Universitat Autònoma de Barcelona

Explicitation and Translation Editing Environments

Bartolomé Mesa-Lao

Explicitation and Translation Editing Environments

An empirical study on the impact of computer-aided translation on translated texts

(English to Spanish)

PhD Dissertation

PhD program in Translation and Intercultural Studies

A thesis submitted in partial fulfilment of
the requirements for the Degree of
Doctor of Philosophy

Author: Bartolomé Mesa-Lao
Supervisor: Dr Anna Aguilar-Amat i Castillo

Departament de Traducció i d'Interpretació i d'Estudis de l'Àsia Oriental

September, 2014

To whom it may concern

Acknowledgements

Firstly, I would like to express my deep gratitude to my doctoral supervisor Dr Anna Aguilar-Amat who eventually took over and made it possible for me to complete this PhD. She gave me the freedom to pursue my own research directions and encouraged me to reach the end with constructive comments. I must also thank Anna for her endless patience while waiting for the final version of the manuscript.

I would also like to thank Dr Pilar Sánchez-Gijón for all the project arrangements she made to start this work within the framework of the TRACE project (*TRaducción Asistida, Calidad y Evaluación*). She suffered the first stages of this research letting me enjoy many other academic opportunities that came in my way despite the fact that many times they distracted me from the task in hand.

Thanks go to all the members of the Tradumàtica Research Group for steering me toward academia in the first place and for awakening my interest in translation technologies.

I also wish to express my gratitude to all my former colleagues and students at the Faculty of Translation and Interpreting at the Universitat Autònoma de Barcelona (UAB). Thanks also go to my fellow PhD candidates, especially to Dr Adrià Martín-Mor and José Ramón Biau who shared many of the early discussions in regard to the experimental design presented in this thesis.

I would like to thank all the members at the Localisation Research Centre in Ireland, and the staff and postgraduate students at the Centre for Next Generation Localisation at the University of Limerick for their helpful comments during my research stay there (March–June 2010). Of course, I also want to acknowledge everyone who has helped me with helpful feedback and comments whenever I presented my work in different conferences and seminars.

I want to express my gratitude to Juanjo López Mellado for his expertise and readiness to help me building up the on-line multiple translation corpus for the TRACE project, for being very generous with his knowledge, and for answering my never-ending stream of questions. I would also like to thank Alba Mena Olivella for her invaluable help with the corpus alignment and annotation, and Marcelo Aurelio for his time editing the videos in the corpus. Thanks also go to the Servei d'Estadística, especially to Oliver Valero Coppin, for providing me with statistical advice to work with the data obtained in the experimental part of this thesis.

Last but not least, I want to thank all the participants in the pilot and in the final experiment, who took time out of their busy schedules as professional translators to help the Tradumàtica Research Group with this research. All the meandering of this PhD dissertation stem from their professional skills and I am indebted to them all.

Funding

This endeavour would not have been possible without the financial support given by the former Spanish Ministry of Education and Science for the TRACE project (*TRaducción Asistida, Calidad y Evaluación*. Ref. HUM-04349-FILO, 2006-2010), led by Dr Pilar Sánchez-Gijón.

I also want to acknowledge the Universitat Autònoma de Barcelona for providing financial support in the form of a pre-doctoral grant (PIF - Ref 441-01-2/07, Traducció i Interpretació) to complete my PhD programme.

Abstract (English)

This thesis presents an empirical investigation on explicitation phenomena in translations done under three different translation editing environments involving a variable degree of machine-aided human translation (MAHT). The study falls within the product-oriented translation paradigm and within the more general field of corpus linguistics. Resulting from an experiment involving 90 professional translators, a multiple translation corpus (English – Spanish) is set up with a view to verifying the existence of explicitation phenomena in three different technical texts (software user guides and software marketing collaterals). Explicitation traces in translations are analyzed looking for possible correlations with some objective/external factors, such as the translation editing environment used to translate (i.e. present/absent of automatic text segmentation imposed by a translation memory and present/absent of layout information while translating), as well as with other more subjective/personal factors such as translator profile and experience. Results show that different categories of explicitation phenomena correlate differently with the present/absence of a translation memory during the translation process. Translator profiles and experience also correlate differently with the present/absence of certain explicitation traces in the final target texts when working in a translation memory-mediated environment.

Keywords: *empirical research, translation-inherent explicitation, translation editing environments, human-computer interaction, machine-aided human translation, multiple translation corpus, translation studies..*

Resumen (español)

Esta tesis presenta una investigación empírica sobre el fenómeno de la explicitación en traducciones elaboradas en tres entornos de traducción diferentes con un grado variable de traducción asistida por ordenador (TAO). El estudio se enmarca dentro del paradigma de la traducción escrita como producto y dentro del ámbito más general de la lingüística de corpus. Como resultado de un experimento con 90 traductores profesionales, se ha compilado un corpus paralelo alineado (inglés – español) con el fin de verificar la existencia de marcas de explicitación en tres textos técnicos (guías de usuario y marketing de software). El análisis de las marcas de explicitación en las traducciones se realiza buscando posibles correlaciones con factores objetivos/externos, tales como el entorno utilizado para traducir (presencia/ausencia de segmentación automática del texto impuesta por una memoria de traducción o presencia/ausencia de información del formato del texto mientras se traduce). Del mismo modo, el análisis de las marcas de explicitación en las traducciones se correlaciona con factores subjetivos/personales, tales como el perfil de traductor y su experiencia. Los resultados de este estudio muestran que diferentes categorías de explicitación correlacionan de manera diferente con la presencia/ausencia de una memoria de traducción durante el proceso de traducción. El perfil de los traductores y su experiencia también correlaciona de manera diferente con el presencia/ausencia de ciertas marcas de explicitación cuando se traduce en un entorno de traducción asistida por ordenador.

Palabras clave: *explicitación, entornos de traducción, traducción asistida por ordenador, interacción persona-ordenador, investigación empíricoexperimental, corpus paralelo alineado, traductología.*

Contents

List of Tables

List of Figures

List of abbreviations

CAT: Computer-Aided Translation

DTS: Descriptive Translation Studies

LSP: Language Service Provider

MAHT: Machine-aided human translation

MCC: Monolingual comparable corpus

MT: Machine translation

MTC: Multiple translation corpus

SL: Source language

ST: Source text

TL: Target language

TM: Translation memory

TS: Translation Studies

TT: Target text, translation

TU: Translation Unit

TU: Translation Universal

Chapter 1

Introduction

Translation technologies tend to be approached by following the type of technology they involve, with limited regard to what it actually means to translate using them. The present study is an empirical investigation of explicitation phenomena in human translation from a completely new perspective: the potential impact that translation technology in the form of a translation memory (TM) system may have in the translation product.

This thesis combines thus two primary fields of research: the field of Descriptive Translation Studies (DTS) and the field of translation technology. The combination of these two fields of research seems to be of relevance since technological aids in translation, not least TM systems, have become part of the translation process for most professional in the language industry today.

The aim of this thesis is to carry out an analysis of professional translations with a view to providing a new contribution to the study of assumed common features of translated texts, i.e. peculiarities which would distinguish them from both their source texts and comparable originals in the same language. One such feature in particular will be focused upon, which seems to have gained a lot of attention from Translation Studies (TS) scholars, namely the suggested tendency for translations to be more explicit than their source texts.

The very nature of translated texts has attracted revived interest thanks to the emergence of the corpus methodology as a major paradigm in TS: by allowing for the detection of patterns in translations, corpus techniques have contributed to shed new light on notions such as 'explicitation', which while far from being new, had only previously been investigated only on small-scale, sometimes anecdotal, studies. The increased access to large corpora containing translated texts has favoured the development of numerous *product-oriented* investigations of translation features (studies based on the product of translation, i.e. translated texts), though there have also been *process-*

oriented studies aimed at investigating the cognitive processes, motivations and strategies lying behind given translation choices, based on methods like think-aloud protocols, retrospective interviews and, more recently, eye tracking and key logging methods.

The motivation behind the study springs originally from the intuitive idea that the interaction between the human translator and a TM system must have some effect not only on the translation process but also on the translation product. Translation technologies tend to be approached by following the type of technology they involve, with limited regard to what it actually means to translate using them. Our objective is thus to observe, with a descriptive attitude, how features which have traditionally been studied in translations can correlate with the use of translation technology to translate in the form a TM system, a field which seems not to have received much attention in DTS so far.

In general, it is widely acknowledged that TM systems has garnered unparalleled success among the translation community and has caused the greatest impact on the translator's work, more than any other technology (Bowker and Barlow, 2004:71-75; Somers, 2003:31; Carl et al., 2002:19). First of all, TM systems have not only survived in a highly competitive translation software market for over 18 years, but their technology has also been evolving at a rapid pace thanks to the lively interest received both by industry and academia. In addition, the increasing number and diversification of TM systems that are available on the market nowadays reveals a rising demand for this type of technology. At the same time, surveys on the use of TM systems report a high penetration rate of TM technology (64% by eCoLoRe 2003, 91% by LISA TM Survey 2004, and 82% by TM Survey 2006)[1] as well as an increased TM usage rates (Wheatly, 2003; Lommel, 2004; Lagoudaki, 2006, 2009). Finally, the popularity of TM systems over other translation tools can also be demonstrated by the large number of TM user groups that exist on the Internet with many thousands of members. Because of this evidence that makes TM systems stand out in the translators' toolbox, this thesis is specifically interested in experimental research on TM systems rather than in any other system, since up until now it appears to be the most popular translation support tool.

[1]These percentages refer to the number of each survey's respondents who use TM systems.

1.1 Aim, hypothesis and research questions

The aim of the study is to evaluate the overall hypothesis that the translation product is potentially affected by the integration of TM systems in the translation process.

Following Jiménez-Crespo (2011: 5), working with different emerging text types from the field of localization is a good way to further explore some of the generally assumed properties of translated texts. In our research, translations produced with and without computer-aided tools were selected given that: *(1)* if explicitation is a potential general tendency, it should be equally present in current and emerging translation types; and *(2)* translations produced in computer-aided translation environments are a text type in which explicitation might not be expected due to specific constraints (i.e. space, segmentation, etc.).

The underlying assumption of the present study is that the explicitation phenomena reflected on TTs varies depending on the characteristics of the translation editing environment used to translate. Based on the above general hypothesis, the study aims *primarily* at investigating the interaction between the translator and the translation editing environment used to produce a TT. In particular, this research sets out to test Blum-Kulka's (1986: 19) suggestion that translations tend to increase explicitness compared to their STs and that, since they cannot always be explained by differences in language systems and preferences, explicitating shifts might be an inherent consequence of the process of translation. To illuminate this, the following research questions have been set up:

R1: *Is explicitation a feature of translated English to Spanish technical texts (software user guides and marketing collaterals)?*

R2: *If the answer to R1 is positive, do patterns of explicitation vary depending on the translation editing environment used to translate? In other words, do shifts in explicitation could be used to discriminate between translations done with and without integrating a TM system in the translation process?*

R3: *Is there a correlation between the tendency towards explicitation and different profiles of translators?*

A secondary aim of this thesis is to investigate the usefulness of a multiple translation corpus (MTC) methodology to gain further knowledge about explicitation phenomena in translation:

R4: *What specific insights are offered by the MTC methodology? In other words, what does the analysis of multiple translations for each ST reveal about the nature of explicitation? Can a MTC help distinguish norm-based behaviour from translation-inherent features of translation texts?*

1.2 Methodology and data

In the framework of the TRACE project[2], the above research questions were evaluated through a series of experiments carried out at the Universitat Autònoma de Barcelona, where 90 professional translators were tasked with translating three different texts under three different conditions, i.e. three different translation editing environments. The aim of the study is partly to make observations on explicitation phenomena[3] when translating technical texts, and partly to assess the effects on the product of integrating a TM system in the translation process with its inherent automatic text segmentation feature and a variable degree of visual context information (see R1).

To help evaluate the effects on the product of integrating a TM in the translation process, three texts were translated under three varying levels of TM integration where the presence/absence of automatic text segmentation and the access to visual context made the three environments different (see R2). In order to assess the effects of differences in the translator profiles, data was collected from three groups of participants: 54 freelance translators, 18 in-house translators, and 18 novice translators (see R3).

Although data on the translation process was also collected, the present study follows a fully product-oriented approach. Translations were processed and organized in the form of a so-called *multiple translation corpus* (MTC) specifically set up for this research.

The choice of analysing translations made by professional translators under

[2]This research is part of a larger project whose overall aim is to investigate from an experimental approach translations done with and without computer-aided translation software. Project name: TRACE (*Traducción Asistida, Calidad y Evaluación*), HUM2006-04349/FILO. Principal investigator: Dr. Pilar Sánchez-Gijón, Universitat Autònoma de Barcelona.

[3]I am deliberately avoiding referring to translation "strategies" or "choices" here because translation-inherent features of translated texts, as we will see in Chapters 2 and 3, are most often pointed at in the literature as the result of unconscious processes. Alternative explanations, such as Pym's (2005) suggestion that explicitation might be connected to translator's risk aversion, do not necessarily rule out the existence of unconscious component.

experimental conditions has a double advantage. On the one hand, it makes it possible to collect several translations (or target texts, TTs) for each source text (ST) to create a new resource that can offer new insights for the study of variation and/or regularities in translational behaviour when interacting with technology (see R4). On the other hand, collecting and analysing texts produced under experimental conditions allows us to control as many variables as possible in order to yield reliable insights into the phenomena under investigation, i.e. the possible interaction among translation-inherent explicitation, translator's profile and the use of different translation edition environments while translating.

The chosen approach can thus be described as *target-oriented*: even if the analysis involves the comparison between TTs and STs, it is not centred on a normative notion of equivalence like in ST-oriented approaches to Translation Studies, i.e. there is no expectation about how specific ST features should be reproduced in TTs. Rather, the aim is to investigate variation and regularities in the way professional translators cope with specific ST features depending on the translation editing environment used to translate. Answering the research questions above requires, first of all, that a clear definition of explicitation, as well as of the indicators used to analyse it, is provided. For the purposes of this study, translated texts will be considered more explicit than their source texts when they are characterised by an increase in information, whose *addition* in TTs can be seen as the overt expression of implicit ST information. The *specification* of information in the TTs, i.e. shifts from ST generic lexical units, will also be assumed to lead to explicitation phenomena in TTs. The first part of this research thus relies on frequency data, and more precisely on the comparison of STs and TTs. A quantitative approach is adopted in order to investigate how shifts in explicitation in TTs relate to implicit information in the ST. This comparison is expected to shed light on the relationship between explicitation in translation and the impact of the translation editing environment used to translate. A more qualitative approach is used, on the other hand, to illuminate the second part of the research (R3), in which concordances extracted from the corpus compiled are analysed in order to investigate variation and regularities in translations as well as their potential connection with objective/external factors (such as STs/TTs) and personal factors (the translator's profile). The analyses of the study rely on translation product data coded and set up in the form of a multiple translation corpus (MTC) from where data will be filtered and subjected to statistical tests of significance and variance using SPSS and SAS statistical software packages.

1.3 Theoretical basis

Since emerging as one of the first potential translation universals toward the end of the 1980s, explicitation has continued to haunt TS as an almost omnipresent concept. As pointed by Kamenická (2008), explicitation appears to occupy a position at a cross-section of approaches to studying translations: approaches studying the general and the individual features of translated texts, approaches studying translation as a process and as a product, and approaches studying the cognitive and sociocultural aspects of translation. Explicitation is linked to concepts important to TS such as norms, potential translation universals, and style in/of translation. For this reason, it indeed touches on many of the core questions of translation. The examination of explicitation phenomena in a specific language pair not only raises our awareness and understanding of the very nature of translation process and product, but also contributes to the translation theory by enabling us to explain and predict phenomena in translation.

The present study draws on research in two main fields. First and foremost, the study falls within the theoretical framework of Descriptive Translation Studies (DTS) on the basis of which the study's hypotheses are formulated and evaluated. A corpus-based investigation derived from an experiment is carried out to provide a new contribution to the study of alleged common features of translated texts, i.e. peculiarities which would distinguish them from both their source texts. For this reason, the notion of explicitation is examined in the framework of mainstream research in the field of DTS, where it has been extensively studied as a candidate 'Translation Universal' (TU).

The connection between explicitation and other potential TUs is discussed, as well as its possible motivation. More recent developments focusing on the analysis of variation among translators rather than on "universalistic" tendencies are also pointed out. We discuss the potential of multiple translation corpora as resources for the investigation of both variation and general translation features, currently underused due to practical difficulties in their creation. We also report on corpus based studies on parallel translation corpora, a special subtype of multiple translation corpora which has been little exploited in TS so far, and which is the resource used in this research.

The other main field of research elaborated here is the field of translation technology considering theoretical and empirical research on the use of translation support tools, especially the use of TM system. When human translators integrate TM systems in their work, this is an instance of translator-computer interaction, and, more specifically of machine-aided human translation (MAHT). The relevance of MAHT (machine-aided human translation), HAMT (human-aided machine translation) and fully automatic

MT (machine translation) has been much debated over the past decades, and some researchers still believe that MAHT is the only viable alternative to automation of translation to produce high-quality texts. Whatever the case might be, the truth is that almost all professional translators today use some sort of computer aids to assist them.

Technology is clearly shaping the translation industry (and the way individual translators work) from within by making more efficient tools and processes. The overwhelming argument for embracing TM technology appears to be the benefits that the system can bring in terms of productivity, cost savings and quality of the translation output (Lagoudaki 2006; O'Hagan 2009: 48; Wheatley 2003). Indeed, it is no exaggeration to say that the advent of TM systems in the translation profession has led to drastic changes in translators' processes and workflow (e.g. Garcia 2007: 56), and yet, though many professional translators nowadays depend on some form of TM system, neither MAHT in general nor TM-assisted translation in particular has been the object of much research. Therefore, as mentioned above, the combination of these two primary fields, text-based analyses of translations and the effects of the integration of translation technology in the process seems relevant.

1.4 Delimitation

As mentioned above, this study is deployed following a product-based approach. It would have been interesting indeed to analyse the translation *process* along with the *products* and, although the information about the process in the form of screen recording and key strokes was also logged, this data has not been taken into account for the analysis of this study.

Many data elicitation methods, e.g. introspection and retrospection, could have been employed to provide further information on how translators cope with explicitation phenomena. However, the large sample of translator under study (e.g. 90 translators and 270 translations done under experimental conditions) made us decide for a product-based approach where the *research process* may not affect the *translation process* and, consequently, the *translation product*.

Even when the integration of several research fields is clearly considered to be a strength for the purpose of formulating and evaluating relevant hypotheses, it also has the weakness that the discussion of individual paradigms may not be as elaborate as might be desirable. Hence, even when our topic of research might be elaborated by analysing and discussing adjoining issues in translation, e.g., drafting and reviewing patterns or cognitive processes in translation, in the presentation of the theoretical basis for the study, only the

models and concepts which are of relevance for the empirical investigation are discussed in detail (i.e. explicitation in translation, characteristics of translated texts and translation automation in the form a TM system).

Since some of the conclusions drawn on the basis of the data are rather speculative and call for further testing and the formulation of new hypothesis, we hope to broad some of the delimitation of this study in future research taking also into account, for instance, a process-oriented approach to translation incorporating other data elicitation methods such as eye-tracking methodology.

Focusing on the presence of explicitation phenomena in translations done under different translation editing environments, no assumptions about the quality of the TTs depending on the appearance of explicitation phenomena are made in this study. Criteria for good translations is not constant, but subject to change, among other things as a consequence of how translators actually translate. Also evaluations of one and the same TT sometimes vary considerably among evaluators. Therefore, this study will instead analyze a particular textual feature, which can be objectively established as present or absent in the TT, and which has received a lot of attention in studies of translation, i.e. explicitation. Our position here is thus merely descriptive.

1.5 Structure of the thesis

The thesis comprises an account of relevant theoretical concepts as well as a report of the empirical investigation carried out. Hence, the first two chapters (following this **Introduction**) provide the theoretical background for the thesis and set up the framework for the empirical study. The following two chapters describe the research design and methods, as well as the characteristics of the corpus compiled for this study. The last two chapters report and discuss the empirical findings of the study.

More specifically, **Chapter 2** presents various concepts concerning the characteristics of translated texts and translation universals, which are of relevance to the study of explicitation in translation. An overview of the literature in regard to this translation shifts is also provided.

Chapter 3 focuses on the notion of translation-inherent explicitation and how it have been approached in TS so far, giving an account of the existing research in this field s and how it has been investigated so far. The different indicators of translation-inherent explicitation chosen for this research are presented and discussed.

Chapter 4 outlines events and approaches in the field of translation automation, focusing on machine-aided human translation (MAHT), and

describes the functionality of TM systems. This chapter also includes a review of empirical studies that have investigated the role played by TM systems in translation from different approaches.

The theoretical framework of this thesis (Chapters 2, 3 and 4) concludes with a number of hypotheses subject to testing in the empirical investigation described in the following chapters.

Chapter 5 provides an account of the study's research design by presenting the participants, the experimental texts and the experimental task. Methodological conclusions derived from a pilot test of the study are also included in this chapter.

Chapter 6 describes the procedure by which data was collected, prepared and coded for analysis. More specifically, this chapter describes the platform developed as a research by-product of this thesis, i.e., a research assets management system within which the multiple translation corpus specifically assembled for the research has been set up and made available online on the Internet.

Chapter 7 presents the results of the study on how explicitation phenomena correlates with the translation editing environment used to translate. The results are discussed in relation to the hypotheses presented at the end of chapters 2 and 3.

Chapter 8 sums up the study's main findings bearing in mind its strengths and weaknesses and discusses future avenues of research.

