonados por queijos e trouxeram para a Gra Bretanha suas vacas prediletas juntamente com suas tecnicas de producao de derivados do leite. Sempre que a Gra Bretanha era invadida, junto com os

conquistadores também vinha uma nova raça de gado. Ainda hoje é possível determinar a origem de uma vaca pela sua cor: as de origem Celta são pretas, as anglo saxônicas geralmente são vermelhas e as Holandesas são malhadas.

Hoje em dia muitas pessoas ainda recebem leite na porta de suas casas todas as manhãs. O serviço de entrega de leite da Inglaterra começou no século 18, quando o leite era tirado de vacas criadas nos quintais das casas, colocado em baldes e vendido de porta em porta diretamente para o consumidor.

Quando a população da Grã Bretanha cresceu, a demanda de leite também não ficou atrás. Na metade do século 19, doenças bovinas eliminaram a maioria dos rebanhos de gado caseiros, mas o desenvolvimento das ferrovias permitiu que leite fresco fosse transportado em grande quantidade diretamente das fazendas de gado para o consumidor todas as manhãs.

Nos anos 20, as donas de casa todos os dias recebiam seu leite em práticas e higiênicas garrafas de vidro que eram entregues pelo leiteiro que as transportava em carrinhos de mão ou em carrinhos puxados por cavalos. Somente após a segunda guerra mundial que os carrinhos de leite elétricos foram universalmente adotados pelas empresas de laticínios. Hoje, recebemos o leite nosso de cada dia em carrinhos elétricos que além de práticos são inofensivos ao meio ambiente.

Por mais de 60 anos, o leite era pego nas fazendas de gado todas as manhãs pela Associação dos Comerciantes de Leite e transportado para a empresa de laticínios para ser engarrafado e entregue aos consumidores. Hoje, a Associação não existe mais. Mas o leite ainda é buscado nas fazendas regularmente, tanto por cooperativas ou por empresas independentes.

(PT4) MUITO MAIS QUE UM BALDE!

Há séculos que as vacas leiteiras vêm nos fornecendo leite e derivados. Anita Bourne nos revela os segredos do estábulo.

Ninguém sabe exatamente quando adquirimos o hábito do meio litro, mas sabe-se que as pessoas já bebem leite há pelo menos 5.000 anos. Talvez tenham sido os celtas, uma das primeiras tribos a domesticar o gado, que passaram aos britânicos a ideia de beber o leite da vaca. Sabe-se também que os romanos foram grandes amantes do queijo e trouxeram seus conhecimentos sobre o leite para a Grã-Bretanha, juntamente com algumas de suas raças bovinas preferidas.

O fato é que cada vez que a Grã-Bretanha era invadida, nossos conquistadores traziam suas próprias raças. Pode-se ainda dizer a origem das vacas pelas cores que elas têm: as celtas nativas são pretas, as anglo-saxônicas normalmente são vermelhas e as holandesas são malhadas.

Ainda hoje em dia muita gente recebe o leite em casa, deixado na soleira da porta todas as manhãs. No Reino Unido, esse serviço de entrega começou no século 18, quando então as mulheres que faziam a ordenha tiravam o leite das vacas e o vendiam de porta em porta, de seus grandes baldes diretamente para o jarro do freguês.

À medida em que a população britânica foi crescendo, a demanda de leite foi aumentando. Já em meados dos anos de 1800, as pragas do gado acabaram com quase todo o rebanho bovino das cidadezinhas do interior, mas o desenvolvimento das ferrovias permitiu que o leite fosse então transportado a granel das fazendas da zona rural e entregue fresquinho ao freguês da cidade todas as manhãs.

Por volta dos anos de 1920, a dona de casa recebia seu leite diário em higiênicas garrafinhas de vidro de meio litro, entregues pelo leiteiro em carro de mão ou carroça. Só depois da Segunda Guerra Mundial é que os laticínios adotaram universalmente as bombas de leite elétricas e ecológicas que atualmente entregam o seu leite matinal.

Durante mais de 60 anos o leite foi coletado das fazendas leiteiras pelo "Milk Marketing Board" todas as manhãs e transportado para as leiterias para engarrafamento e entrega. Agora a indústria leiteira foi desregulamentada e o "Milk Marketing Board" não existe mais, mas a ordenha ainda é feita regularmente para garantir o seu leite, quer pela "Milk Marke" (uma cooperativa de fazendeiros) ou por leiterias autônomas.

(PT5) Para além do balde

As vacas leiteiras vêm nos fornecendo leite e nata por séculos. Anita Bourne nos dá as informações dos bastidores do estábulo.

Ninguém sabe exatamente quando começamos com o hábito de beber leite, mas as pessoas vêm consumido leite há 5000 anos, no mínimo. Talvez tenham sido os celtas, uma das primeiras tribos a domesticar o gado, quem apresentou aos primeiros bretões a idéia de beber leite de vaca. Sabemos que os romanos eram grande apreciadores de queijo, e trouxeram suas habilidades no manejo do leite para a Bretanha junto com algumas de suas vacas favoritas.

Toda vez que a Bretanha era invadida, nossos conquistadores traziam junto suas próprias raças de gado. Ainda hoje, pela sua cor, é possível dizer de onde as vacas vieram: as raças celtas nativas são pretas; as anglo-saxônicas são, em geral, vermelhas; e as holandesas são malhadas.

Ainda hoje, muitas pessoas recebem seu leite na soleira de suas portas toda manhã. O serviço de entrega a domicílio do Reino Unido remonta ao século XVIII, quando as ordenhadeiras tiravam leite dos rebanhos do vilarejo para vendê-lo de porta em porta em grandes baldes, direto para a caneca do freguês.

Junto com a população, também cresceu o consumo de leite. Em meados do século XVIII, pestes dizimaram a maior parte dos rebanhos dos vilarejos, mas o desenvolvimento das linhas de ferro permitiu que o leite fosse transportado a granel desde as fazendas e entregue ainda fresco para o consumidor da cidade toda manhã.

Em fins dos anos 1920, a dona de casa recebia seus litros de leite diários em garrafas de vidro higiênicas, entregues por um leiteiro que vinha num carrinho de mão ou numa carroça puxada a cavalo. Foi somente depois da II Guerra Mundial que as leiterias adotaram universalmente o carro elétrico, ecologicamente correto, que entrega seu litro de leite até hoje.

Por mais de 60 anos, o leite era tirado a cada manhã nas fazendas pela Comissão de Comercialização do Leite, e transportado para a leiteria para engarrafamento e distribuição. Atualmente, a indústria do leite foi desregulamentada e a Comissão de Comercialização do Leite não existe mais, mas o seu leite ainda é tirado regularmente, seja pela Milk Marque (uma cooperativa de fazendeiros), ou por fazendas individuais.

(PT6) Além do balde

Há séculos, o gado leiteiro nos abastece com leite e nata. Anita Bourne nos dá as últimas novidades direto dos currais.

Ninguém sabe ao certo quando começou nosso hábito de tomar leite, porém as pessoas têm tomado essa bebida há pelo menos 5.000 anos. É possível que os celtas, uma das primeiras tribos a domesticar o gado, tenham apresentado a idéia de beber leite de vaca aos primeiros ingleses. Os romanos certamente eram grandes amantes do queijo e trouxeram suas habilidades para produzir laticínios para a Inglaterra juntamente com algumas de suas vacas favoritas.

Todas as vezes em que a Inglaterra foi invadida, nossos conquistadores trouxeram consigo suas próprias raças de gado. Ainda é possível distinguir de onde as vacas são originárias, considerando-se sua cor: as raças celtas são pretas; as anglo-saxônicas não normalmente vermelhas e o gado holandês é malhado.

Ainda hoje, muitas pessoas recebem seu leite em casa todas as manhãs. O serviço de entrega domiciliar do Reino Unido remonta ao século 18, quando as ordenhadoras coletavam o leite de rebanhos locais e o vendiam de porta em porta, tirando-o de grande baldes diretamente para o jarro do próprio consumidor.

Na medida em que a população da Inglaterra cresceu, assim também cresceu a demanda por leite. Em meados do século 18, as pestes nos gados dizimaram a maior parte dos rebanhos locais, porém o desenvolvimento das estradas de ferro significou que o leite poderia então ser transportado a granel das fazendas de laticínios e entregue fresco ao consumidor urbano toda manhã.

Nos anos 20, a dona de casa recebia sua porção diária de leite em garrafas de vidro higiênicas, entregues por um leiteiro com um carrinho de mão ou carroça puxada por cavalos. Somente após a Segunda Guerra Mundial, a indústria de laticínios passou a adotar generalizadamente os carrinhos de propulsão elétrica que não agredem o meio ambiente, os quais ainda hoje entregam seu leite pela manhã.

Por mais de 60 anos, o leite era coletado em fazenda leiteiras todas as manhãs pelo Conselho de Comercialização do Leite e transportado para a indústria de laticínios para engarrafamento e entrega. Hoje, essa indústria foi desregulamentada e não há mais o Conselho de Comercialização do Leite, porém seu leite ainda é coletado regularmente, seja pela Milk Marque (uma cooperativa de fazendeiros), seja por indústrias individuais de laticínios.

APPENDIX E: PROFESSIONAL TRANSLATOR QUESTIONNAIRE

1. Would you call yourself a professional translator? _____ Why? _____

 2. When did you start working as a professional translator? _____
 3. Have you had any type of formal training or academic education in translation? _____. If yes, please specify:
 - Especialização/Diploma course _____
 - Master's course _____
 - PhD course _____
 - Training courses _____
 4. Has translation been your main occupation since you started working professionally or during the period you worked professionally? _____. If not, what is/was your main occupation? _____
 5. Are you still doing professional translation? _____
If not: 5.1 when and why did you quit? _____
5.2 what is your present occupation? _____
 6. While translating professionally did you /have you been work(ing) on a free-lance basis or employed by an agency? _____
 7. Have you had any of your translations published? _____
If yes, when and where? _____
- Date ____/____/____ Signature _____

APPENDIX F: TRANSCRIPTIONS OF TAPs

R Researcher	(...)	Extract not clear
NT/PT Novice/Professional Translator	[...]	Added word(s)

(NT1: 29/08/2003)

R: I can see you started translating with the elapsed time of [10.46.56]. What were you doing around this time?

NT: Well, I started reading first to see the context, to see the subject, and more... er... (...) with the text, and see a lot of kinds of difficult words.

R: Did you have any problems with the title?

*NT: Just the word *pail*. I didn't know, but it wasn't so difficult to find.*

R: You translated "dairy cows" as "vacas leiteiras". Any problems?

NT: No.

R: you translated "milk and cream" as "leite e nata".

NT: Yes. I put just nata after this.

R: Oh, then you changed. Why?

NT: Because I think it was unnecessary to put cream....er... *creme e nata*. I think it's the same.

R: I think you had a problem there to translate "low down", yeah? You wrote "nos mostra".

NT: Yes, I can't find this word at the dictionary, but with a little time I can find... er... some equal word that represents the... how can I say... the subject, the same meaning, you know.

R: Let's see how you translated "the pinta habit"...

NT: This was my first problem.

R: And how did you solve the problem?

Seção 6.02 NT: I had to see again the dictionary because I couldn't find pinta... just pinta, the word pinta. I saw that it was a measure, but I don't know what is the meaning of it. Then I discovered that it was like a litro, in Portuguese. So I discovered that it's a um litro de leite, for example.

R: But you translated "pinta habit" as "esse hábito".

NT: Yes, because I think it wasn't necessary to put "esse hábito de beber leite", because we're talking about to drink milk, you know.

R: You translated "cow's milk" as "leite de vaca". Any problems?

NT: No, no, no.

R: And then "cheese-lovers" as "amantes do queijo". Any problems?

NT: Not at all.

R: And then you translated "dairy skills" as "habilidades com laticínios". Problems?

NT: No.

R: Buy you changed it... you wrote "habilidades com laticínios" and then you changed it. You wrote just "habilidades"... for "dairy skills".

NT: No.

R: Any problems with "piebald"? You put "malhadas".

NT: No, I just didn't know too, but I find it at the dictionary.

R: You wrote "their milk" as "seu leite". [Why] do you think it's important to keep this "their" translated as "seu"?

NT: Because here is *people*, ne? It's a plural, but I put in Portuguese... Yeah, I think I put in the generally way. It was strange to put *seus leites*.

R: You translated "milkmaids" as "leiteiros". How did you come up with this translation?

NT: Because I find at the dictionary too. I just have a doubt, but I know it was a *leiteiro*, but I had just to certificate myself [make sure].

R: Did you have any problems with "town cow herds"?

NT: A little, because I tried to know what is... if it were a co-operative or even a city, a real city, you know, in that time. I don't know how people do this kind of work in that time. In that time there wasn't a enterprises as today, so maybe they really had to be cows in the city, something like that, you know.

R: And then you chose... er... "town cow herds"... "vacas dos estábulos".

R: Here you were thinking about "bulks", yeah? [Reading from the text] "transportado em grande quantidade". Any problems?

NT: No.

R: You translated "dairy farms" as "fazendas leiteiras".

NT: I don't know how to find a... in Portuguese, a word that represents this word in English. I think is fazendas leiteiras. I don't know if there is other name.

R: Did you look it up anywhere?

NT: No, I put the thinking [sic].

R: Let's see how you translated "daily pintas" now. You put "recebia diariamente seu litro leite".

NT: I think was the better construction to put, because I don't need to put a *pinta* measure *meio litro*. A *pinta* is *meio litro*. People have to drink *meio litro de leite*. So, here we don't talk this way. (...) *Tomam um litro de leite, ou tomam leite*. I found this desnecessary [sic].

R: Did you have any problems with "milkman"?

NT: Milkman? No.

R: "Hand cart or horse-drawn float"?

NT: *Horse-drawn float*. I had to look at the dictionary.

R: You translated “hand cart” as “carrinho de mão”. So, no problems?

NT: No.

R: And “horse-drawn float” as “uma carroça”. How did you come up with this translation?

NT: Because of the *horse-drawn*. I think it’s the best way to (...) this kind of merchandising.

R: Let’s see how you translate “dairies”...

NT: *Dairies* is... *laticínios*, yeah? Well, I think that *dairies* is like an enterprise here, like *laticínios* here, a factory, you know. So I put this like *laticínios*, like a enterprise.

R: You looked it up in the dictionary?

NT: Yes.

R: Did you use the internet or any websites to check anything while you were translating?

NT: Yes. Just the *Milk Marketing Board*.

R: Any problems with “cattle plagues”?

NT: No. I just try to find the better way to put this in Portuguese. Not, I don’t know, *praga* ou *exterminio*, you know. I just tried to make the correct word.

R: End of the fourth paragraph, after “dairies”, it says “environmentally friendly electric milk floats”. Did you have any problems with this?

NT: Yes. I couldn’t think what it is, but when I saw *electric*, I think it could be something like a refrigerator, you know, a *câmara fria*, something like that. So when I looked up at the dictionary *environmentally*, I saw something like *meio ambiente*... er... *melhor meio ambiente para algo*. So I decided to put *refrigerator*.

R: So, “environmentally friendly electric milk floats” was translated as “o sistema de refrigeração ideal” [and later on changed for “um sistema ideal de refrigeração elétrica”].

NT: U-Hum.

R: And then “morning pinta” was translated as “leite diariamente”. Why?

Seção 6.03 NT: Because the people receive this every single day. So I think it wasn’t necessary to put the measure, just the noun milk.

R: Right, but you translated “morning” as “diariamente”.

NT: I think because it’s a usual thing, you know, people receive this every single day, so you don’t need to say at morning, because people know the milk is received at morning, [correcting himself] in the morning. So I think I put *every single day*... er... *diariamente*... I think it’s understood.

R: You said you looked up on the internet for “Milk Marketing Board”, yeah?

NT: Yes. Well, I can’t find the translation... er... literally translation, you know. But I knew it was something like an expression, but I don’t know what expression, so I go to the internet and put in the google [www.google.com] the *Milk Marketing Board*, and I find a site: *Milk Marketing Board*. And I start to read and find that I think it is something like a co-operative in Brazil, you know, *cooperativa de leite*, something like that. Then I choose to put these words.

R: And then you translated “dairy” as “laticínio”.

NT: Yes, because it’s [reading from the source text] “transported to the dairy for bottling and delivery”. So, it’s a place, not a laticínio like a merchandising.

R: And then you translated “milk industry” as “indústria leiteira”. Any problems?

NT: No.

R: Any problems with “Milk Marque”?

NT: No.

R: Why not?

NT: Because the [reading from the source text] “farmers’ co-operative”. I know the meaning of what it is.

R: Right. You translated “Milk Marque” as “leiteiros”. How did you understand that “Milk Marque” should be “leiteiros”?

NT: Because the *farmers’ co-operative* [note in parenthesis, in the source text, adding information about Milk Marque]... *fazendeiros cooperativos*. [Shifting to Portuguese] Não podia ser *fazendeiros cooperativos*, tinha que ser *leiteiros* mesmo.

R: You translated “individual dairies” as “laticínios particulares”.

NT: Yes. Because the *Milk Marketing Board* has now gone, so it was at that time a private enterprise that did this kind of work.

R: Right, you finished the first draft of your translation, with the elapsed time of 1 hour and 38 minutes approximately. What were you doing now, between of 1 hour and 38 minutes and of 1 hour and 55 minutes, when you actually finished your translation?

NT: I started to review my text to see mistakes, problems about words, to see the better way to put some kind of expression, some kind of meaning... to see again, everything. To discover a wrong [mistake] or something that passed me [unnoticed]. Something like that.

R: Were you reading the text in English and in Portuguese, or just in Portuguese?

NT: I read in Portuguese.

R: Only in Portuguese.

NT: No, in English and in Portuguese, only to review.

R: So, during this time here, when you were going back and reading the text, you were reading in Portuguese and in English, and making changes, yeah?

NT: Yes.

R: Do you think it's important to read the text in both languages?

NT: Yes, I think so.

R: You wouldn't read it just in Portuguese and forget the original?

NT: No, no.

R: Do you also revise while you're actually translating or you leave the revision only to the end?

NT: No, [during the first draft] I was reading and making some changes, but not long changes, just details, small changes. And then [during the revision phase] at first I saw the whole text and see what I can do to change, to get better to read.

R: Thank you very much.

NT: Thank you.

(NT2: 11/08/2003)

R: I can notice that you started translating almost straight away. You only allowed, like, 15 seconds to start translating. Why is it that you decided to start translating straight away?

NT: Well, normally I begin to translate like this, and today I think it was because I was anxious [to start the experiment].

R: Did you have any problems with the title?

*NT: Yes. The first word, *beyond*, I didn't remember. And then I looked up at the dictionary... and the third word too, *pail*, I didn't know what it means, and I looked up at the dictionary.*

R: Did you have any problems translating "dairy cows"?

NT: Yes, I had seen these words, but I didn't remember. Then I looked up at the dictionary.

R: Did you have any problems translating "milk and cream"?

NT: No.

R: You translated "low down" as "informações confidenciais".

NT: Yes, I found this at the dictionary in the computer [Michaelis].

R: How did you translate "the pinta habit"? Let's see... "o hábito de beber leite de vaca". How did you come up with this translation?

NT: [She shakes her head, indicating that she cannot tell how she came up with this decision].

R: You translated "cow's milk" as "leite de vaca". Any problems?

NT: No.

R: Let's see how you translated "cheese-lovers"... "apaixonados por queijo". Any problems?

*NT: I got some doubts, but I think more and decided to *apaixonados por queijo*.*

R: Ok, you were just thinking. You didn't look up in the dictionary?

NT: No, no.

R: And what were you thinking? Why were you in doubt?

*NT: Because I thought amount Roman eating cheese... that we see in movies. Then I decided for *apaixonados*...*

R: You translated "dairy skills" as "habilidades com laticínios". How did you decide for this?

NT: I don't remember.

R: So you didn't have any problems with this?

NT: No.

R: You stopped there. I think you were deciding on how to translate "piebald", yeah? You wrote "malhadas". How did you solve this?

NT: I looked up at the dictionary for this word.

R: *In this third paragraph, it says “their milk delivered”. You translated “their milk” as “o leite”. Why did you decide to translate “their milk” as “o leite”?*

NT: It could mean... *their milk*... er... *o leite deles*. Like, the milk could come from *deles*, not from the cow.

R: *You translated “milkmaids” as “ordenhadeiras”. Can you tell me something about this?*

NT: Like a profession, the woman who take the milk from the cow.

R: *Did you look it up?*

NT: Yes. And I found *ordenhadeiras*.

R: *“A maioria dos animais”. This is the translation for “most of the town cow herds”.*

NT: I thought it could be repetitive to translate *vacas*. Then I decided to put *animais*.

R: *And you translated “cattle plagues” as “pragas dos rebanhos”. Any problems about this?*

NT: Not so much, I looked up at the dictionary. Then I found *pragas*.

R: *Here you were thinking about “bulk”, yeah? [Reading from the text] “poderia ser transportado em grande quantidade”.*

NT: Yes, I had some doubts, because I found many words that means *bulk*. And I decided to put *em grande quantidade*.

R: *And then you translated “dairy farms” as “fazendas”. Why?*

NT: Because the person who is reading the text will understand that it's *milk farm*, when they read this.

R: *You translated “daily pintas” as “o leite”. Why did you decide for this?*

NT: To simplify.

R: *And you translated “milkman” as “leiteiro”. Any problems?*

NT: Yes. First I think it... er... I translated it like *vendedor*, then I looked up at the dictionary and found *leiteiro*. Then I remembered.

R: *Did you have any problems translating this: “hand cart or horse-drawn float”?*

NT: Yeah. I found *hand cart* and I didn't found *horse-drawn float*. Then I decide to translate just *a cavalo*.

R: *Why did you translate “dairies” as “laticínios”?*

NT: [I think] I looked at the dictionary. I don't remember.

R: *Then you translated “environmentally friendly electric milk floats” as “as ordenhadeiras elétricas”, then you changed... “as maravilhosas ordenhadeiras elétricas”, and then you changed again “os maravilhosos carros de entrega que ainda são usados para a entrega diária do leite”... and that's it, yeah? I can see you had a lot of problems doing this, yeah?*

NT: Yes. That was the translation that I found, you know, in the dictionary.

NT: Yes, because I didn't found [the words in the dictionary], then I translated by the context.

R: *Did you have problems translating “Milk Marketing Board”?*

NT: Yes. I didn't found it in any dictionary. Then I decided to see at the internet. And then I see it in a site, rural news. And I see that it is a proper noun. I keep like this.

R: *You translated “dairy” as “indústria de laticínios”. Why?*

NT: Because here is saying that the milk is transported, then it must be a place, then I put *indústria*.

R: *And then you wrote “hoje a indústria de laticínios”, which is the translation of “milk industry”... and then you were thinking here... First, why did you translate “milk industry” as “indústria de laticínios” again, and why were you thinking here?*

NT: I were thinking about the word *derregulated*.

R: *Ok. And why did you translate “milk industry” as “indústria de laticínios” again? Do you know?*

NT: No, just because it's the... it means *indústria de laticínios*.

R: *And you were thinking about “derregulated”?*

NT: Yes.

R: *And what did you do?*

NT: I looked it up at the dictionary. And then I found it just at the English/English dictionary. And I think it reflect (...) translated.

R: *Did you have any problems translating “Milk Marke”? [side A of the tape ended here] You were telling me that you decided to leave “Milk Marke” as a proper name, yeah?*

NT: Yes. Like a noun to this farmers' co-operative, in parenthesis.

R: *You translated “individual dairies” as “laticínios individuais”, yeah? Any problems there?*

NT: No.

R: *Did you use any websites to check anything?*

NT: Google [www.google.com].

R: *And it was when you checked... er...*

NT: *Milk Marketing Board.*

R: *Did you use the internet for anything else?*

NT: *No, just for it.*

R: *I can see you finished the first draft of your translation, with the elapsed time of 51seconds [actually minutes, not seconds] point 49 [51.49 minutes]. The whole total time for your translation was 1 hour and 1 minute. So, now, between 5--52 almost--minutes, to 1 hour and something, you were just revising your first draft. How do you revise?*

NT: *I go to the beginning of the text and I start to read. Then I change some words to be clear for... like, who will read... er... it makes easy.*

R: *Do you read the text in English and in Portuguese, or just in Portuguese? Or just in English? How do you do this?*

NT: *Just in Portuguese, because I think in the person who will read this in Portuguese. Just for it to be clear for this person.*

R: *Do you think it's important to read it just in Portuguese and forget about the English [text], or not?*

NT: *Sometimes we can read in English to see some words, maybe if we have some doubts; but to review the complete text, just in Portuguese.*

NT: *Here in force, I changed to traz, to be more... more simple.*

R: *Why do you want to make it simpler?*

NT: *To people understand the text better.*

R: *Why did you write "carros de entrega" in quotes?*

NT: *Because I didn't know the name of this car.*

R: *Which is "float"?*

NT: *Yes, but in Portuguese we don't have, yes?*

R: *Fine then, that's it. Thank you very much.*

NT: *Thank you.*

(NT3: 08/08/2003)

R: *I could notice that you started translating almost straight away. You only paused for 10 seconds which is just the time to get down to the keyboard and start typing. Why did you start doing the translation straight away?*

NT: *It's because when I translate, you know, just... er... concomitantly to the reading of the text, I believe I can have an idea of the text I'm taking to translate.*

R: *You wrote the title, but you left it incomplete. Reading from the text [Além da...], and then suspension marks. Why is that?*

NT: *Well, I didn't know the meaning of the word [pail], that's why.*

R: *You translated "dairy cows" as "vacas" [... vacas]. You left suspension marks at the beginning again, yes?*

NT: *Yes. It's... er... these three points [suspension marks] are always the same thing, they have the same meaning. Means I didn't know the word, so I left this space for later.*

R: *So you didn't look any words up in the dictionary at this point?*

NT: *No, not at this point.*

R: *You translated "milk and cream" as "leite e creme". Any problems there?*

NT: *Well, that one was the first choice. Cream is so similar to creme in Portuguese and then I just decided to put that. But then I realised that the word didn't have the exact meaning I wanted. That's why I changed later.*

R: *You didn't know the meaning of "low down" as well, because you left suspension marks at the end there.*

NT: *Yeah, yeah.*

R: *And how did you solve these problems of the suspension marks?*

NT: *[For] some of the words I went to the dictionaries and some others, as low down, I went to the internet, to google [www.google.com], and asked to program to look for similar texts or similar uses of the word that I could just read and try to infer [sic] the meaning of low down, just by reading other texts.*

R: *The same thing happened with "the pinta habit" yeah? You wrote "o hábito..."*

NT: *Yes. I knew the meaning of pint, but I didn't know if there was a noun for pinta or if it was the same as pint, so I decided to put it this way.*

R: *You translated "cow's milk" as "leite de vaca". Any problems?*

NT: *No.*

R: You translated “cheese-lovers” was translated as “amantes dos queijos”.

NT: Well, that’s something I forgot to correct later, because... er... this was the literary [sic] translation, but what I wanted to say is that these people really loved to eat cheese, and I was going to put later *que adoram* ou *que adoravam comer queijo*, but I forgot to correct.

R: And instead of “dairy skills” you left suspension marks again [...*habilidades*]. So, you didn’t know “dairy skills”?

NT: I had an idea, but I couldn’t put it in a word. So I left it for later.

R: Did you look it up anywhere?

NT: No, I just tried to think of a word, of an expression.

R: Because of the suspension marks I can infer that you didn’t know how to translate “Dutch” and “piebald”.

NT: No. *Dutch* is just... I never, never remember the... the word in Portuguese for *Dutch*. As well as I can never remember *Netherlands*, the name of the country.

R: Did you look them up in the dictionary?

NT: Yes.

R: It says in the text “...their milk delivered...” and you translated it as “recebem leite”. So you omitted “their”. Why did you choose this?

NT: Because I think it’s a little bit worrying to read so many pronouns in Portuguese. *Têm seu leite...* my Gosh... you’re going to take the milk out of the people? Out of this person who’s having it delivered?

R: You put suspension marks again in the place of “Milkmaids”. How did you solve this problem?

NT: Well, it was just at the end of the text, when I had no idea [of] what word I would put there... Because the only image I had in my mind for this word, *milkmaids*, was the image of that can of condensed milk, *leite moça*. And the girl with the pail... er... holding a pail. But I couldn’t find a word for it, so at the end of the text I decided to put *empregadas das leiterias*, I believe.

R: But you didn’t look it up?

NT: No.

R: Suspension marks again for... after “*coletavam leite*”. That’s for “town cow herds”, yeah?

NT: Oh, yes. My Gosh, this expression was just horrifying.

R: And how did you solve the problem?

NT: In fact I didn’t know if I solved this problem, because at first I was trying to think if there was an expression for *town cow*... if there was a problem expression for this. Then I couldn’t find in any of the dictionaries. I tried, but I couldn’t. Then I tried in the internet [sic] but there was a problem with the connection and... well, then I put *rebanhos urbanos* as cows that were raised in town. But it was a little strange, because... *town cows*... *urban cows*? *Urban herds*? It was just like... er... *como se as pessoas*... *rebanhos de pessoas*. Then that was really strange and I had to change it.

R: And you put an exclamation [interrogation, actually] mark after “*vasilhames*”. I think you were not happy with “pails” as “*vasilhames*”, yeah?

NT: No. It’s because I didn’t know the word for pails yet. I hadn’t looked for that word. Then I put *vasilhame* because I thought I was something to hold the milk [with]. But then I looked for jug in the dictionary and it was *jarro*, *vasilhame*; and I noticed that it couldn’t be the same meaning for *pails*, and then I looked for. And I had to change.

R: Then you went back and started making changes in the text. Do you always do this? You translate, then you go back and you revise while you’re translating... you don’t leave the revision to the end.

NT: No, because sometimes I have an idea just in the middle of the translation, and I go back to the first or second paragraph, you know, and just re-arrange everything. (...) with the constructions, something with the style. It doesn’t mean it’s the translation all the time. Maybe the style of the text and the writing.

R: Another suspension mark here. You were thinking of “cattle plagues”, yeah?

NT: Yes. The first thought I had was *plague* meaning *praga*. But I was not sure if this was the meaning there. Then I had to think of a little, and then I went back and tried to solve this.

R: You translated “bulk” as... nothing. You put the suspension marks. How did you solve the problem?

NT: First of all, I had that image of *bulk* from my e-mail Yahoo. They have, in the version in English, they have *bulk mails*. But the word I had in my mind for this kind of expression was *lixo eletrônico*. And I couldn’t think [of] anything but *lixo* for *bulk*. But it wasn’t. I knew it wasn’t. So I had to go to the dictionary and look for the word.

R: You translated “dairy farms” first as “*fazendas [leiterias, actually] rurais*”. Then you went back and changed it for “*fazendas leiteiras*”.

NT: Yes, because then I noticed that *fazendas rurais* was just the same. And then I saw *dairy* and it reminded me of *leiteira*.

R: You translated “daily pintas” as “litros de leite”. Why?

NT: Because we don’t have half a litre here. And we don’t have a special word for half a litre. Maybe I should have put a note at the end of the text. People wouldn’t understand why a person would ask for half a litre of milk.

R: And you translated “milkman” as “leiteiro”. Any problems?

NT: No.

R: And then you left other two suspension marks there. One for “handcart” and another one for “horse-drawn float”.

NT: I had no idea of what these words meant. And then I wrote a lot there, and I had to picture the words. So I tried to make a [mental] picture of the literary [sic] expression. So I started to think about *handcart* and I remembered about *cart*, that sport that they have... as *formula 1* and they have the cart. Then I just joined the two words, *hand* and *cart*, and then I had the picture of those small vehicles that paper collectors, they push. Then I tried to find a word for this and the only thing I could think about was *rolimã*, which is not exactly this, but I had this word in mind. And then *horse-drawn float*, it was easy because I just looked at the dictionary for *float*, that I didn’t know, and... er... and then I realised it was like those carriages.... er... they were pushed by horses.

R: You translated “dairies” as “leiterias”. Any problems there?

NT: No.

R: You suspension marks here, which is exactly for the translation unit “environmentally friendly electric milk floats”, yeah?

NT: Well, [for] *environmentally friendly* I had the idea in mind, but I couldn’t find the word and I just left this expression for later so that I could remember. But [in the case of] *electric milk floats*, I had no idea what this vehicle was, because we don’t have this kind of car here in Brazil. So I had to look for this idea of the vehicle. I didn’t think about looking for this in the dictionary. Then I realised that I could do this, and I found *milk floats*. And then I just translated as I knew already what *float* mean [sic]. So I put vehicle, and then *electric milk* I just translated word by word.

R: You translated “your morning pinta” as “seu litro de leite”. Why did you decide to omit “morning”?

NT: I think [it’s] because I had put just at the beginning of the text that every morning they used to deliver milk at the customer’s door, so it was going to be a little repetitive.

R: Any problems with “Milk Marketing Board”?

NT: No. I knew it was a company.

R: How did you know this?

NT: Because of the... well, *Milk Marketing Board*... er... it sounded like the name of a company for me, and... er... I believe I have heard this name before, I don’t know. I just knew it was a company.

R: Why did you put a footnote there [after Milk Marketing Board]?

NT: Because I had this impression that, ok, I knew this was a company, but maybe most of my readers wouldn’t know that, and I didn’t feel like translating the name of the company, cause I don’t feel it’s right to translate these fantasy names [sic]. So I decided to put this note to let my reader know why I didn’t translated that and what was this company about.

R: Did you search anywhere to get more information about it?

NT: I don’t know which word I was looking for. I believe it was milk floats... Well, one of the expressions I was looking for, and then I was just reading and I saw the name of the company [Milk Marketing Board]. It was just out of the blue. I was not looking for the company’s name, but it was there.

R: And you took that information for the footnote?

NT: Yes.

R: And you translated “dairy” as “leiteira”. Any problems there?

NT: No.

R: “Milk industry” as “indústria leiteira”. Any problems?

NT: No.

NT: I had problems with *deregulated*, because the root word was regulated and I was thinking about regulamentada, regularizada. And I couldn’t think of the word with this de-... *deregulated*. And then I looked for this word in the dictionaries and I couldn’t find the word. And then I went to the internet again, and I just tried to find once again as I had done with one of the expressions before. So I tried to find similar texts with similar uses of the word. Then I noticed that it was *privatizadas*... *privatizar*.

R: Did you have any problems with “Milk Marque”? And why did you decide to leave it as it was, in English?

NT: Because, once again, it’s the name of the co-operative. So, it’s the name of a company.

R: And you translated “individual dairies” as “leiterias individuais”.

NT: Yes. Well, at first it was a word-by-word translation, and then I realised that *leiterias individuais* was a little strange in Portuguese, so... er... as there was this co-operative, which means a group of farmers working together, so... I realised that *individuals* there could be private and not a co-operative, but private ones.

R: You finished your translation, let’s say, the first draft with the elapsed time of 27 minutes and 11 seconds, almost 12 seconds. And then you spent a long time revising your work, making considerable changes in the text. Look at the screen and tell me what you were doing between this elapsed time of 27 minutes and the total time of 1 hour and 43 minutes, ok?

NT: I was thinking about the text, reading. Reading again.

R: Were you reading it just in Portuguese, or in Portuguese and English?

NT: In Portuguese, just thinking about the text as my readers would read. I was thinking about... this sounds like a translated text or does it seem like an original one? This was my concern. So that’s why I was thinking so much about the text.

R: So you were not looking at the English version?

NT: No, just the Portuguese.

R: Why do you think it’s important not to look at the English version when you’re revising?

NT: Because I don’t like to read a text and -- when you read a text, or a book, or whatever -- and I can notice “well, this is... this sounds strange in Portuguese, because this was a translated text”. It seems unnatural to Portuguese readers too, you know. And I think it’s horrible when you have a text that it seems that it was translated.

NT: I put question marks just after every word that I wasn’t sure about the meaning, or if I wasn’t sure about the construction, or if it was... er... it sounded translated or anything. So I was just putting these question marks to remind me I had to go back to this part of the text and rewrite it.

R: During this phase, would you go to the dictionary all the time to check the words you don’t know?

NT: No, not quite.

NT: [Looking at her text being replayed] Just thinking... trying to find solutions for the gaps I had in my mind.

NT: Then I put *urbanos* for *rebanhos de leite* [town cow herds]. And I couldn’t think of anything better than this. And it was just horrible, because I felt like it was *rebanhos de pessoas*, because of this urban word. So, it was just horrible. I started laughing. I was just trying to think and I started laughing.

NT: [About the title] This time I put this note [she wrote: PENSAR NUM TÍTULO MAIS ATRATIVO] just to remind me that I had to find an attractive title, but I couldn’t. I tried, but I couldn’t.

NT: It was still strange, that why I put this still [she wrote: “still ?” just after town cow herds].

NT: I looked for the words in an on-line dictionary.

NT: [About her footnotes] While I was translating I knew that I had to put a footnote, but I didn’t want to write at that moment just because I didn’t want to break the process.

R: How did you find [come up with] this footnote that “Milk Marketing Board” is “uma empresa estatal”?

NT: I didn’t find, I was inferring this, because of the deregulated word. So, if it was deregulated, it means that the previous company was not private, it was from the Government. I inferred from the text.

R: And how about “Milk Marque”? [Reading the footnote] “Cooperativa formada por fazendeiros do ramo leiteiro, que passou a funcionar no Reino Unido após a privatização da MMB (Milk Marketing Board)”. Did you find this anywhere?

NT: Exactly the same. Inferring by the text. I was going to make a research about this, but the [internet] connection was still off.

R: [About the title] You erased everything and you were thinking of another title... And you left the same!

NT: Yes, because I couldn’t find any better [title]. Just couldn’t.

R: What this what you were saying [before we started taping the interview] about leaving the title for later?

NT: Yes... I think as a writer, because I worked for four or five years in journalism, and the last thing I was used to thought [sic] was about the title. I had to write all the text, and then after the text is ready, then was going to think of a proper title for it. I think the title has to call your attention, has to be attractive to you, so you will feel like reading. It’s not just something to identify the text, it’s kind of an identity for the text. But I couldn’t find a creative, an interesting title for this one, cause I think it had to have some historical character [sic] because the text talks about the origins, and when the milk industries started in the United Kingdom... and I just couldn’t think of something interesting related to the historical content. So, I just gave it up.

R: *Ok, that's it. Thank you.*

NT: Not at all.

(NT4: 08/08/2003)

R: *I can see that you started translating after 7 minutes and 14 seconds approximately. What were you doing during this time?*

NT: First of all I started thinking about the title. I didn't know if I was supposed to write the word *balde* or... and then... I also thought about the word *superior*. So that's the reason that I stopped for several minutes.

R: *You translated "dairy cows" as "vacas leiteiras". Any problems there?*

NT: No, I think that was the right way to translate it, so I didn't have any problems about it.

R: *Ok. Any problems with "milk and cream" ?*

NT: Yeah, I thought about *cream* because I know that *cream*... there are many, so... but I thought that the right word would be *nata* and... so I put *nata*.

R: *Any problems with low down?*

NT: Yes, I had. Because I didn't know the meaning of *low down*. I know *low*, and I know the meaning of *down*, but when I saw in the dictionary, I saw the meaning was exactly the... not the same as I thought, so I had to stop and look for the meaning of these words.

R: *You translated "the pinta habit" as "o hábito de comprar leite na garrafa"*

NT: Yeah. I decided to translate like that... but... I don't know exactly if it's right. I know that *pinta* is a kind of measurement. So, I didn't find another word. So I was thinking about omitting this word. So that was the way that I thought was the best way.

R: *And then you changed for "o hábito de tomar leite", yeah? [Her first decision was to translated it as "o hábito de comprar leite na garrafa". Then she changed it to "o hábito de tomar leite", and finally, "o hábito de tirar leite da vaca"]. Why did you decide to change it?*

NT: Er... I had written... oh, yes. And then I saw it was better to write *hábito de tomar leite*. I could take the word *garrafa* out. I thought *o hábito de tomar leite na garrafa*... Yeah, maybe I should... If I start thinking over, I think it would be better if I put the word *garrafa*, because it's related to a measurement, yeah? But now, it's like this.