Chapter 2

Researching translated language

This chapter describes the broad theoretical background that the present research draws upon, i.e. the study of the alleged common features of translated texts. Firstly, the notion of translationese is introduced as it is the notion often used in discussion on the qualities of translated language. Secondly, explicitation, simplification, normalisation and unique items are briefly examined in the framework of mainstream research in the field of Descriptive Translation Studies (DTS), where they have been extensively studied as a 'Translation Universals' (TU). The connection between these potential TUs is also discussed and the different methods to research these potential universals (i.e. corpus-based approaches) in translated text are also introduced. The chapter concludes by reporting more recent developments which focus on the analysis of variation among translators rather than on "universalistic" tendencies: the emerging concept of 'translator style'. Finally the notion of multiple translation corpora (MTC) is presented as it will be the corpus-based approach used in this study to analyse the interplay between variation and regularities in translations produced under experimental conditions (see research design in chapter 5).

2.1 Recent trends in Translation Studies

Until quite recently, the unquestioned central issue in Translation Studies (TS) was that of the *equivalence* —holding, or to be reached— between a source text (ST) and its translation (TT). During the last decades, however, the emphasis has gradually moved away from the investigation of the relationship between specific STs and TTs to the analysis of translations themselves,

and more precisely of translated language as opposed to non-mediated text production. It is one of the challenges of TS to find out by empirical research if translations are indeed systematically different from originally produced texts. Many studies have therefore set out to investigate the existence of common features of translated texts which would regularly distinguish them not only from their STs, but also from comparable non-translated texts in the same language. Several factors, of both a theoretical and technical nature, have contributed to this shift.

First, it can be seen as an indirect result of the emergence of target-oriented and functionalist approaches to translation evaluation, such as Nida's *dynamic equivalence* (1964) or the *skopos-theory* (Reiss and Vermeer 1996), which placed more importance on the naturalness of expression of the TT and on the recipient's response than on the TT equivalence to the source message form. Similarly, but adopting a descriptive rather than evaluative approach, a number of scholars —though from different standpoints, such as Toury (1981, 1995) and Baker (1993)— started to plead for the recognition of translated texts as objects of study in their own right, as "actual textual-linguistic products" rather than as reconstructions of given STs (Toury 1981), which normally implied "justify[ing] them or dismiss[ing] them by reference to their originals" (Baker 1993: 235). Simplifying these authors' views, ST-oriented approaches based on a somewhat prescriptive notion of equivalence would fail to investigate what translations actually are, focusing on what they fail to be (Toury 1981: 14). Translation began then to be considered as a language form of its own, not reducible to either the SL or the TL:

> [i]t is highly probable that there are "dialectical" differences between texts originally composed in TL and translations into it [...]. As a matter of fact, [...] "deviations" of translations both with respect to ST- or SL-based models of "functional equivalence" and to TL-normality are the major justification for a *distinct* discipline of translation studies which will incorporate the achievements of contrastive linguistics and comparative stylistics attained independently of the existence, let alone the analysis, of actual translations but in themselves will focus on translational phenomena *per se*. The theory underlying this discipline will inevitably be *TT-oriented*, and descriptive, non-normative in nature. (1981: 16, original emphasis)

The belief that the language of translation differs from "original" language has been present in DTS for some time now. Until the emergence of corpus linguistics in the study of translation, only a few isolated studies attempted

to unveil the nature of this third code. According to Chesterman (1997) the most important change in today's DTS is the changeover from philosophical conceptual analysis to empirical research. Wilss (1996) even pointed out the re-empirisation of the discipline, which in his view is an answer to the "pragmatic constraints" that almost all disciplines have to face. The emergence of corpus linguistics and the study of corpora as a methodology have contributed a great deal to the re-empirisation of translation studies. With access to huge amounts of data and with the methods and the linguistic approach characteristic of corpus linguistics, the study of the language of translation can be approached in a novel way.

The comparison of TTs with original texts in the same language being easier than the comparison of STs and TTs (at least on a superficial level), parallel corpora, i.e. corpora composed of original texts and their translations, aligned at some level (e.g. paragraph or sentence), have been gradually set aside in favour of monolingual comparable corpora, defined by Baker as "two separate collections of texts in the same language: one corpus consists of original texts in the language in question and the other consists of translations in that language from a given source language or languages" (1995: 234). This new approach has led to a substantial neglect of STs and their role in the translation process, a tendency that, however, appears to be declining.

However, as pointed by Castagnoli (2009a:3), these two strands of research (one investigating ST-TT relationship and the other focusing on differences between translated and non-translated language) have in fact not only co-existed, but have not always been kept clearly apart conceptually (Mauranen 2007: 33). The following sections review the most important aspects of 'translationese' and 'translation universals', two key notions which have been at the heart of recent TS research. Particular attention will be paid to the notion of 'explicitation' which will be at the core of the present study and further explored in detail in chapter **??**.

2.2 On the notion of 'translationese'

The approach of TS to search for regularities and general laws is not new: Toury (1980) is the best-known advocate for general *laws of translation*. He proposed this as a fundamental task of DTS due to the fact that translated language is believed to manifest certain universal features, as a consequence of the translation process. These "fingerprints" that the translation process leaves behind are generically called *translationese*. Translations exhibit their own specific lexico-grammatical and syntactic characteristics.

In an attempt to shed some light on the terminological confusion which

has ensued, the following sections give an account of how the meaning of the word *translationese* has evolved over time.

2.2.1 Translationese or "third code"

The features which characterise languages in contact have been well documented in the literature on second language acquisition and have been termed *interference* or *interlanguage* (Selinker 1972), *quasi-correctness* (Papp 1984), *lack of naturalness* (Sinclair 1984), while in the context of translation a similar phenomenon has come to be known as the *third code* (Frawley 1984) or *translationese* (Toury 1979, Gellerstam 1986):

> Theoretical considerations highly verify it, and even lead to hypothesising that the language used in translation tends to be interlanguage (sometimes designated "translationese"), or that a translation is, as it were, an "inter-text" by definition. (Toury 1979: 227)

To our knowledge the term *translationese* was first used by Toury (1979) to refer to the supposedly peculiar language used in translations: in his work the term was strictly linked to the notion of *interlanguage* that had been developed in the field of second language learning to denote a "separate linguistic system [resulting] from a learner's attempted production of a TL norm", a system which "enjoys an intermediate status between SL and TL, and [...] reflects the interference of these two codes in the performance of the learner" (Toury 1979: 223).

Toury argued that since interlanguage forms are likely to occur whenever one language is used in contact with another, and more precisely, as a consequence of this contact, they are also unavoidable in translation, irrespective of the translator's mastery of the two languages involved and even when translation is performed into the translator's native language. In his view, "the occurrence of interlanguage forms in translation follows from the very definition of this type of activity/product, thus being a formal 'translation universal'" whose analysis "should form an integral part of any systematic descriptive study of translation as an empirical phenomenon" (ibid.: 224-225).

The idea that translation could be seen as a kind of separate sub-language drawing from both the SL and TL was similarly expounded by Frawley (1984), who argued that

> the translation [...] is essentially a third code which arises out of the bilateral consideration of the matrix and target codes [...] it

> emerges as a code in its own right, setting its own standards and structural presuppositions and entailments, though they are necessarily derivative of the matrix information and target parameters. (1984: 168-169)

From this perspective and mainly seen as re-codification, translation is a new code which receives input from both the matrix (the SL/ST) and the target language (TL) codes: "the matrix code provides the essential information to be re-codified, and the target code provides the parameters for the re-rendering of that information" (ibid.: 161). However, "insofar as the third code supersedes its matrix information and target parameters, it differentiates itself" (ibid.: 169), representing "either a moderate innovation or a radical innovation with respect to the codes that contribute to its genesis" (ibid.: 173, original emphasis), but in any case establishing itself as a new code with its own features.

Yet translationese is a complex phenomenon which manifests itself on each and every level of the linguistic system, and even beyond, it has often been used to refer to the difference in the distribution of particular lexical items or to the translated version of the target language (Gellerstam 1986). The language of translations does not bear only features of SL, however. Like interlanguage in second language acquisition, translations also show universal traits: "features which typically occur in translated text rather than original utterances and which are not the result of interference from specific linguistic systems" (Baker 1993: 243). Such features are present even in translations which House (1977) has termed *covert*. In contrast to *overt translations*, which can easily be identified as such, covert translations sound like natural target language texts. Research (e.g. Laviosa 1997) has proven that even these texts carry features which differ from those of genuine texts in the same language.

Various attempts have been made to assess whether and how translated texts are really identifiable if compared with original texts. The typical methodology adopted in studies focusing on translationese is based on the construction of monolingual comparable corpora, with a view to identifying features which might be indicative of the distinction between translated and non-translated texts.

A first study carried out by Tirkkonen-Condit (2002) based on a Finnish monolingual comparable corpus aimed at investigating the human perception of translationese, i.e. whether it is possible for people to tell originals and translations apart, and at "identify[ing] the linguistic features shared by texts assumed to be translations, as well as those shared by texts assumed to be originally produced" (ibid.: 207). The conclusion drawn by Tirkkonen-Condit

on the basis of the quantitative results of her study was that translations could not be readily distinguished from original writing according to their linguistic features (ibid.: 216), and that evaluators tended to look for deviance to identify translated texts, whereas normalcy and idiomaticity were considered as signals of originality.

On the basis of experiments using Support Vector Machines (SVM) to automatically recognise translated texts within an Italian monolingual comparable corpora (MCC), Baroni and Bernardini (2006) reported that features of translationese are "robust enough to be successfully used for the automated detection of translated text" (ibid.: 260). The perspective taken by them is quite novel: reporting a machine learning approach for the task of classifying Italian texts as translated or originals. Several features were employed in the feature vector, including unigrams, bigrams, trigrams, word forms, lemmas, and part-of-speech tags in order to prove that shallow data representations can be sufficient to automatically distinguish professional translations from non-translated texts with an accuracy above the chance level and hypothesise that this representation captures the distinguishing features of translationese. The authors found that "an ensemble of SVMs reaches 86.7% accuracy with 89.3% precision and 83.3% recall [...] well above the average performance of ten human subjects, including five professional translators, on the same task" (thus confirming Tirkkonen-Condit's finding about the difficulty for humans to discriminate originals and translations). A particularly interesting aspect of Baroni and Bernardini's study is that the SVM approach does not require the preliminary manual selection of features expected to be relevant for the translated/original distinction, thus reducing the risk of introducing a bias in the investigation.

That translation is qualitatively different from authentic text production —although they both belong to the same linguistic code— is an idea which has received prominence in recent TS. More and more studies support the view that there is only partial overlap between the two modes of text production. Correspondence is found where translated texts read like original texts, and what lies beyond the common area belongs to the third code. Used in a non-evaluative way, *translationese* refers to all those features, overt or covert, at each level of the linguistic structure which distinguish translated text from original, genuine language. The *third code* is used as a synonym while others like *interlanguage* or *quasi-correctness* are ignored because of their implicit evaluative stance. In line with Toury (1980) and Frawley (1984) who claim that translationese is the product of the translation process itself, which results from the confrontation of the SL and TL under circumstances specific to the process of translation. Translationese is regarded here as a particular code with its own characteristic features.

Translationese is made up of two sets of components: one set consists of features of TL which behave differently from what is typical of TL usage. The second is made up of what has been referred to in DTS as universals of translation, i.e. *explicitation*, *simplification* and *normalisation*.

2.2.2 Translation Universals

In most recent developments, the notion of *translationese* as *third code* has further detached itself from considerations of SL and TL and has been increasingly used to refer to the language of translation being characterised by "features which typically occur in translated texts rather than original utterances and which are not the result of interference from specific linguistic systems" (Baker 1993: 243), i.e. by patterns which are specific to translated texts, or, which occur with differences in frequency and/or usage compared to TL original texts. It was hypothesised that these patterns may derive from translation being "a mediated communicative event" (Baker: ibid.) and, more precisely, that they may be the result of socio-cultural and cognitive —rather than linguistic— constraints inherent to the process of translation. As such, they would qualify as "universal features of translation" (Baker: ibid.).

The search for TU has been at the heart of the TS agenda since the mid-nineties, and in particular following Baker's (1993) seminal paper on the promising role of electronic corpora for studying the nature of translations not only in contrast with STs, but also with comparable non-translated TL texts. As mentioned in earlier sections, the hypothesis underlying the search for TUs is that translation as a communicative event differs considerably from original text production (due to the presence, above all, of a ST to reproduce, as well as of time, social and cognitive constraints) and therefore, since language is influenced by the specific context in which it is used, the very process of translation —irrespective of the languages involved— "must leave traces in the language that translators produce" (Baker 1996: 177).

Candidate TUs proposed by Baker in 1993, build on the findings of previous small-scale manually-conducted studies, and then retained in subsequent works (e.g. Baker 1996) included: a tendency towards *explicitation*, *simplification*, *normalisation* (or *conservatism*, that is, a tendency to stick to TL typical patterns, or even exaggerate them), and *levelling out* (defined as the tendency for TTs to "gravitate towards the centre of [a] continuum" (1996: 177), i.e. to be more similar to each other in terms of lexical density, type-token ratio and mean sentence length, among others, than comparable original texts would be).[1]

[1]Baker (1993: 244) had also suggested "a tendency towards disambiguation" (nowadays

The following sections will show how, due to the lack of clear-cut definitions, the above labels have been used in the literature to describe overlapping or even contradictory phenomena, with different authors associating similar textual phenomena to different categories. In addition, new hypotheses as to TUs will be discussed which have emerged from recent empirical research.

2.2.3 Universals vs. Laws

The search for TUs is not the only attempt made by TS scholars to account for the regularities which characterise translated texts, nor are the term *universals* and the idea of 'universality' undisputed.

As mentioned in section 2.1, Toury (1981, 1995) has been one of the first and best-known advocates of general laws of translation. Toury explains that he prefers the term *laws* to *universals* because it "has the possibility of *exception* built into it" (which is important as he conceives laws as probabilistic regularities) but also because "it should always be possible to explain away [seeming] exceptions to a law with the help of *another* law, operating on *another* level" (2004: 29).

Toury (1995) indeed put forward two exemplary and interacting laws of translational behaviour: the *law of interference*, and the *law of growing standardisation* which, it has been argued by Pym (2008), essentially subsumes the four TUs conceptualised by Baker (see 1.3.2 above). In its most general formulation, the latter postulates that "in translation, source-text textemes tend to be converted into target-language (or target-culture) repertoremes" (Toury 1995: 268), i.e. specific ST items are replaced in the TT by more typical items available in the TL repertoire.

Along similar lines, other scholars prefer to avoid the term *universals* and use more neutral terms like *hypotheses* (e.g. Blum-Kulka 1986), *core patterns* (e.g. Laviosa 1998), or simply *regularities* or *tendencies*. This reflects a widespread view that the claim of universality needs to be hedged, because of the limits of current corpus-based methodologies on the one hand, and because of the limited representatives of the empirical studies on which the claim has been put forward on the other hand.

Nevertheless, entering into this debate is not among the objectives of the present study. For the sake of convenience, we will discuss specific TUs in the following sections with a descriptive attitude and following how they have been presented in the literature; without thereby supporting their presumed universality. Our investigation of explicitation in translations done with and

possibly interpreted also as explicitation), i.e., "a strong preference for conventional 'grammaticality'" and "a tendency to avoid repetitions which occur in source texts".

without computer-aided translation tools does not aim at proving the the universality of this concept, but rather to investigate how certain linguistic features manifest differently depending on the translation editing environment used to translate.

2.2.4 S-universals and T-universals

Chesterman (2004b: 39) remarks that an important distinction should be made between candidate universal differences between translations and their source texts, or *S-universals* ("characteristics of the way in which translators process the source text") and differences between translations and comparable non-translated texts or *T-universals* ("characteristics of the way translators use the target language"). According to the author, this distinction was not made by Baker in her original conceptualisation of TUs: "her point of comparison is non-translated original texts; however, several of the examples of previous research that she mentions are based on evidence from a comparison with source texts" (ibid.: 43). Nonetheless, it is an essential one, for two main reasons: first, because the two types of analyses concern two key but separate aspects of research on translation, namely the equivalence relation with the ST and the relation of textual fit with comparable non-translated TL texts (ibid.: 39); and second, because they make use of different reference corpora, i.e. parallel and monolingual comparable corpora respectively.

Due to the lack of this conceptual distinction, terms like *explicitation* and *simplification* —though they convey the idea of a process taking place in the transition from ST to TT— have been used in the literature to refer to both S- and T- phenomena.

2.2.5 Hypothesised Translation Universals

This section reviews the TU candidates which seem to have attracted most attention so far (i.e., explicitation, simplification and normalisation). We will first discuss central hypotheses put forward by Baker (see Section 2.2.2) and then present some tendencies which have emerged from empirical studies more recently. The notion of 'explicitation', central to our research, will be discussed in greater detail in the next chapter.

It should be pointed out that we will concentrate here on linguistically/textually-oriented approaches to the study of TUs, and especially on corpus-based studies, which focus on the product of translation. Such approaches can uncover linguistic features but in no way can they offer causal explanations for TUs which seem to be linked to the process of translation, i.e. to cognitive and socio-cultural factors. Empirical research aimed at assessing these factors

—notably by means of think-aloud protocols, questionnaires, interviews, key-logging, eye-tracking, etc.— has been more limited; but some results will nonetheless be reported if they are significant from the point of view of a comparison with corpus-based studies.

2.2.5.1 Explicitation

This potential TU has been investigated both as an S- and a T-universal. As will be extensively discussed in chapter 3, the general idea that translations tend to be more explicit than non-translations (the broad "explicitation hypothesis") is one of the few apparent discoveries that have been made by TS. Developed by Klaudy (2001a, 2003) in relation to translation directionality and processes of implicitation, this hypothesis has been refined in such a way that we can now distinguish fairly well between explicitation required by different language systems (where explicitation in one direction is ideally matched by implicitation in the other) and explicitation as a feature of the translation situation itself, i.e. translation-inherent explicitation, where the relation between explicitation and implicitation is asymmetric. In these terms, specifically asymmetric explicitation has been hailed as a potential TU.

This notion of asymmetric explicitation has received a lot of attention in TS making it the strongest candidate for translation universals (Baker, 1993; Toury, 1995; Øverås, 1998). One of the most quoted studies on explicitation was conducted in the mid-eighties by Blum-Kulka (1986). She formulated the so-called "explicitation hypothesis", which "[...] postulates an observed cohesive explicitness from SL to TL texts regardless of the increase traceable to differences between the two linguistic and textual systems involved" (Blum-Kulka, 1986: 19).

This notion of explicitation in translation was first introduced by Vinay and Darbelnet in 1958 in their work *Stylistique comparée du francais et de l'anglais. Méthode de traduction*, subsequently translated into English in 1995. According to these two scholars, this "stylistic translation technique" does not necessarily stem from structural or semantic causes, especially when what remains implicit in the SL and made explicit in the translation is apparent from either the context or the situation (Vinay and Darbelnet, 1995: 170).

Since Vinay and Darbelnet (1958), explicitation has been studied from different approaches, and statements about its nature are heterogeneous. When explicitation is considered a S-Universal, that is when the term refers to the spelling out in TTs of information which is only implicit in STs, it has been studied by means of parallel corpora. In the second case, when explicitation is considered as a T-Universal, i.e. when the term explicitation is used to refer to the presumed higher explicitness of TTs compared to texts

originally written in the same language, this strand of research is thus based on monolingual comparable corpora.

In fact, explicitation in TS functions in the literature as an umbrella term for a number of different transfer procedures such as addition of modifiers, qualifiers and conjunctions to achieve greater transparency; addition of extra information and insertion of explanations; or specification of meaning, among others. This is why Candace Séguinot calls for the need to reserve the concept of explicitation for "additions in a translated text which cannot be explained by structural, stylistic, or rhetorical differences between the two languages" (Séguinot, 1988, p.108).

The wide variety of forms which explicitation might assume is not the only factor differentiating individual approaches. Explicitation is either known as one of the TU, i.e. a natural translation-inherent procedure and a spontaneous by-product of the translation process, or as a conscious translation technique deliberately employed by professional translators wanting to avoid linguistic and socio-cultural differences between source and target texts. According to Klaudy and Károly (2005: 15), explicitation can be both an unconscious operation and a deliberate strategy, depending on the circumstances. However, it should also be noted that few studies address the problem of conscious vs. unconscious procedure, as they concentrate on descriptive phenomena related to explicitation.

Klaudy's classification for explicitation (1993, 1996) encompasses four different types of explicitation: *i*) *obligatory explicitation*, due to language-specific differences; *ii*) *optional explicitation*, resulting from the different text-building strategies and stylistic preferences between SL and TL; *iii*) *pragmatic explicitation*, resulting from cultural differences between SL and TL communities; and finally, *iv*) *translation-inherent explicitation*, which "can be attributed to the nature of the translation process itself" and "explained by one of the most pervasive, language independent features of all translational activity, namely the need to formulate ideas in the target language that were originally conceived in the source language" (Klaudy, 2000: 83).

Following this classification, the view of explicitation under examination in this research is translation-inherent explicitation, best reflected in Séguinot's claim stating that "[...] to prove that there was explicitation, there must have been the possibility of a correct but less explicit or precise version" (Séguinot, 1988: 108). Hence, the exclusion of all obligatory explicitating shifts due to language-specific differences and also those optional shifts which can be attributed to clear-cut stylistic differences between ST and TT languages. What is more important is that explicitation is considered as such only according to definite parameters, that is, when "something is expressed in the translation which was not in the original, something which was implied or

understood through presupposition in the source text is overtly expressed in the translation, or an element in the source text is given greater importance in the translation through focus, emphasis, or lexical choice" (Séguinot, 1988: 108).

2.2.5.2 Simplification

The simplification hypothesis postulates that the language used in translations is lexically and syntactically simpler than the corresponding ST and comparable non-translated texts in the same language. Seen as a strategy, simplification may be conceived as a (more or less conscious) technique used by translators to "mak[e] things easier for the reader" (Baker 1996: 182) but, in fact, so far it has been investigated mainly as a T-universal.

The simplification universal is known to be a controversial claim, with different studies bringing evidence both for and against it. However, it has been investigated by studies of collocations (Mauranen, 2000), lexical use (Jantunen, 2001), and syntax (Jantunen, 2004).

Baker (1996: 181) suggested that simplification might result in lower sentence length in translated texts. Contradictory findings in this respect were reported by Laviosa (1996, 1998) using different MCCs, i.e. a newspaper and a narrative corpus; the tendency was confirmed in the first case, whereas mean sentence length was found to be significantly higher in translated English narrative than in comparable original texts, independently of possible author idiosyncrasies. The monolingual comparable newspaper corpus was also used by Laviosa (1996) to empirically test other hypotheses concerning simplification, such as Baker's suggestion that translations may show a less varied vocabulary than comparable original texts (Baker, 1996: 183). Her studies indeed brought to light a series of "core patterns of lexical use" in translations which seem to point to their higher "simplicity" compared to non-translated texts[2].

Laviosa (1996) found, for instance, that TTs are characterised by lower lexical density (i.e. the ratio of lexical to grammatical words), and that the proportion of high-frequency words vs. low frequency words is higher in TTs, which is an indication of higher repetitiveness and smaller lexical variation (in line with Pápai's (2004) analysis of type-token ratios).

Three more textual features by which Baker suggested that simplification might be investigated —i.e. *i*) at the syntactic level, the use of finite vs. non-finite clauses, *ii*) the disambiguation of possibly ambiguous ST passages,

[2]Again, it is worth noting here that the term *simplification* would be more appropriate to refer to a ST-TT relationship, that is to the process whereby the ST information is possibly simplified when translating it into a TT.

iii) the use of simplified, TL-adjusted punctuation instead of a ST "unusual punctuation"— do not seem to be unequivocally pointing to this TU, having been also used to provide evidence supporting explicitation (see Section 2.2.5.1) and normalisation (see Section 2.2.5.3).

More recently, a corpus-based approach which tests the statistical significance of features proposed to investigate the simplification universal has been exploited for Spanish (Corpas, 2008). In her study, Corpas tries to verify the validity of the simplification universal on a Spanish comparable corpus of medical and technical translated and non-translated texts produced by both professional and semi-professional translators. Simplification in this study seems to be validated for the lexical richness feature. However, it is contested in terms of sentence complexity and length, depth of syntactical trees, information load, and ambiguity.

The idea that translations "tend to reveal reduced rates of structuration (that is, simplification, or flattening) vis-à-vis their sources" had already been elaborated by Toury (1995: 273). According to him, the phenomenon is not due to some voluntary effort on the part of translators; on the contrary, he attributes it to the difficulties involved in the "reconstruction in target-language material of the network of relationships constituting a source-language text" (ibid.: 272), so that "decomposed textual patterns are normally reconstructed to a lesser extent than is initially possible" (ibid.: 268). On a concrete, textual level this might result in disambiguation ("dissolution of [...] intricate textual relations", ibid.: 270) and in greater standardisation, which suggests that a certain degree of overlap exists between simplification, explicitation and normalisation.

2.2.5.3 Normalisation

One of Toury's several reformulations of his *law of growing standardisation* suggests that "textual relations obtaining in the original are often modified [...] in favour of (more) habitual options offered by a target repertoire" (1995: 268). This idea is echoed in Baker's (1996: 183) definition of *normalisation* (or *conservatism*), i.e. "a tendency to exaggerate features of the target language and to conform to its typical patterns [...] most evident in the use of typical grammatical structures, punctuation and collocational patterns or clichés". The language of translations would thus be more conventional, less marked and less creative than the language of source texts and non-translated texts.

As a candidate S-universal, the normalisation hypothesis has been investigated by Kenny (1998, 2001), who suggested that negative semantic prosodies in STs are likely to be replaced by more neutral prosodies in TTs, and that unusual, creative ST words/collocations may tend to be normalised

in translation. Investigating a parallel German to English literary corpus and comparing selected items with SL and TL reference corpora, she found that 44% of creative hapax legomena and 16% of creative collocations were normalised.

As for normalisation as a T-universal, Puurtinen (2003a) reported that, whereas the language of original Finnish children's books seems to imitate colloquial language, translated children's books tend to adhere to the Finnish written standard, favouring conventional language. Similar results are found in Olohan's (2003) study of contractions in the Translational English Corpus, which confirmed her hypothesis that contractions —-as informal constructs— would be more frequent in original than in translated English.

2.2.5.4 Unique items and non-prototypical pattering

The normalisation hypothesis contrasts with the existence of plenty of anecdotal evidence of linguistic oddity in translation (Mauranen 2007: 41), which has now found empirical confirmations in a number of MCC-based investigations. Based on the analysis of a Finnish MCC of academic prose and non-fiction texts, Mauranen (2000, 2005) has suggested that translations show untypical frequencies of some lexical items as well as untypical combinatory tendencies. For instance, she found that the Finnish connector *toisaalta* —whose contrastive meaning approximates "on the one/other hand", while having also an additive meaning like "moreover"— was much more frequent in Finnish original texts than in translations, arguably because translators into Finnish used it only in its contrastive sense. Along similar lines, she observed that the verb *haluta* ("to want to") was more frequent in translated than in original Finnish; however, she also observed that the verb was used in untypical patterns of co-occurrence — i.e. while the verb normally collocates with the Finnish equivalent of "to emphasise" (40% of its overall occurrences), in translation the same pattern accounts for less than 10% of the occurrences of the verb. Besides providing evidence contrary to the normalisation hypothesis, these findings also suggest that simple word counts, including measures such as type/token ratio and lexical density, have limited value in establishing lexical differences between original and translated texts, as they do not take usage differences into account.

Jantunen's (2004) analysis of collocations in translated vs. non-translated texts confirmed that "translated texts, regardless of the source language, [seem] to show dissimilar collocations compared to non-translated texts", but further refined the claim by suggesting that the "source language [appears to] affect the lexical combinations" (ibid.: 122). This hypothesis is supported by Eskola (2004), who found that "[t]here is a clear tendency that preferences

in choosing between certain interchangeable expressions in translations are strongly associated with the features of the source language" (2004: 88).

Non-prototypical patterns in translation may thus exhibit a strong correlation with ST interference. Related to this latest claim, it has been suggested that typical features of the TL which lack straightforward linguistic counterparts in the SL, so-called *unique items*, tend to be under-represented in translation (Tirkkonen-Condit 2002, 2004 and Mauranen 2000). Unique items are to be intended here as both lexical items (e.g. Tirkkonen-Condit's 2004 analysis of some "untranslatable" Finnish verbs of sufficiency) —which may also be associated to cultural realia (Kujamäki 2004)— and syntactic constructions (Eskola 2004). Tirkkonen-Condit argues that one possible cause for their not readily suggesting themselves as translation equivalents "even where they would fit the context very well" (2004: 182) might be the lack of stimulus in the SL, a hypothesis which might be seen as a sort of "negative" or "hidden" discourse transfer, i.e. ST interference, thus bringing back Toury's (1995) law of interference into the picture.

2.2.6 Tools and methods for investigating translationese

Two major research methodologies which are central to corpus-based translation studies have been mentioned in the previous sections, i.e. the monolingual comparable corpus (MCC) approach and the parallel corpus approach. These two methodologies have different premises: in the former case, the focus is on the relationship between STs and TTs, whereas in the latter the comparison is between translated and non-translated texts in the same language.

With respect to MCCs, Baker claimed that their main contribution is that of making visible "patterning which is specific to translated texts, irrespective of the source or target languages involved" (1995: 234). While the attempt to overcome language-pair specificities and find generalisations belonging to translations as such is certainly commendable, however, it has been repeatedly pointed out that the MCC approach hides the unavoidable impact of STs on translations, which was instead proposed as a law of translational behaviour by Toury (1979). As Mauranen puts it,

> [w]hen we translate, there is a source, even if the translation brief may involve abbreviating, combining or modifying the source(s). Even if common sense views of translations mirroring the source are simplistic, the source text is nevertheless a point of departure, requiring a response from the translator. (2005: 77)

Accordingly, if the aim of corpus-based TS is not just to observe patterns, but also to find explanations for these which go beyond mere hypotheses, the

inclusion of a parallel component should be essential (Laviosa 1998, Bernardini 2005b).[3]

Parallel corpora may be useful tools for investigating translationese resulting from ST/SL interference, in that they also contain the source texts that are supposed to give rise to specific phenomena. The fact that they have been largely neglected by recent DTS is possibly due to a certain reluctance among researchers to revert to traditional source-oriented approaches (Kenny, 2005: 155, Castagnoli, 2009a: 24). Research on common features of translation has shown, however, that they can be revealing in other respects. As pointed out by Bernardini (2008), the methodological premises of corpus-based DTS are largely different:

> [t]he main aim of the analyses is not to pinpoint inadequacies of a target text (TT) as compared to its ST. Rather, [...] comparisons are carried out in order to point at systematic differences between the two sets that may result from the operation of cognitive strategies or socio-cultural norms. (ibid.: 19)

The notions of explicitation, simplification and normalisation, for instance, may all refer to phenomena implying some shift from STs to TTs. From this perspective, however, parallel corpus analyses should ideally be coupled with analyses of reference corpora of the TL (and possibly of the SL), thus setting up monolingual comparable analyses, in order to have a benchmark to identify peculiar uses of the SL and TL in translation, and to identify SL and TL preferred patterns, which is indispensable to distinguish translation-inherent phenomena from phenomena referable to the translator's attempt to conform to TL conventions. It should also be mentioned that any claim about universality in translational behaviour would be much stronger if it were supported by the analysis of several TTs for each ST, rather than of traditional parallel corpora. This point will be further explored in section 2.3.2 (Multiple translation corpora) since it is the approach taken in our study.

It is therefore encouraging to see that, whereas early studies on TUs were characterised by an over-enthusiastic attitude towards the monolingual comparable methodology and its presumed advantages (such as the possibility of relying on automatic counts and dismissing the ST altogether), or by

[3]The MCC methodology also suffers from another major drawback, i.e. it relies on the assumption that the two components of MCCs (i.e. translated and non-translated) are (or can be) fully comparable. This assumption, however, has repeatedly been questioned: e.g. Bernardini and Zanettin (2004) and Bernardini (2005a) take into account potential asymmetries in the types of authors, genres, and domains when exploring a MCC.

exclusive reliance on evidence from parallel corpora, the need to combine both types of analyses is now being increasingly recognised. Ideally, then, research on translated texts should involve two steps: 1) a STs-TTs comparison by means of a parallel corpus, and 2) an analysis of the ST and TT characteristics with respect to comparable corpora of the SL/TL which can help identify compliance with or deviation from SL and TL conventions. The order in which the two steps are made depends on the approach one chooses to adopt. The most important difference between the two is arguably that the first approach requires that specific indicators for the ST-TT comparison are preliminarily selected.

For instance, in order to distinguish translation-related explicitation from explicitation caused by stylistic preferences or ST interference, Konsalová's (2007) parallel analysis is both preceded by a stylistic comparison of SL/TL non-translated texts and followed by a comparison of TTs with comparable TL originals. Similarly, Nilsson's (2004) study is composed of two phases: in the first phase, translated Swedish texts are compared to comparable originals to find out peculiarities of translations (in this specific case, an over-representation of the grammatical word *av*); in the second phase, a STs-TTs analysis is performed to check whether such unusual distribution is caused by specific ST patterns.

2.3 Variation and regularities in translation

The use of a corpus-based approach using a multiple translation corpus (MTC) is proposed in this section (and further developed in chapter 5) as one of the best resources that can offer sound and new insights for the study of variation and regularities in translated texts. When dealing with the study of general tendencies in translation, it should also be taken into account that variation do occurs in translation and it may also be attributed to the notion of translator style. For this reason, translator style is also briefly introduced in this section with a view to justifying that the methodology chosen in the study, i.e. the analysis of concurrent translations in a MTC should take into account both between and within subject analyses.

2.3.1 Translator style and universal tendencies

Traditionally there has been little interest in studying the style of individual translators or groups of translators, arguably due to the mainstream belief that translation is a derivative act and therefore translators have to reproduce as closely as possible the style of the ST rather than imposing their own style

on the TT (Baker 2000: 244).[4] In the last decade, however, research aimed at uncovering evidence of the translator's voice and at comparing strategies adopted by different translators has been carried out e.g. by Winters (2004, 2007) and Bosseaux (2006), who analyse, respectively, the use of loan words, code switches and speech-act report verbs in two German translations of Fitzgerald's *The Beautiful and Damned*, and translations of the English personal pronoun *you* in two French versions of Virginia Woolf's *The Waves*.

As suggested by research on TUs, there are linguistic/behavioural patterns of translators which cannot be exclusively traced to conscious choices. Baker (2000: 246) thus suggests that the study of translator style should resemble forensic stylistics more than literary stylistics, i.e. it should focus on "subtle, unobtrusive linguistic habits which are largely beyond the conscious control of the writer" (or translator) rather than on conscious linguistic or translational choices. In other words, this line of investigation should attempt to identify translators' individual fingerprints which would distinguish them from other translators, while at the same time leaving aside what can be carried over from the ST, i.e. the author's style and SL features.

Ideally, then, it may be hypothesised that research into translator style may profitably borrow techniques commonly used for authorship attribution, where a variety of statistical methods are used to identify "stylistic discriminators, i.e. characteristics which remain approximately invariant within the works of a given author but which tend to vary from author to author" (Koppel and Schler 2003), such as average sentence length, average word length, type/token ratio, etc. This possibility was tested by Mikhailov and Villikka (2001), who analysed Russian to Finnish translations of different texts by the same translator and of the same text by different translators according to established authorship attribution indicators like vocabulary richness, frequent and favourite words (after verifying that they could indeed be used to group Russian texts produced by different authors). These measures proved ineffective for the identification of different translators, "as if translators did not have a language and a style of their own" (ibid.: 383); however, the authors found that other indicators contributed to shape a translator's profile/identity, such as the use of modals and conjunctions, splitting or joining of sentences, or shortening or expanding of the text. Text length had also been found to be relevant by Englund Dimitrova (1994).

The idea that patterns of explicitation may be revealing with respect to translator style was tested by Kamenická (2008), who compared the frequency and variability of explicitation phenomena in English to Czech translations

[4]With the exception of some approaches which have in fact called for a higher visibility of the translator, such as Venuti (1995).

by two different translators in order to assess whether/what characteristics of explicitation behaviour are shared by different translators. Explicitation and implicitation shifts were manually identified and categorised according to the textual function involved (based on the Hallidayan distinction between ideational, interpersonal and textual metafunctions). She found that what differentiated the two translators was the relative frequency of explicitation vs. implicitation shifts, rather than just the frequency of explicitation: one of the translators was found to use implicitation almost as often as explicitation, while for the other explicitating shifts considerably outnumbered implicitating shifts, thus supporting the author's hypothesis that the analysis of explicitation behaviour can give interesting insights into translator style.

Saldanha (2005, 2008) similarly suggested that differences in the use of italics and cultural borrowings accompanied by contextual information (when they are not due to constraints related to genres, cultural backgrounds or languages involved) may be indicative of translators' stylistic preferences when it comes to explicitating information. She also argued that some tendencies may be connected to the translators' own conceptions of their role of cultural mediators, and corroborated by the analysis of interviews with the two translators involved in her own study (Saldanha, 2008: 31). This suggests that translational stylistics may be a research area for which the corpus methodology shows some limitations, especially if analyses are conducted on the basis of monolingual comparable corpora alone (as was also acknowledged by Baker (2000), the first scholar to perform a corpus-based study of translator style).

Some of the limitations of this methodology were brought out in Olohan's (2004) study of contractions in the work of two translators: while the difference in raw frequencies initially suggested different stylistic preferences (ibid.: 156), further analyses based on ST author and genre in fact suggested that it was determined to a higher extent by literary genre and narrative structure (ibid.: 159-160). On the whole, MCCs do not allow researchers to distinguish stylistic features which can be attributed to the translator from features which reflect the style of the ST author, general SL preferences or the preferences of a specific subset of translators (Baker 2000: 261).

The simplest way to remedy the first two shortcomings is to compare patterns in translators' output with patterns in the ST (ibid.: 255), thus resorting in the end to parallel corpora; according to Malmkjær, "unless this relationship is taken into consideration, many textual features of potential interest are unlikely to come to the notice of the analyst" (2004: 16). Bernardini (2005b) further recommends that reference corpora of both the SL and the TL should be used as benchmarks, in order to obtain information on the distance between the specific texts under examination and general SL/TL

linguistic and textual norms (ibid.: 15).

Another promising way of singling out a translator's style is to compare their performance to other translators', even more so if the comparison is made keeping not only the SL but also the ST constant, that is by analysing several translations of the same source text into the same TL. Such a methodology allows researchers to investigate variation as well as common patterns in translator behaviour, bringing thus ideally together what can be attributed to translational stylistics. The merits and difficulties of this option as advocated by Baker (2000: 261), but so far put into practice only to a limited extent, will be presented in the next section, as it has been the approach chosen for the present research using a MTCs.

2.3.2 Multiple Translation Corpora methodology

Multiple translation corpora (MTCs) represent a special kind of parallel corpora which contain several translations into the same language for each ST, aligned so as to be searchable in a one-to-many relationship between ST and TT. Like traditional "one-to-one"[5] parallel corpora, MTCs make it possible to observe strategies adopted by previous translators, but whereas traditional parallel corpora provide only one translation solution for each SL unit (thus concealing the variation that would inevitably emerge if translations produced by different translators were available), MTCs offer a range of solutions for each ST item or segment. As such, they represent a more reliable resource to investigate both regular patterns in translation and variation/translator style.

Our hypothesis is that for research focusing on presumed common features of translated texts, as is the case explicitation, it is precisely the analysis of the interplay between variation and regularities in translations that may offer insights which are not available with other traditional resources. For instance, MTCs may help to understand whether a particular instance of explicitation should be treated as obligatory or optional, depending on the proportion of translators who adopt it and on a comparison with other translational solutions: if all translators decide to explicitate one specific ST passage or item, that might point to a case of obligatory explicitation, while explicitation due to TL preferences or to the translation process should arguably be decreasingly less regular (see research question R4 in the Introduction).

Along the lines suggested by Baker (2000: 261), MTCs should help to differentiate between norm-governed ST-induced and idiosyncratic behaviour. In spite of their potential, MTCs are still exceptions in DTS research for one obvious practical reason: there exist very few texts with several translations

[5]This expression is used by McEnery and Xiao (2007: 23).

into the same TL, with the exception of classic literary texts which have been re-translated over time. Moreover, even when re-translations of literary texts exist, a number of variables should be taken into account which might make their comparison problematic. Firstly, they are usually produced at different points in time, the target language may have changed, and the various translators may have been constrained by different norms. Secondly, subsequent translations may have been influenced by previous versions, so the several TTs available may hardly be considered as fully independent texts. In order to create a MTC, therefore, researchers cannot but commission translations or they can resort to longitudinal studies to build Learner Translation Corpora (i.e. Castagnoli (2009b)). Scholars generally resort to Learner Translation Corpora as a way to overcome these two barriers, because in educational settings it is common to have many students translating the same ST.

Besides a few small-scale studies based on the comparison of two/more translations of the same literary ST (e.g. Malmkjær 1998 and 2003, Winters 2004 and 2007), and some studies of student translations (e.g. Toury 1986, Tirkkonen-Condit 1986, Puurtinen 2003b, Kujamäki 2004, Scarpa 2006, Castagnoli 2009a), the first and most representative example of this innovative corpus design is, to our knowledge, the multiple-translation component of the Oslo Multilingual Corpus, first mentioned in Johansson (1998: 10) and described in greater detail in Johansson (2004).[6]

The Oslo MTC contains ten translations into Norwegian of two English STs (a short story and a scientific article), commissioned from ten established professionals, with a view to examining the range of variation across the translations and, more specifically, to what extent variation is connected to specific linguistic features, text types or individual translators (Johansson 2004: 30). So far data from the corpus have been mainly analysed from the perspective of contrastive linguistics. For instance, Johansson (2004) sets out to investigate to what extent translators choose to change ST subjects in their translations and depending on which factors, such as differences in lexis between the two languages and relative preferences concerning the use of nominalisations in subject position, impersonal subjects, active/passive voice, etc. The author finds that subjects are left unaltered in about 9 out of 10 cases, and comments that when changes in subject selection occur, they

[6]MTCs developed for purposes other than translation studies research, e.g. paraphrase extraction for NLP applications or for integration into translation aids (as suggested in Danielsson 2007) are deliberately excluded here. In most such cases, the aim is finding alternative ways of expressing a concept but there is no interest in studying how these correlate with the ST/SL. Consequently, use is made of what Ulrych (1997: 426) calls "monolingual parallel corpora", i.e. corpora made up of two or more translated texts in the same language which do not include the corresponding STs.

can most often be ascribed to differences between the two languages (ibid.: 49). However, the borderline between structural and stylistic differences is by no means clear: on the one hand, the corpus does not contain instances of identical behaviour across the ten translators as regards the feature under examination, which would possibly point to systemic differences. On the other hand, Johansson reports examples both of changes which he considers linked to the translator's search for more idiomatic forms (ibid.: 36), and of cases in which the choice to reproduce the ST structure leads to "awkward" TL constructions (ibid.: 37), without unfortunately making reference to a TL corpus to support these claims. As for the possibility to exploit the corpus to study translator style, the author suggests that it should be possible to identify translator profiles by analysing whether translational choices are guided by adequacy (vis-à-vis the ST) or acceptability (vis-à-vis the TL), but no mention is made of the possible impact of translation-inherent phenomena.

2.4 Conclusions

This chapter has offered an overview of two main strands of research which form the very background of the present thesis: on the one hand, DTS dealing with general features of translated texts and, on the other hand, corpus-based research analysing the specific feature of translations using monolingual comparable corpora, parallel corpora or multiple translation corpora (MTC). The MTC, a corpus formed by several translations for each source text, have been presented as the possible solution for studying allegedly universal tendencies in translation as well as variation and regularities in translation based, for instance, on translator styles or TL norms.