R: *You translated "cow's milk" as "leite das vacas". Any problems?*

NT: Yeah. Because we have different kinds of milk. So, that's why I put there. Maybe I wouldn't need to write that it's *leite das vacas* or *da vaca*, but then I wrote because we have other different kinds of milks.

R: *"Cheese-lovers" was translated as "apreciadores do queijo". Do you know why you chose this translation?*

NT: I think it's ok.

R: *You translated "dairy skills" as "habilidades com o leite". Any problems?*

NT: Yeah. I didn't know if I could write *habilidades*, because I know that if we have experience with milk or other... like, *experiência com o leite*, maybe another word would be better. So that's why I stopped and I went to the dictionary to look for another meaning for *skill*. So I decided to write *habilidades*.

R: *Any problems to translate "piebald"?*

NT: Yes, I had to look for this word. I didn't know the meaning of *piebald*. I looked it up in the dictionary.

NT: I have another comment to say about the second paragraph, where it says "Every time Britain was invaded, our conquerors brought over their own breeds of cattle". So... er... I didn't how could I translate this part *our conquerors brought over their own breeds of cattle*, because I thought... I didn't think about myself as being a translator, I thought as maybe I would be writing for a Brazilian magazine. So, if I had translated *nossos conquistadores*, I would say *the Brazilian, né? Os conquistadores brasileiros*. So, that's why I decided to write *os conquistadores ingleses... transformaram suas raças de gado*. So... er... but then, when I finished translating the text, I came back to the second paragraph, I came back to this part and I decided to cross out the word *ingleses* and I translated the way it's written in the text. And I translated... er... *nossos conquistadores trouxeram*, because I perceived that I was... I was a translation, and I was not the person who was writing for the magazine. So, that was... er... the person who was going to edit the... this was going... er... the... the job for the person who was going to edit the magazine, you know.

R: *Then did you come back to the instructions [the brief given at the beginning]?*

NT: Yes, I came back to the instruction that Péricles had given, and then I saw that he has written *you are to... no... er... this text is going to be translated to a similar Brazilian magazine... is going to be published in a similar Brazilian magazine or journal*. So, that's the moment that I thought "No, I'm wrong. I have to translate the way it's written. Not the way it's going to be published."

R: Any reason why you chose “their milk” as “o leite”?

NT: Yeah. I put... er... First of all I put *seu leite*, but since I cannot write, like (...) I just thought it would be better to write *their milk* like *o leite*, and not *their, seu leite*.

R: “Milkmaids”... you translated as “ordenhadoras”. Any problems there?

NT: No, I think it’ll be the right way to translate...

R: And how did you come up with “ordenhadoras”?

NT: I looked for this word in the dictionary.

R: I think you were... Here, I think you were thinking about “cattle plagues”, yeah?

NT: No, I was thinking about *meados*. I didn’t know if I could write *meados de 1800*. So, I’d like to find another word instead of *meados*. And that’s why I stopped.

R: And you translated “cattle plagues” as “doenças”, so you didn’t have any problems with this.

NT: I had some problems with this word. I didn’t know if I said *pragas*, *doenças*, or *epidemias*. So I decided to put just *doenças*, not *doenças de gado*. So, that’s the reason that I had to stop.

R: Did you have any problems to translate “town cow herds”?

NT: Yes. I didn’t know the meaning of *herds*. I had seen this word before, I don’t know in which line, but then I had to check again if I was really right about this translation.

R: But you left it as “rebanhos de gado da cidade”, yeah?

NT: Yes.

R: Did you have any problems translating “bulk”? You put “em grande quantidade”.

NT: Yes, I had to look it up in the dictionary.

R: You translated “rural dairy farms” as “fazendas rurais”.

NT: Yeah. I translated like this, but in the end of the translation, when I was revising, I cross out the word *rurais*... I crossed it out. And then it was like *fazendas de gado leiteiro*, not *fazendas rurais de gado leiteiro*.

R: Oh, ok. The whole unit is “rural dairy farms”, and you translated it as “fazendas rurais de gado leiteiro”.

Right. I understood it now. Ok. Then you changed it later and chose “fazendas de gado leiteiro”, yeah?

NT: Yes.

R: You were thinking about “daily pintas” here.

NT: Yeah. I was not sure about...

R: You changed it several times, and then you finally wrote “leite diariamente em garrafas”

NT: Yeah, I omitted the word *pintas*, you know.

R: You actually translated “pintas” as “leite”, yeah?

NT: Yeah, that’s it.

R: Ok. Why did you translate “pinta” as “leite”?

NT: Because I thought that would be better, you know. I didn’t have another word to write besides *leite*, so I think it would be ok if I could write *leite*.

R: And you translated “milkman” as “leiteiro”. Any problems?

NT: No. I think it’s ok.

R: And you translated “hand cart or horse-drawn float” as “carrinho de mão ou com um veículo puxado a cavalo”. How did you decide this?

NT: Yeah. I found these words in the dictionary, but I was not sure of *hand cart* and *horse-drawn*. So, this word *float*, I couldn’t understand what was the meaning of this word, so I look up this word in another dictionary, then I saw the meaning. So, I put like... er... later you’ll see that we have another word which means... *milk float*, I think. But, if you see here, you’ll see that I didn’t translate *float*. I just put *veículo puxado a cavalo*.

R: So you did. You translated it as “veículo”.

NT: Oh, so it’s just one word. So, it’s ok.

R: You translated “dairies” as “fábricas de laticínio”. Any problems

NT: No, I think it’s ok.

R: How did you decide for this translation?

NT: I found this word in the dictionary.

R: I think you had a problem a here. You translated “environmentally friendly electric milk floats” as “veículo elétrico sem teto, sem laterais, conveniente para entrega domiciliar de leite”.

NT: Yes. That was the translation that I found, you know, in the dictionary.

R: Did you find in the dictionary that it was a “veículo elétrico sem teto, sem laterais”?

NT: Yeah. Not *elétrico*, because the word *elétrico*, *electric*, is here. But *milk float* was written: *veículo elétrico sem teto e sem laterais, conveniente para entrega domiciliar de leite*.

R: You translated “your morning pinta” as “seu leite matinal”.

NT: Yeah. I translated again *pinta* as *leite*.

R: You wrote “por mais de 60 anos”, and you stopped some time to think. And then you came up with “fazendas de gado leiteiro”. Which is the translation for “dairy farms”. What were you thinking here?

NT: I was thinking about the word *collected*... *Milk was collected*. I couldn't say *o leite era coletado*.

R: So “dairy farms” was not a problem then?

NT: No, no problems with dairy farms. My problem was with the word *collected*. Then I decided to write *recolhido*. I still don't know if it's a good translation, but I decided to write...

R: And I think you were thinking now about “Milk Marketing Board”, yeah?

NT: Yeah, and that was a problem because I didn't know the meaning, so I went to the internet to look for this meaning.

R: And how did you look it up?

NT: I typed the *Milk Marketing Board* and I found some sites. But I didn't find the meaning, so I tried to look for a similar translation, like a similar way how to say that in Portuguese. How would you say that in Brazil? How would you translate *Milk Marketing Board*?

R: And by the parallel texts you read on the site, could you understand anything about “Milk Marketing Board”... what it is, what it's used for?

NT: Yeah, maybe I could see that it was a... I don't know. I saw the meaning, but I don't remember now, but I saw like, I could have written something that was not sure. So I decided to write *Milk Marketing Board*. As I was not sure, I did not want to write it wrongly, you know. But I don't remember the meaning.

R: And then you translated “dairy” as “fábrica”, just “fábrica”.

NT: Yeah. I didn't want to repeat *fábrica leiteira* or *fábrica de laticínio*, you know. Because I had written before. So, I don't think it would be good if I could write again this word. It would be repeated so many times.

R: And then “milk industry” was translated as “indústria do leite”. Any problems?

NT: No.

R: What were you thinking about here?

NT: I was thinking about the word *deregulated*. I didn't know the meaning of... First of all I thought it would be *disorganised*, *desorganizado*. But I saw it was not the right translation. So I had to look up for this word, and I found out that it was not controlled anymore. Then I put *não é mais controlada*. But I thought... I saw it was not ok, so I changed it many times here, as you can see. This was a part that I had to think a lot.

NT: Here I had problems with *the Milk Marketing Board has now gone*. How could I translate *has now gone*? So I put *não é mais de controle*... er... *não é mais controlado pelo Milk Marketing Board*.

R: Did you have any problems with “Milk Marke”?

NT: No, I didn't translate it. I don't know if I should, but...

R: And why did you decide not to translate it?

NT: I thought it was a name of a company.

R: And then “individual dairies” was translated as “laticínios individuais”, yeah?

NT: Yes, then I changed. You're going to see that when I was revising I changed to *laticínios particulares*... *fábricas de laticínios particulares*.

R: You actually finished your translation, you finished the first draft with the elapsed time of 2 hours and 4 minutes. What were you doing now, between 2 hours and 4 minutes, and 2 hours and 19 minutes, which is the time when you actually finished your translation?

NT: I started revising. I read it again, and then I started looking for some Portuguese mistakes, or even a translation that was not so good. And then I decided changing some words, maybe omitting some words, you know.

R: Were you reading both English and Portuguese texts at the same time?

NT: No, I was just reading the Portuguese.

R: Why just the Portuguese one?

NT: Because I was looking for some mistakes, like, English mistakes and also some sentences that were not so well elaborated, you know... Like, well translated.

R: Do you think it's important to read just the Portuguese version during revision?

NT: No, I think it's important to read the English version also, because you can see what is written in English. Because if you read just the Portuguese translation, maybe you're going to change... er... not the meaning, but the order of the words, you know. And... so, you have to try to keep it *da maneira mais fiel* [as close as possible to the source text]. And you read just in Portuguese, maybe you feel like changing and

you're going to change a sentence, you're going to write the same way, the same... er... idea, the same message, but you're going to change the... the sentence, the order... I don't know.

R: Did you use any websites during the translation?

*NT: I used just altavista to look for the word *pinta*, and also for the word *Milk Marketing Board*.*

R: Did you look for these problems by reading parallel texts or by looking the words up in an on-line dictionary?

NT: I looked for the words in an on-line dictionary.

R: Did you use the website also to read different texts?

*NT: No, I didn't do that. I just... I tried to read a different text when I was looking for the word *Milk Marketing Board*. So, I read a text, but I saw that I wouldn't find the meaning, because the text was in Portuguese, and the word *Milk Marketing Board* was written in English, but in italics.*

R: So you were trying to find a translation of "Milk Marketing Board" in the text?

NT: Yeah, maybe, because sometimes they put it, right. This is... or something like that... But they didn't do that. The person who translated didn't do that.

R: Thank you very much.

NT: You're welcome.

(NT5: 08/08/2003)

R: I can see that you started translating with the elapsed time of 5 minutes and 16 seconds approximately. What were you doing during this time?

NT: I was reading the [source] text in order to have a general idea.

R: You translated "dairy cows" as "diariamente...". Why?

NT: Because I understand it as a false cognate, and after I woke up [laugh].

R: Ok. So you understood [in fact, he misread] "dairy" as "daily"?

NT: Yes.

R: I believe you translated "milk and cream" here as "leite e creme". Any problems?

NT: Hm. Don't think so.

R: And you were thinking after "Anita Bourne nos dá...". I think you were probably considering how to translate "low down", yeah? And then you translated "low down" as "desonestidade".

NT: (...) after I translated it different.

R: What? "Low down"?... "Low down" is "desonestidade" [in his first draft].

*NT: Yes, after... er... at the end of the text I translate it as... let me remember... *diminuição*.*

R: And why did you choose this translation for "low down"?

NT: Because of the... [shakes his head, as if not knowing the answer].

R: Did you look it up in the dictionary, or not?

NT: Yes.

R: You stopped again here. I think you had a problem with "the pinta habit", yeah? Which you translated as "o hábito de tomar leite". How did you come up with this translation?

*NT: Because I didn't find the word *pinta*. And I saw that *pinta* was connected to milk. It's a measure of milk.*

R: You translated "cow's milk" as "o leite das vacas". Any problems there?

NT: No.

R: You translated "[great] cheese-lovers" as "grandes amantes de queijo". Any problems there?

NT: No.

R: Did you have any problems with "dairy skills"? You translated it as "habilidades diárias".

*NT: After that I translated as *habilidades leiteiras*.*

R: Ok, just because you thought... you read "dairy" as "daily", yeah? Ok.

*R: And why did you decide that you should translate it as *habilidades leiteiras*? Do you know? Did you look it up in the dictionary?*

NT: No, no.

R: Any problems with "piebald"? You translated it as "malhados".

NT: No.

R: Did you look it up?

NT: Yes. Just to confirm.

R: Here "nowadays many people..." it says in the text... [pointing at the source text] ..."their milk", yeah? And you translated as "o leite". Why did you choose this?

NT: I decided to... to do a... to have an idea... no literal translation... but the idea.

R: *Let's see how you translated "milkmaids", yes?*

NT: I didn't know the word was connected to the past. I believe that there is a difference between the past and now. And in the past, people used to be employees, but... er... I just found *milkman*...

R: *You didn't find "milkmaids" in the dictionary?*

NT: No.

R: *And why did you choose "encarregados da ordenha", then?*

NT: The employees in general... I... I wasn't sure.

R: *You stopped here [for] a long time. You were thinking about "bulk", in think. You put "em grandes tonéis". Did you have any problems there?*

NT: No, I tried to find another word, besides *tonéis*, like *baldes*, but I didn't.

R: *No, it's my mistake. Here "em grandes tonéis" is not the translation of "Bulk". It's the translation of "pails". You found "baldes" because it's the translation of "large pails". So, you found "baldes", but you didn't like "baldes"... Why [is it that] you didn't like "baldes"?*

NT: Because it's a strange word. *Balde* is open, and *tonel* is closed, it's special, I think. Because my context, when I used to receive milk at home, we had little *tonéis*.

R: *You translated "cattle plagues" as "pragas de gado". Any problems?*

NT: No. Actually I tried to find another word, like *epidemia*, but *epidemia* is another thing.

R: *Did you have any problems with "town cow herds"?*

NT: I stopped to think about, because *town* is a century, and... er... (...) but (...) typed a word, a special word... er... *sede*.

R: *So how did you translate it? Er... "A maioria dos rebanhos"... "most of the town cow herds". So you translated "town cow herds" as "rebanhos"?*

NT: Yes.

R: *So you decided to omit the rest of it, yeah?*

NT: Now I'm thinking about it... *sede*, *matrix*, something like that. I don't know.

R: *Matrix?*

NT: I don't know. The headquarter...

R: Now you were thinking about "bulk", yeah? So, "transportado em massa". Why did you choose "massa"?

NT: *[Just shrouded. No answer].*

R: And you were thinking here about the translation for "dairy farms", yes? And you translated "dairy farms" as "fazendas leiteiras". Any problems?

NT: No.

R: *Did you have any problems with "daily pintas"?. You translated [it] as "leite diário".*

NT: No, no problems.

R: *"Milkman" was translated as "entregador de leite". And then you changed... "leiteiro".*

NT: Yes, I thought *leiteiro*, because it's a common word for us.

R: *And here you stopped to think again. What was your problem here? [Reading from the text] "com carrinho de mão ou carroça"...*

NT: Because I stopped to think about... er... *electric [milk] float*. And then I used the google [www.google.com] to search. I put the all name [electric milk float] and [I got] some museums, another sites that has information about this car. And I could see *friendly* because is *simpático*, and *environmentally* because he has *electric energy*.

R: *Let's see how you translated it... "os simpáticos 'electric milk floats'", and then in parenthesis "veículos movidos a energia elétrica". Why did you decide to do this?*

NT: *Because we don't have this kind of cars in Brazil. So I decided to put the original name, and after to make an explanation about the name.*

R: *And why did you translate "environmentally friendly" as simpático?*

NT: I could use *amigável*, but *simpático* is a... I thought it was the best word.

R: *Let's see some other translation units in this paragraph.... So we have "daily pintas" there, we have "milkman", and then we have "hand cart or horse-drawn float". Any problems here?*

NT: No.

R: *Did you look anything up in the dictionary?*

NT: No.

R: *You translated "dairies" as "produtoras de laticínio". Any problems?*

NT: No.

R: So, ho... er... why did you decide that “dairies” would be “produtoras de laticínio”?

NT: I look up on the dictionary, and I saw that... er... is *leitaria*, and I thought that a common word for us. And *indústria* or *produtora de laticínio* is... er...

R: Did you have any problems to translate “Milk Marketing Board”?

NT: Yeah, I didn't translate it because I had to (...) more about it, in order to find the correct name.

R: And how did you search about it?

NT: On the google [www.google.com].

R: And what did you type there? Milk Marketing Board?

NT: Yes, but I didn't find any translation, just *Milk Marketing Board*.

R: Did you read any texts about “Milk Marketing Board”?

NT: Some texts. In Portuguese and in English.

R: But those texts didn't help you anyhow?

NT: No.

R: And then you translated “dairies” as “as indústrias”. Why did you decide to translate “dairies” as “indústrias”?

NT: Because I... we are talking about the present. And the industry is... [he could not complete it].

R: Did you have any problems to translate “Milk Marke”?

NT: I didn't translate it. Because I think it's a own name.

R: You translated “individual dairies” as “indústrias individuais”. Why?

NT: But after as *a particular* [indústrias particulares]. Because *cooperativa* is a meeting of lots of farmers or lots of individuals. It doesn't take part in the same idea.

R: You finished your translation with the elapsed time of 1 hour and 44 minutes. What were you doing now, between 1 hours and 44 minutes, and 2 hours and 07 minutes, when you actually finished the translation?

NT: I was reviewing... changing words... er... wrong words or just synonyms.

R: Were you reading both the English and the Portuguese texts at the same time?

NT: Yes.

R: Do you think it's important to read both texts when you're revising?

NT: Yes, because we cannot escape [from] the goal [of the] original text.

R: Ok, that's it. Thank you very much.

NT: Thank you.

(PT1: 29/07/2003)

R: I can notice you started translating after 15 minutes and something. What were you doing until then?

PT: First of all I read the whole text in the hard copy, and then I looked for words in the dictionary. The words that were not familiar to me. Actually, new words.

R: You mentioned something about nine words, yeah?

PT: Yes.

R: Did you have any problems with the title?

PT: No.

R: You translated “dairy cows” as “vacas leiteiras”, and “milk and cream” as “leite e nata”. Did you have any problems there?

PT: First I had put *cream* as *creme*, and then I realised we don't use that here. It's *nata*, so I changed.

R: Anything about “dairy cows”? Any problems?

PT: No.

R: You translated “low down” as “as notícias”. Any problems there?

PT: No... [from] *notícias* I put *outros fatos*, because I realised she's not telling us the news, she's telling us... *low down* is like, what is important, or whatever she wanted to tell us.

R: So you checked that when you were revising, yeah?

PT: Yes.

R: Er... “o hábito da dose de leite” is the translation for “the pint habit”, yes? Did you have any problems with that?

PT: Yeah. I had to look, actually. I had to look up for the *pint of milk*. I didn't know what it was.

R: Pint or pinta?

PT: Both. So I understood it was a *dose*.

R: Ok. And you found that in the dictionary.

PT: Yes.

R: You translated “cow’s milk” as “leite de vaca” and “dairy skills” as “habilidades leiteiras”. Did you have any problems with this?

PT: Not really.

R: Do you know why you chose “dairy skills” [as] “habilidades leiteiras”, or not?

PT: Skills are always (...) *habilidades*. And then *dairy* is *leiteira*.

R: You probably looked up these words before, yeah? Like *piebald*..

PT: Yeah. I looked for... Do you want to know which ones I looked for?

R: Yes.

PT: *Low down, cow shed, pinta, breeds* (I knew what it meant, but I didn’t know how to put it in words), *piebald, milkmaids, electric milk float* (I had never heard of that), and then *dairy* (I wasn’t sure what... I know what a dairy... like dairy product, but I wasn’t sure what dairy meant).

R: So these are the words you looked up before the commencement of the translation.

PT: Yes.

R: Then you stopped and you went back to the previous paragraph. So you were translating and you went back and started revising.

PT: Yes. After I got here to *the United Kingdom* I realised... and then I stopped and I thought “Ok, I must be wrong”, so I went straight away instead of waiting, I went... because there was something I was not comfortable with. I had typed *Bretanha*. It’s very strange, so the moment I decided I went back and fixed it. I didn’t wait until the end.

R: And do you do this normally? You go back to the previous paragraphs and go on editing, revising?

PT: Yes, I think it’s quite mechanical. You start typing and doing things, but it stays there in your mind, so you go back the moment it’s clear, because maybe for the (...) you realise it was... what you were thinking... it was right, so you go back... I go back immediately. Like, you’re doing something, and you carry on thinking about it. Although you’re already in the next paragraph.

R: You translated “milkmaids” as “ordenhadoras”...

PT: Yes. That I looked up.

R: So you found this in the dictionary then, yeah?

PT: Yes.

R: Then you stopped to think about “rebanhos”, I think... “Town cow herds”.

PT: Yes. I had to look for the word actually, I think.. *Herds*... I knew *herds*, from *elephant herds*. But then... So I looked in the dictionary.

R: You translated “town cow herds” as “rebanhos de vacas da cidade”...

R: ... and “transportado em grandes quantidades”. That’s “transported in bulks”.

PT: Yes.

R: Did you have any problems with this?

PT: No.

R: And then you translated “fazendas”. That’s the translation for “rural dairy farms”. Why did you choose to leave it just as “fazendas”?

PT: Because we don’t say *fazenda rural*. I think there is no city farm here. In Portuguese, I don’t think we use. So I decided to make it shorter.

R: And “delivered fresh”... “*ainda fresco*”. Why did you add this “*ainda*”?

PT: I don’t know (laugh). I thought it was still fresh.

R: (...) “daily pinta” as “*dose diária de leite*”. Do you know why you chose that?

PT: Yes. Because I had said that *pinta habit* is a dose, so it’s a daily dose.

R: You chose “milkman” as “*leiteiro*”. I believe you had no problems with that.

PT: No.

R: And “hand cart or horse-drawn float” as translated as...

PT: Yeah, but then I fixed that. I realised *cavalo* (...) So I looked that in the dictionary as well. ... *Handcart*. The *handcart* I didn’t know, and *horse-drawn float*. I believe that *float* (...) it’s like the carriage that carries the milk. But I just translated the whole thing. But they... it’s drawn by the horse, so it must be a *carroça*.

R: Ok, so you chose “*carrinhos de mão ou em suas carroças puxadas a cavalo*”.

PT: Yeah.

R: Let’s see how you translated “dairies”... “*as leitari... as leiterias*”.

PT: Oh, I put the “p” [in the word *adoptaram*, as spelled in European Portuguese], you see. Now I realise, you see. (laugh).

R: So you chose “*leiterias*”?

PT: Yes, because I thought *leitarias* would be too Portuguese from Portugal. And I looked in the dictionary and they were both right, so I just thought *leiterias* would be better.

R: You translated “environmentally friendly electric milk floats” as “carros elétricos que não agridem o meio-ambiente”. Any problems with that?

PT: I wasn’t sure if this.. if we had a specific word for *environmentally friendly*, so I just decided to do that. I wasn’t sure. Maybe there is a specific usage or term, but I’m not familiar with [it] in Portuguese.

R: And “milk floats” became “carros elétricos”.

PT: But that I looked up in the dictionary.

R: And then how did you translate “morning pinta”?

PT: The daily dose again.

R: “Dairy farms” [was translated as] “fazendas de laticínios”. Was it the same [translation] as before, or not?

PT: No, I thought this is a different thing: *dairy farm* from just *dairy*. *Dairy* for me is a smaller thing. *Dairy farm* would be very specific.

R: And here I believe you were thinking about “Milk Marketing Board”.

PT: Yes. So I decided for the *Conselho*.

R: “*Conselho do Mercado do Leite*”. How did you come up with this decision?

PT: I had to think of the *Marketing*. Was it like, *Marketing* as advertising or.. you know, I wasn’t sure then it must be... then I thought... I split the three words. Ok. *Milk, Marketing*. I left the *Board* out. Ok. *Milk Marketing* means *Mercado do Leite*.

R: Then there’s something different here. First, “*Milk Marketing Board*” was “*Conselho do Mercado do Leite*”, and then “*Milk Marketing Board*” became “*Governo e...*”

PT: Não! [Reading from the source text] “Now the milk industry has been deregulated and the Milk Marketing Board has now gone”. So, deregulated for me... I couldn’t even find it in the English/Portuguese, I had to look in the English/English [dictionary]. [It] means that [it] doesn’t have any Governmental control anymore. That’s why (...) a indústria do leite já não tem o controle do Governo... it means deregulated.

R: Did you have any problems with “*Milk Marke*”?

PT: No, because I just put it as a name. I didn’t even look up the word. I just assumed it was a name.

R: “*Individual dairies*” became... Oh, you changed and then you changed again, and your final decision was “*leiteiras individuais*”.

PT: Yes, because I wasn’t sure if it was... I think I had put that before. Can we check? Something like *particular* ou *privada*. Then I just chose for the word in English [individual = individuais] because *particular* means something else.

R: You actually finished your translation in about 39 minutes. From 39 to 50 minutes you were just revising.

PT: Yeah. I read it about twice or three times.

R: Reading the translated text or both texts: English and Portuguese?

PT: First I read just Portuguese. Then, English and Portuguese. And then the Portuguese for the last time. I read the Portuguese first to see if it made sense just in Portuguese, without relating to the English one. Then I went back to English to see if it was really what it meant. Then I read again [in Portuguese] and I made a few changes, I believe.

R: And why do you read just the Portuguese and you don’t read the English version [at this stage]?

PT: Because it has to be sound, it has to make sense without... because whoever is going to read it in Portuguese, they don’t have the English part to check if it’s right or not. So it has to make sense just by itself.

R: Do you always do this, when you finish the translation, you read just the Portuguese version and forget the original?

PT: Yes. If I have the time, I’ll do it the next day even. Because then you’re not thinking of the English text, you don’t remember kind of things... You know, you just read the Portuguese as if were reading a fresh text. And... “Oh, it doesn’t make sense”... Ok, then I go back to the English [text] and I check, and then I read the Portuguese again.

R: What were you concerned about [during the revision phase], was it the grammatical side of it or...

PT: Yeah, (...) when you’re reading... I’m thinking of a person reading, how it would sound. If it sounded strange and...

R: To whom?

PT: To any other person reading the text. A Portuguese reader. Because I get very influenced... When doing the translation, and looking at the English [text], I get very influenced. “Oh, I know what’s happening [I understand the message]”, so I write anything that it could be. Then, when you do the revision the next day

(...), then you really have to think “Oh, I don’t know what it relates to”. I don’t have any other standard one, the English one, the main one [the source text]. So it has to make sense here and now.

One thing I forgot to say is that I would wait till the following day to revise, but if I could, I would wait *and* give it to someone else, a Portuguese speaker, to read. Even if I couldn’t wait, I would still give it to the person... for checking.

R: *Who do you normally give it to read?*

PT: Either to my boyfriend, or my mum, whoever is near me. Someone I trust and someone I know has good Portuguese knowledge, and someone who would correct me in a nice way.

R: *Did you use any websites to check anything while translating?*

PT: No.

R: *Ok, thank you very much*

PT: Thank you.

(PT2: 28/07/2003)

R: *I can notice that you spent 4.33 minutes [exact elapsed time was 04.32.65] before you actually got down into doing your translation. What were you doing before you started translating?*

PT: I decided to read the text through because it was a short text and (...) [I found it] useful to read it through so I could already spot some of the possible problems: words and expressions. And also to feel the register of the text.

R: *You wrote the title and you stopped to think. Did you have any problems there?*

PT: I was not happy with the title, but then I decided to leave it for later.

R: *Did you have any problems to translate “dairy cows”?*

PT: Not really, because I have a background in agriculture.

R: *You translated dairy cows as “vacas”. So you decided to actually omit “dairy” from the translation.*

PT: Yeah, because in Portuguese it would be *vacas leiteiras*, and then we will talk about *milk*, which in Portuguese is *leite*, so I think there would be some kind of echo, or redundancy.

R: *You translated “milk and cream” as “leite e nata”. Was it ok?*

PT: That’s ok for me.

R: *Did you have any problems with “low down”? I think you were thinking of “low down” here.*

PT: Oh, yeah. I looked it up in the dictionary to see what the expression was and to be sure.. yeah. I had a problem with that expression.

R: *And then you translated “the pinta habit” as “o hábito de tomar leite”.*

PT: Yeah, because we all know that *pinta* is a measure that we don’t use in Portuguese, so I thought it would be ok *hábito de tomar leite*, and we don’t need to specify how much milk they... it’s something that is really... it belongs to the British Culture.

R: *And then you translated “cow’s milk” as “leite de vaca” and “cheese lovers” [as] “apreciadores de queijo”. Did you have any problems with any of those translation units?*

PT: Yeah, I was thinking if it would be ok, but then I thought it would be better to write *leite de vaca*, because we can drink *leite de cabra*, buffalo, whatever. And I think *apreciadores* sounds more natural than *amantes do queijo*.

R: *And then “dairy skills” was translated as... so you were thinking about “dairy skills”, yeah?[Reading from the text] “levaram as suas... a sua habilidade em produzir laticínios” as “dairy skills”... “habilidade em produzir laticínios”. How did you come up with this?*

PT: First... er... *habilidades*. Whenever I read *skills*, *habilidades* is the first word that comes to my mind. And after reading it I thought it was pretty much like the text had this translation. It sounded really like a translation. I think *habilidades* in this case, in Portuguese, would be kind of artificial so I looked up other words for *skills* in the dictionary, and then there was *perícia*, which was the one I chose later. I thought it would be more natural.

R: *Oh, then you went back, made some changes in this paragraph (...) [Reading from the text] “Beber leite de vaca”...*

PT: Yes, sometimes I stop to think in terms of collocation, what sounds better, *beber* or *tomar* and then I had already used *tomar* somewhere before in the text, so I decided to put *beber* just to use a wider range of vocabulary.

R: Is it something you normally do when you translate? You stop and then think about the micro structure of the text while you’re translating?

PT: I do. And also sometimes I stop to read the text in the target language, trying to detach myself from the source text to see if it sounds natural.

R: *Do you do this during the first draft?*

PT: Sometimes, yes.

R: *[Reading from the text] “O gado holandês é”... You were thinking of “piebald”, I think.*

PT: Yeah. I was 99% sure, because I know that Dutch cattle is [sic] *malhado*, like white... black and white, but I wanted to make sure because I’d never seen this word.

R: *Then you had a problem with “the milkmaids”, yeah?*

PT: Yeah. I decided to omit *milk* because it would be obvious in Portuguese, and if I translated that... I don’t think that exists in Portuguese (...). The outcome would be very funny.

R: *So you decided for “moças”.*

PT: Moças. Yeah.

PT: [Looking at his Replay Log File] *Fregueses* I was in doubt... for the word *customers* I think *fregueses* for that time... er... was [a] more widely used word rather than *clientes*. It sounds a better form for people who buy milk, I guess.

PT: Then I looked for *cattle plagues*. Because in Portuguese we normally use the word *pragas* for plants... diseases. And use *doenças* or *pestes* when we refer to animals. This knowledge I drew from my background in agriculture. Even so, I looked it up in the dictionary, for options for plagues. I decided for *pestes*. *Pestes bovinas*.

R: *What were you thinking about here?*

PT: *In bulk!* Because a *granel*... I’m not sure, but I think the expression *granel* comes from *grãos*. And I was wondering if we could use a *granel* for liquids. But I, I think so. I was also wondering whether I could also use *em grande volume*, but I then think a *granel* sounds more natural, usual.

R: *And you chose to translate “dairy farms” as “fazendas”.*

PT: *Fazendas*, because you have [reading from the source text] *milk could then be transported in bulk from rural dairy farms*, [translating] *o leite poderia ser transportado das fazendas de leite*... Then again we would have some kind of echo. And *fazendas leiteiras* is not a term that is used in Portuguese. (...) Because if milk is transported from the farm, it’s the *milk farm* in Portuguese, not from any other kind of farm.

R: *And then you translated there... you were thinking about this, because you came back and changed... “daily pintas” as... you wrote “leite diário”, then you came back and changed, left just “leite”.*

PT: My first option was to keep the original structure from the source text, but then again I thought that it would sound kind of artificial in Portuguese: *leite diário*. We don’t usually use this kind of collocation. So I decided to alter the structure in the target text and I chose to use an adverb instead: *diariamente*.

R: *And then let’s see how you translated “milkman”... “o entregador”.*

PT: O entregador, yes. Then again is the same case as that of the *milkmaids*. I could use *entregador de leite*, but I guess *leite* had been mentioned before and kind of close to this word as here: *recebiam o leite*.

R: *Did you have any problems translating--you definitely did, because you came back and changed everything again—translating “handcart or horse-drawn float”?*

PT: *Float*, because I had two options: *carroças* and *carros*, but I don’t think that a *carro* pulled by horses is something very... if the reader... native reader in Portuguese would read he would find it strange. So I’d rather put *carroça*. I’m not sure if this *float* is a vehicle that is closed or is open like a *carroça*, used in Portuguese, open. But anyway, what we have is *carro de boi* in Portuguese and everyone knows that *carro de boi* is an open vehicle, but we don’t have *carro puxado por cavalos*. So I decided to put *carroça*.

R: *And then you translated “dairies” as “indústrias de laticínios”.*

PT: Yes, this was referring to dairies activities in general. They put it in the plural. So, as I understood, it’s not a farm. So I decided to put *indústrias de laticínios*.

PT: And here we have the word *float* again, but this time electric, isn’t it?

R: In the original it says “environmentally-friendly electric milk floats”, and you translated as “os carros elétricos ecologicamente corretos”. How did you come up with this?

PT: We don’t have this environmentally-friendly in Portuguese, *amigável*. We usually use the word *ecológico* or *ecologicamente correto*, which I think is the closest to *environmentally-friendly*. And this time I chose to translate *float* as *carro* because it’s electric. This is the opposite of the first option, because *uma carroça elétrica* would be very funny to imagine in Portuguese.

R: And then “morning pinta” became “leite matinal”.

PT: Yeah, this would be ok, but still I spent some time thinking on the collocation... er... thinking about the collocation to see if it would sound kind of foreign... a foreign thing. But I didn’t think so.

R: And then you had a bit of a problem here with “Milk Marketing Board”, yeah?

PT: Yeah, because...er... I thought that if I left... this is a proper noun. I thought that if I left this way, native Portuguese readers without a knowledge of English would have a problem, so I decided to explain between brackets what this could be.

R: So you decided to keep it in the original and explain in brackets what it meant.

PT: Yeah.

R: So you decided for “Junta de Comercialização do Leite”, but you came back and changed it.

PT: Yeah, because I thought this was odd and artificial. I went back and changed it later when I was revising the text.

R: And here “dairy” becomes “usina de laticínio”, but there [previous paragraph] you chose “indústrias de laticínio” for “dairies”.

PT: Yeah, but there... the first time it’s used in the plural, and here they make [it] clear that the milk was collected in the farms and taken to a separate place where it would be processed, and... er... so it wasn’t on the farm. It was on a ... Well, *indústria* for me is something larger, and sometimes used even as a collective noun. In this case I decided to use *usinas* because it’s also a term that is used in the area in Portuguese: *usina de laticínio* and then *indústria de laticínio* for a broader collective meaning.

R: Did you have any problems with “Milk Marketing Board”?

PT: If I had the option I would use... er... perhaps italics here [he’s accounting for his choice of having kept the translation unit between inverted commas] and would keep the translation of *Milk Marketing Board* between brackets... er... between these inverted commas.

R: You translated “your milk” as “o leite”.

PT: Yeah. Again I thought that this is the same case as *wash your hands*, [translating] *lave as mãos*. We don’t use the possessive in this case. *Your milk*, [translating] *seu leite*... is kind of odd in Portuguese.

R: Did you have any problems with “Milk Marque”?

PT: No, because there is an *aposto* [a farmers’ co-operative] here, of what *Milk Marque* was. So I just put it between inverted commas.

R: And then you translated “individual dairies” as “usinas de laticínios individualmente”.

PT: And then I changed *individualmente* later again, and decided to leave it as *individuais*. Because then I finished the first draft and started reading the text in Portuguese, detached from the original in English, and I thought that there would be no problem with *usina de laticínios individuais*.

R: You actually finished the first draft with the elapsed time of 01 hour and 06 minutes approximately. What were you doing now, between 01 hour and 06 minutes and 01 hour and 15, almost 01 hour and 16 minutes, when you actually finished your translation?

PT: I was reading the target text... er... proof reading it to see if it sounded natural, if there were print mistakes or punctuation, alterations. While reading I decided to change the title because I thought that *Além do Balde*... only *além* does not convey the same meaning as *Beyond*. So I was thinking and thinking, and I decided... because as I understood they wanted to show what goes on after you milk the cows. So I decided to make this addition: *Além dos Domínios do Balde*. I thought it would sound more appealing to the Portuguese reader, rather than *Além do Balde*.

R: You have just mentioned something about reading the Portuguese version and detaching from the original. Is it what you were doing here?

PT: Yeah, I’m proof reading it.

R: So you were reading in Portuguese, you were not reading the English version anymore?

PT: No, I’m not.

R: Do you always follow this procedure? You go on... er... you revise while you translate and when you finish, you proof read it. That is, you edit it, you revise it again.

PT: I do, yeah.

R: And do you always do this, you detach from the original and then read just the translated version?

PT: Yeah. If I have time, I prefer to, perhaps, read this first draft the next day, not immediately after I have finished the translation. Because then I won’t remember much of the source text, and I will read this translation as if I was reading a text that... I will pretend that I am reading a text that was written originally in Portuguese and I will look for signs of translations and try to (...) to make the text as natural as possible.

R: Why do you think it’s important to leave it to the next day?

PT: In order for you to get rid of the influence of the source text. Sometimes, while you are translating, I get in a kind of limbo between the two languages and you cannot tell anymore in your own language whether that collocation is natural or not. Sometimes I even give it to people, let’s say my father, my mother, my brother,

whoever is close to me, and has certain level of culture, to read that and tell me if that sounds Portuguese or not, because there are moments when I'm not able to tell.

R: *Did you use any websites to check anything while you were translating?*

PT: Not this time. I usually use them as... er... they are usually my last option because I prefer to leaf through books... dictionaries. But I use the website very often to check for collocations, to see if they exist, and sometimes *neologismos*.

R: Great. Thank you very much.

PT: Thank you.

(PT3: 23/07/2003)

R: *I can see you started translating almost straight away. You allowed something like four, five seconds [the precise elapsed time was 00.04.91] to start translating, yeah? Why was that?*

PT: I took a look at the text and then I noticed the title and I thought it would be better for me to read the text before and then I could come up with an interesting translation for the title. So I just started doing it right away.

R: *Right, but when you say "reading the text before" you mean "not reading before you started translating", yeah?*

PT: Yeah, I mean reading while I was translating the text.

R: *Is that a normal practice?*

PT: I guess I can call it a normal practice, yeah.

R: *First line. You wrote "pinta", and you left it in capitals in English.*

PT: Exactly. Actually, I didn't know what that meant. So I was in doubt, you know. I was like, "hey, what is that?", so I thought I could write it in capital letters and then I could go back to it later on.

R: *You go back sometimes [in the text] and make changes. You think, and you go on... you proceed on the translation, [but] you keep going back and making changes...*

PT: I guess I write it and then I take a second look at it, and then I see if something should be changed, or some word... I tie around some of the words.... Just collocation.

R: *You translated "cow's milk" as "leite de vaca".*

PT: Yeah.

PT: [Reading from the source text] *...were certainly great cheese lovers.* That I changed a little bit: *Notoriamente apaixonados por queijos.*

R: *Why did you choose this?*

PT: I just hm... that time I thought it read better.

R: *You translated "dairy skills" as "técnicas de produção de derivados do leite". Any problems here?*

PT: I was just trying to find how it sounded better.

PT: Here I wrote hm... *vaca*, and then I changed it for *gado*.

R: *Do you know why?*

PT: Because I thought I was written *cow*, but actually we had *cattle* here.

R: *Every time you translate, do you always go back and make changes at the sentence level?*

PT: Yeah, usually. So when I do the final review I don't have a lot of things that need to be changed... depending on the text, of course.