MTCs offer a new dimension of comparison for translated texts: not only against STs and comparable non-translated texts (as in more traditional corpus-based translation studies), but also against concurrent translations for the same ST, following an approach comparing the performance of several translators with respect to the same ST. Accordingly, MTCs may offer new insights into notions which have already been extensively investigated in DTS, in the case of our study: explicitation. The specific theoretical object of the research, i.e. translation-inherent explicitation, will be presented in detail in chapter 3, whereas chapter 5 will provide further details on the MTC which has been assembled for the research.

Chapter 3

Explicitation in translation

The following chapter comprises of an account of the theoretical standpoints as well as empirical studies concerning explicitation phenomena in translation (i.e. the dependent variable of the present study). A critical introduction to both the Explicitation Hypothesis and the Asymmetry Hypothesis is presented, as well as a review of some of the most relevant works analysing explicitation shifts from different corpus-based perspectives. The notions of expertise and translator style are also examined in relation to explicitation. The chapter closes with a set of conclusions and assumptions that will be taken for granted in the empirical research presented in the following chapters. A readymade definition of explicitation is also provided as a conclusion as it will be functional to the research presented in following chapter.

3.1 Introduction

Explicitation is indeed one of the most thoroughly studied phenomena in Translation Studies (TS) (see chapter 2). However, approaches to the subject are heterogeneous. Nowadays, explicitation is either known as a universal feature of translated texts or regarded as a frequent conscious strategy used by both professional and non-professional translators. Different studies view explicitation either as a natural translation-inherent and language independent procedure (a by-product of the translation process) or a conscious strategy (a professional device) deliberately employed by translators who want to circumvent linguistic and/or socio-cultural differences between the SL and the TL.

Explicitation may then be described as a phenomenon which "leads to TTs stating the ST information in a more explicit form than the original" (Shuttleworth and Cowie 1997: 55), brought about for instance by the trans-

lator adding explanatory phrases, resolving ST ambiguities, making greater use of repetition, as well as other cohesive devices. However, this concept has also been used as an umbrella term to cover unavoidable shifts such as those involved in translation from a null-subject to a non-null subject language, or from weakly inflected languages to more inflected ones, which inevitably lead to greater explicitness in these respects.

Explicitation indeed touches on many of the core questions of TS. It appears to occupy a position at a cross-section of approaches studying translations:

- It approaches studying the general and the individual features of translations,
- It approaches studying translation as a process and as a product, and
- It approaches studying the cognitive and socio-cultural aspects regarding translation.

Explicitation is also recurrently linked to central concepts to TS such as norms, potential TUs, translator expertise, and style in/of translations.

As pointed by Englund Dimitrova (2005: 5) there are several reasons for studying explicitation: the examination of explicitation in a specific language pair not only raises our awareness and understanding of the very nature of the translation process and product, but also contributes to the translation theory by enabling us to explain and predict phenomena within translation.

The fact that it has been claimed to be a universal feature in translation already suggests its central nature and status. Results gained on the basis of empirical data from a particular language pair can therefore be expected to be generalizable to translation between other language pairs, as well as form the basis of hypotheses that can be tested on other language pairs and under other task conditions. In fact, research on explicitation as a strategy and explicitness as a supposed universal tendency of translated texts has become a testing ground for new experimental methods in translation studies, such as thinks-aloud protocols and keystroke logging, and has benefited from new theoretical approaches (House 2004; Pym 2005; Heltai 2005; Becher 2011).

3.2 Perspectives on explicitness

In its most basic meaning in the field of Linguistics, the term *explicitness* refers to "the overt encoding of information" (Baumgarten et al. 2008: 177). In other words, the part of a message that is encoded linguistically is

explicit, while the information which can be understood from the message without being directly referred to by linguistic material is implicit. Usually, in communicative interaction, only part of what is said is said explicitly, that is, with the lexical and grammatical means of a language. Another part is said implicitly, i.e. suggested or presupposed by the speaker/writer.

In a cross-linguistic perspective explicitness —in the sense of the amount of information that is overtly linguistically encoded— has been posited as a feature that distinguishes the communicative conventions in different languages (e.g. House 2004). That is, in some languages messages require more linguistic meaning to be explicitly encoded by linguistic material than in other languages in order to be 'acceptable' in communicative interaction. An explanation for this difference in explicitness is provided by language typological approaches within contrastive linguistics, which likewise use "explicitness" as a measure of difference.

Explicitness is posited in our research as a feature that distinguishes the organization of information structure in different languages (Baumgarten et al 2008). The amount of information that has to be explicitly encoded is related to optimal meaning interpretation on a sentence level and discourse/textual coherence. In this approach, the degree of "explicitness" of a message is seen as a reflection of different conventionalized patterns of information processing by language users (e.g. Doherty 1995, 2002; Fabricius-Hansen 1999). In text and register linguistics (e.g. Biber 1988), explicitness is furthermore described as a property of texts and discourses. It is seen as the opposite of context-dependent communication resulting from the need for denotational precision and referential specificity in specific types of communicative interaction such as written communication and risk communication. Explicit texts/discourses are independent of their contexts of text production and reception in the sense that every link to their contexts of text production is unambiguously encoded in the text/discourse.

In summary, on the one hand, explicitness refers to lexical and grammatical material on the surface of the linguistic structure. Since all sentences, utterances, texts and discourses consist of linguistic material, all of them are explicit, but some feature more explicit information than others. On the other hand, in most of the uses of the term in linguistics, explicitness is a measure of difference between two comparable variants of expression. Following this view, for an expression to be considered explicit, there has to be the systemic possibility of an implicit (or less explicit) variant and this dichotomy facilitates distinguishing properties of languages, communicative behaviours and registers. In TS the term *explicitness* is used in a slightly different way. While this phenomenon is generally also based on the premise of overt linguistic encoding, it is often considered to be the result of the

process or procedure of "explicitation", i.e., "the technique of making explicit in the target text information that is implicit in the source text" (Klaudy 1998: 80). Explicitness is seen as a feature of translated texts as opposed to original text production and is invariably related to the translator as the agent in the process of language mediation, who introduces explicitness into the TT. The following section outlines the conceptualizations of explicitation in TS in detail.

3.3 Explicitness and explicitation in Translation Studies

When considering the concept of explicitness in TS, it is useful to distinguish between linguistically-oriented approaches to translation (e.g. House 1997, 2006; Steiner 2004; Fabricius-Hansen 1996, 1999), which usually employ the term *explicitness* on the one hand, and translation-theory and translation-practice-oriented approaches (e.g. Weissbrod 1992; Olohan and Baker 2000), which tend to consider explicitness in terms of *explicitation* on the other hand.

Among the linguistically-oriented approaches, at least two could also be categorized as essentially contrastive-linguistic endeavours, employing translations and the shifts in the explicitness of linguistic encoding as indicators of underlying differences between the two language systems involved (Doherty 1995; Fabricius-Hansen 1996). Other scholars, such as House (2004) and Steiner (2004, 2005), consider translations from the perspective of an increasing amount of language mediation via translation, which requires a systematic description of the text type/register "translation" and its relation to comparable texts in the SL and TL communities. House focuses on translations in terms of language contact and inducing TL variations due to STs. For instance, she posits a change in the conventions of the explicitness of linguistic encoding in German as a result of translational contact with English (House 2004).

Steiner investigates translations in terms of their properties as a genuine TL text type (Steiner 2004). Among the linguistically-oriented approaches to translation only Steiner connects explicitness in translations overtly to explicitation in the process of translation. All others treat explicitness as a measure of difference between the two languages involved in the translation: first, as a property of the linguistic encoding and, secondly, as a feature of the higher level unit text. In the translation-theory and translation-practice-oriented approaches to explicitness in translation, the focus is placed on

explicitation, i.e. the process that results in increased explicitness in the TT as opposed to its ST.

Explicitation seems to have been first defined as a concept by Vinay and Darbelnet (1958). They state that explicitation is the

> [p]rocédé qui consiste à introduire dans LA [langue d'arrivée] des précision qui restent dans LD [langue de départ], mais qui se dégagent du contexte ou de la situation (Vinay and Darbelnet 1958: 9).

Since then the phenomenon of explicitation has attracted considerable interest giving rise to a number of contributions exploring this aspect of the ST–TT relation. The concept was further developed by Nida (1964). Without actually using the term *explicitation*, he distinguishes three main techniques used in the process of translation, namely *addition*, *alteration* and *subtraction*. In his framework, explicitation is most easily related to "addition" techniques such as "filling out elliptical expressions", "obligatory specification", "additions required because of grammatical restructuring", "amplification from implicit to explicit status", "answers to rhetorical questions", "classifiers", "addition of classifiers and connectives", and additions triggered by "categories of the receptor language which do not exist in the source language" (Nida 1964: 227).

Throughout the 1970s and the 1980s most publications on the subject of partial translation theories, especially in the field of language-restricted, area-restricted and culture-restricted theories (Holmes 1972), followed Nida's example. Explicitation and implicitation were thus seen as only two among a variety of methods for addition and omission in translation.

Nida's conception of addition shows that explicitation is basically a two dimensional concept. There is, on the one hand, "obligatory" explicitation caused by grammatical differences between the SL and the TL (without explicitation the TL structures would be ungrammatical). On the other hand, there is "optional" explicitation. Optional explicitation is due to culture-specific world knowledge in the SL and TL communities and differences in communicative conventions between these two communities, for example with respect to text building strategies or the overt encoding of the writer persona in the text. In these cases, translation necessitates an adaptation —or "cultural filtering" (House 1997)— to local genres and the intended readers' knowledge base in the TL community.

In the years following Vinay and Darbelnet (1958) and Nida (1964), explicitation in translation has received considerable attention. As it is the case of our research, most of the investigations into the phenomenon are

qualitative in nature and focus on the product perspective, i.e., they account for instances of explicitation in translations and suggest explanations for their motivation (e.g. Weissbrod 1992; Øverås 1998 — see, however, Olohan and Baker 2000 and Englund-Dimitrova 2005 for qualitative and process-oriented approaches, respectively).

In her overview of research on explicitation, Gumul (2006) presents a diverse list of explicitation phenomena in interpreting, which ranges from the lexical to the discourse level of linguistic structure:

- adding connectives,
- categorical shifts of cohesive devices (i.e. from lexical reference to proforms),
- shifts from referential cohesion to lexical cohesion,
- shifts from reiteration in the form of paraphrase to reiteration in the form of identical/partial repetition,
- filling out elliptical constructions,
- lexical specification,
- addition of modifiers and qualifiers,
- addition of proper names to generic names,
- distributing the meaning of a ST unit over several units in the TT,
- replacing nominalisations with verb phrases,
- disambiguating metaphors with similes,
- addition of explanatory remarks.

Since the explicitation phenomena listed above appear so pervasively, and since they occur seemingly irrespective of the languages involved and the translation direction, it has been suggested that explicitation is in fact inherent in the process of translation. This idea was first investigated by Blum-Kulka (1986) in her study of shifts in cohesion and coherence in translation. She posits what she has called the "explicitation hypothesis" for translation, namely "an observed cohesive explicitness from SL to TL texts regardless of the increase traceable to differences between the two linguistic and textual systems involved" (Blum-Kulka 1986: 19). This Explicitation Hypothesis (see Section 3.6) gained much support in TS (e.g. Séguinot 1988; Englund-Dimitrova 1993; Øverås 1998; Puurtinen 2004). While Blum-Kulka's explicitation hypothesis refers only to shifts in cohesive markers from the ST to the TT, explicitation is now often considered a translation universal, encompassing linguistic features beyond those responsible for expressing cohesive relations (Vanderauwera 1985; Baker 1992; Schmied and Schäffler 1997). However, most of the investigations of explicitation to date are qualitative enquiries into small data sets, which can make only little claim to representativeness or the universality of the observed phenomena (cf.Tymoczyko 1998).

A further controversial issue concerns the status of explicitation in relation to addition, in terms of which of the two is the more general overriding concept. One school of thought speculates the dominance of explicitation as the more generic (i.e., Vinay and Darbelnet 1995; Vanderauwera 1985; Blum-Kulka 1986; Séguinot 1988; Øverås 1998, Neumann and Hansen-Schirra 2005). With respect to this point of view, Øverås (1998: 5) is particularly accurate when she mentions the two "subcategories of addition and specification" included in both grammatical and lexical explicitation. The opposite school of thought takes the opposite position viewing addition as the generic concept and explicitation as the more specific (i.e., Nida 1964; Newmark 1989). These two concepts are handled as synonyms by Englund Dimitrova (1993), who uses the terms *addition-explicitation* and *omission-implicitation*.

In fact, explicitation has now developed into a cover term which includes a number of obligatory and optional translational operations (Klaudy 2001, 2003). Pápai (2004) distinguishes between explicitation as a strategy used in the *process* of translation and explicitation as a feature of the *product* of translation, the latter being manifested in a higher degree of explicitness in translated than in non-translated texts in the same language.

The dichotomy in viewing explicitation as a hyperonymic or hyponymic notion compared to addition is represented below in Figures 4.3 and 3.2:

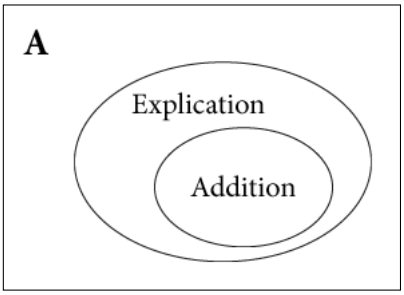


Figure 3.1: Explicitation as hyperonym (A)

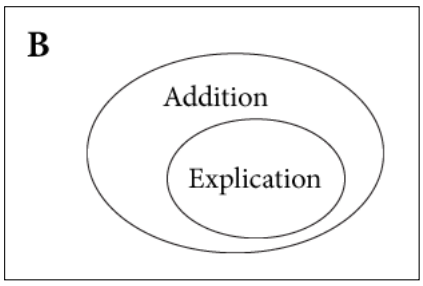


Figure 3.2: Explicitation as hyponym (B)

A further possible refinement of the notion of explicitation in translation relate to the extent to which translators may make a deliberate decision to increase explicitness in a TT. Explicitation is described both as a "strategy" or "technique" and as a "process" (Weissbrod 1992; Pápai 2004; Blum-Kulka 1986; Baker 1996; Olohan and Baker 2000). While the first two terms stress the translators' conscious decision to deviate from the information given in the ST, "process" defines explicitation as an involuntary departure from the information given in the ST, evoked by the specific conditions of cognitive language processing during language mediation.

We can presume that, at one end of the scale, the addition of extra information in the form of explanatory material constitutes a strategy knowingly employed by the translator in a specific manner for a specific purpose. Similarly, disambiguation is at least something likely to stem from, first, a realisation on the part of the translator that something in the ST is ambiguous and, second, a wish or need to resolve that ambiguity for the target reader. However, comparable corpus analyses (e.g. Olohan and Baker 2000) have referred to 'subconscious' processes of explicitation, hypothesizing that translators may unintentionally use language in certain ways that increase the explicitness of the TT, without setting out to do so. One of the difficulties here is the terminology employed to distinguish between deliberate and non-deliberate explicitation. Underlying this terminological issue are conceptual and methodological difficulties and, most crucially, the question of how accurately we can gain evidence of translators' motivation or lack of motivation when they employ deliberate or non-deliberate strategies, i.e. when they follow subconscious procedures rather than technical expertise.

3.4 Klaudy's classification of explicitation

The wide variety of forms which explicitation might assume is not the only factor differentiating individual approaches. As emphasised by Klaudy and Károly (2005), explicitation functions in translation literature as an umbrella term for a number of different transfer operations. Klaudy's typology (1993, 1996, 1998) encompasses four distinct types of explicitation: 1) obligatory explicitation; 2) optional explicitation; 3) pragmatic explicitation; and finally 4) translation-inherent explicitation.

Table 3.1 below reproduces Klaudy's attempt to systematise the different types of explicitation which can be found in translation: her classification, which is essentially based on the likely motivations for explicitating shifts, overtly suggests that only explicitation type 4 would qualify as a universal trend in translation.

Type of explicitation	Motivation for explicitation	Consequences of non-explicitation
1. Obligatory	structural syntactic and semantic differences between SL and TL	ungrammatical TL sentences
2. Optional	differences in text-building strategies and stylistic preferences	correct but clumsy and unnatural TL constructions
3. Pragmatic	differences between cultures (i.e. to bridge cultural gap)	culture-specific ST references/items might not be accessible to TL readers
4. Translation-inherent	the process of translation itself	none

Table 3.1: Klaudy's (1998) classification of explicitation: motivation and consequences

3.4.1 Obligatory explicitation

Obligatory explicitation is dictated by differences in the syntactic and semantic structure of language (Barkhudarov 1975; Vaseva 1980; Klaudy 1993, 2003; Englund Dimitrova 1993). Syntactic and semantic explicitation is obligatory because without it TL sentences would be ungrammatical. The most obvious cases of obligatory cases of obligatory explicitation are triggered by the so-called 'missing categories'. For example, there is no definite article in Russian. Translation from Russian into Spanish, which uses the definite article prolifically, will thus involve numerous additions, as will translation from the preposition-free Hungarian into languages such as Russian and English, which use prepositions. While syntactic explicitation generally entails an increase in the number of words (tokens) in the TT, semantic explicitation consists of choosing more specific words in the TT. Because of the different linguistic structuring of reality in different languages, certain concepts such as body parts, colours and kinship terms may have more detailed vocabularies in some languages than in others. For example, the English terms 'brother' and 'sister' cannot be translated into Hungarian without explicitation, because Hungarian has different terms for 'younger brother' (*öcs*) and 'younger sister' (*hug*), and for 'older brother' (*báty*) and 'older sister' (*nővér*).

3.4.2 Optional explicitation

Optional explicitation is dictated by differences in text-building strategies and stylistic preferences between languages. Such explicitations are optional

in the sense that grammatically correct sentences can be constructed without their application in the TL, although the text as a whole would become clumsy and unnatural. Examples of optional explicitation include sentence or clause initial addition of connective elements to strengthen cohesive links, the use of relative clauses instead of long, left branching nominal constructions, and the addition of emphasizers to clarify sentence-perspective, among others (Doherty 1987; Vehmas-Lehto 1989).

3.4.3 Pragmatic explicitation

Pragmatic explicitation of implicit cultural information is dictated by differences between cultures: members of the target-language cultural community may not share aspects of what is considered general knowledge within the SL culture and, in such cases, translators often need to include explanations in translations. For example, names of villages and rivers, or of items of food and drink, which are well known to the SL community may mean nothing to the TL audience. In such cases, a translator might, for instance, write 'the lake Alster' for *Alster*, or 'Lake Fertö' for *Fertö*.

3.4.4 Translation-inherent explicitation

Translation-inherent explicitation can be attributed to the nature of the translation process itself. Séguinot draws a distinction between "choices that can be accounted for in the language system, and choices that come about because of the nature of the translation process" (1988:18). The latter type of explicitation is explained by one of the most pervasive, language-independent features of all translational activity, namely the necessity to formulate ideas in the TL that were originally conceived in the SL (Klaudy 1993).

3.4.5 Discussion

As useful as this classification can be for theoretical categorising purposes, however, it also shows some limitations. Englund Dimitrova (2005), for instance, already pointed out that the categories *obligatory* and *optional explicitation* seem to be superordinate, as *pragmatic* explicitations are in fact instances of *optional explicitations*, while *translation-inherent explicitation* would seem "obligatory" from the point of view of the translation process (ibid.: 38).

In addition, the examples provided by Klaudy for type 2 (namely, explicitation dictated by differences in text-building strategies and stylistic preferences between SL and TL), i.e. the addition of *a*) connective elements

to strengthen cohesive links and *b*) emphasizers for clarifying the sentence perspective, and *c*) the use of relative clauses instead of nominal constructions (ibid.: 83), do not seem fully comparable: the first two cases seem to relate to rhetorical preferences which may not be perceived by TT readers, whereas the third is one which may easily result in TT unnaturalness. Arguably, the choice between a clumsy and a perfectly acceptable sentence is not really an option for professional translators. The distinction between obligatory and optional explicitation may therefore be less clear-cut than it might seem in Klaudy's classification.

Klaudy's types 1 to 3 are caused or (non-obligatorily) motivated by certain differences between SL and TL (in the case of pragmatic explicitation: between SL and TL communities). This means that types 1 to 3 are all bound to exist. When we translate from English into Spanish, for example, we know in advance that we will have to explicitate at some point, because Spanish has two copulas with different meanings (*ser/estar*) while English has one (*to be*). In general, we know from linguistics that in every imaginable language pair there are lexicogrammatical, stylistic and cultural differences. These will inevitably cause or motivate instances of explicitation in translation, and we would be very surprised if their prediction were not born out by empirical data.

Type number 4, on the other hand, is a very different case: the translation-inherent type of explicitation is not predicted, but rather postulated to exist.

3.5 Motivations for translation-inherent explicitation

Several hypotheses have been put forward as to likely motivations for explicitation in translation. It is often mentioned that translators may resort to explicitation because of linguistic constraints or in order to adapt to TL communicative preferences; or, when explicitation is seen as a potential translation universal, because of ST interference. In both cases emphasis is put on linguistic/textual factors, and corpus techniques may help to test these hypotheses.

The same does not apply, however, to translation-inherent explicitation: although arguably it can be observed through corpus-based analyses, explanations for it need to be sought at a socio-cognitive level. Three main hypotheses have been presented in this respect.