PT: I stopped here because I checked a word in the dictionary.

R: *Which word was it?*

PT: Piebald.

R: *You wrote...hm... [Reading from the source text] "Nowadays many people still have their milk delivered", [Reading from the translated text] "recebem leite na porta". So, you ignored the word "their". Do you know why you did this?*

PT: Again, I just thought it read better that way.

R: *How did you translate "milkmaids"?*

PT: I didn't. I just left it out.

R: *And why?*

PT: Because how... I don't know if we have this word in Portuguese. What would you call it? The ladies that milk the cows?

R: [Reading from the translated text] *"o leite era tirado de vacas criadas nos quintais das casas". "Quintais das casas" is the translation for "town (cow herds)", is it?*

PT: Here we have *town cow herds*, but then I remembered that as far as I know, I think that during this time, [the] 18th century, I think people had... it was an occupation to raise cows and then milk the cows, and go around town selling them. So I think, you know...

R: You translated “dairy farms” as “fazendas de gado”, yeah? Any problems?

PT: I thought it made sense in the text.

R: And you translated “daily pintas” as “garrafas de leite”. Why did you choose “garrafas”?

PT: I changed it in the review. I just wrote *recebiam seu leite*.

R: And why is it you had this original idea of “garrafas”? And then why did you change your mind?

PT: Because I always thought that, you know, in England, in the United States, a long time ago people always got their milk in bottles, every morning delivered to their door. Then I changed it cause later on in the text we have the origin of the glass bottles.

R: And [reading from the texts] “handcart or horse-drawn float” was translated as “carrinhos de mão ou carrocinhas”.

PT: Again, you know, I thought about... maybe (...) seen the milkman walking around, pulling, you know...

R: You translated “dairies” as “laticínios”. Any problems with this?

PT: I don’t think so.

PT: Oh, I then I chose to elaborate a little bit on the *pinta* definition. Then I put *o leite nosso de cada dia*.

R: And why did you make this decision?

PT: Because I thought that, you know, since *pinta* appeared more than three times in the text I thought it was interesting to find an equivalent in Portuguese for that.

R: And then you translated [reading from the texts] “environmentally-friendly electric milk floats” as “carrinhos elétricos que além de práticos são inofensivos ao meio ambiente”

PT: Yeah. I changed it around a little bit.

R: And how did you come up with this decision? Did you have any problems with this?

PT: Yeah. I checked it out on the net.

R: What did you check?

PT: The milk floats.

R: And what did you find?

PT: I saw a picture. And then, by the picture I drew this definition.

R: And you added “que além de práticos”, which is not really in the source text.

PT: Not at all [laughter].

R: So, why is it that you added this information?

PT: Because I thought it would be, you know, just a little bit... hm... more interesting to have *práticos* there, [more interesting] for the reading, no, for the readers, actually. Because it would be *carrinhos elétricos inofensivos ao meio ambiente*. Pum! No, *carrinhos elétricos que além de práticos*..., you know, there is a better rhythm for the reading. And, you know, it’s not a lie.

R: And why did you choose [reading from the texts] “inofensíveis ao meio ambiente” for “environmentally friendly?”

PT: Because they do no harm to the environment.

R: [Reading from the texts] “The morning *pinta*” became (...) “o leite nosso de cada dia”.

PT: Because I think that *morning pinta* today, I think it has a little bit of the... hm... How can I put it? Not funny aspect. It has a cultural meaning for a British person who would be reading it, I think. So, I think that a similar effect could be achieved by using *o leite nosso de cada dia*.

R: Did you have any problems with “Milk Marketing Board”?

PT: Yeah, I did.

R: And what did you do?

PT: Well, I thought about it and I had some possibilities, and I then chose for “Associação dos Comerciantes do Leite”.

R: You thought about the possibilities before, yeah?

PT: Yeah, like *Comissão*...

R: Any reasons why you finally chose “Associação dos Comerciantes do Leite” and not anything else?

PT: No, nothing that I can think of.

R: Did you have any problems with “dairy” at all?

PT: I don’t think so.

R: Did you translate “milk industry” there?

PT: No, I think I left it out.

R: *Was it on purpose?*

PT: No, actually, I forgot.

R: *How did you translate “Milk Marque” ?*

PT: Well, I just wrote *cooperativa*.

R: You left this bit in parenthesis out, and you just wrote “*cooperativas ou empresas independentes*”. Do you have anything to say about this? Was it your choice, or not?

PT: Yeah, it was my choice. Actually, I’m not familiar with *Milk Marque*. It’s a British text and I’m not (...)

R: *Ok. This is not the end of your first draft, because you went right to the beginning of the text again to add the title and the first few lines, yeah? Why did you do this?*

PT: I think I said that in the beginning, didn’t I? Because maybe there was some kind of specific comment that could be useful in better translating the title. But since I didn’t find anything much too relevant for that I just did a literal translation. (...) have a pun, or have something like that, then I think it’s useful and it’s better to read the text and do the translation before translating the title.

R: *Let’s say you finished your translation with 33 minutes [the precise elapsed time was 32.27.93]. And between this elapsed time and [00.36.46] you were doing the last final revisions. Can you briefly tell me what you did during this revision time?*

PT: Well, I simply read the text again (...) and I checked for some words that could be changed.

R: *Where you reading just the Portuguese version or also the English?*

PT: Just the Portuguese version.

R: *Do you normally read just the Portuguese version at the end of a translation and forget about the English one?*

PT: Actually, most translations I do are versions, so I have the Portuguese version and I write them into English. And... hm... it depends on the translation. I think this time I could’ve spent more time, reviewing again and reading the...

R: *Did you use any websites to check anything?*

PT: Yeah, once [A parallel text, to check milk float]. (...) And I used the dictionary twice, I think, for two words that I can’t quite recall.

R: *Do you always do this quick revision at the end?*

PT: Yes, I do.

R: *Do you at times compare both texts, or not? Or do you read just one... in the last revision phase?*

PT: What do you mean, the original?

R: *And the translation, yeah.*

PT: It depends on how much time I have. But usually if I have the translation for tomorrow, and then I finish the translation and if I have time, so I look, and I look again. But usually I do a quick first draft, and then I review and I try to change a little bit. But then sometime later, maybe... I don’t know, maybe a day later or some hours later, you know, I get it back and I read it again. Because I might come up with different versions.

R: *So, sometimes you might do the revision even days later?*

PT: That can occur.

R: *And why would you do this, to leave the text aside for a few hours, or even days?*

PT: Hm... you know, I think it’s a good thing to do. Cause, you know, you’re in a different frame of mind, and you have different things in your head and maybe you can come up with different things in a different state. Or maybe, you know, you can even... it might be different.

R: *Ok, that’s it. Thank you very much.*

PT: Thank you.

(PT4: 11/07/2003)

R: *Eliana, you spent 35 seconds [the precise elapsed time was 37.33 seconds] before you started translating. That means you started translating almost straight away. Why was that?*

PT: Well, I don’t think the text was very difficult. I could understand immediately what I was reading, and I then decided not to waste time, and go straight to the point. And do what I always do, you know, leave the words I do not know in English and then look them up in the dictionary. And then have another reading to make the necessary changes, etc.

R: *You translated “dairy cows” as “vacas leiteiras”. Any problems here?*

PT: No.

R: You translated “milk and cream” as “leite e creme”.

PT: Yeah, but later on I decided to change *creme* because I realised that here in Brazil it’s not a habit for us to have cream in the coffee, for instance, as they have in the United States, half and half.

R: Ok. You had a problem with low down, yeah?

PT: Yeah. And cowshed.

R: And what did you do?

PT: I left as they were, in quotes, and then I looked them up in the dictionary.

R: Ok, so you left the words in English and then you looked them up later and then you came back and changed them.

PT: Yes, because I think it’s easier for me this way, instead of stopping every now and then, you see.

R: And then you also did the same thing with “pinta habit”.

PT: Yes, that’s right. Because I had never seen the word *pinta*. I remember the word *pint*. *A pint of milk*. And then I thought “well, again, I’m going to ... I have to look it up”.

R: And then you were thinking of the word “celtas”?

PT: Yeah, because I remembered, “well, the initial capital is because it’s English, but in Portuguese it’s not necessary”.

R: And you left “Britons” in quotation markers as well.

PT: Yeah. Because I was going to look up [later] and I was going to see [how I would translate it].

R: You translated “dairy skills” as “habilidades leiteiras”.

PT: Yeah. Observe that I put the quotation marks because I thought, “well, that’s so strange; so I’ll have to think a little bit about this, and find something better”.

R: You wrote “próprias raças” and in parenthesis you wrote “breeds”.

PT: Because I was not sure, you see, if I could use the word *raça*.

R: After “cores” you were thinking again. You paused. You were probably thinking of...

PT: Yeah, the word here, *breeds*, you see.

R: Ok. You were thinking of “breeds” again...

PT: Yeah. That’s why I left [it in parenthesis].

R: You stopped after “breeds”, and came back and changed everything again.

PT: Not to be repetitive.

R: Ok. You thought “piebald” could be “malhadas” but you were not sure...

PT: But I was not sure, so that’s why I decided to leave the word in English, and then the translation, the possible translation [in parenthesis].

R: You wrote “muita gente recebe”, and then you stopped. And then you wrote “o leite”. [Reading from the source text] “Many people still have their milk delivered”. Do you remember why you stopped before you wrote “o leite”?

PT: No, I can’t remember.

R: And you stopped there, before “soleira”...

PT: Because I thought, “well, am I going to put ‘nos degraus da porta’? No... ‘soleira da porta’”. I thought it was better.

R: Milkmaids...

PT: Again, I didn’t know how I was going to translate, you see. [I was thinking] “Am I going to put what? ‘as mulheres que fazem a ordenha’, ‘ordenhadora’, ‘tiradora de leite’?”. So that’s why... I was going to check later on.

R: [Reading from the text] “E a cidadezinha” ... “town cow herds”...

PT: Because I was going to see if that was a good translation for *town cow herds*.

R: So you wrote the translation, [keeping] the original in parenthesis to check it up later.

PT: Yes.

R: You wrote “gado” and then decided for “rebanho”...

PT: Yes. Not to be repetitive, you see... *gado, gado, gado*...

R: Ok, you try not to be repetitive when you write in Portuguese...

PT: Yes. I try not to.

R: Problems with the word “bulk” here, or not?

PT: No, because when I worked at Portobelo they sold sugar in bulk too. So it was not new for me.

R: Did you have any problems to translate “dairy farms”? You wrote “fazendas leiteiras” there.

PT: No, no problems. Believe it or not, my doubt was concerning *leiteiras* or *leteras* [laughters]. Believe it or not, it was the “i”, you see. Because it’s *leteria*, but it’s *leiteira*, so I decided to check.

R: [Reading from the source text] “Delivered fresh”...you translated as “*entregue fresquinho*”...

PT: Well, because I thought... I remember that in your text [the translation brief] you said that the text was supposed to be published in a magazine such as the one... what is it? Your Choice. Then I thought, “well, it has to have a commercial appealing”[sic], so I think the word *fresquinho* is more “simpática”, more attractive, you see.

R: You translated “milkman” as “*leiteiro*”. Any problems with that?

PT: No, no problems.

R: You were thinking after the word “*carroça*”. What were you thinking about?

PT: Because of the word here... *horse-drawn float*. I was concerned about the word *float*.

R: And you translated [it] as “*carro de mão ou carroça*” for handcart or horse-drawn float.

PT: And then I decided to leave only “*carroça*” e forget the word “float”.

R: And you translated “dairies” as “*laticínios*”. Any problems?

PT: No, no problems.

R: And you stopped again there, after “*universalmente*”.

PT: Ah, yeah, *envir...* *hum...* because I was thinking about *universalmente*, *environmentally friendly*...and then [I thought] “well, I have to find a translation, but I don’t want anything with [the suffix] *-mente*”.

R: Why not?

PT: Because then, I don’t know, that wouldn’t sound very well to me.

R: So the problem with “*universalmente*” was the sound of the word.

PT: Yes, with the following words, you see. Also, [about the TU environmentally friendly] I was not going to translate it literally: *amigavelmente ecológicos*, *ecologicamente amigáveis*. I thought that was going to be strange.

R: You translated “your morning pinta” as “*seu leite matinal*”. Was it ok?

PT: Yes, yes.

R: But you put “*pinta*” in parenthesis.

PT: Yes. Because I was going to check. And then I was going to read again and think if *pinta* would make a difference.

R: [Reading from the target text] “*Mais de 60 anos*”, you stopped, you came back, changed it several times...

PT: Yes. [verbalising possible translations] *durante mais de 60 anos*, *há mais de 60 anos*, *por mais de 60 anos*, yeah, that was...

R: What was the problem with “Milk Marketing Board”?

PT: Because I don’t think we have something similar here in Brazil, so I couldn’t find, you see, the name of an institution in Portuguese, to replace [it]. Then I thought, “well, anyway, they’re talking about Great Britain, so no problems in having Marketing Board”.

R: And you translated “individual dairies” as “*leiterias autônomas*”.

PT: Yes, and then... well, perhaps I... I don’t know... individual... because I thought, “well, hm... *leiterias individuais são autônomas*”.

R: Did you try to translate Milk Marque?

PT: No, I didn’t worry about *Milk Marque*. I was concerned about *Milk Marketing Board*. I even tried to put something in parenthesis, you see, but then I thought, well, by the context, you see, one can notice that.

R: And then you finished your translation in approximately 27 minutes [the precise elapsed time was 27.01.77]. And then you went on revising. You spent quite a lot of time revising your text (...). Can you tell me a little of what you were doing [between the elapsed time of 27.01.77 and 01.22.17.90]?

PT: For instance I thought, “well, *além do balde*...perhaps... *muito mais que um balde*... In terms that there is much more involved, than just a *pail*. And the exclamation mark because I wanted to call the attention, since there was no italics, no bold [available in the Translog software]. So I thought, “well, something has to be done in order to call attention”. Then I went to look up *low down*, *cowshed*...and make the necessary changes, so as to make the text smooth and... easy to read... reader-friendly, right? That’s the expression they use.

R: So, in order to make the text more reader-friendly, you went on re-reading the text, and looking up the words in the dictionary. Is that correct?

PT: Yes.

R: Right. Anything else?

PT: No.

PT: Ah, then I thought of the word *estábulo*. Because whenever we think of the word *estábulo*, we remember *horses*, you see. And this was not the case. Horses were not mentioned in the text. But then I thought, “what other word is there for *estábulo*”? Perhaps I could check that later on if this were a real text for me. If I were to give it to someone I would check that probably.

R: *Is it a common practice [that] you always write the text in a more literal way, leaving the words you don't know in brackets and then going back, looking up the words in the dictionary?*

PT: Yes. And making the necessary changes, and adaptations and [thinking] “well, this word here is not necessary; this is going to be repeated; let's see if...”. [This is] basically what I do.

R: *Did you use any websites?*

PT: No, no, no. I went straight to the dictionary.

R: Do you sometimes revise while you're actually translating or you do most of your translation once you're finished?

PT: Normally, when I think that something is strange, I stop and revise, and then I go on again. Normally I do as I did, I translate everything and then I go back and make the changes... I look up the words in the dictionary...

R: *Do you compare the English with the Portuguese text, or not?*

PT: I compare when I... Let's see, for instance, there was a word here that I thought, “well, I don't think it's going to make any difference if I translate it or not. It's not going to make a difference”.

R: *Ok. But you always have both texts?*

PT: Yes, I do. Or when something looks strange or sounds strange, then I look back, you see, “well, that's it. It's strange, but it's in the text”. So it's not me, it's the text.

R: *Ok, so there is not a time when you forget the original and read only the Portuguese version. You don't do this.*

PT: Well, perhaps if I were to revise this text another time, then I would forget the original.

R: *And do you normally do this, revise the text another time?*

PT: Yes, I do. But normally not immediately after finishing.

R: *When do you do this?*

PT: Well, if I have time I prefer to do it the next day, because then I am not so involved, you see. I have already rested, so... I don't know... when you are too much involved, then there are things you cannot see anymore.

R: *Involved with the original text?*

PT: Yes, with the original, with the translation, etc. So, that's why I prefer to do it – when I have time, of course, because they normally want the translation for yesterday... but when I have time I try to do my last revision the next morning, after having slept, and rested, and forgotten all the trouble I had.

R: *But in this last revision, which would happen in the next day, would you revise with both texts or just with one [the translated] text?*

PT: No, unless again, rereading the translation, if I found something strange, then I would look back. Otherwise, only the translation then.

R: *Ok, that's it then. thank you.*

PT: You're welcome.

(PT5: 08/07/2003)

R: *Fernando, I realize that you started translating straight away. You did not allow any time to read the text before. Why was that?*

PT: Well, because that's my usual technique. I like to start right away... er... with just a few concerns about literality. I think it's easier to work with the text to get its final version after I've put it into the second language, the language into which I'm translating.

R: *You wrote “as vacas leiteiras vêm” and then you stopped to think. Did you have any problems there?*

PT: Well, I was trying to choose the best verb form in Portuguese for it, like, I was in doubt about *vêm* or *têm*.

R: *For “have been provided”... And then you chose vêm.*

PT: Yeah. According to my technique I know that everything is always temporary. (...) In the second moment of my translation, when I'm revising the text already translated, anything can be changed.

R: *You translated “dairy cows” as “vacas leiteiras”, and then you translated milk and cream... er...as...let's see... You were actually thinking here on how to translate milk and cream...*

PT: Yeah. My first impulse was to translate it as *leite e creme*, but then I thought better and decided that *nata* is a better translation in this case.

R: *You were also thinking on how to translate “low down”, in think.*

PT: Oh, yeah. That was the tricky part of the text because it’s a game with the words. Like, low down means how the cow...

R: *The moo of the cow.*

PT: Yeah. And also to deliver information. That was something that could not be translated properly.

R: *(...) And you stopped again. [Reading from the text] “Ninguém sabe exatamente quando...”*

PT: Well... Here again I was in doubt about the construction of the verb, and which verb I was going to choose. And not only the verb, but how I was going to use it.

R: *And you translated “the pinta habit” as “o hábito de beber leite”.*

PT: I couldn’t think of any equivalent phrase in Portuguese for it. It’s more or less like *low down*, but in the first case [low down] there is some sense of humour, which was lost in Portuguese. Not the same thing happened in the second case [the pinta habit].

R: *Er... “cow’s milk” was translated as “leite de vaca” ... I think you had no problems there, had you?*

PT: No.

PT: (...) I’m just a bit concerned about style in the first moment.

R: *What you do is you actually go on writing, editing, revising... everything at the same time?*

PT: Yeah. (...) Usually I work [on] whole sentences, or sometimes half a sentence, as blocks... as separate blocks. Doing the... revising, and translating, and other small corrections. But just enough to leave a fairly well translated text. So then in a second moment I can choose the best style. Sometimes I may make greater corrections in my first draft.

R: *You translated “dairy skills” as “habilidades no manejo do leite”.*

PT: Well, that was a kind of phrase that, if I was not running against the clock, I would do some research on it. Maybe I... possibly I would find a better translation for that. (...) Again, that would happen in the second moment of the translation.

PT: I stopped at *ao século XVIII* because I remember thinking about translating it using numbers, one-eight, or using roman numbers. So I remember thinking “should I use numbers or not?”. So... but I decided to use...er... (...) numbers.

R: *And you went back there changing something. [Reading from the text] “nossos...” and you went back and then you changed it. Do you see?*

PT: Oh, yeah... because... er... in the instructions I was told that I should try to put into Portuguese the text as [if] it were for a Brazilian magazine. So I first used the verb *levaram*, because we’re in Brazil and we’re talking about Britain. But then I decided that it wouldn’t work because the whole text was about what happened in Britain. So I went back to that part already translated and changed it...as, you know, to be in accordance to that.

PT: And here again the order of the word in this sentence is something that needs a lot of attention from the translator and it doesn’t happen too often in Brazilian translations. It’s very common, very usual to find translations in which the order of the words is very much like to that in English.

R: *You stopped here and I think you were thinking of “piebald”. [Reading from the text] “As holandesas são...” and you stopped.*

PT: Oh, yeah. I had a good hint about what I meant, but I wanted to be sure, so I checked the dictionary.