The first hypothesis, originally put forward by Blum-Kulka (1986: 19), suggests that translated texts may be more explicit than the corresponding

STs as they bear traces of the process of interpretation that translators need to perform (see Section 3.6). This hypothesis is supported by Steiner (2001) who, with respect to the reduction of grammatical metaphors in translation, comments:

> [u]nderstanding [...] is taken to involve relating meaningful (grammatical) units to some of their less metaphorical variants, thus making many types of meaning which are implicit in the original explicit with the help of co-textual and contextual knowledge. At some point in that chain of de-metaphorization, then, re-wording in the target language begins, and although good translators will approximate a full semantic paraphrase [...], they will often not go all the way back up the steps of grammatical metaphorization (ibid.: 11)

thus producing TTs characterised by a higher degree of explicitness. Similarly, Pym (2005) suggests that explicitation might result from translators' "writing down markers for everything they have just construed", an idea also supported by the researcher Whittaker (quoted in Pym 2005) "where instances of explicitation are found to increase in passages marked by greater discursive complexity. The harder the source text, the harder the translator works, and the more likely they are to make their renditions explicit" (Whittaker 2004).

According to the second hypothesis, explicitation may be the result of the translator's attempt —either conscious or unconscious— to adapt the TT to the readers, to make it easier for them to understand. Evidence supporting this hypothesis has been found by Englund Dimitrova's (2003) study based on think-aloud protocols, during which some translators verbalised that they were adding an adversative connective "so that the contrast becomes clearer" (ibid.: 27). Translators' awareness of their role as cultural mediators may explain their propensity towards facilitating communication, i.e. towards reducing the processing effort required from readers; as pointed out by Chesterman (2004) and Saldanha (2008) among others (see Section 3.10).

According to Pym (2005), however, even admitting that translators provide more communicative clues than non-translators because they are more co-operative, it is not clear why that should be the case. His hypothesis instead is that translators' explicitating behaviour may be the result of some sort of risk avoidance. As argued by Øverås (1998) "translators will do their best to reduce to a minimum the damage related to the transfer process, and it seems better to end up with some redundancy than with major losses". As pointed out by several authors (e.g. Øverås 1998, Englund Dimitrova 2003, Pym 2005), this attitude needs not be necessarily due to cognitive reasons, but

possibly to translation *norms* at work in given cultures. The term *norm* is generally used, following Toury (1995), to refer to "the translation of general values or ideas shared by a community –as to what is right or wrong, adequate and inadequate– into performance instructions appropriate for and applicable to particular situations" (ibid.: 54-55).

Pym (2005) thus argues that "[i]f translators are made to work in such a way that they are penalized for instances of non-cooperation and are not rewarded for taking risks in order to achieve values beyond cooperation, then they will logically tend to be risk-averse". If translation norms indeed play a role, it is legitimate, for instance, to expect that the translational behaviour of student translators (who still need to internalise the norm) differs from professionals', i.e. that there is a correlation between explicitation and expertise.

According to Klaudy and Károly (2005:15), explicitation can be both an automatic operation and a conscious strategy, depending on the circumstances. The question remains, however, which of them prevails and whether the tendency is mode-specific or not. Some researchers are in favour of the strategy standpoint (e.g. Weissbrod 1992; Vehmas-Lehto 2001; Pápai 2004; Pym 2005), while others maintain that explicitation is mainly a by-product of language mediation (e.g. Blum-Kulka 1986; Baker 1993, 1995, 1996; Shlesinger 1995; Ishikawa 1999; Olohan and Baker 2000; Whittaker 2004).

3.6 The Explicitation Hypothesis

The assumption that translations are inherently more explicit than their corresponding STs and comparable, non-translated texts written in the TL has become one of the more recurrent tenets of TS. This is largely due to the great influence that Blum-Kulka's Explicitation Hypothesis has exerted on the development of this discipline, postulating that "explicitation is a universal strategy inherent in the process of language mediation" (1986: 21).

The Explicitation Hypothesis was first formulated by Blum-Kulka in 1986 in what is considered by many to be the first systematic study of explicitation. Drawing on concepts and descriptive terms developed within discourse analysis, Blum-Kulka (1986) explores discourse-level explicitation, that is, explicitation connected with shifts of cohesion and coherence (overt and covert textual markers) in translation. Shifts of cohesive markers can be attributed partly to the different grammatical systems of languages (see Section 3.4.1). Other shifts in the use of cohesive markers are attributable to different stylistic preferences for certain types of cohesive markers in different languages (see Section 3.4.2). For example, in English-Hebrew translation

preference for lexical repetition rather than pronominalization may make the Hebrew text more explicit (1986: 19). However, according to the so-called Explicitation Hypothesis, it is the translation process itself, rather than any specific differences between particular languages, which bears the major part of the responsibility for explicitation:

> The process of interpretation performed by the translator on the source text might lead to a TL text, which is more redundant than SL text. This redundancy can be expressed by a rise in the level of cohesive explicitness in the TL text. This argument may be stated as 'the Explicitation Hypothesis', which postulates an observed cohesive explicitness from SL to TL texts regardless of the increase traceable to differences between the two linguistic and textual systems involved. It follows that explicitation is viewed here as inherent in the process of translation. (ibid.: 19)

This postulated increase in cohesive explicitness is supposed to occur "regardless of the increase traceable to differences between the two linguistic and textual systems involved" (ibid.: 19).

This additional stipulation makes clear that Blum-Kulka does acknowledge the existence of obligatory explicitations (which are due to differences between textual systems); nevertheless, the Explicitation Hypothesis postulates an additional, translation-inherent type of explicitation, which is supposed to be caused by the "process of interpretation performed by the translator on the source text" (ibid.: 19).

According to Séguinot (1988: 108), however, this definition is too narrow: "explicitness does not necessarily mean redundancy". Séguinot also points out that "the greater number of words in a French translation, for example, can be explained by well-documented differences in the stylistics of English and French" (ibid.). In her view, the term 'explicitation' should be reserved for additions which cannot be explained by structural, stylistic or rhetorical differences between the two languages, and addition is not the only device of explicitation. Explicitation takes place not only when "something is expressed in the translation, which was not in the original" (ibid.), but also in cases where 'something which was implied or understood through presupposition in the ST is overtly expressed in the translation, or an element in the ST is given a greater importance in the translation through focus, emphasis, or lexical choice' (ibid.).

Séguinot (ibid.) examines translations from English into French and from French into English, and in both cases she finds greater explicitness in translation, resulting from improved topic-comment links, the addition

of linking words and the raising of subordinate information into coordinate or principal structures (ibid.: 109). Her study suggests that the increase in explicitness in both cases can be explained not by structural or stylistic differences between the two languages but by the editing strategies of the revisers.

Support for the Explicitation Hypothesis may also be found in Vehmas-Lehto's study (1989), which compares the frequency of connective elements in Finnish journalistic texts translated from Russian with their frequency in texts of the same genre, originally written in Finnish. She finds that the Finnish translations are more explicit than the texts originally written in Finnish.

Many other studies (Øverås 1998, Olohan and Baker 2000 or Pápai 2004, just to name a few) claim to find evidence in favour of the Explicitation Hypothesis even when they don't work only with the notion of "cohesive explicitness", but with other linguistic features unrelated to cohesion, thus considerably widening the actual scope of the Explicitation Hypothesis.

3.6.1 Discussion

The argumentative frame used in this section will closely follow the three main issues already pointed out by Becher (2010a) in regard to the scientific status of the Explicitation Hypothesis. Blum-Kulka (1986) states that the process of interpretation that invariably happens in translation "might" lead to a TT which is more redundant, or explicit, than the corresponding ST, but we do not learn how the interpretation process is supposed to produce this effect.

It is sometimes claimed that the Explicitation Hypothesis may be motivated as follows: When translators interpret the ST, they enrich their interpretation with inferential meaning (e.g. by interpreting temporal sequence as causal sequence), as is normal in text comprehension processes (Graesser et al. 1994). This pragmatically enriched interpretation is of course more explicit than the ST itself and it may thus lead to a more explicit TT. This conclusion, however, may not always be the case since it depends on the assumption that translators directly verbalize their (more explicit) mental representation on the ST, without applying operations that might render it in not such an explicit way, such as politeness strategies, omission of contextually inferable material, etc. There is no reason why translators in contrast to authors of non-translated texts should skip the application of such operations.

As pointed by Becher (2010a: 6), it can be argued that Blum-Kulka's Explicitation Hypothesis does not fully qualify as a scientific hypothesis. It is

crucially important for a hypothesis to be motivated because non-motivated hypotheses entail the danger of pseudo-significant findings, i.e. statistically significant but otherwise meaningless results. An example of an alternative cause for explicitation in translations would be a (hypothesized) universal tendency of translators to simplify (Baker 1993: 244, 1996: 181ff), which potentially "raises the level of explicitness by resolving ambiguity" (1996: 182) and thus may also result in TTs that are more explicit. It is often the case in corpus-based translation studies that "the same surface expression may point to different features or tendencies" (1996: 180). If we want to fully accept Blum-Kulka's Explicitation Hypothesis as a scientific one, then we need to demonstrate that it is better motivated than the "explicitation through simplification hypothesis" sketched by Becher (2010a).

The second criticizing that the Explicitation Hypothesis must face is that it does not conform to the principle of Occam's Razor: *entia non sunt multiplicanda praeter necessitatem* ('entities must not be multiplied beyond necessity'). This principle, which has become one of the cornerstones of scientific research, calls for hypotheses that are parsimonious in their assumptions and thus not only more easy to handle, but also more likely to be true. Blum-Kulka assumes a new entity, namely a new type of explicitation that is translation-inherent also acknowledge by Klaudy's classification (2008). This means that any other hypothesis which might explain an observed tendency of explicitation in translation without assuming a new type of explicitation is better compatible with Occam's Razor and thus to be preferred over the Explicitation Hypothesis.

Following the example provided by Becher (2010a) about a hypothetic "explicitation through simplification hypothesis" already sketched above, we could explain a universal tendency of explicitation without postulating a new type of explicitation. It would simply be assumed that the (hypothesized) urge of translators to simplify makes them resort to optional and pragmatic explicitations more often than appropriate and/or necessary. Under this assumption it would be possible to explain the data without postulating an additional translation-inherent kind of explicitation. So this hypothesis is more compatible with Occam's Razor and should thus be preferred over Blum-Kulka's Explicitation Hypothesis.

Finally, in a later passage of her paper, Blum-Kulka (1986) paraphrases the Explicitation Hypothesis postulating that "explicitation is a universal strategy inherent in the process of language mediation" (1986: 21), where the term *strategy* particularly calls our attention. It is not clear whether Blum-Kulka means a conscious or a subconscious strategy. Olohan and Baker (2000) seem to interpret her as meaning the latter while Øverås (1998) seems to interpret her as meaning the former. In other words, although both Olohan and Baker

as well as Øverås invoke Blum-Kulka's considerations as the basis of their studies, it is unclear how they motivate the supposedly same phenomenon.

The three criticisms pointed out by Becher (2010a) are not minor shortcomings, but fundamental issues that seriously question the way in which the Blum-Kulka's Explicitation Hypothesis should be approached in TS. In this respect, the Explicitation Hypothesis has been extremely useful in TS but after an initial phase of pioneering explicitation research, the time has come to work with a better motivated hypothesis to explain explicitation phenomena in translation.

An alternative hypothesis that may be motivated on independent grounds and that is compatible with Occam's Razor is Klaudy and Károly's 2005 Asymmetry Hypothesis. The Asymmetry Hypothesis can serve as a more useful and plausible guide for further research on explicitation. Another promising approach to the study of explicitation in translation is not to depart from a hypothesis-generating perspective. Such a data-driven approach has been pursued by Hansen-Schirra, Kunz, Neumann and Steiner at the Unviersity of Saarbrücken in recent years. One of their aims is a more fine-grained operationalization of the concept of explicitness/explicitation, which they try to achieve "by defining explicitness and explicitation, by stratifying it in term of different linguistic levels, by tightening its boundaries and by modularizing it in a multifunctional perspective." (Steiner 2005: 19). The results of this new approach are presented in Hansen-Schirra et al. (2007), Steiner (2008) and Kunz (2009).

3.7 The Asymmetry Hypothesis

An alternative to the Explicitation Hypothesis would be the Asymmetry Hypothesis firstly proposed by Klaudy (2001b), where she examined the relationship between explicitation and implicitation in operations carried out by translators translating literary works from Hungarian into English, German, French and Russian, and vice versa. In its formulation by Klaudy and Károly (2005: 14), this hypothesis postulates that

> Explicitations in the L1 >L2 direction are not always counter balanced by implicitations in L2 >L1 direction because translators —if they have a choice— prefer to use operations involving explicitation, and often fail to perform optional implicitation. (ibid.)

On the one hand, obligatory explicitation shifts are generally symmetrical, that is, explicitation in one direction is matched by implicitation in the

other. On the other hand, optional explicitation in one direction may also be in a symmetrical relationship with implicitation in the opposite direction. However, due to its optional nature, this last type of explicitation is not always counterbalanced by optional implicitation in the opposite direction.

Klaudy (1996) demonstrated that translators carrying out English-Hungarian back translation do not omit elements added in Hungarian-English translations. Quantitative analysis of semantic variability of reporting verbs in English-Hungarian and Hungarian-English translations indicate that, while translators tend to choose more specific reporting verbs in translations from English into Hungarian (for example, 'say' would be replaced by the equivalent of 'mutter', 'burst on', 'accuse', etc.), they do not choose more general verbs in the Hungarian into English direction (Klaudy and Károly 2005). These findings seem to verify the Asymmetry Hypothesis postulated by Klaudy (2001b), according to which explicitation in the L1 >L2 direction is not always counterbalanced by implicitation in the L2 >L1.

Should this hypothesis be verified, it would underpin the assumption that explicitation is a universal strategy of translation, independent of the language-pair and the direction of translation.

3.7.1 Discussion

The Assymetry Hypothesis does not assume the existence of a distinct, translation-inherent type of explicitation. Rather it claims that among the language pair-specific types of explicitation (see Section 3.4), whose existence is uncontroversial, explicitations tend to outnumber the corresponding implicitations.

Another positive approach to Klaudy and Károly's formulation of their Asymmetry Hypothesis is that it only states a tendency i.e. *not always* on the part of the translators as it does not claim that explicitations outnumber implicitations in each and every case. However, one of the main shortcomings for this hypothesis is that its formulation may be a bit problematic, because it does not become quite clear which kinds of explicitation are covered: Klaudy's types 1 to 3 or only optional explicitations?

When formulating this hypothesis, the authors use the term *prefer* which seems to evoke the impression of a conscious decision on the part of the translator. According to Klaudy and Károly's hypothesis, it seems that there is no room for the possibility of subconscious explicitation behaviour. As pointed by Becher (2010a: 17) the use of the term *fail* in this hypothesis adds a prescriptive flavour to it. We cannot blame translators for being more explicit than authors of non-translated texts. Becher (2010a: 17) reformulation proposal of the Asymmetry Hypothesis to overcome the above mentioned

problems would be this one:

> Obligatory, optional and pragmatic explicitations tend to be more frequent than the corresponding implicitations regardless of the SL/TL constellation at hand. (ibid: 18)

Thanks to the Asymmetry Hypothesis it is possible to claim that translators display a tendency to explicitate without the need of postulating a separate translation-inherent type of explicitation (Occam's Razor principle) and working only with Klaudy's explicitation types 1 to 3, which are unproblematic and uncontroversial when finding explanations for explicitation phenomena in translation.

As pointed out by Becher (2010a), the only remaining problem with Klaudy and Károly (2005) is that they do not provide a motivation for the postulation of the Asymmetry Hypothesis. Taking as a starting point that translation can be described as an act of performance, of *parole* and not of *langue* or competence, Becher (2010a) supports the idea that human communication is driven by two competing principles (adapted from Horn 1984: 13; Atlas and Levinson 1981, Fabricius-Hansen 2005, Grice 1975):

1. **The Q principle**: "say as much as possible" (explicitness)
2. **The R principle**: "say no more than you must" (implicitness)

The Q and R principles can thus be regarded as the two virtual end-points of an explicitness/implicitness scale inherent to linguistic communication. It is obvious that strictly speaking, the two principles contradict each other: "[a] speaker obeying only Q would tend to say everything she knows on the off-chance that it might prove informative, while a speaker obeying only R would probably, to be on the safe side, no open her mouth." (Horn 1984: 15) Speakers have to decide which principle to follow and to which degree when preparing their messages. In other words, the speaker has to find the most favourable trade-off between the two principles.

In face-to-face communication, the exchange will tend towards the implicit end of the scale: if the hearer signals that my message turned out to be too implicit, I can then elaborate on it, i.e. make it more explicit *ex post*. In written texts, on the other hand, the communication exchange will seems logical to tend towards the explicit end of the scales since we do not have direct access to the hearer feedback in this case. When in doubt, anyone should tend to be too explicit rather than too implicit.

In terms of the explicitness-implicitness scale, translations are written texts *par excelance* and thus they should tend to be located even farther towards the explicit end of the scale than non-translated texts. This is due to two

properties of the communicative situation typically underlying translation: *i*) the communicative situation underlying translation is typically characterized by cultural distance between (SL) author and (TL) reader (House 1997). The main task of the translator is to ensure understanding between SL author and TL reader while avoiding misunderstanding between SL author and TL reader; *ii*) The communicative situation underlying translation is typically characterized by a great deal of risk (Pym 2005), the risk of not being understood.

Accordingly to these two properties, it is not surprising that translators will do everything to ensure understanding, and this is where explicitation comes into play. It seems plausible to assume that translators will move up on the Q-R scale, i.e. they will tend to be too explicit rather than too implicit when in doubt. From this perspective defended by Becher (2010a), and originally by House (2008), the tendency of translators to avoid risk cannot be called "translation-inherent". First, it depends on individual translators and how much risk they are willing to take. This means that explicitation, insofar as it is caused by the tendencies of translators to compensate for cultural distance and to avoid risk, seems to be neither "translation-inherent" (translators do not do anything translation-specific, they only do what authors of non-translated texts do) nor fully "universal" in the strict sense (there will always be situations on which translators do not display the mentioned tendencies).

3.8 Corpora in explicitation research

As pointed out already in chapter 2, research on explicitation gained a new impetus in the 1990s thanks to the introduction of electronic corpora as a research tools in TS. Corpus-based studies revealed new evidence of explicitation as a strategy of translation and of explicitness as a characteristic feature of translated texts.

Baker's notion of explicitation refers to 'an overall tendency to spell things out rather than leave them implicit in translation' (1996: 180). This tendency is one that many scholars have commented on, either anecdotally or in reporting results of textual analysis. Baker (ibid.) makes specific suggestions as to how explicitation may be reflected in translation and how it may be investigated empirically. For example, when translations are longer than their STs, this is sometimes attributed to explicitation. Lengths of texts and text segments can be compared relatively easily using a parallel corpus, and further qualitative analysis may provide some explanation for those differences in length. Syntactic and lexical explicitation, on the other

hand, could be studied using a comparable corpus, and Baker's proposals for research at that early stage included investigation of whether the optional *that* in reported speech is used more in translation than in non-translation and whether 'explanatory vocabulary and conjunctions' (e.g. *cause, reason, due to, lead to, because, therefore, consequently*) figured more in translation, making the relations between propositions more explicit (ibid.: 181).

From what we saw in the previous sections, it should not come as a surprise that one of the main concerns of most studies aiming to investigate explicitation as a potential universal of translation has been how to distinguish/classify explicitation in translation. The major concern has been to exclude structure-related shifts. Øverås (1998), for instance, opted for the manual identification of explicitating shifts of a varied nature in a bidirectional parallel English-Norwegian corpus. At both the lexical and the grammatical level, she found cases of explicitation by means of what she defines as *addition* and as *specification*. Examples range from the insertion in TTs of connective elements not present in the ST to the lexicalisation in TTs of ST pro-forms. A textual trace of explicitation, for instance, might be the higher frequency of conjunctions or of adverbials signalling temporal or causal relations (e.g. *but* or *therefore*), which could be seen as the result of the translator's (deliberate or unconscious) attempt to clarify in the TT the relations existing between different parts of the ST; conversely, the above principle seems to exclude cases of straightforward additions, as in Øverås' example "*It lived in yet another shadow*" >TR: "*It lived its life* [...]"[1].

As for specification, the term is used by Øverås to refer e.g. to the expansion of nouns by means of determiners (e.g. articles, demonstratives, possessives), the lexicalisation of ST pro-forms, or the replacement of a grammatical device by a more informative one.

Lexical additions/specifications can partly explain the observed tendency for translated texts to be longer than their SL counterparts, which a number of authors (e.g. Blum-Kulka 1986, Frankenberg-Garcia 2009) have considered as an indicator supporting the Explicitation Hypothesis (see Section 3.6). Frankenberg-Garcia (2009) illustrates how it is possible to make sure that word counts pointing to explicitation are not biased by morphosyntactic differences between languages (compare e.g. the English word *teapot*, 1 word, and the Portuguese equivalent noun phrase *bule de chá*, 3 words) by carrying out bidirectional corpus analyses:

> if counting words, characters or morphemes can make texts in one language seem comparatively shorter or longer, we believe that

[1]Here other factors may come into the picture, as the alleged tendency of translated texts towards normalisation.

> this will affect both the translations and the source texts of the language in question. A carefully balanced, bi-directional sample of source texts and translations will therefore enable one to filter out language-dependent biases, and find out whether translations are longer than source texts regardless of the changes in text length dictated by language-specific constraints. (ibid.: 54)

Investigating an English-Portuguese bidirectional parallel corpus, she actually finds that even though increased text length appears to be more pronounced in Portuguese to English than in English to Portuguese translations, the overall increase in words from STs to TTs is statistically significant in both translation directions. Such results allows her to take word count as a reliable measure to support the existence of explicitation due to the translation process and not to morphosyntactic differences.

The idea that bidirectionality can offset morphosyntactic differences has also been put to the test by investigating other forms of apparently obligatory explicitation, such as the explicitation of gender vs. neutral forms, or the insertion of subject pronouns in translations from a pro-drop SL, which ideally could not be used as evidence for translation-induced explicitation.

Studies by Klaudy and Károly (e.g. 2005, 2007) concerning the Hungarian-English pair, for instance, have shown that including obligatory cases of explicitation does not necessarily introduce a bias in results which compare the two translation directions, as "an interesting operational asymmetry [can be observed] between obligatory explicitation in one direction and optional implicitation in the opposite direction" (Klaudy and Károly 2005: 16). The authors' assumption is that obligatory, language-specific explicitations should always be matched by implicitations in the opposite direction (e.g. the addition of articles in Russian-Hungarian translation and their omission in the other direction), whereas such symmetry may be less common in the case of optional explicitation. In fact, Klaudy and Károly find that even obligatory explicitations are often not counterbalanced by symmetric implicitations, such as the omission of personal pronouns and pronominal objects, and that this tendency is particularly marked in the work of novice translators (2005: 17). It may be remarked in passing that failure to perform necessary implicitation overlaps substantially with ST interference. These and other studies (e.g. Schmied and Schäffler 1997, Øverås 1998, Konsalová 2007) thus demonstrate that translators tend to prefer more explicit forms to more implicit ones, i.e., cases of explicitation outnumber cases of implicitation, in both translation directions, thus providing further evidence for considering explicitation a potential universal translation strategy[2]. In addition, they stress the importance

[2]Contradictory results are reported by House (2004), however, who found that whereas

of taking into account both explicitating and implicitating shifts when testing the Explicitation Hypothesis.

3.8.1 Explicitation as a candidate S-universal

Following Chesterman (2004: 04), explicitation from a S-universal approach is used to refer to the spelling out in the TT of information which is only implicit in the ST. This strand of research has been studied by means of parallel corpora.

According to the Blum-Kulka (1986), "only [optional shifts] can be legitimately used as evidence for showing certain trends in shifts of cohesion through translation" (ibid.: 33), and it is further necessary to distinguish changes in the level of explicitness resulting from TL stylistic preferences from changes resulting from translation-inherent shifts. To this aim,

> it would be necessary to first carry out a large scale contrastive stylistic study (in a given register) to establish cohesive patterns in SL and TL, and then to examine translations to and from both languages to investigate shifts in cohesive levels that occur through translation. (ibid.)

Various authors have borrowed this idea that bidirectional parallel corpus analyses (i.e. SLa >TLb, SLb >TLa) should be carried out in order to be able to comment on the nature of explicitation, based on symmetry/asymmetry in translational behaviour. We include below a list of works working with explicitation in translation from a S-universal perspective.

English >German translations are indeed characterised by considerable explicitating shifts (fewer occurrences of pronominalisation, substitution, ellipsis, and higher occurrence of conjunctions), implicitation largely occurs if the translation direction is reversed. The author thus argues that explicitating/implicitating shifts depend on language-specific linguistic-textual norms, and therefore do not qualify as universal features of translation. These results are contradicted, in turn, by Konsalová (2007), who found that explicitation occurred in German translations from Czech despite stylistic preferences for nominalisation found in German original texts (ibid.: 29), i.e. a stronger tendency to explicitness was found in translated than in original German texts.

Reference	Corpus type	Languages	Objects of analysis / focus points
Vanderauwera (1985)	(parallel) (manual analysis)	NL >EN	- non-finite >finite clauses - introduction of extra information - several forms of stylistic simplification
Blum-Kulka (1986)	(parallel) (manual analysis)	EN >FR	- cohesive redundancy - addition of explicit connectives - expansion - increased text length
Séguinot (1988)	(parallel) (manual analysis)	FR >EN	- addition of linking words - improved topic-comment links and improved focus - raising of subordinate ST structures to principal or co-ordinate structures in TT
ŘverÍs (1998)	parallel + bidirectional (manual analysis)	EN <>NO	explicitating (+ implicitating) shifts - addition of - conjunctions/connectives - words/propositions - specification - lexicalisation of ST pro-forms - "more cohesive" connectives - shift in voice - more specific (hyponymic) words - unusual >usual collocations
Pavesi and Tomasi (2001)	parallel (manual)	EN >IT	- addition of connectives, partitive words - adjectives >relative clauses - lexicalisation of pronouns - non-finite >finite clauses
Englund Dimitrova (2003, 2005)	selected sentences in parallel texts (+ TAPs and keylogging)	RU >SV	- addition of connectives (esp. adversative conjunctions and other markers of contrast)
Garzone (2004)	parallel	EN >IT	- personal pronouns in subject position - ST noun phrase >TT clause
Pápai (2004)	parallel (manual)	EN >HU	- addition of linguistic information - conjunctions - cataphoric references - punctuation marks - addition,of,extra-linguistic information - ,disambiguated items in TTs,-,lexical,repetition vs. substitution -,filling elliptical,structures,-,lexicalisation of pronouns
Klaudy and Károly (2005, 2007)	parallel + bidirectional	HU <>EN	- lexical specification - lexical and grammatical additions (e.g. modifiers, quantifiers, explanatory remarks) - distributing the meaning of a ST unit over several units in the TT - nominalisations >verb phrases
Hansen-Schirra et al. (2007)	parallel + bidirectional	EN <>DE	- frequency of relative clauses with nominal referent vs. non-finite clauses - frequency of noun vs. pronoun tags - frequency of conjunction tags
Frankenberg-Garcia (2009)	parallel + bidirectional	EN <>PT	- increased text length

Table 3.2: Summary of (corpus-based) studies on explicitation as an S-universal

3.8.2 Explicitation as a candidate T-universal

Following Chesterman (2004: 04), explicitation from a T-universal approach is used to refer to the presumed higher explicitness of translated texts compared to texts originally written in the same language. This strand of research is thus based on monolingual comparable corpora (MCC).

Concerning this second strand of research on explicitation, several studies based on monolingual comparable corpora have suggested that some optional syntactic elements appear to be more frequent in translated texts than in comparable originals, and that more explicit structures and lexic are used in translations compared to non-translated texts. This would lead to a higher explicitness of TTs with respect to comparable non-translated texts, and in fact it has been suggested (e.g. by Hansen-Schirra et al. 2007) that the term *explicitness* would be more appropriate in this case than *explicitation*. Explicitness, which is nothing more than the absence of implicitness, can now be defined as the verbalization of information that the addressee might be able to infer (e.g. from the preceding discourse) if it were not verbalized (see Section 3.3).

Below is a list of references which deal with explicitation in translation from a T-Universal perspective.

Reference	Corpus type	Languages	Objects of analysis / indicators
Olohan and Baker (2000)	MCC (TEC)	EN	- use and omission of optional *that* following reporting verbs
Olohan (2001)	MCC (TEC)	EN	presence/omission of optional features: - complementiser *that* - *to be* in complement clauses - *should* - *(in order) to*
Puurtinen (2003, 2004)	MCC of children literature	FI	- frequency of selected connectives and relative pronouns vs. non-finite clauses
Pápai (2004)	MCC	HU	- frequency of punctuation, conjunctions, cataphoric reference, derivatives, discourse particles - lower type-token ratio
Mauranen (2000)	MCC of prose	FI	- frequency of connectors - frequency of metatextual verbs
Saldanha (2008)	literary MCC (2 translators)	EN	- cultural borrowings - optional *that* - use of italics

Table 3.3: Summary of (corpus-based) studies on explicitation as an T-universal

Reference	Corpus type	Languages	Objects of analysis / indicators
Hansen and Teich (2001)	PC + TL MCC	EN >DE	- ratio of conjunctions vs. prepositions (i.e. finite vs. non-finite clauses) - frequency of optional complementiser *dass* (*that*)
Nilsson (2004)	MCC + PC	SV + SV >EN	- overrepresentation of grammatical word av in TTs
Kenny (2005)	MCC + PC	DE >EN + NT EN	- optional *that* and corresponding *dass* in German STs
Konsalová (2007)	PC bidirectional + MCC	DE <>CZ	- expansion of non-finite and nominal constructions into less condensed structures - raising of SL phrases to clause level

Table 3.4: Summary of corpus-based studies on Explicitation - Mixed designs

3.9 Explicitation and expertise

Hypotheses and findings concerning the relationship between explicitation in translation and translators' expertise have been rather contradictory. Authors claiming that explicitation is a feature of translators with limited competence/experience include, amongst others, Levý (1965), Vinay and Darbelnet ("le traducteur allonge par prudence at aussi par ignorance", 1958: 185) and Blum-Kulka, who suggested that explicitation is expected to be particularly pronounced in the work of non-professional translators because "the less experienced the translator, the more his or her process of interpretation of the SL might be reflected in the TL" (1986: 20). Results obtained by other scholars, however, show that professional translators not only perform explicitations as well, but also show a stronger tendency in that direction than non-professionals.

Research by Birgitta Englund Dimitrova (2003, 2005) seems to be the only psycholinguistic investigation on explicitation combining a product-based with a process-based perspective on explicitation. Englund Dimitrova (2005) asked nine subjects to translate a short text from Russian into their native language, Swedish, using a computer. Among the subjects were four professional translators, two translations students, and three language students. The idea behind this heterogenous composition of subjects was to find out whether a translator's explicitation behaviour might be connected to his or her level of expertise. While being limited in terms of generalizability (due to the low number of subjects), Englund Dimitrova's results suggests that such a connection indeed exists.

To gain some insight into what might be going on in a translator's mind when translating, Englund Dimitrova (2005) asked the participants of her study to think aloud while translating, recording their utterances on tape. Furthermore, participant's keystrokes were recorded using Translog software. In this way, in addition to obtaining participants's translated texts, Englund Dimitrova was able to collect two kinds of psycholinguistic data offering insight into the translation process.

Englund Dimitrova's main findings in regard to explicitation can be summarized as follows: First, the author found that "from a process perspective there are at least two different kinds of explicitation occurring for different reasons" (2005: 36): The explicitations she observed in her study may be divided into two groups according to the reasons for which participants explicitated:

1. **Norm-governed explicitation**. This type of explicitation is language pair-specific, occurring as a result of lexicogrammatical and pragmatic

constrasts between the SL and TL. Norm-governed explicitations (a) are characterized by their high degree of regularity ("i.e., most translators tend to do the same type of explicitation in the given linguistic environment"; 2005: 37) and (b) tend to be independent of translator's processing problems.

2. **Strategic explicitations**. This type of explicitation occurs when a translator encounters a processing difficulty in their TT: When translators come up with a translation solution that they find difficult to process, they may explicitate by reformulating the TT in order to make processing easier. It is interesting to note that when performing strategic explicitation, participants in Englund Dimitrova (2005) rarely went back to the ST, but generally preferred to reformulate the translation solution they had in mind.

Englund Dimitrova's findings revealed that the majority of the professionals added connectives in Russian to Swedish translations, whereas most of the students tended not to explicitate them. This led the author to state that the results may be interpreted within a framework of translation norms, i.e. the strengthening of logical links in TTs may be a norm in professional translation for that specific language pair. The fact that a proportional link exists between competence and explicitation seems to be also confirmed by Denver (2002), who found that the tendency towards explicitation of logical links was stronger in students with higher levels of general and linguistic competence. The second main result of Englund Dimitrova's study is that difference between translators in terms of explicitation behaviour can be remarkable (see Section 3.10).

In Englund Dimitrova (2003), the author investigates in detail how the participants in her study have dealt with two particular ST passages that 'invite' the addition of a connective. Overall, the author found that professional translators tended to explicitate, while rather inexperienced translators were found to explicitate rarely or inconsistently. However, Englund Dimitrova emphasizes that this difference between professional and non-professional translators is merely a tendency, since there were individuals that did not follow the established trend.

Englund Dimiatrova's approach to explicitation seems to justified be "professional norms" in Russian-Swedish translation, although they may be overridden by "parallel, competing norms, or [by] idiosyncratic behaviour." (2005: 238) To this respect, it can be followed that explicitation is not a "universal strategy inherent in the process of language mediation" (Blum-Kulka 1986: 21), but rather one translation strategy among many.

Finally, Englund Dimitrova's study can also contribute to answering the old question of whether explicitation is a "subconscious process" (Olohan and Baker 2000) or a conscious strategy. The author's findings suggest that explicitation is more often than not the result of a conscious decision on the part of the translator. Think-aloud data collected by Englund Dimitrova (2005) show that explicitation does not always happen automatically, eluding the conscious control of the translator, but rather seems to be the result of conscious reasoning processes. However, Englund Dimitrova suggests that explicitating translation solutions that are evaluated positively (by translators themselves, clients, teachers, etc.) "may tend to be repeated and perhaps eventually become automated". (2005: 239)

In sum, Englund Dimitrova's study once again shows that explicitation can be explained without the need to claim that it is a "universal" or "translation-inherent", but should rather be described as a frequent, but not ubiquitous, phenomenon governed by factors that can vary across individuals. This approach will be taken as one of the assumptions underlying the present research (see Section 3.11.1).

3.10 Explicitation and translator's style

Having presented the different approaches taken in regard to explicitation and translator's expertise, we will address now another of major arguments in regard to variation in translation when it comes to explicitation. Saldanha (2008) addresses some aspects of explicitation that have been largely neglected in TS, i.e. translator's style. The present section summarizes some of her most important points. In the first part of her paper, Saldanha questions the commonly made assumption that explicitation generally results in a TT that is more informative than the ST.

As an example, she considers the translation of Latin American Spanish *chicha* as English *chicha beer*, arguing that "the item *chicha*, on its own, is likely to be much more informative to the source culture reader than *chicha beer* to an Anglo-saxon reader" (2008: 27), although this shift definitely represents an instance of explicitation, at least according to the definition usually found in the literature. Saldanha's solution to this paradox "is to explain explicitation as a strategy that is not necessarily associated with implicitness in the source text, but with translator's assumptions about their readership and about their role as literary and cultural mediators." (2008: 28).

In the second part of her study, Saldanha reports on a corpus study in which she compared the explicitation profiles of two renowned literary

translators, Margaret Jull Costa and Peter Bush, using two corpora of Spanish-English and Portuguese-English translations by the two translators. In this study, the author found that there was "a more marked tendency towards explicitation in translations by Margaret Jull Costa than in translation by Peter Bush" (Saldanha 2008: 30). To find out why, Saldanha turned to Jull Costa's and Bush's writings about translation and conducted interviews with the two translators, concluding that "their own different conceptions of their role as intercultural mediators in relation to their audience" (2008: 31) were responsible for the translators' different explicitation profiles. More specifically, Saldanha (2008) found that:

> Jull Costa wants her translations to be acceptable in the terms established by the target culture, her translations are driven by a desire to make their reading a pleasurable experience, which is not interrupted by encounters with information, such as source language words, that the readers cannot process in their own cognitive environment. [...] Bush, on the other hand, is driven by a desire to introduce new foreign authors to Britain's literary market [...] and is ready to challenge readers to shift out of their usual patterns to read them. (ibid.: 31ff)

The quotation suggests that the higher number of explicitation in Jull Costa's translations vis-à-vis Peter Bush's translations results from a tendency to normalize and to simplify her TTs (normalization and simplification have already been mentioned as possible causes of explicitation). Peter Bush, in contrast, is ready to tolerate and, in fact, to embrace a much higher degree of SL interference in his translations.

In conclusion, Saldanha's study is highly interesting in that it once again underlines that explicitation is not an invariant property of translated texts. Rather, explicitation is a phenomenon that 1) it can differ radically across translators and 2) it may be a consequence of translators' efforts to normalize and/or simplify. Another important issue raised by this paper has to do with how to handle informativeness in regard to explicitation. Could *chicha beer* be considered in English an explicitation at all even when it seems clear that the term still will remain far more informative in the source culture than in the English target culture? This paradox can be solved making a distinction between linguistically encoded information and derivable (inferable) information. If only linguistically encoded information is considered, then the English term *chicha beer* is more informative than the Spanish term *chicha*, since only the former (linguistically) specifies that it refers to a kind of beer. However, when derivable information is additionally taken into account, it

is the other way around. The Spanish term is more informative for (most) Latin-American readers than the English term is for (most) English readers, because only in the former the term *chicha* is likely to activate associated encyclopaedic information.

3.11 Conclusions

The review of literature on explicitation provided in this chapter has furnished some important insights on the dependent variable of our research. The purpose of this chapter was first of all to arrive at an internal, operational definition of explicitation in translation which could serve as the basis for the analysis of the data collected in the empirical study with a view of gaining greater insight into explicitation in computer-aided translation environments. This chapter has therefore resulted in the identification of a set of general assumptions underlying the data analysis and interpretaion reported in Chapter 7.

3.11.1 Set of general assumptions

Based on the previous research presented in this chapter, key assumptions are presented below. They will undergo no further testing or elaboration, but will serve as the foundation for the analysis of the data collected in our empirical investigation and as a basis for formulating and evaluating the study's hypotheses.

1. Explicitation takes place not only when something is expressed in the translation, which was not in the original, but also in cases where 'something which was implied or understood through presupposition in the ST is overtly expressed in the translation, or an element in the ST is given a greater importance in the translation through focus, emphasis, or lexical choice'. (Séguinot 1988: 108)

2. Explicitness does not necessarily mean redundancy. A greater number of words in a translation can be explained by well-documented differences in the stylistics of SL and TL. (Séguinot 1988: 108)

3. Translation norms indeed play a role. Certain types of explicitation occur with such a frequency and regularity from a textual point of view that they can be claimed to be norm-governed. (Englund Dimitrova 2005: 236)

4. Strategic explicitations occur in order to solve a problem encountered in the translation process. To solve the problem, the translator reformulates a tentative TT solution in the TL and, in this process, various types of explicitation may arise. In regard to this, strategic explicitations can be assumed to be of an ad-hoc nature, being more varied than the norm-governed explicitations. (Englund Dimitrova 2005: 237)

5. The communicative situation underlying translation, i.e. typically characterised by cultural distance, makes translators to be more explicit rather than more implicit when in doubt. (Pym 2005, House 2008, Becher 2010a).

6. Explicitation behaviour can differ radically across translators and it may be a consequence of translators' efforts to normalize and/or simplify as well as a consequence of their own translator style. (Saldanha 2008)

From the above, it should have become clear that it is highly misleading to work exclusively with the concept of explicitation as a possible "universal" of TTs. For our research purposes explicitation won't be considered as "universal" or "translation-inherent", but should rather be described as a frequent, but not ubiquitous, phenomenon governed by factors that can vary across individuals.

It appears as if translation in general is in fact dependent on a variety of factors, such as linguistic norms, stylistic conventions, situational features and individual preferences, and that it cannot be readily characterized in terms of universal properties which occur without exception in all kinds and all instances of language mediation. (Englund Dimitrova, 2005b)

Based on these general assumptions generated from the above sections on explicitation and translation, it is now possible to provide an internal operational definition of translation-related explicitation based on Klaudy 2003, Øverås 1998: 575, Perego 2003: 74, Englund Dimitrova 2005 and Becher 2010a, which will form the basis of our empirical study:

> **Explicitation** is observed where a given target text is more explicit than the corresponding source text by verbalizing information that the addressee might be able to infer if it were not verbalized. On the text surface, this linguistic phenomenon can take one of two forms: *addition* of new elements or *specification* by supplying more specific information.

Given the nature of the TRACE project within we place our research, our definition of explicitation deliberately ignories potential processing consider-

ations. It should be pointed out that the definition provided here is purely product-based.

Chapter 4

Translation automation and TM systems

Any attempt to investigate the impact of Translation Memory (TM) systems on the work of translation professionals must start from a sound understanding of the technology in question. A sufficient level of background information will help to define the technical context and nature of these systems, and explain its purpose of use, its functionality, and those characteristics that make TM systems special, compared to other translation support tools. The first half of this chapter provides a fundamental description of the characteristics of the domain under investigation: outlining events and approaches in the field of automated translation (focusing on MAHT), and describing the functionalities of TM systems. The second half of the chapter is devoted to a review of empirical studies that have provided quantitative and qualitative accounts in regard to TM systems. Particular focus has been given to studies using an empirical approach. This chapter closes with a series of hypotheses on the use of TM systems which will be tested in the experimental study presented in the Chapter 5.

4.1 TM systems and Translation Technology

TM systems as a subject of study fall within the young field of Translation Technology, an interdisciplinary field that pertains to Translation Studies (TS), Software Engineering, Computational Linguistics and Natural Language Processing. As an overview, the Translation Technology field covers the following thematic areas: development, management and exploitation techniques for corpora; translation memories; machine translation; software, multimedia and web localisation; documentation management; creation and

management of terminological databases; pre- and post-editing techniques; controlled languages, and standards used in the translation industry.

The first attempt to schematically depict the relationship between Translation Technology and TS was made by Quah (2006: 42), who revised Holmes' schema of TS (Holmes 2000: 172-185) by adding "Translation Technology" as a branch of 'Applied Translation Studies":

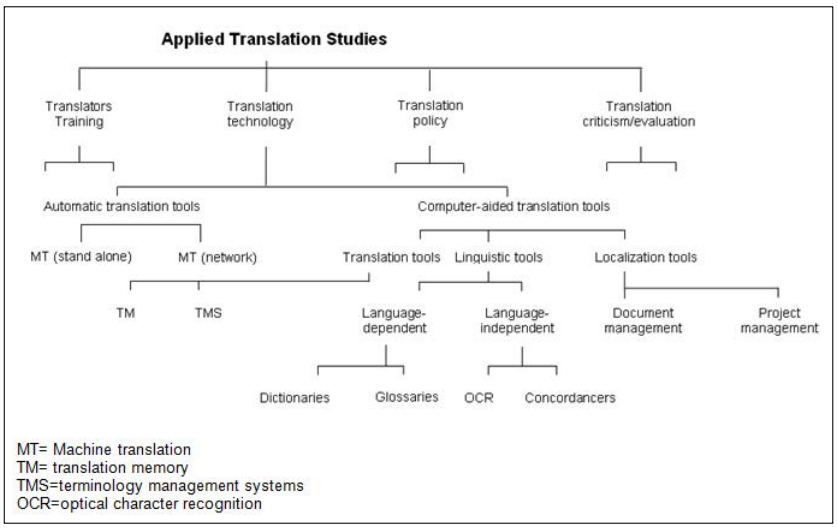


Figure 4.1: Quah's schema of Applied Translation Studies (2006: 42)

According to Ulrych (2002: 200), Pure TS research aim for an improved understanding of languages, cultures and translation phenomena, whereas Applied TS uses the information obtained by Pure TS to address practical aspects of translation, such as translation training, translation tools, creation of translation policies and translation quality assessment. On this basis, Quah correctly identifies the place of Translation Technology under the Applied TS.