R: *You translated “milkmaids” as “as ordenhadeiras”...*

PT: Well, part of me was saying “look it up in the dictionary”, but I felt a bit lazy and I decided that it was good enough or close enough.

R: *Ok. And the pause after “as ordenhadeiras”, was it to think of the verb “collected”, which you translated as “tiravam” or...*

PT: Yeah. Yeah.

PT: I had some problem here with *town cow*. I had a bit of a problem with that.

R: *And how did you translated “the town cow herds”?*

PT: *Rebanho do vilarejo*, because I was thinking “well, the text is talking about the 18th century”, so I tried to figure the context and I thought “well, probably *town* here means something like *villages*”. I might be wrong. If I were being paid to do the text, than I would... it would go under a third moment, you know, a very detailed revision of the text.

R: *And when would you do this revision?*

PT: I would have just a small pause to have a cup of coffee. Then I would go back, but then I would use the dictionaries very much, very carefully.

Artigo VII. R: *Ok. But then this pause would be a pause of a couple of minutes...?*

PT: Yeah.

R: *You wouldn't revise it after a few hours, or leave it till the next day...?*

PT: No, unless if I've been translating for hours and hours and I'm just too tired to go on. But with a short text like that... immediately after.

R: *When you wrote "direto para a caneca do freguês", which is [reading from the source text] "straight to the customer's own jug", you went back to the beginning again and you were still making changes.*

PT: Well, at this time I'm more worried about the style and checking the typing, and also making some less choices of specific words. There are many moments in the first draft. When I choose a word in Portuguese I put in my mind that after I finish I have to go back to check it to see if it was the best choice.

[At this point I realised that the participant hadn't translated the complete text. He had forgotten to scroll down the source text on the screen and therefore only rendered the translation for the first 181 words that appeared on the screen. A new [.log] file was then opened and the participant proceeded with the translation from where he had left off. According to the participant, there is nothing in the first extract that he would change in his final version had he read the second extract beforehand. He guarantees that his final version of the first extract has not therefore been affected by his not having been aware of the existence of the second extract earlier. In what follows, I transcribe the protocols related to the remaining 158 words of the source text]:

PT: There I had to stop a bit to choose the best way to build the sentence. I wanted to put it in a more Brazilian style.

R: *[Reading from the text] "nos permitiu que..." And then you were thinking on how to translate...*

PT: Yeah. The whole sentence was a bit long. It took me some seconds to decide what was the word in Portuguese for plagues, *cattle plagues*. I kept thinking of *pragas*, but *pragas* we use to (...) and things like that.

R: *You were thinking on the translation for the word "bulk" here...*

PT: Yeah. I knew what it meant, but I wanted to find the best word or phrase for it. And I was in doubt about *a granel*, which I finally chose, after looking up in the dictionary and *grandes volumes* [which] was another possibility I was thinking of.

R: *You were thinking again... [Reading from the text] "das fazendas..."*

PT: Yeah, because in Brazil we don't quite have an equivalent word or phrase for *dairy*. We call it *fazenda*. But *fazenda* can be any kind of farm. Then I thought that, in the context, it's enough to write *fazenda*, because the reader knows we're talking only about milk. I thought of all that during that part.

R: *And then you wrote "a dona de casa recebia..." and then you were thinking on how to translate "daily pints".*

PT: Yes. Because that's a measure we don't use in Brazil. I could [have] resort[ed] to translators notes or something like that, but that's not very nice in a magazine. It's better to put it in a more fluent text, so I decided that *litros...* [it] is not the same as *pint*, but...readers would remember the time they would receive the same... er... as in... in Britain... their milk at home in the morning, and they would come in glass litres. So I decided that was a small treason.

R: *And here you wrote [Reading from the text] "vinha numa carroça...". And you stopped to think on how to translate "horse-drawn float", yeah?*

PT: Yeah, again the same problem. We don't quite have a word equivalent for that... *float*. So I had to look it up in the dictionary. What I got was *carrinho de leiteiro*.

R: *And you translated "carrinho" for handcart and "carroça puxada a cavalo" for "horse-drawn float.*

PT: Yeah. I decide to put just *carrinho* instead of *carrinho de leiteiro*, not to repeat *entregues por um leiteiro que vinha num carrinho de leiteiro*.

R: *And here you were thinking on how to translate "dairies". [Reading from the text] "Foi somente depois da Segunda Guerra Mundial que as..." dairies...*

PT: Well, That's the same problem, because you have the farms that produce milk and you have those places where it is bottled and may be ready for distribution. And in Portuguese I had some difficulty deciding which word would go for the *farm* and for the *dairy* properly.

R: *You were thinking again after the word "universalmente". What were you thinking about?*

PT: I was trying to decide if it was a good word in Portuguese. Sometimes I try to pay attention to the sound of the word in the text. It sounded a bit formal at first, but then I decided it was ok.

R: Er... you were thinking of the word “universalmente”... ?

PT: Universalmente, yeah. A more direct translation for *universally* (...) and I thought for a moment that it was a kind of a difficult word for that kind of reader, or for the reader of that kind of magazine, you know, but then I decided against it and...

R: Ok. You were thinking about the word “universalmente” and then you started thinking on how to translate “environmentally friendly electric milk float”?

PT: Yes. At first I translated it as *não poluente*, but at the right moment I wrote *não poluente* I knew I would have to go back to that phrase and think it over again. And then I decided [that] *ecologicamente correto* was a more updated phrase.

R: And were you thinking just about “environmentally friendly” or did you also have a problem to translate “milk floats”

PT: Both. Both phrases were a problem for me.

R: So you were thinking of the whole thing as a translation unit?

PT: Yes.

R: [Reading from the text] “Your morning pinta” you translated as “seu litro de leite”. Why did you translate “pinta” as “litro”?

PT: Because I think it’s a more familiar way to refer to the matter in Portuguese... because I do believe that when you translate you commit a number of treasons, like, you know, in *tradutor e traditori*. It’s always impossible to translate everything from one language to another. You will always miss something. You will always have to give up something in order either to make it more understandable for your reader, or to obey to your style, or to obey to your culture, so every moment I have to decide what is going to be left out, what is going to be sacrificed, and what will have to be kept in order to respect the text, the original text. And this was that kind of situation.

R: You translated “Milk Marketing Board” as “Comissão de Comercialização do leite”. Any problems here?

PT: Well, it took me a few seconds to decide if it would be better to leave it in the original or to make a free translation.

R: And why did you decide to translate it?

PT: Because that kind of magazine is not so concerned with precise information. It’s more for leisure... so a general idea of what is going on is what is expected from that kind of text, or from that kind of magazine. So, if it were a more academic text, I would probably put it in Portuguese as I did. Maybe I would take some more time to make the translation of that organisation and then I would add a translator’s note with the original and some explanation about it.

R: And talking about this, you left “Milk Marque” in the original, didn’t you?

PT: Yeah. Well, I thought it very difficult to find an equivalent for *Milk Marque*. And since in the original text there is an explanation of what it means, a co-op of farmers, then that would be enough. It’s like a trademark and usually you don’t translate trademarks.

R: And then you translated “individual dairies” as “fazendas individuais”. And here you actually finished your translation with the elapsed time of 13 minutes, this piece of [the] translation. And then you went on revising the whole thing. What did you do after this, from 13 to 17 minutes?

PT: Oh, then I read the extract in Portuguese, just in Portuguese, to see if there is any typing mistakes or any repeated words or anything like that. And also if it goes smoothly in Portuguese. And then, again, I go back to the original text, to some specific parts of the text which called my attention in the first moment.

R: Right. During the first moment you forget about the original, right? You read it in Portuguese and you think about cohesion in Portuguese. Then you go back to the original and you compare both texts. Is it right?

PT: Yeah. That’s it.

R: While you were revising, you changed *Guerra Mundial*. You put *second* in *Romans* and you put *Guerra Mundial* in capital letters.

PT: Yeah, because I think that’s the correct way, the usual way. And in the first draft I wasn’t concerned about that. It had to make sense, you know, it had to be a fluent text, the most fluent possible. For that second moment, when I read it just in Portuguese to see if it goes right, but in the first moment when I wrote it differently, I knew I would have to change it, but I don’t like to waste time in the first draft.

R: Ok, thank you.

PT: Welcome. My pleasure.

(PT6: 07/07/2003)

R: You were not typing until the elapsed time of 06.15 minutes [in fact, the precise elapsed time was 06.12.81]. What were you doing between the beginning and these first six minutes?

PT: Well, I was doing what I usually do, that is, to read the whole text, to have a grasp of the whole thing, to know what I'm into. So... and I was also checking two words in the dictionary that I immediately noticed that I would have problems with. And these words were *pail* and *pinta*. What I thought should be *pint*, but I had never seen it written the way it is written in the text. So... that's why it took me so long to start.

R: And then you wrote the title, and then you were thinking again before you wrote "o gado leiteiro".

PT: Yeah, because I thought... I was going straight from the text, but I noticed that I should not start with *O gado leiteiro*. I could use the time *Há séculos* first. So, then I stopped to re-write the sentence. And I was not really satisfied with the word *proporciona*, and so... that's why I stopped.

R: After "creme" you were thinking again...

PT: Yeah. I was not satisfied with *creme* and I thought it should be *nata*.

PT: And then I had a problem with this expression *low down*. And then I had to stop again to look it up in a dictionary.

R: And then you translated dairy cows as... or you didn't... did you translated it?

PT: Yeah, I did. I used *o gado leiteiro*.

R: *O gado leiteiro!* Any reasons why you chose this translation? Did you have any problems with it?

PT: No.

R: And Milk and cream you translated as "leite e nata". Any problems there?

PT: No. Just the problem with *cream* that I had mentioned before.

R: Ok. You mentioned having some problem with the word "pinta". And you translated *pinta* as...

PT: I just... I decided to ignore the measure and use something general.

R: And "the pinta habit"... you translated as "o hábito de tomar leite"...

PT: Yeah, I considered that it was not important for the reader to know that it was half a litre or whatever. So... I chose to ignore the measure.

R: You translated "drinking cow's milk" as "tomar leite de vaca", yeah?

PT: Yeah, but... I wrote it that way, but when I reread the text and revised the text I decided to use *beber*.

PT: And I was not satisfied with the word *introduzindo*. I changed it quite a few times because was not really satisfied with that. This is the kind of thing I would probably change or... er... on a second or third reading.

R: (...) There's "dairy skills"...

PT: I used *habilidades laticínias* first. But then I decided to change it. I don't remember what I finally... what was the last expression that I used, but probably *habilidades com produtos laticínios*.

R: And do you know why you decided to change? Do you remember?

PT: Yeah. Because I thought that the collocation *habilidades laticínias* sounded... could sound a little awkward to an average reader... an average Brazilian reader.

PT: And I went straight ahead until I saw... er... the word *piebald*. I really didn't remember what it meant so I had to check it up. And at this time, while I was doing this, I remember thinking that I should have checked the vocabulary first, before I started. That's something I usually do. I first identify the words that I do not know, look them up in a dictionary, write a translation just above the word... if I have a written text I write the translation above the words so that I don't have to interrupt my writing of the text while I'm translating it.

PT: I stopped at *ao século XVIII* because I remember thinking about translating it using numbers, one-eight, or using roman numbers. So I remember thinking "should I use numbers or not?". So... but I decided to use...er... (...) numbers.

R: Ok. Then you were thinking again. You stopped for some time, thinking of "the milkmaids".

PT: Yeah. I really couldn't think of the word.

R: And how did you solve the problem?

PT: I looked it up in a dictionary.

R: Did you use any websites?

PT: I used... er... I checked twice two expressions on the internet, but I don't remember which words they were... which expressions they were (...). Oh, I remember one is... one that I checked up was *environmentally friendly* because I wanted to see if in Portuguese people were using the expression the way I did.

R: Did you check it up in an on-line dictionary or [was it] by reading other texts?

PT: No on-line dictionary, no.

R: Ok. So you were reading other texts in the area...

PT: Yes. Because *board* is usually translated as a *conselho*. This is probably something that I would consider better on a second, or third reading in the revision phase. I don't think this is important for the translating process, I mean, the moment when you are translating. I would certainly take a look at that. And I changed the term in the revision... ok, I changed when I wrote *commercialisation*...

R: Ok. [Reading from the text] "*Conselho de Comercialização*"...

PT: It sounded a little better than *venda*.

R: So sometimes you go on revising while you are actually translating...

PT: Yeah. If I think that something is better, I go back and change the other... the other word that I had translated in a different way before.

PT: I was not really satisfied with this *individuais*... er... I felt there should be a better term to be used, but I couldn't think of any, so I left it the way it was.

PT: After I finished doing the first rough translation...

R: ... Which was around 35 minutes, when you finished. [The precise elapsed time was 35.15.73]

PT: Ok... I went back to check if I had not missed anything, I had not missed any term or expression. I did what I call the first revision of the text, in which I try to compare both texts to make sure, as I said before, that I have not forgotten anything. And in this phase I also try to come up with better translations for the things I had translated before. That's when I change lots of things. The things I was not satisfied with in the first writing of the text, I try to change in this first revision of the text.

R: So the first revision is right after you finish doing the translation...

PT: Yeah. I go back and re-start.

R: Soon after the end of the translation?

PT: Yes.

R: And do you revise the text more than once?

PT: Well, it all depends on the level of difficulty of the text. I can revise it four times, if it's necessary. So, in this first revision, what I do is... I... it is a comparative revision. So I compare the Portuguese version with the English version, to make sure, as I said, that I haven't forgotten anything, to change some expressions that I didn't like when I originally translated the text... and if I feel that I have changed many things, and I'm not sure about the quality of the text, I do the same process all over again. Start from the beginning, checking, comparing the Portuguese with the English version. So, this first revision phase can in fact be done twice. And then I go back to the text to look for problems with the Portuguese language. And this is something I usually don't do on the same day on which I translated the text. I usually leave the text for a while, or if I translate the text in the morning I revise in the afternoon... or if I translate in the afternoon I revise in on the other day... if it is a legal document or something that was difficult I never deal with the text on the same day on which I translated it.

R: And why do you wait for some hours or days to revise the text?

PT: I think you have to forget the text a little, so to speak.

R: The source text...

PT: The source text. You have to... because otherwise you can read the same thing a hundred times and not notice something obvious. So... or... specially for the Portuguese revision... the revision of the Portuguese language. So, this is something that I usually... I usually put the text aside, at least for a few hours. And then I can forget everything that I wrote and start as if from scratch, as if I were reading a text originally written in Portuguese, so that I can see how this text would sound to the native speaker of Portuguese.

R: Ok. Thank you.

PT: Ok. You're welcome.

APPENDIX G: PILOT STUDY

The pilot study has been developed using the research instruments proposed for my thesis, and the sample data has been trialed and evaluated. The data analysed has been collected from two participants: one novice and one professional translator. In what follows, I will provide some background information about the two participants in the pilot study.

The novice translator has taken two and a half years of undergraduate course in Translation Studies at a private university in Belo Horizonte, MG, and then transferred his studies into Languages--English/Portuguese--for the remaining two years of undergraduate studies. He has also taken, but not completed, a discipline of graduate studies as an external student at FALE/UFMG. He has lived in an English-speaking country for six years and currently teaches English as a Foreign Language at private and public

institutions in Belo Horizonte, apart from FCE (Cambridge First Certificate in English) crash courses on a private basis. He does not speak any other foreign languages. The question of whether or not the participant could speak any other foreign languages has been included in the questionnaire in case the knowledge of any other foreign languages could influence the inferential process. Although the participant has not done any translations for the past six months, he claims to have done many translations of several types in the last few years--ranging from abstracts of theses and dissertations, letters and other texts--although he has never worked as a professional translator. The professional translator has taken undergraduate studies in Psychology and has attended a one-week seminar in Translation as well as a discipline of graduate studies as an external student at FALE/UFMG. He has lived in an English-speaking country for one year and currently teaches English as a Foreign Language and TOEFL (Test of English Foreign Language) crash courses on a private basis. He has also been a professional translator for some twelve years, translating mainly technical texts in general. As for knowledge of other foreign languages, he can also speak French at intermediate level.

The questionnaire submitted to participants included a few questions about the text. Questions were rated on a scale from 1 to 5, with 1 being very easy and 5 very difficult. When asked if the text was easy or difficult to understand, the novice and professional translators rated the question as 1 and 2 respectively, which shows that they both found it quite easy for comprehension. Both participants liked the text very much (grades 4 and 5) and agreed that the source text was well written (grades 4 and 5). The professional translator found the text very easy to translate (grade 1), although he added the comment that this is not the type of subject he usually translates. The novice translator, on the other hand, found it neither difficult nor easy to translate (grade 3). As for what they liked best in/about the text, they both mentioned that the informative nature of the text was appealing: "I liked the subject" (novice translator) and "Information on milk delivery in [the] UK" (professional translator). Interestingly enough, when inquired about what they liked least in/about the text, the answer provided by the novice translator reinforces the idea that inexperienced translators tend to concentrate on the micro textual problems: "I didn't like the word 'pinta'; which I didn't find and I found very colloquial" (novice translator; quotation marks and underline in the original). The professional translator did not make any remarks.

Before analysing the Translog representation, I applied a pause unit of 5 seconds to each translation, since pauses below that time would not represent a translation problem, but probably simply the variations in typing speed. The program therefore counted and displayed every time the translator interrupted the process and paused for longer than five seconds, which was then understood as a translation problem. Then I added up all the minutes and seconds of pauses during the whole process, so as to find out the total time the participant spent doing something else other than actually translating: looking up words in the dictionary, searching for parallel texts on the internet or just thinking. The results between both participants varied greatly. While the professional translator had a total pause of 38 minutes, the novice translator paused for 1 hour and 10 minutes. Apart from this, I also observed the time spent on the revision process¹. The professional translator devoted 9 minutes to revise his work, whereas the novice translator used 15 minutes. These might serve as indicators that the novice translator applied a lot more effort in doing research and revision⁹ than the professional translator during the process.

Additionally, the novice translator mentioned looking up words in the dictionary at least eight times during his verbalisation, whereas the professional translator mentioned it just three times, what corroborates Fraser's observations presented in the Review of Literature (section 2.2.5, p. 6). Also, while the novice translator appeared to be very much concerned with lexical problems (see words in bold in the verbalisations below), only the professional translator showed some macro-textual awareness; he mentioned searching parallel texts on the internet and indicated an awareness of the target readership. These are some comments made by the novice translator during the recording of his verbal protocols:

(01) *Researcher: And you stopped here again: "a demanda do leite também aumentou". Do you remember what you were doing here? (...)*

Novice Translator: No, I... **I'm sure that it was related to words...** probably the best version, or... you know.

¹ I regard *revision* as the time spent doing corrections and alterations after the first draft of the product is done.

(02) *R: Then it says “uma praga destruiu quase todo o rebanho das...” and then... hm... Before you had something else and you changed here, then you stopped...thinking. Maybe this sentence was a bit of a problem.*

NT: Yeah. **The problem was that the sentence**, you know, was giving double meaning. And I decided to change it. Then I was thinking... how to do.

(03) *R: So you were thinking here again...*

NT: Yeah. Probably a word... I was checking... **vocabulary**.

(04) *R: Right... hm... you finished your translation with the elapsed time of 01.55.46, which is 1 hour and 55 minutes, and then from this time up to... hm... 02.10.21, which... when is... when you actually finished the translation [final product], you were just revising your work, yeah?*

NT: Yes, I was.

R: Hm... So what exactly did you do between this elapsed time and the total time here?

NT: Hm.. I was...er... you know, **changing some words**...because...er... I could understand in English, but sometimes is not the same, you know. **I was looking for cognate words** and...you know... hm... **things like that**.

(05) (...) I had problem with “rollers” because I couldn’t find a... you know, a...er... good translation, version for it.

R: And what did you do?

NT: I just translated it literally. [All emphases are mine]

The novice translator also mentioned “looking for the best version” for several times throughout his verbalisation, by which he means “looking for the best lexical translation”. He did not make use of any internet search tool or any parallel text for his work, but by observing him translating it could be verified that he put a lot of effort into doing his task. Now compare the comments made by the professional translator:

I found some examples of low down being used... in some... some sites. And [it] just gave me a fair idea of what low down is, and then I decided to use the word “cenário” think. At first... the first impression was “subterrâneos” but I thought that “subterrâneos” was **not a very commercial word for this text**, so I decided for “cenário”. [Although the participant did not recover the pun of *low* (the moo of the cow) and *lowdown* (spelled as one word and meaning “the most important facts and information”), this is not what I will be concentrating on here.]