Quah's schema presents a classification of translation systems based on the distinction originally made by Hutchins and Somers (1992: 147-148) and later refined by many, including Austermühl (2001: 8-11) and Hutchins (2004: 2). In fact, virtually all researchers in Translation Technologies who have offered proposals for categorising translation systems have based their typology on the Hutchins and Somers model (e.g. Sager 1994: 290). According to this model, fully automatic machine translation systems are distinct from translation support systems, in the sense that the former attempt to produce translation automatically without the intervention of a human translator, whereas the second category covers interactive tools that are designed to support the human translator during the translation activity (Hutchins 2004: 2). This distinction, based on the degrees of translation automation, is still

relevant today and allows for a definition of a group of interactive translation support systems that includes TM systems, terminology management systems, concordance tools, localisation tools and a new type of translation workflow automation systems: Translation Management systems.

It is important to note here that today it is quite common to see hybrid systems that are a combination of any of the above systems, depending of their intended purpose of use. It is also evident from the latest developments in those systems that translation systems, in general, have become multifunctional, which means that each system has integrated functions from different types of translation systems or other systems outside translation technology. This may well be indicative of a possible future convergence of all translation systems into a single unified system.

One possible criticism that Quah's classification can face is that it includes both *tools* and *resources* under the same branch of Translation Technologies, even though many o the resources used by professional translators (i.e. dictionaries, glossaries and other reference material) were widely used before the appearance of translation technologies. They have certainly been enhanced (computerised) by translation technology and they have become more sophisticated, but it would be imprecise to say that translation technology has led to the appearance of such resources. Therefore, it is deemed logical to favour the addition of a separate category relevant to translation technology under Applied TS, which would treat translation-relevant language resources as a stand-alone entity. This sub-field would study resources that serve as aids to translators and it would include both printed and digital resources such as dictionaries, glossaries, and corpora.

4.2 A brief history of translation automation

The dream of translation automation must be traced back long before the appearance of computers. It was first in the 17th century when both Descartes and Leibniz made first suggestions for mechanical dictionaries based on universal numerical codes. Such dictionaries were inspired by another dream of humanity, namely the dream of a universal language based on logical principles and iconic symbols. Proposals for universal languages continued in the centuries to come, but it was not until the 1930s that the first attempts were made to automate translation of whole texts in France and in Russia.

Around the same time, the possibility of using computers for automatic translation was discussed for the first time by the American scientist Warren Weaver, the Rockefeller Foundation, and Andrew D. Booth, a British crystallographer. In a memorandum by Weaver in July 1949, the first mention

on the possibilities of using the newly invented digital computers for the task of translating documents was made. In 1950, the so-called 'Georgetown experiment' involved fully automatic translation of over sixty sentences from Russian into English, and four years latter another demonstration was made on the APEXC machine at Birkbeck College (University of London) translating from English into French. These were the beginnings of many years of research and development in this field translation automation (Hutchins and Somers 1992: 5).

In the 1950s, government funding became available in the United States, which led to progress in the development of MT systems, notably at MIT, throughout the 1950s and the beginning of the 1960s. Systems developed during this 'first generation' of MT research were direct MT systems, i.e. they were essentially dictionary-based, direct replacement systems in which translation was performed on a word-by-word basis. The typical translation process would normally involve some internal morphological analysis of individual words, look-up in bilingual dictionaries to find the TL equivalent, and some word-order manipulations on the basis of local environment (Somers 1998: 144). Since this approach involved no analysis of the internal structure of the source text, it presented severe limitations and led to mistranslations on the lexical as well as the syntactic level. It should be noted that the researchers behind these systems were neither linguists nor translators, but computer scientists with a rather naïve concept of language (Somers 1998: 144).

Although the systems were very simple and scientifically of little value, the 1950s were characterised by optimism and the certainty that eventually machines would be capable of making perfect translations comparable to that rendered by human translators. However, expectations proved to be far too high and soon criticism started to arise. In a report of 1958 (more widely available in 1960), Bar-Hillel, head researcher at MIT, criticised the belief that MT research would eventually lead to fully automatic high quality translation (FAHQT, see Section 4.3). He recommended less ambitious goals in the form of human-machine interaction.

In 1964, the US Government MT sponsors set up the Automatic Language Processing Advisory Committee (ALPAC) whose task was to examine the evolution in the MT research field. The US government was concerned that there was a lack of progress being made despite significant expenditure. The ALPAC report published in 1966 concluded that MT was slower, less accurate and twice as expensive as human translation and stated that "there is no immediate or predictable prospect of useful Machine Translation" (Hutchins and Somers 1992: 7). This report essentially put a stop to investments in MT research in the US for at least a decade, although it also contained positive aspects such as recommendations for machine aids for translators.

The so-called first generation of MT research ended with the ALPAC report, and was followed first of all by what has been referred to as the 'dark age' of MT research, notably in the US. The more positive result of the ALPAC report was that it forced researchers to revise the basic techniques they had applied so far, and develop the 'indirect method' for language transfer in MT. This marked the beginning of the second generation systems (Somers 1998: 141).

The basic idea of the indirect approach is that the source text is transformed into the target text indirectly via an intermediate representation (Somers 1998: 144), also referred to as a 'pivot' language (Lehrberger and Bourbeau 1988: 11). There is a distinction in the indirect MT systems between the so-called interlingual method and the transfer method. In the *interlingual approach*, translation is based on an abstract language-independent representation (Somers 1998: 145), and in the *transfer approach*, SL syntactic structures are transferred into corresponding TL structures on the basis of which the TL output is generated. The transfer method, even though more complex than the interlingua method, generally became the preferred approach, mainly because it is much more difficult to produce a language-independent representation. [1]

During the 1980s, MT researchers began to recognise the limitations of the second generation systems. It was argued that MT had to go beyond purely syntactic and semantic analysis, as the translation process involves understanding of the text to be translated, a position which was well in line with what Bar-Hillel argued back in 1958. Thus, MT research began to focus on developments of natural language understanding systems based on Artificial Intelligence (AI) (Hutchins and Somers 1992: 7).

The 1980s were characterised by substantial private funding and the emergence of several new commercial systems.[2] In general, the 1980s saw an advance in computer hardware, which enabled the realisation of the idea, suggested first by Martin Kay in 1973, of interactive programmes on smaller machines allowing human and computer to work together on translations (Somers 1998: 142). As a result of the improved availability of microcomputers, there was a market for lower-end MT systems.

[1] In fact, some of the most significant systems to appear in the 1970s were hybrid first/second generation systems, notably the Canadian MÉTÉO system translating weather bulletins between French and English, and SYSTRAN, a system developed privately by Peter Toma in California (Somers 1998:141) and installed in 1970 for the for the United States Air Force and subsequently for the Commission of the European Communities (CEC) in a French-English version in 1976. In 1978, the CEC also decided to launch the ambitious Eurotra project, which continued throughout the 1980s (Hutchins and Somers 1992:7).

[2] Some of these commercial systems included Siemens' METAL, Philips' Rosetta, IBM's LMT, and the ALPSystems' Logos and Weidner (Hutchins and Somers 1992:8).

At the beginning of the 1990s, the second generation paradigm had been more or less fully explored and its limitations had been recognised. The expectation that AI would overcome these limitations had proven to be too ambitious, and an entirely new paradigm for MT emerged: The so-called *empirical approach*, in which MT was based on (parallel) text corpora and statistics rather than linguistic rules and algorithms as in the second generation systems (Somers 1998: 143). The empirical approach may be divided roughly into example-based MT and statistical MT.

In *example-based MT systems* (also referred to as the analogy-based approach (Arnold et al., 1995), translation is produced by comparing an input passage in the SL with a bilingual text corpus of typical examples of translation. The closest matches are extracted and used as models for the target text (Nirenburg et al., 1996). A defining feature of both of these approaches was the lack of syntactic and semantic rules and reliance instead on the manipulation of large text corpora. This approach is claimed to be more similar to the way humans translate and to yield more stylish and less literal translations as it is not based on the structural analysis of the input text (Somers 1998: 148).

Whereas in an example-based MT system, the text corpus contains a limited amount of representative translation examples, a *statistical MT system* translates on the basis of probabilities calculated by considering preferably millions of words of parallel text. The choice of lexical equivalents and the TL word order is thus made purely on the basis of statistical probabilities (Somers 1998: 148).

Another result of using corpora in translation is that it presents the possibility of building parallel corpora to be used by human translators, the so-called TMs, which will be dealt in detail with in section 4.4below. Thus in essence, the new approach to MT also implied a shift from pure machine translation to more machine-aided translation involving more interaction between human and computer, and the 1990s was also the decade in which the idea of a translator's workstation was actually realised (Somers 1998: 143). Systems involving human involvement will be the focus of the next section as it is also the kind of tool investigated in this study.

4.3 Human (translator)-Computer interaction

In the above section, the term machine translation has been used in a rather broad sense to cover all kinds of automated translation. In reality, translation can be automated to a greater or lesser extent, and it is common to operate with a scale of automation as represented graphically in Figure 4.2:

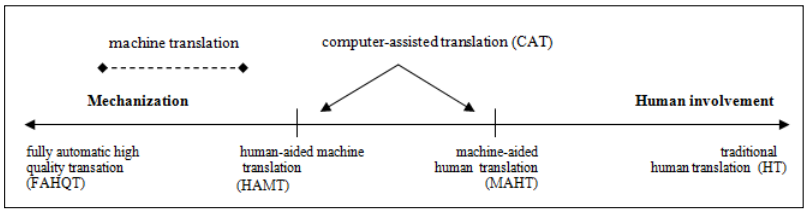


Figure 4.2: Degrees of automated translation. Adapted from Hutchins and Somers, 1992: 148

At one end of the scale are totally computerised translation systems producing high quality translation without any form of human involvement. This translation type is known as 'fully automatic high quality translation' and is typically referred to by the acronym FAHQT (Hutchins and Somers 1992: 147).[3]

Early MT research was characterised by the firm belief that it was only a matter of time before FAHQT would become a reality. However, already in 1958, as mentioned in section 4.2, Bar-Hillel claimed that FAHQT was an unrealistic aim for research and impossible in principle because translation involves human abilities which can never be incorporated in a computer. He focussed particularly on what is now referred to as 'real world knowledge', claiming that since a computer will never be able to acquire episodic knowledge about the world, the aim of FAHQT can never be reached.[4]

What Bar-Hillel therefore suggested as the focus of MT research was the more realistic aim of Human-Aided Machine Translation (HAMT) (Hutchins and Somers 1992: 148). In HAMT systems, it is the computer that performs the translation, but humans are involved in the translation process at one or more stages. Depending on the stage at which the human operator intervenes, the involvement is called pre-editing, interaction during the process, or post-editing.

Although it is generally accepted that at this point by the industry, MT systems cannot provide fully automatic translation of high quality (Hutchins and Somers 1992: 149). It should be stressed, that the obstacle to FAHQT

[3]This acronym is sometimes modified by the extension 'of UT'. FAHQT of UT means *fully automatic high quality translation of unrestricted text*. This clarification is necessary because FAHQT has indeed been accomplished within highly restricted domain-specific text (Melby et al., 1995: 39).

[4]Since Bar-Hillel's report in 1958 and until today, MT researchers and linguists have debated the plausibility of achieving the goal of FAHQT. The focus of this debate seems mainly to concern the question of whether or not it is or will ever be possible to incorporate 'real world knowledge' into a computer (throught AI) and whether such knowledge is at all required for translation, be it by computers or by humans (Hutchins and Somers 1992: 149).

concerns the 'High Quality' more than the 'Fully Automatic' part. In other words, Fully Automatic Machine Translation, or FAMT as it is generally known, is indeed possible, but the output is of draft quality and usually needs extensive post-editing if it is to be published, in which case it becomes HAMT (Lehrberger and Bourbeau 1988: 8).

4.3.1 CAT and the translator's workstation

Computer-assisted translation (CAT) covers both human-aided machine translation (HAMT) and machine-aided human translation (MAHT). In HAMT, translation is essentially carried out by the software itself, but humans are required to resolve specific language problems arising from the ST or to correct the resulting TT. In MAHT, translation is carried out by a human translator, but computer assistance is seen as an integral part of the process.

It seems safe to assume that any translator today use some sort of computer aid, at least a word processor with spell (and grammar) checkers and electronic dictionaries and terminology databases. Moreover, many professional translators use more sophisticated tools to assist them. TM technology is the computer tool that is most widely used by individual translators, translation agencies and other organisations involved in translation nowadays (Somers 2003: 31; Garcia 2007: 56; O'Hagan 2009: 48). While TM systems may differ in internal processes that govern segmentation, alignment, indexing, searching and match retrieval, they all share the basic function of deploying existing translation resources in a new translation project. In some cases, this is combined with other types of software such as word processors or terminology databases (Alcina 2008: 96).

Since the aim of this study is to investigate the potential effects of a MAHT tool, MAHT will be the subject of the remainder of this chapter. MAHT can be defined as "any situation where a machine-readable source text is processed by computerised tools in order to produce a target-language translation, with the translator being in control of all stages of this process and performing the intellectual process of translation" (Freigang 1998: 134). Several definitions have been proposed for this concept, which sometimes have caused confusion around its meaning. Some researchers define MAHT in a narrow sense as a collection of translation tools (= computer applications, excluding computerised resources) (Bowker 2002: 7-8; Hatim and Munday 2004: 336), and some even limit the concept to TM systems themselves (Benis 2007a: 28-32; Samuelsson-Brown 2004: 77-78; Valderrábanos 2003: 2).

Hence, MAHT systems always involve at least one computer-based linguistic aid, which may be of a more or less sophisticated nature. Usually, a range of aids are integrated and together make up what is commonly referred

to as a 'translator's workstation' or 'translator's workbench'.

Mentions of translator's workstations date back as far as the 1970s and early 1980s, but it was not until the 1990s that systems were actually developed and put to use in step with the prevalence of personal computers. Of major importance to the development of translator's workstations was the circulation of a memorandum in 1980 by Martin Kay (Kay 1997) criticising the idea of fully automatic MT[5] prevailing at the time, and describing instead a system (the *translator's amanuensis* as he called it) very similar to the translator's workstations actually available today, cf. below for a description (Hutchins 1998: 287). Also, Alan Melby's suggestion from 1981 for a bilingual concordance tool presenting equivalent source and target language 'translation segments' seems to have played an important role in the development of, particularly, the TM component forming the backbone of modern translator's workstations (Melby 1992: 147, Hutchins 1998: 297).

In 1989, the EU launched the first major research project concerning translator's workstations, the TWB (Translator's Workbench) project under the ESPRIT framework, which ran from 1989 to 1994 (Kugler et al., 1995). Other EU projects related to translator's workstations include the TRANSLEARN project, a TM tool based on EU regulations from CELEX, and EURAMIS, the EU Commission Translation Service's own workstation.

Following the pioneering TWB project, commercial workstations for professional translators started to emerge on the market in the early 1990s. These included the IBM *Translation Manager*, the *Transit* system from STAR, and *Translator's Workbench* from the former Trados company. The German company Trados, initially formed as a translation agency, was the first to use the term 'translator's workbench' and, more importantly (for the present study), the first company to incorporate a TM component into the system, a feature now comprised in all translator's workstations.

4.4 Translation memory systems

Since one of the main aims of the present study is to investigate the integration of a TM system into the translation process and its consequences in the product, this section will describe the design and evaluate some of the advantages and disadvantages of TM systems available on the market today. The system used for the analysis is *Translator's Workbench* by SDL Trados 2007, the TM used in the experimental part of our research (see chapter 5),

[5]In Kay's words "history provides no better example of the improper use of computers than machine translation" (Kay 1997:4).

but most of the points described here can apply to other commercial systems as well.

Many definitions have been offered for a TM system in the literature, each one reflecting the technology or the operation of the system that each person has in mind. Most frequently, a TM system is defined as an application whose technology enables the user to store translated segments or sentences in a special database (called 'translation memory') for later reuse (Gotti et al. 2005: 1; Benis 2003; Esselink 2000: 362). However, since the appearance of TM systems (such as MultiTrans and LogiTrans) which allow for the storage of full texts in a database, this definition is no longer accurate. Moreover, some TM systems (such as STAR Transit) do not even create a physical database, but instead make use of associated parallel texts, wherever these might be located.

In the light of these recent developments, the definition of TM systems needs to be more general to include all systems. For that reason, some researches have defined TM systems in a broader sense as memory-based applications that allow users to recycle their old translations by comparing a source segment with an archive of aligned texts and matching it with the appropriate translation (Macklovitch and Russell 2000, Simard 2003). This generic definition makes no assumption about the way in which the archive is queried, nor about the linguistic units that exist in the archive (Macklovitch and Russell 2000: 1). However, it is so broad that it could even include bilingual concordance tools.

Basically, the content of a TM system is an aligned parallel corpus, i.e. a database containing original texts in language A, the SL, and their translated versions in language B, the TL, which are aligned, or 'paired', sentence by sentence (Baker 1995: 230). It has been claimed that 'existing translations contain more solutions to more translation problems than any other available resource' (Isabelle et al., 1993), and indeed TM databases often provide a very valuable source of information to the translator.

This thesis adopts a narrower definition of a TM system that builds on the definition by Macklovitch and Russell and takes into account the automatic search function that distinguishes TM systems from concordancers. A TM system is, therefore, an application that links to a repository in which previous translations and their corresponding source text are stored in a structured and aligned way, so that any new text to be translated is searched for automatically and matched to the available resources associated with the system, in order for the system to be able to suggest a translation. The users of the system are then free to accept the suggested translation as it is, to edit it, or to reject it and translate the text themselves. This definition covers all systems that are based on the 'translation memory' concept (i.e. a system's

ability to 'remember' previous translations), and that consist, among other components, of:

1. a *repository of resources* (= the TM), no matter whether those reside in a database (or databases) within the system, or anywhere in one's hard disk, or in an external database (located on a remote server), and

2. a *search engine* that automatically queries the resources and matches the source text with the appropriate translation (if it exists).

This application normally comes equipped with a set of standard tools (such as an alignment tool and various file format converters), as well as additional translation support tools (such as a terminology management tool and a concordance tool), thus offering an interactive translation support environment. The architecture of a TM system is much more complex than that, therefore it will be discussed in more detail in section 4.4.4, but for the purpose of developing a definition for a TM system that is as precise as possible, it is important to have clarified the basic characteristics that all TM systems share.

The current definition is open enough to accommodate the existence of different approaches to TM technology and wide enough to encompass TM systems that have acquired such an advanced peripheral functionality that they are able to offer an integrated translation support environment. On this basis, our definition of a TM system is synonymous with what Hunt (2006) calls a 'Language Search Engine', what Zetzche[6] calls 'Translation Environment Tool' (i.e. TEnT) and what Reinke (1999) refers to as an 'Integrated Translation System'.

In fact, the current definition mirrors the current state of evolution reached by TM systems. The strategies to bring about better results have changed and multiplied through time, but the idea behind the systems has stayed the same since their inception. Interestingly, our definition is much closer to the original visualisation of a translators' aid system (or a *translators' amanuensis*), as it was proposed by Martin Kay in 1980 (Kay 1980/1997: 3-23), than to many of the more recent definitions proposed by contemporary researchers.

[6]In his biweekly newletter *Toolkit*, nº 71 (20/09/2006), Jost Zetzche gives the following definition of a *translation environment tool*: "Translation environment tools, [...] is a term that is geared towards tools with a transaltion memory component —like Trados, Heartsome, Wordfast, across, MemoQ, Transit, etc.— or a bitext component —like MultiTrans or Ligotek— but also with tools for terminology management, analysis, code protection, project management, batch processing, spell checking, code page conversion, and many other features that most of these tools have."

4.4.1 Historical overview

Going back in time to trace the history of TM systems, it is hard to identify with certainty the origins of the idea for a translators' support tool, as different research groups have claimed. Even though most contemporary researchers attribute the original idea to Martin Kay, with his influential paper "The Proper Place of Men and Machines in Language Translation" published in 1980, Alan Melby (1995: 225) suggests that the idea might have originated with his group at Brigham Young University in the 1970s. However, the idea seems to predate any of their published works, as evidenced by the ALPAC report "Language and Machines", published in 1966, which, after discouraging any future research in MT, points to the development of computer-based aids for translators (Hutchins 1998: 3). The ALPAC report was a decisive moment for the birth of TM technology, as it caused a shift in research and development from MT to more useful translation systems. More specifically, in this report, a system (developed by the European Coal and Steel Community) for "automatic dictionary lookup with context" is described, which seems like an early incarnation of the 'translation memory' concept:

> It is similar in that the translator indicates, by underlining, the words with which he desires help. The entire sentence is then keypunched and fed into a computer. The computer goes through a search routine and prints out the sentence or sentences that most nearly match (in lexical items) the sentences in question. The translator then receives the desired items printed out with their context and in the order in which they occur in the source. (ALPAC 1966: 27)

Although this system was intended for terminological search, it included processes such as text alignment, as well as automatic matching and retrieval of terms in context, thus approaching the model of a modern TM system which still retains these essential processes.