Well, I usually do this after I finish translating I read everything again. And then I don’t care about the original text... I don’t care about the... the English text. Then I need to have my Portuguese tuned and I... and I try to find the words, even if the words are not totally related to the word in English. I try to find a word that **makes the text easier to read**. This is my objective. Or more coherent too. Now, coherence is very important when I’m revising the final text.

(...) I think the writer wants to (...) show that there are, or, there is this logo on the carton, so... I don’t know if it was the right decision, but it seems to me **more attractive for the reader**. If I were (...) translating this for a newspaper... I’m sure **they** would like to have kept these words. [all emphases are mine]

As can be seen from the above, the professional translator appeared to be more aware of the readership (e.g. **makes the text easier to read and more attractive for the reader**) and the brief provided to participants prior to the commencement of the task (e.g. **not a very commercial word for this text and they** in the last citation). The brief stated that they should translate the article as if for publication in a similar Brazilian magazine or journal, bearing in mind its attractiveness for consumers at retail outlets. According to Janet Fraser “the notion of the reader’s needs is (...) a crucial one in determining translation strategy” (1996, p.86). At least at one point, the effort applied by the novice translator was unsuccessful, in which case the translation was simply left out. Note his verbalisation concerning the translation of the following extract:

“(...) use it to make desserts like Banoffi Pie”.

NT: (...) and here...you know, about (...) pies, I was looking for the word... Ban...Banoffi? Is it Banoffi? (...) Which I guessed, you know... I... **I didn’t translate it**.

R: Ok, so you omitted the word Banoffi.

NT: Yes...and... I just left it... you know... because I... from my point of view it wouldn’t... you know, it’s not going to affect the translation... in the total... to change the meaning.

The professional translator, on the other hand, did not attempt to find a translation for the British pudding Banoffi, but his effort can be evidenced via macro textual assumptions:

PT: (...) I translated straight, since... ‘cos... it’s a... Banoffi **must be a proper name**, I suppose, **or a name of a place**... or... so I decided as “Torta de Banoffi” as a... as a dessert. [all emphases are mine.]

Another evidence of the professional translator’s effort can be demonstrated when both final products are compared. The professional translator’s target text is exactly 100 words longer than the novice translator’s (686 and 586 words respectively), which indicates that the professional translator paraphrased a lot more. Even though the novice translator’s target text was considerably shorter, with regards to time he needed approximately 30 minutes longer to finish the task, which is another indicator of effort.

Whilst scrutinising the source text, fifty-six translation units² (TUs) have been selected. They form a lexical tie related to *milk* and construct an intervening discourse (i.e. that comes between the main discourse) throughout the text. For space constraint, only the TUs related to "dairy", "milk" and "pinta", as well as the Novice and Professional Translator's renderings are presented in the table below:

Translation Unit (TU)	Novice Translator	Professional Translator
(01) Dairy cows	[2' 12''] a cooperativa leiteira.	[15''] vacas leiteiras.
(02) Dairy farms	Not translated.	fazendas; fazendas leiteiras.
(03) Dairy products	derivados do leite; leite e derivados.	[10'']laticínios; produtos do leite.
(04) Dairy skills	[20''] o consumo dos derivados do leite.	Not translated.
(05) Dairy creams	[1' 5'']produtos e cremes.	[10'']cremes (...) de leite.
(06) Individual dairies	(...) particulares.	laticínios independentes.
(07) Milkmaids	[1'']os leiteiros.	[5'']jovens leiteiras
(08) Electric milk floats	sistema de ordenha eletrónico.	[5'']carro leiteiro elétrico.
(09) Milk and cream	Leite e seus derivados.	leite e creme.
(10) Milk Marketing Board	Uma cooperativa.	Departamento de Comércio de Leite.
(11) Pinta habit	[20''] hábito de beber leite.	hábito de consumir leite.
(12) Daily pintas	[5'']o leite.	[5'']quota de leite.
(13) Morning pinta	Leite diário.	[15'']leite matinal.

Two main collocational chains that are clearly interwoven can be observed in the text: their nodes are *dairy* and *milk*. According to Halliday's FG, lexical cohesion is divided into the two main categories of *reiteration* and *collocation*. The former involves the repetition of lexical items, as with *dairy*, *milk* and *pinta*, showed above. The latter is related to a pair of lexical items that are associated with each other, as in *dairy cows*, *dairy farms* and *milk and cream*, for instance. The professional translator's protocol provides an example of how the shift of collocations from source language to target language occurs:

R: (...) Right. The following sentence goes "The first Co-operative dairy", [and] you wrote "a primeira cooperativa leiteira". And then you changed. Why did you change it?

PT: Well, Portuguese (...) The idea in Portuguese that the practical... not the practical, **the usual idea in Portuguese is "cooperativa de laticínio". This is a common expression in Portuguese. I think the reader wouldn't understand "cooperativa de lei..." ... what word was that? "cooperativa de..."**

R: "de leite".

PT: "... de leite". They would better understand it as "cooperativa de laticínio". **It's a common expression in Portuguese.** [all emphases are mine.]

Sometimes the reiteration and collocation in the source language can get lost in the translation process--by being translated as non-collocations or by omission--either due to misinterpretation of the source text or by language constraints (e.g., Novice Translator's items 01 and 07, Professional Translator item 04). Sometimes a superordinate is replaced by a general word in the target text, as it is the example of the renderings for *pinta*, which created a translation problem for both translators due to its cultural specificity. In terms of the intertextuality between original and translated texts, "it is impossible to reproduce networks of lexical cohesion in a target text which are identical to those of the source text" (Baker 1994, p.206), especially in cases such as the title of this source text³ or in the constituent *low down* just below the title, which are a play on idiom, significant shifts in the lexical chain do occur. What novice translators apparently seem unaware of is that the random choice of renderings which do not contribute to recognizable lexical chains will intervene and misrepresent the meaning of the source text, as it can be perceived in examples (01), (04 – 08), and (10) from the table above. Lexical repetition seems to be far more tolerated in English than in Portuguese, what can be perceived in the examples provided (*milk* and *dairy*). If we take the example of *dairy*, the lexical item is repeated 07 times throughout the text and translated by the Professional Translator in a variety of renderings: *leiteiras* (02); *laticínios* (02); *do leite* (01); *de leite* (01); and not translated at all (01). This pattern that can also be observed in the Novice Translator's target text might not occur strictly because of low tolerance for repetition or collocation demands in Portuguese, but still provide interesting data to be mused on and given a closer look at. The transcriptions below refer to the professional translator's verbalisations on

² "Segments of the source text, independent of specific size or form, to which, at a given moment, the translator's focus of attention is directed" (Alves, Magalhães and Pagano, 2000; In Alves and Gonçalves, 2001)

³ "Beyond the Pail" evokes *beyond the pale*, which means unacceptable behaviour and is also the title of a famous short story by Rudyard Kipling.

rendering no. (06) from the table above. This is the extract from the source text: “(...) but your milk is still collected regularly, either by Milk Marque (a farmers' co-operative), or by individual dairies.”

R: *Ok. Then you stopped in “uma cooperativa”. You were thinking again or... what were you doing here?*

PT: “Uma cooperativa”... [talking to himself].

R: *“A farmer’s cooperative” (...) in parenthesis... [reading from the source text].*

PT: Well, probably I was looking for the best word. If I... it could be a “cooperativa de fazendeiros”, it could be a “cooperativa de laticínios”. But then I had to read forward, because there will be the word “laticínio” at the end. **I think I was trying to avoid repetition.**

R: *Ok. Then you chose...*

PT: So I chose “produtores”. Not farmers, not “fazendeiros”, but “produtores”. I was... **I might have been looking for a word to avoid repetition.**

R: *Right. Then, straight after this sentence, where it goes “individual dairies”, you spent some time thinking as well, before you get the next line.*

PT: This is the case. Is the case for... **In this case I was trying to avoid repetition of terms.**

Still referring to the table on pages 15-16, the numbers in brackets preceding some of the translators’ renderings refer to the instances of elapsed time when they were thinking over the solution to the translation problem of the given TU. This sample exemplifies the earlier argumentation on page 15, that the Novice Translator spent considerably longer time tackling the problems.

RESULTS OBTAINED FROM THE PILOT STUDY

It is clear from the evidence aforepresented that both the novice and professional translators did exert themselves for the task, though under different levels. What remains to be seen is the validity of the assertion by Jääskeläinen (1996) that *Hard Work Will Bear Beautiful Fruit* **regardless of** the experience of the translator. I am unsure of the extent to which my findings can corroborate such assertions, since the data collected from my pilot study reveals that the greater time and effort dedicated in the process by the novice translator did not result in a product of the same quality as the professional’s. Yet, given its unreliability due to the small amount of the data collected for the pilot study, further investigation with a larger corpus should be carried out before any assertion can be refuted.

SOURCE TEXT BEYOND THE PAIL

Dairy cows have been providing us with milk and cream for centuries. Anita Bourne gives us the low down from the cowshed.

No one knows exactly when we first got the pinta habit, but people have been drinking milk for at least 5,000 years. It may have been the Celts, one of the first tribes to domesticate cattle, who introduced early Britons to the idea of drinking cows’ milk. The Romans were certainly great cheese-lovers, and brought their dairy skills to Britain along with some of their favourite cows. Every time Britain was invaded, our conquerors brought over their own breeds of cattle. You can still tell where cows originally came from by their colour: native Celtic breeds are black; Anglo Saxon ones are usually red, and Dutch cattle are piebald. Nowadays many people still have their milk delivered to their doorstep every morning. The UK’s doorstep delivery service goes back to the 18th century, when milkmaids collected milk from town cow herds an sold it door to door from large pails, straight into the customer’s own jug. As Britain’s population grew, so did the demand for milk. In the mid-1800s, cattle plagues wiped out most of the town cow herds, but the development of the railways meant that milk could then be transported in bulk from rural dairy farms and delivered fresh to the town customer each morning. By the 1920s, the housewife received her daily pintas in hygienic glass bottles, delivered by a milkman with a handcart or horse-drawn float. It wasn’t until after the Second World War that dairies universally adopted the environmentally-friendly electric milk floats which still deliver your morning pinta today. For more than 60 years, milk was collected from dairy farms each morning by the Milk Marketing Board, and transported to the dairy for bottling and delivery. Now the milk industry has been deregulated and the Milk Marketing Board has now gone, but your milk is still collected regularly, either by Milk Marque (a farmers' co-operative), or by individual dairies. The Co-op, one of the largest milk suppliers in Britain, was a pioneer in the production of pasteurized milk. The first Co-operative dairy opened in Eccles in 1879, handling 250 gallons of milk a week. Today, the Co-op processes more than 400 million gallons every week! Milk is still one of our purest, most natural foods, pasteurized to ensure high standards of hygiene and - in the case of lower fat milk which is increasingly popular with those of us following a healthier diet - processed to reduce its fat content. The fat which is taken out of the milk is used to make butter, and a wide range of fresh dairy creams. Look for cartons marked with the special Daisy the Leaping Cow logo, which guarantees that the cream you buy is fresh from the dairy, with no additives or preservatives. There are also several types of tinned and dried milks on the supermarket shelves. Evaporated milk has been sterilized

and reduced to a final concentration almost twice that of normal milk. It will keep for several months in the store cupboard. Condensed milk is evaporated milk with sugar added, and this also keeps for several months - use it to make desserts like Banoffi Pie. Dried milk has been evaporated and dried with hot air or rollers to produce a powder containing less than five per cent moisture. Dried milk will also keep for months, and when water is added it returns to the consistency of ordinary milk. Soya milk is a milk substitute made from extracts of soya bean. It is popular with vegans who have cut out dairy products from their diet, and with those allergic to dairy products.

TARGET TEXT FROM NT

Atrás do Balde que carrega o leite.

A cooperativa leiteira, têm nós supridos de leite e seus derivados por anos. Anita Bourne nos irformará direto do cural.

Ninguém sabe exatamente de onde nós herdamos o hábito de beber o leite, mas as pessoas bebem o leite por mais de 5.000 anos. Provalvemente os Celtas, uma das primeiras tribos à domesticar o gado, ensinou os Britânicos a beber leite de vaca. Os romanos eram amantes do queijo e com eles, trouxeram o consumo dos derivados do leite. Sempre que o Reino Unido era invadido, os conquistadores traziam com eles uma raça de gado de sua preferência. Nós podemos distinguir a origem do gado, pela cor: o gado Celtico é preto; o Anglo Saxónico é vermelho e o gado Olandez é malhado. Mesmo hoje, muitas pessoas ainda recebem o leite em casa toda manhã. A entrega domiciliar, data-se do século 18; os leiteiros tiravam o leite, colocavam em baldes grandes e vendiam porta á porta; ou seja direto do balde para a jarra do consumidor. Com o aumento da população, a demanda do leite também aumentou. Em meados de 1.800, uma praga destruiu quase todo o rebanho das cidades, porém com o desenvolvimento da estrada de ferro foi possível transportar em quantidade maior, e mantendo a qualidade, o leite matinal. Na década de 20, a dona de casa recebia o leite em garrafas plasticas higienicas, entregues pelo leiteiro em uma carroça puchada por ele mesmo ou de tração animal. Depois da segunda guerra mundial, foi adotado, o sistema de ordenha eletrónico, que nos garante o nosso leite diário e mantém a proximidade da ordenha natural. Por mais de 60 anos, o leite era coletado por uma cooperativa, sendo engarrafado e distribuído para os locais de vendas e entregas domiciliar. Hoje a industria do leite, tornou-se livre, mas o produto, continua sendo coletado por uma cooperativa ou particulares. A Cop, uma das maiores fornecedoras de leite na Grã Bretanha, foi pioneira na pasteurização do leite. A primeira cooperativa de leite em Eccles, desde 1879, distribui 250 galões de leite por semana! O leite, ainda é um de nossos alimentos mais puro, natural; é pasteurizado para garantir um alto padrão de higiene. O leite com baixo teor de gordura, o qual é muito consumido entre as pessoas que prezam uma dieta saudável, é processado para reduzir o teor de gordura. A gordura retirada é usada para a produção de manteiga e muitos outros produtos e cremes. Observe as embalagens com o selo de qualidade, o qual garantem que o produto é fresco sem adição de conservantes. Há muitos tipos de leite em pó e enlatados nas prateleiras dos supermercados. O leite concentrado, através do vapor, têm a comcentração duas vezes mais que o leite normal; ele pode ser conservado por muitos meses no armário. O leite condensado, é o leite evaporado com á adição de açúcar; este também pode ser conservado no armário por muitos meses; nós usamos para fazer sobremesa, tortas. O leite em pó é feito através da evaporação; seco com ar quente ou em rolos, para que possa ser produzido o pó com menos de cinco por cento de umidade. O leite em pó, também pode ser armazenado por muitos meses, voltando a sua forma natural com a adição de água. O leite de soja, é um substituto do leite, extraído dos grãos da soja. A soja é popular entre as pessoas que não consomem derivados do leite em suas dietas, e pessoas alergicas ao leite e derivados.

TARGET TEXT FROM PT

Vacas leiteiras nos fornecem leite e creme há séculos. Anita Bourne nos traz um cenário dos estábulos.

Ninguém sabe exatamente quando primeiro adquirimos o hábito de consumir leite. Mas as pessoas tomam leite há pelo menos 5.000 anos. Podem ter sido os Celtas, uma das primeiras tribos a domesticar rebanhos, que ensinaram aos primeiros Ingleses a idéia de beber o leite de vacas. Todas as vezes que a Inglaterra foi invadida, nossos conquistadores trouxeram consigo suas próprias raças de gado. Ainda se pode dizer de onde as vacas se originam com base nas suas cores: as raças nativas celtas são pretas; as anglo-saxãs são, em geral, vermelhas e a raça holandesa se caracteriza por manchas pretas e brancas. Ainda hoje, todas as manhãs o leite é levado até às portas de seus consumidores. O serviço de entrega a domicílio no Reino Unido existe desde o século XIII, quando jovens leiteiras tiravam o leite de rebanhos existentes nos arredores das cidades e o vendia de porta a porta, de grandes baldes direto para as jarras dos consumidores. Com o crescimento da população britânica, também cresceu a demanda por leite. Nos meados do século XIX, doenças aniquilaram a maioria dos rebanhos citadinos, mas o desenvolvimento das ferrovias permitiu que o leite pudesse ser transportado em grandes quantidades das fazendas rurais e entregue ainda fresco, aos consumidores da

cidade, a cada manhã. Nos anos 20, a dona de casa recebia a sua quota de leite em higiênicas garrafas de vidro, trazidas pelo leiteiro em uma carrocinha manual ou em carroças puxadas por cavalos. Foi só mesmo depois da segunda guerra mundial que os laticínios adotaram, unanimemente, o carro leiteiro elétrico, ecologicamente correto, que hoje nos traz o leite matinal. Por mais de 60 anos, o leite foi coletado nas fazendas leiteiras a cada manhã pelo Departamento de Comércio de Leite e transportado até o laticínio para ser engarrafado e distribuído. Hoje, a indústria do leite não é mais regulamentada pelas regras do Departamento de Comércio de Leite e este já não mais existe, porém o seu leite ainda é coletado regularmente, seja pela Milk Marque (uma cooperativa de produtores), ou por laticínios independentes. A Co-op, um dos maiores fornecedores de leite na Inglaterra, foi o pioneiro na produção de leite pasteurizado. A primeira cooperativa de laticínios foi fundada em Eccles em 1879, processando 250 galões (cerca de 1.100 L) de leite por semana. Hoje, a Co-op processa mais de 400 milhões de galões (1,8 Bi/L) por semana. O leite ainda é um dos alimentos mais puros e naturais, é pasteurizado para garantir altos padrões de higiene e - no caso do leite desnatado que se torna cada vez mais popular junto àqueles, como eu, que buscam seguir uma dieta mais saudável - processado para se reduzir o teor de gordura presente no produto in natura. A gordura que é extraída do leite é usada para a produção de manteiga e uma linha completa de cremes frescos de leite. Observe nas embalagens comercializadas com o logotipo da Daisy the Leaping cow - Margarida a vaca saltitante - que garante que o creme que você compra é fresco, direto da fazenda, sem aditivos ou conservantes. Há também vários tipos de leite enlatado e em pó nas prateleiras dos supermercados. O Leite evaporado foi esterilizado e reduzido a uma concentração final quase duas vezes aquela do leite normal. Mantém-se preservado por vários meses na dispensa. Leite condensado é leite evaporado adicionado de açúcar, que também se mantém alterado por meses - use-o para fazer sobremesas como a torta de Banoffi. O leite em pó foi desidratado e transformado em pó através da ação de ar quente ou cilindros, para se obter um pó que contém menos de 5% de umidade. Leite em pó também dura, sem perder suas características originais, por meses e quando a ele se adiciona água se obtém a consistência do leite original. O leite de soja é um substituto do leite, feito de extratos da soja. É popular entre os vegetarianos que cortaram laticínios de suas dietas e por aqueles que têm alergia aos produtos do leite.

TAPs FROM PARTICIPANTS

TAP 07/10/2002 with novice translator:

R: Ok, we can see that you started writing at 09.25 [elapsed time] and I'd like to know what you were doing from the beginning... and...up to these first nine minutes.

P: I was reading the text to have, you know, a total idea... to have an idea of the text.

R: *Ok. And...you were reading the... the hard copy, yeah? Ok. Did you just read the text?*

P: No, actually I was reading not this copy, you know, I was reading from the screen.

R: *Ok... You see you paused here, where it says: "ou seja direto do balde para a jarra do consumidor". What were you doing here?*

P: Probably I was checking a word or trying to find the best translation, the best version.

R: *And you stopped here again: "a demanda do leite também aumentou". Do you remember what you were doing here? (...)*

P: No, I... I'm sure that it was related to words... probably the best version, or... you know.

R: *Then it says "uma praga destruiu quase todo o rebanho das..." and then... hm... Before you had something else and you changed here, then you stopped...thinking. Maybe this sentence was a bit of a problem.*

P: Yeah. The problem was that the sentence, you know, was giving double meaning. And I decided to change it. Then I was thinking... how to do.

R: *What double meaning was it?*

P: Hm... you know... I can't remember... But I know that it [had] got something.

R: *You see...hm... you went back several times here: "em quantidade maior, e mantendo a qualidade..." [then] you came back, wrote again, came back again...*

P: Maybe because the word "transportar" was wrong... I misspelled that...

R: *You misspelled the word "transportar"...*

P: Yeah.

R: *... and you were thinking of... of the cohesion of the sentence?*

P: Yeah.

R: *So you were thinking here again...*

P: Yeah. Probably a word... I was checking... vocabulary.

R: Do you know what vocabulary you were checking?

P: No (...) to go to the text and see it because... (...) [participant was mumbling, reading from the hard copy]. I believe it was (...) herds, right? I was checking it because... cow herds... yes, ok.

R: And... were you checking in the English-English dictionary?

P: English-English, yes.

R: Then, did you find the translation?

P: Yes... not the translation, but...

R: The meaning.

P: ...the meaning. And also... the word, you know, bulk... yes?... “transported in bulk from...”

R: And... hm... how did you... how did you find the...hm... how did you solve the problem... in bulk?

P: In bulk? (...) I went to a... English-Portuguese dictionary (...)

R: You see... you changed this again (...).

P: Yes. I changed it because of... just the sentence order.

R: It goes “o leite era coletado por uma cooperativa e distribuído para os locais de venda”, then you came back: “sendo engarrafado e distribuído para os locais de venda”. So, why did you decide to change this?

P: Because, you know, there is the order...the sentence order and also the meaning, you know... best version... or, to get the best version.

R: And you were thinking again: “locais de venda e entrega domiciliar”. Then you stopped, and you were thinking. What were you doing here?

P: Where?

R: Here.

P: [Reading from source text] “For more than 60 years, milk was collected from dairy farms each morning by the Milk Marketing Board”... hm... I was checking “the Milk Marketing Board”.

R: And how did you check it?

P: I went to an English–English dictionary and after an English-Portuguese one.

R: And did you find anything?

P: Actually, no. I didn’t find... you know... Marketing Board. And then... from the context, yes, I came to the meaning.

R: “Há muitos tipos de leite em pó e enlatados nas prateleiras dos supermercados”. Then you stopped to think.

P: Yes, let me see where (...).

R: Where it says “there are also several types of tinned and dried milks on the supermarket shelves”... hm... you stopped here before the next sentence.

P: Yes, I (...) evaporated milk, yeah. Because, you know, I know the meaning, yes, but I was looking for... the best...you know, the best version... the best translation in Portuguese, because, you know, in English you can understand it... without problem (...). But...hm...I don’t know if we have this, you know. And then I... I was looking for it.

R: And what did you do?

P: I found it, you know. Actually I translated literally, yeah, explaining... the best way I could.

R: Ok. You put “o leite concentrado, através do vapor”, yeah?

P: Yeah.

R: So you couldn’t find the translation at all?

P: Yes.

R: And then you went to the back of the s... you went to the end of the sentence, then you went back to the beginning, to rephrase something, you see.

P: Yeah... And here...you know, about (...) pies, I was looking for the word... Ban...Banoffi? Is it Banoffi? (...) Which I guessed, you know... I... I didn’t translate it.

R: Ok, so you omitted the word Banoffi.

P: Yes...and... I just left it... you know... because I... from my point of view it wouldn’t... you know, it’s not going to affect the translation... in the total... to change the meaning.

R: Right... hm... you finished your translation with the elapsed time of 01.55.46, which is 1 hour and 55 minutes, and then from this time up to... hm... 02.10.21, which... when is... when you actually finished the translation [final product], you were just revising your work, yeah?

P: Yes, I was.

R: *Hm... So what exactly did you do between this elapsed time and the total time here?*

P: *Hm.. I was...er... you know, changing some words...because...er... I could understand in English, but sometimes is not the same, you know. I was looking for cognate words and...you know... hm... things like that.*

R: *So you went back...*

P: *[interrupting] Re-phrasing...*

R: *You went back to the text again...*

P: *Yes!*

R: *...and then you went on to look for... hm... lexical problems in Portuguese, and thinking of cohesion and coherence...*

P: *Yes.*

R: *So you went to the first sentence, you changed something in the first sentence...*

P: *Yes, because actually... you know, I... in the beginning, I translated the title "Beyond the Pail", yes...hm... "atrás do... do balde"... it was translation as "atrás do... do balde que produz leite"... and in fact, you know, bucket can't produce milk. And then I re-phrased.*

R: *Ok. And put "atrás do balde que carrega o leite".*

P: *Yes.*

R: *And you stopped here to think: "em Eccles, desde..."*

P: *"...1879".*

R: *And you go [about] changing again. You went to the end here..."O leite em pó é feito através da evaporação", and you stopped here, thinking again. But you didn't change anything, and you decided the work was ready, yeah?*

P: *Yes.*

R: *Fine... Are there any changes you remember you made? Any changes which...*

P: *...we didn't mention?*

R: *yeah, we didn't mention.*

P: *No.*

R: *Ok. That's it. Thank you very much.*

[The tape was then stopped, and the participant remembered to make an observation. The tape was then set on again, so that his comment could be recorded].

P: *ok... then... hm... there is a paragraph here that I'd like to make a comment about... hm... I'm going to read it: "As Britain's population grew, so did the demand for milk. In the mid-1800s, cattle plagues wiped out most of the town cow herds, but the development of the railways meant that milk could then be transported in bulk from rural dairy farms and delivered fresh to the town customer each morning". I understood that, you know, a... rural farms... I understood town, and then I was...er... looking for... because, you know, now I understood. Now, you know, making a comment and re-reading it again, I understood that it...er... it was transported from the farms, you know, to the town... and... I couldn't understand... and then, my translation, my version of it...er... came out like that: "Com o aumento da população, a demanda do leite também aumentou. Em meados de 1.800, uma praga destruiu quase todo o rebanho das cidades, porém com o desenvolvimento da estrada de ferro foi possível transportar em quantidade maior, e mantendo a qualidade, o leite para a cidade toda manhã". As I confused, you know, I...er... I came back, you know, and ... and even though I couldn't...er... correct it.*

R: *Ok. Thank you. Did you have any problems with this word "low" ... low down...?*

P: *Not really, no.*

R: *So, You found the translation in the dictionary?*

P: *Yeah [reading from the source text] Dairy cows have been ...yeah...providing us with milk and cream for centuries. Anita Bourne gives us the low down from the...er... cowshed.*

R: *Did you have any problems there?*

P: *No, not really.*

R: *Did you have any problems with...hm... "rollers"?*

P: *Yes, I had problem with "rollers" because I couldn't find a... you know, a...er... good translation, a version for it.*

R: *And what did you do?*

P: *I just translated it literally.*

R: *Ok. Did you have any problems with “vegans”?*

P: Vegans? Actually, you know, actually I’ve heard about it in England, and I had a er...you know, I knew about it. And... but I went and checked it up, you know, I looked it up in a dictionary...

R: *And how did you translate “vegans”?*

P: Vegans? You know...er... people...er... [switching into Portuguese] as pessoas que...er... não...er... bebem leite... tá... e não consomem produtos derivados do leite.

R: Ok. Hm... then you... that’s how you translated, you explained what vegans are.

P: Yeah, I translated vegans explaining.

R: Ok. Right, thank you.

P: You’re welcome.

TAP 05/10/2002 with professional translator:

R: *Right. You had some problems here. You stopped where it says “Anita Bourne nos traz”. What happened here [name of participant]?*

P: I couldn’t recognize the expression, so I had to look it up in a dictionary, couldn’t find a dictionary answer, so I just jot the word in the original language.

R: *And you kept the word in English then.*

P: That’s it.

R: *OK. And the word was...*

P: It was an expression: “low down”.

R: *“Low down”.*

R: *Right. Here you wrote “gados” and then “rebanhos”. Third line. No, you wrote “o gado” and then you wrote “rebanhos”. Yeah?*

P: So, I had to translate the word “cattle”... and cattle is a collective word, so... “gado” is ok, but I needed a plural word in Portuguese, so “rebanho” sounded better.

R: *Ok. Thank you.*

[Next few seconds were not transcribed for being irrelevant. The participant enquired whether the tape recorder was on and wondered if it was recording ok].

R: *I’ll just rewind it a little bit and see... because... I think I missed something... Well, here you rephrased the whole lot. Do you know what happened here [name of participant]?*

P: Where?

R: *Let’s see again... “Todas as vezes que a Inglaterra foi invadida”... no, not here... Do you know anything in particular here that you came across with? [any] difficulty?*

P: No, not difficult. If, you know, if I change something it’s usually because I want to find the best sentence order. This is what I usually look for. And I set an agreement in... for one sentence with the other.

[Next bit was not transcribed for being irrelevant. The participant looked at the hard copy and claimed that the extract “The Romans were certainly great cheese-lovers, and brought their dairy skills to Britain along with some of their favourite cows” was not included in the upper screen of translog [source text] and therefore was not translated. We later checked that the extract was actually there.]

R: *Have a look at this. After “manchas pretas e brancas”. “Na atualidade muitas pessoas...” then you come back, re-write again, rephrase it (...).*

P: (...) You see, this is a causative passive voice sentence. You have a causative ‘have’. And usually a causative ‘have’... as we don’t have a ... in Portuguese... we don’t have a causative ‘have’ in Portuguese...so you have to find the best way to solve this kind of translation problem. That’s exactly what I did. I tried to use the passive voice. Maybe I used the active voice, and then I changed for the passive voice, I don’t know. What is the last sentence? What is... the final sentence?

R: *You see, we haven’t got to the final one yet... Right, we can see that you wrote, and then you re-wrote the sentence that... which one was in the original?*

P: “Nowadays many people still have their milk delivered to their doorstep every morning”.

R: *Ok. So, the problem was the “have their milk delivered”, and you tried to find a way to make it sound more Portuguese, yeah?*

P: Yeah.

R: *Then you got “o leite é levado até as portas dos consumidores todas as manhãs”. And then continuing, “The Uk’s doorstep delivery service goes back to the 18th century”, which also caused some problems here. You see... you also rephrased it several times... Right, you went back to the previous line, you see. Hm, any problems here that you can remember?*

P: You know, I had to keep this word in the original language...

R: Which is “Milk Marque”, yeah?

P: Yeah. ‘Cos it seems to be the name of a company or a co-operation, or whatever. And I kept the name as it is.

R: Ok. Then you stopped in “uma cooperativa”. You were thinking again or... what were you doing here?

P: “Uma cooperativa”... [talking to himself].

R: “A farmer’s cooperative’ (...) in parenthesis... [reading from the source text].

P: Well, probably I was looking for the best word. If I... it could be a “cooperativa de fazendeiros”, it could be a “cooperativa de laticínios”. But then I had to read forward, because there will be the word “laticínio” at the end. I think I was trying to avoid repetition.

R: Ok. Then you chose...

P: So I chose “produtores”. Not farmers, not “fazendeiros”, but “produtores”. I was... I might have been looking for a word to avoid repetition.

R: Right. Then, straight after this sentence, where it goes “individual dairies”, you spent some time thinking as well, before you get the next line.

P: This is the case. Is the case for... In this case I was trying to avoid repetition of terms.

R: Ok.

P: Many terms are similar in this... in these two paragraphs. So I had to find a word for dairies, which is “laticínios” in Portuguese, but I had to find one that gave me the idea of [an] isolated or on their own ... where’s that? ... Hm, where’s it? [Looking at the source text] Individual. I had to find a word for individual, so I decided for “independente”.

R: Ok. And then... probably in the ... this very line, where it goes “The Co-op, one of the largest milk suppliers in Britain, was a pioneer in the production of pasteurized milk”. Right. The following sentence goes “The first Co-operative dairy”, [and] you wrote “a primeira cooperativa leiteira”. And then you changed. Why did you change it?

P: Well, Portuguese (...) The idea in Portuguese that the practical... not the practical, the usual idea in Portuguese is “cooperativa de laticínio”. This is a common expression in Portuguese. I think the reader wouldn’t understand “cooperativa de lei...” ... what word was that? “cooperativa de...”

R: “de leite”.

P: “... de leite”. They would better understand it as “cooperativa de laticínio”. It’s a common expression in Portuguese.

R: Ok.

P: For this kind of text, you know. For this kind of subject.

R: You were thinking here again. What’s (...) line?

P: Well, yes, I know why. I know why. It’s 250 gallons, right?

R: Yeah.

P: I usually... when I translate texts... technical texts, we... we always have to put the... the units in [the] Portuguese system (...). I don’t know the name of the system, because centimetre... litre system. So I was calculating the... [showing a sheet of paper full of mathematical calculations] the amount of gallons you have... amount of litres you have in 250 gallons. That goes about 1.100... it’s around 1.100 litres, you’ll see there [in the target text].

R: Ok. And you decided to leave “gallons” in Portuguese.

P: No, I decided to put “galões” in Portuguese.

R: Right. Then you wrote in parenthesis how it would be in litres.

P: Yeah. Positive. This is a rule. It’s a rule in technical translation. You should always bring the unit system into Portuguese, you know, the Brazilian accepted unit system. That’s what I did. I did the same with 4 million.

R: 400 million gallons...

P: 400 million gallons.

R: ...which is 1.8 billion...

P: Billion, yeah. If you multiply 4.5 which is... no, a gallon is about four and a half litres, so you have this amount... this amazing amount of milk... per week. It’s... it’s too much.

R: Any problems here... that you can remember?

P: Ah, yes. Yes. It’s a very interesting sentence. The writer... the writer says... (...) about fat... (...) “...[lower] fat milk which is increasingly popular with those of us”. She says “those of us”. The writer is including herself in the list of people concerning with the diet.

R: Ok. Where it says... where it says "in the case if lower fat milk which is increasingly popular with those of us following a healthier diet".

P: I could have left only "aqueles" in Portuguese, but then "aqueles" wouldn't be including the writer.

R: Ok.

P: So... and the writer is including herself in this group of people that are not worried about the diet. Look at that.

R: So you chose "aqueles como eu".

P: Which is... Ok. "As myself" !

R: Let's see... there's something else. You changed something there ... "in natura"...

P: Well, I was looking for the italic, because the latin words in Portuguese texts should be written in italics. And I couldn't find it.

R: Right. Ok. You were just trying to italicise it. And then you stopped and (...) here, after "in natura". Were you thinking or...

P: No, I was looking for a way to put "in natura" in italics... or italicise it.

R: Ok... Right, can you tell me something about this bit here? About the... "the special Daisy the Leaping Cow logo"...

P: Well, this is a logo. I kept it in English and then I translated the logo right after, but between hyphens.

R: Right. So you decided to keep "Daisy the Leaping Cow" in English and you translated it between dashes then.

P: Yeah.

R: And you decided to do this because it's a logo, so you didn't... didn't change it.

P: Well, it's part... I think the writer wants to build the... the figure in the... she wants to show that there are, or, there is this logo on the carton, so... I don't know if it was the right decision, but it seems to me more attractive for the reader. If I were writing a newspaper... If I were writing the... translating this for a newspaper... I'm sure they would like to have kept these words.

R: Ok. Any problems here... that you stopped again? "Leite condensado é leite evaporado".

P: You see, this is not a common expression in Portuguese. "Leite evaporado" is a technical word. In fact, when you told me that there wouldn't be any technical piece you lied to me, because this is a technical word. We don't have "evaporado mil..." ... hm... "leite evaporado" in Portuguese. So... I had to go to the dictionary to see if I could find some technical help. I couldn't find it... because my dictionaries are not technical dictionaries... the ones I was using. Then I kept the word "evaporado" but from the definition, from the English – English dictionary... and the monolingual dictionary, I decided to use the word "desidratado" afterwards. You'll see there.

R: Ok, so you changed "evaporado" for "desidratado".

P: No, I didn't change. I kept "evaporado" and then there is another... there was another chance to use the word "evaporado"... I used it again, but with the word "desidratado" right after... explained that "evaporado" is a kind of dehydrated milk.

R: Ok. Did you think anything about this "Torta de Banoffi"?

P: No, I translated straight, since... 'cos... it's a... Banoffi must be a proper name, I suppose, or a name of a place... or... so I decided as "Torta de Banoffi" as a... as a dessert.

R: And here you were thinking again: "ar quente ou cilindros", the rollers.

P: Again we have technical words there. I don't know what kind of rollers these are. I suppose they are hot rollers. I've never seen this process, although I have seen the air, the hot air process in operation. I've already visited a lot of dairies, but I've never seen any rollers, because rollers are cylinders, yeah. So I just...in fact I had to go to the dictionary. I looked it up in a dictionary to see if I could find something else... some rollers that are used to dry milk... or dry a kind of liquid. But I couldn't find anything, so I decided to keep the word cylinders... hm... "cilindros", which is a synonym for rollers... 'cos rollers are "rolos" in fact. And it didn't make any sense then. It's not very... it's not very clear... not even in English it's so clear.

R: Did you have any problems with the word vegans?

P: No, not at all.

R: So you just decided to put "vegetarianos" straight away, yeah?

P: Yeah. I didn't even bother to look... look it up in a dictionary... Think I inferred it then.

R: Right. So, then you stopped here again. Hm, let me show you... Right. You finished the translation at 01.33.19 [repeated the figure about three times] and from 01.33.19 to 01.42.30 you were just revising your work, yeah?

P: Well I check... I checked the internet for the expression... the expression down... low down, which was still in English.

R: *So low down... hm... was a problem you kept to the end.*

P: Yeah, 'cos I couldn't find it in the dictionary, so I had to go to another source of information. So I used the internet.

R: *And then, what did you decide to do with low down?*

P: I found some examples of low down being used... in some... some sites. And [it] just gave me a fair idea of what low down is, and then I decided to use the word "cenário" think. At first... the first impression was "subterrâneos" but I thought that "subterrâneos" was not a very commercial word for this text, so I decided for "cenário".

R: *And after that you went to "ainda hoje o leite é levado até a ...asas"... "até as portas"... and then you changed something here (...)*

P: I might have corrected some mistakes, you know. Might have. I don't know.

R: *You might've decided to change something here in this line?*

P: Well, I usually do this after I finish translating I read everything again. And then I don't care about the original text... I don't care about the... the English text. Then I need to have my Portuguese tuned and I... and I try to find the words, even if the words are not totally related to the word in English. I try to find a word that makes the text easier to read. This is my objective. Or more coherent too. Now, coherence is very important when I'm revising the final text.

R: *Ok. If you see anything relevant, just tell me, yeah.*

P: Well, yeah. This is one of the words, you see. I had to translate it... hm... to the word "universalmente"... it's a... it's a cognate [of the] word universal in English. And I translated straight for "universalmente". You see, this text is local, it's regional. It's for the United Kingdom. It's not universal. So I thought the word was not proper for this. And I decided to use "universamente" for... I changed "universalmente" for "unanimente"

R: *Ok. And then you spent some time thinking here... "por mais de 60 anos", and decided to leave it the way it was...*

P: Uh-huh

R: *And then you changed it and you went back to the original way you had left here... "não tem se preservado".*

P: Well, the Word "preservado" is not exactly what we say... we usually say "conservado"... but it's becoming a common word for this purpose. "Preservado" is becoming a common word for this purpose. You see, it's a problem we have in English... conservative, preservative and... conservative. These are two tricky words in English and to translate in Portuguese. You have to be very careful because "preservativo" in Portuguese means condoms. So... but the word "preservar" is becoming very usual in... in food processing. It's another technical problem. It's a technical expression.

R: *Let's see now here. Then you stopped here. See if there's anything else that (...)*

P: Maybe I was checking for the word rollers... if I could find something... if I could put something better for the word "cilindros", you know. But I couldn't find it. I think... I think I went back to the dictionary at this point... to see if I could find... maybe hot... hot rollers or hot cylinders or... but the dictionary didn't give me. This is... this is again a technical process. It's a process to dry some kind of liquid. It's industry.

R: *Then you paused at 01.32.20 and were thinking for about 10 seconds, until you decided that the translation was ready, yeah?*

P: Yeah, that's it. I was certainly running my eyes through again, you know, checking small points in it.

R: *Ok. Thank you.*