Since then, many researchers elaborated on the idea of a terminological database, among whom was Fredrick Krollman, who in 1971 envisaged its further expansion into 'a linguistic data bank', which would include monolingual and multilingual dictionaries, thesauri, an index file, a corpus bank and translation archives (Hutchins 1998: 5). In the same year, Erhard Lippman visualised a translators' support system where

> ...the system serves an extension of the capabilities of the user. [...] Rapid iteration toward the desired goal (i.e. a finished translation) can be achieved by switching back and forth as many

> times as required among human translation, direct dictionary lookup, editing, file management, and printing via typewriters or display screens. (Lippmann 1971: 10)

In fact, he went further into suggesting that "access could also be made to computer resources outside the organisation, e.g. to remote terminological databases" (Hutchins 1998: 6).

In 1979, Peter Arthern built further on the idea of a translation archive by proposing the development of multilingual text processing tools that would be based on what he called "translation by text-retrieval":

> The pre-requisite for implementing my proposal is that the text-processing system should have a large enough central memory store. If this is available, the proposal is simply that the organization in question should store all the texts it produces in the system's memory, together with their translations into however many languages are required. This information would have to be stored in such a way that any given portion of text in any of the languages involved can be located immediately [...] together with its translation. (Arthern 1979: 94)

His vision of a tool that would search and retrieve "any given portion of text" —in other words, one that is not limited to terms— stretched the functionality boundaries of the until then existing terminological tools and seems to be the earliest proposition for the development of a tool that suggests translations for any ST from the texts that reside in its 'translation memory'. Arthern (1979) appears to be the first to make an implicit reference to a 'translation memory' as we know it today.

In 1980, Martin Kay published a paper in which he visualised in greater detail, with regard to functionality, a translator-support system called 'a translator's amanuensis'. His paper presented an advocacy for placing machines to the service of translators (as an opposition to the mainstream research efforts of that time, which were consumed for MT), and a proposition for the most complete version of a translator-support tool so far. He firstly proposed a 'special' multilingual text editor which would be the outcome of a 'flexible design' and that would 'make provisions for various kinds of extensions' (Kay 1980/1997: 14). The editor's interface would be split into two windows: one that would contain the ST and another that would provide space for the translation. To this would be added a facility to automatically look up any word or phrase in a dictionary, and the ability to refer to previous decisions by the translator to ensure consistency in translation:

> the translator might start by issuing a command causing the system to display anything in the store that might be relevant to [the text to be translated]. This will bring to his attention decisions he made before the actual translation started, statistically significant words and phrases, and a record of anything that had attracted attention when it occurred before. Before going on, he can examine past and future fragments of text that contain similar material. (Kay 1980/1997: 19)

Kay also envisaged and additional facility to his system: the automatic translation of text segments, which the translator could opt to let the machine do without intervention and then post-edit the result, or which could be done interactively, i.e. the systems could ask the translator to resolve ambiguities (Kay 1980/1997: 20).

The most important contribution of Kay's visualisation of a translator-support system to the evolution track of TM systems is not the idea of the 'translation memory' *per se*, since that idea pre-existed (since Arthern, 1979). It is rather the unification of ideas around the design of a tool which for the first time attempts to address the needs of human translators. As Hutchins rightly notices, in retrospect,

> What Kay did [...] was to provide the impetus for the development of a workstation that incrementally incorporated aids that were really wanted by professional translators. (Hutchins 1998: 9)

Programs moved from DOS to Windows, user interfaces became more standardised and the processing and storage power of PCs improved significantly. Advances like these, coupled with an increased availability of large electronic corpora of bilingual texts (Hutchins 2003: 510), generated new conditions for research, so that ideas like the one of 'bi-text' by Harris (1988) could be realised. His idea essentially involved the existence of a bilingual database where the translator would store translations and their originals, segmented in translation units. Each translation unit of original text would be aligned to a unit that represented its translation. This way, the system would look for "bi-text segments that will be similar enough to help him towards his objective" (Harris 1998: 9). His 'bi-text' proposal is today seen as the predecessor of the bilingual concordancer, but it is also a refinement of the earlier ideas on the TM. It was, however, the "development of statistical means of text alignment" that made possible the "realisation of these and earlier embryonic proposals for bilingual databases of translations", as Hutchins rightly observes (1998: 14).

In the early 1990s, while research and in-house systems continued to progress, the first commercial systems made their appearance. In 1991, the first commercial translator-dedicated system running on DOS was made available by STAR (STAR Transit))[7]. Soon after, in 1992, TRADOS released their commercial TM system running on DOS[8], incorporating a TM and alignment facilities, under the name 'Translator's Workbench'. According to Hutchins (1998: 15), TRADOS appeared to be the first to use the term 'translation memory' for its product. In the same year, IBM introduced onto the market 'Translation Manager/2'[9]. A year later, ATRIL released Déjà Vu for Windows 3.1[10], and the following year TRADOS introduced 'Translator's Workbench' for Windows, while at same time STAR released the Windows version of their system 'STAR Transit'[11]. From 1994 onwards, the TM software market blossomed. New TM systems appeared year after year, most surviving up to the present day, while others enjoyed a promising start only to fall into oblivion a few years later.

A landmark development in the TM technology of the late 1990s was the remote access of a TM, enabled by the Internet. Logoport Software was the first developer to launch a commercial Web-based Translation Memory system ('Logoport') that allowed Logoport's client companies to have online access to a central TM database that resided on their servers. Since then, the modes of accessing TM databases have evolved from purely standalone to distributed data either synchronised with a central database or as a remotely accessed central database (Yuste 2004: 9-10).

Finally, it is worth noticing in the evolution of the TM marketplace the considerable interest shown in developing open source TM systems. Some of

[7]This is according to combined information from: 1) *Wired* magazine 8.05 (Available at: http://www.wired.com/wired/archive/8.05/timeline_pr.html) and 2) the University Johannes Gutenberg's list of translation-relevant software (Available at: http://www.fask.uni-mainz.de/ze/term/cat-pas.html[Accessed: 21/12/2010]).

[8]This is according to: 1) an unknown author in the July-August 1994 issue of *Language Industry Monitor* (Available at: http://www.lim.nl/monitor/trados-2.html [Accessed: 21/12/2010]) who quotes Jochen Hummel (co-founder of Trados): "1992 was the year we released MultiTerm for Windows and our DOS Translator's Workbench package", and 2) a document provided by Trados (Available at: http://www.lai.com/tmcompet.htm [Accessed: 21/12/2010]) where it states that: "In 1992, TRADOS ships MultiTerm for Windows and Translator's Workbench 2 for DOS".

[9]According to the University of Leipzig's list of terminology management tools (Available at: http://www.uni-leipzig.de/xlatio/software/soft-termiman.htm [Accessed: 21/12/2010]).

[10]According to ATRIL's website (http://www.atril.com/aboutus.asp?InFrame=true [Accessed: 21/12/2010]).

[11]According to the University Johannes Gutenberg's list of 'translation-relevant software (Available at: http://www.fask.uni-mainz.de/ze/term/cat-pas.html [Accessed: 21/12/2010]).

the efforts have led to the release of working products (such as Transolution, ForeignDesk, and OOxlate), and some others have been less fruitful. Among the open source TM systems, the most successful ones, which have been under continuous development up to the present day, are Omega-T and Open Language Tools (Lagoudaki, 2006).

4.4.2 TM system generations

From the perspective of computational linguistics, TM systems qualify as NLP systems, since they deal with natural language which they are required to process to some degree. According to Nirenburg et al., (1992: 117-8), there are four levels of language processing that NLP systems aim to be able to perform: morphological, syntactic, semantic and pragmatic. If we draw an analogy to the level of technical sophistication of TM systems, we could define two, or perhaps three, generations of TM systems.

The *first generation* of TM systems is hardly capable of any language processing, with the exception of few TM systems (e.g. Déjà Vu) which are able to perform some basic morphological processing ('shallow processing') that does not require any additional linguistic knowledge (Benis, 2003: 24). The vast majority of TM systems currently available on the market belong to this first generation of TM systems.

The *second generation* of TM systems requires the introduction of linguistic knowledge into the system in order to be able to perform morpho-syntactic analysis on the ST and TT. Two commercial TM systems are known so far to belong to this generation: SIMILIS[12] and Masterin[13]. The two systems are described briefly below, forming a picture of state-of-the-art TM technology.

SIMILIS, in general, applies linguistic rules to a number of processes, including segmentation, alignment, and automatic extraction of terms and phrases from TM content[14]. After segmenting the ST and the TT sentence level, it runs a linguistic analysis and splits each sentence into syntactic units (chunks) attaching grammatical annotations to them. This is performed with the help of monolingual lexicons and algorithms that can recognise grammatical categories (Planas, 2005). It then indexes those as translation units as well. So, every time the system searches for a match, it looks not only at the sentences, but also at the chunks, thus increasing the possibilities of finding a match, and especially those chunks that are in the same grammatical category as the source segment and therefore increasing the possibility of finding the right one. Each segment is annotated with grammatical information (with

[12]Developed by Lingua et Machina.

[13]Developed by Master's Innovations.

[14]Based on Jost Zetzche's Newsletter of 23/02/2007 (82nd *Tool Kit*).

the help of a POS tagger) and constitutes a grammatical 'translation pattern'. So, matches are sought by a deep-structure pattern recognition method that looks beyond the surface appearance of segments. If several matches are found, the system determines the best match by using semantics (with the help of a built-in lexicon) and/or by examining their use frequency or domain information. In the case where no match is found, the system constructs and suggests a fuzzy match from the available resources in the database by applying translation heuristics (Grönroos and Becks, 2005).

From an overall examination of the literature on second generation TM systems, no evidence exists for any human evaluation of these systems. Therefore, it is impossible to determine if any of the systems outperfoms the rest or, most importantly, if the systems of the second generation surpass the systems of the first generation in usefulness.

Perhaps prematurely, since no actual proof has established yet that second generation TM systems have succeeded in their purpose, a *third generation* of systems has already been proposed. Pekar and Mitkov (2007) suggest that it is not enough for a TM system to perform morpho-syntactic analysis on the ST and TT, but it also needs to perform semantic analysis that will help the search engine to have a better idea of what the segments are about, so that it can retrieve more relevant matches. Their proposal consists of a procedure that considers the syntactic, lexical and lexico-syntactic variability of segments and is interested in arriving at generalised semantic representations (with the help of the WordNet lexical resources) that can be attributed to each segment. The retrieval mechanism operates on these generalised representations in order to determine useful translations for a given source segment. Mitkov and Corpas (2008) concentrate their efforts in the identification of rhetorical predicates for each TM segment with the belief that sentences labelled with the same rhetorical predicates have a greater probability of being semantically equivalent. These latest techniques have not been implemented in an existing TM system so far, therefore no human evaluation has yet been able to determine their usefulness for the translator.

As pointed by Benito (2009), the main obstacle in the road to fully exploiting the capabilities offered by TM systems is the fact that the LSP are still focused on applying TM technology at the segment level, foregoing the advantages offered by treating translation databases as large parallel corpora:

> The most obvious reason for this is that special pricing schemes involving discounts for TM matches are only reasonable at the segment level, if at all. Any advantages obtained by applying TM technology at the subsegment level are therefore only of immediate value to the freelance translator, since they cannot be automated

> by the LSP. Additionally, given the nature of the translation tool market —where the specific software used by the freelance translator is often imposed by the LSP— freelancers have very little power as consumers when it comes to influencing the evolution of commercial TM tools. Together, these two idiosyncrasies of the translation industry have effectively resulted in a stagnation of the commercial research and development efforts towards improving and expanding the use of TM technology. (Benito, 2009)

4.4.3 Overview of current TM systems

These days, more than ever before, a great number and variety of TM systems are available to translation professionals, with new systems entering the market every few months, intensifying the competition in the TM systems arena. At present, a quick scan of the TM software market will reveal more than 30 available commercial TM systems. Some of the most popular TM systems among freelance users of TMs are: Déjà Vu, SDL Trados, STAR Transit, MultiTrans and Omega-T (Lagoudaki, 2006). TM systems, nowadays, come in a selection of types. A common typology promoted by most TM developers is based on the degree of scalability of the system, reflecting differences in the intended use of the system by specific user groups, based on their particular needs. In such a typology, TM systems come in the following editions:

1. Corporate systems, which include:
   - systems for LSPs (translation/localisation companies).
   - systems for organisations dealing with multilingual content.
2. Systems for freelance translators.

Besides the most obvious difference of price (e.g. WordFast is cheap and Omega-T free, while most others sell at full commercial prices), TM systems generally differ in terms of:

- the graphical user interface (GUI) design;
- the architecture (see Section 4.4.4);
- the key internal TM processes (see Section 4.4.5), in particular in terms of:

  - the source file formats they support
  - the granularity of segmentation
  - the indexing method
  - the match search and retrieval techniques
  - the integration of machine translation techniques;

- the ability to export to other applications, such as Content Management Systems, authoring systems and MT systems; and

- the level of customisation allowed to the user.

The differences in GUI relate to the text editing environment in which users are allowed to process their translation. Some TM systems work as add-ins (through macros) to Microsoft Word, while other provide their own translation processing environment, usually in a tabular way. TM systems that belong to the first category are: Wordfast, MultiTrans, Metatexis, SDL Trados 2007 Professional and Fusion. Déjà Vu, Heartsome, MemoQ, STAR Transit NEXT, SDLX, SDL Trados Studio and Across are some of the systems that belong to the second category. Both these approaches to GUI design have respective advantages and the choice of one design over the other is usually a matter of the user's preference.

In conclusion, modern TM systems vary mainly in design and technology employed. However, their development always departs from the very same 'translation memory' concept, and for that reason they are largely based on the same underlying principles.

4.4.4 TM system architecture

The main components that are available to any classical translator's workstation today may comprise of:

- A word processor or a translation editing environment, i.e. the interface where the translator actually edits and translate the source text.

- Some online/offline electronic reference works. These may include monolingual and bilingual dictionaries, thesauri, encyclopaedias and other general sources of information.

- A terminology management tool to store domain-specific terminology. Term banks facilities may be available on the individual workstation or centrally on a server which are normally fed from scratch by the user.

- A concordancer / KWIC (Key-Word-In-Context) tool for displaying a given word with adjoining context.
- An online/offline translation memory tool to access to access previously translated segments in the form of an aligned parallel bilingual corpus.
- A plug-in to a MT engine on the Internet.

TM systems are no longer just databases. As the name 'system' suggests, they may consist of several components linked together within a multi-layered software architecture. A typical TM system has a search-oriented architecture. The architectural layer is usually occupied by a database management system (DBMS), which is supplemented by a search engine. Queries for information are usually performed using Structured Query Language (SQL). The database management system comprises of all the algorithms that govern internal operations related to the creation, manipulation and maintenance of the database, such as text segmentation, alignment of TUs and storage. Typically, two databases are created: a TM database and a terminology database, but the creation of additional databases containing other resources, such as a lexicon, is also possible in some systems (e.g. Déjà Vu X).

TM systems may have a multi-tier architecture, in which information is maintained in a Data-Tier where it can be stored and retrieved from a database or file system. This Data-Tier may be replaced or placed behind another tier which contains a search engine and search engine index which is in-place of the database management system. The search engine itself crawls the database management system in addition to other data sources such as file systems and consolidates the results when queried. Apart from the two core components and their modules, TM systems also commonly include a text-editing module, file filters, and workflow mechanism.

Recent developments in TM technology which caused the emergence of hybrid systems combining TM with MT technology (e.g. Déjà Vu X) have led to the expansion of the search engine's operations, typically limited to match search and retrieval, to include an additional operation (previously performed only by MT systems): match assembly (or construction). This operation poses several special requirements to the TM system architecture, as special modules need to be added, such as a match construction algorithm, part-of-speech taggers, parsers and various auxiliary lexical resources.

The same happens when a TM system combines technologies from other systems, such as localisation tools or term extraction tools. Then, the TM system acquires modules from these systems, and its architecture becomes more complex.

Regarding the architecture model, TM systems can be either centralised ('desktop systems', i.e. all system components reside on a single centralised computer and all the processes run there) or distributed systems. In the latter case, we can come across two types of TM system architecture:

- *client/server*: The server hosts the DBMS and the search engine, with all their modules, as well as any filters and workflow mechanisms. The created databases, which constitute the TM repository, are also hosted on the server, and the system enables their sharing, as well as their remote management and processing. The server may be located on the TM developer's computers, in which case it is accessed by the users via the Internet ('Web-based TM') (e.g. Logoport), or it may be located on a company's server network, e.g. LAN (e.g. across Language Server). The client side is an interface (a web browser, in the case of web-based TM systems) usually hosted in browser-based forms or Java applets. It provides the text-processing components, as well as the necessary code to communicate with the shared resources on the server (Savourel 2001: 329).

- *service-oriented*: Over the last few years, as computer power and broadband connectivity have vastly increased, language data has largely moved from the desktop to the enterprise server, and is now moving to the so-called 'cloud', i.e. computational resources (both data and software) accessible via the Internet rather than from a local computer which frees up PC memory on users' side. It's no surprise in this age of unlimited connectivity and cloud computing that TMs also find their way into the cloud. When personal computers are becoming little more than a browser terminal with constant Internet connection, some TM technologies also offer the possibility to work on a SaaS model. Major LSPs are working with cloud-based TMs where translators now log via their browsers. In 2006, Lingotek pioneered a service-oriented architecture for their commercial TM system, the result being a TM solution offered as a web service rather than as a product. Unlike traditional client/server models, web services do not provide the user with a GUI; instead, they share business logic, data and processes through a programme interface (e.g. a web browser) across the Internet. Developers can then add the web service to a GUI (such as a web page or an executable program) to offer specific functionality to users.[15] For

[15]Definition according to Webopedia (Available at: http://www.webopedia.com/DidYouKnow/Computer_Science/2005/web_services.asp) [Last accessed on 12/09/2011]

> a TM user this practically means that he has access to a TM system through the Internet, instead of owning one. The main advantages of this solution are that the TM system can be accessed from any platform (e.g. Windows, Mac, Linux) and that the software can be improved continually without the users worrying about software updates (Kreckwitz 2007).

Cloud computing is the next computing paradigm shift and refers to Internet-based development and use of computer technology (Haynie 2008). The cloud is a metaphor for the Internet in which users access technology-enabled services. Cloud computing incorporates "software as a service" (SaaS), Web 2.0, virtualization, multitenancy and other recent technology trends in which the common theme is reliance on the Internet for satisfying the computing needs of the users.

In the field of translation automation, this new technology brings obvious benefits for cross-leveraging language data in extensive and collaborative localisation projects. However, at the same time, it raises lots of questions, especially about ownership and legal compliance. Mining the web, aligning translations, and sharing translation memories are common practice nowadays, but "no empirical studies have been done yet on how this emerging web-interactive mode suits the translators" (Garcia 2009: 203).

Thinking on the negative side of cloud-based TM, it seems that the major drawback will be that it will make more difficult for translators to build up their own linguistic assets and an obligation to work with the software suite provided by the LSP in a SaaS model. The positive side, however, is that TMs in the cloud open the way for ubiquitous access to language data independently of the operating system used by the translator and real time collaboration among the different agents working in the same project thanks to cross-leveraging.

Apart from these arguments in favour of and against the use of cloud technology in the field of translation automation, it is also worth taking into consideration the opportunities offered by this new web-interactive technology both for researchers and software developers. Web-based translation tools enable easy logging of user activity, as is the case with traditional web search engines and web activity as a whole. TMs in the cloud can prove very useful for implementing new tools and services based on productivity derived data, use of concordancers during the translation process and work patterns detected while using this web-interactive mode.

4.4.5 TM systems functionalities

Before discussing different approaches to TM processes, it is important to briefly describe the internal workings of a basic TM system. TM systems are produced by different providers of language technology. Although there are differences between the systems, they basically work on the same principles, i.e. to store translation segments in a database and enable automatic retrieval from the database of segments matching a given input segment. Also, they include more or less the same additional facilities, e.g. fuzzy matching and integration with a terminology management system and a MT engine.

In order to understand how TM systems actually operate, it is necessary to be familiar with the way these tools organize and store information. This in turn requires an understanding of following basic concepts: translation unit, segmentation, math search, retrieval and assembly, and alignment.

4.4.5.1 Translation units

In a TM system context, a translation unit is a source and target language sentence pair stored in the TM database. Translation units (TUs) processed by TM systems are often referred to as 'segments' or 'fragments' of text in the source and target language. Common for all TM systems available on the market today is that the translation units they work with are in effect *sentences* from one full stop to the next in source and target language, or alternatively a headline or a bullet point text.[16]

Automatic segmentation below sentence level, for instance at word or phrase level, is not possible in present systems, because they work on the basis of orthographic principles. This means that the system needs a specific character in the text on which the division into segments can be based, *viz.* a full stop. The fact that TM systems are based on segmentation into full sentences is of major importance in relation to this study, and has given rise to some of the hypotheses set up in section **??** below.

4.4.5.2 Segmentation

TM tools process texts in small chunks known as segments. Once the conversion of file formats is complete, the system starts the segmentation of the ST. In essence, it splits the ST into units ('segments'), which can be of any length (e.g. words, phrases, sentences, or paragraphs) depending on the segmentation strategy of each system. Usually, the punctuation marks (e.g. periods,

[16]The user may choose to apply other segmentation rules and divide segments for instance at each colon, semi colon or tabulator.

exclamation marks and question marks), hard returns and text formatting indicators (e.g. paragraph marks, list tags) determine the boundaries of each segment, but the user is also allowed to customise the segmentation rules, for example, by adding stop lists (i.e. by specifying words or abbreviations, such as 'Prof.', which should not be considered as segment separators). However, accurate segmentation, or as often called 'sentence boundary disambiguation' (Mikheev, 2003: 212), is a challenging task, because each language has its own script, so that the principles that drive how a sentence is constructed and delimited differ form on language to another (Savourel 2001: 209).

Segmentation is the first key TM process, as it impacts directly on the quantity and quality of matches retrieved by the system in the subsequent process of matching. For instance, if the segmentation is done at paragraph level, the system has little chance of finding a match for the source paragraph in the repository (a phenomenon called *silence* by NLP researchers). However, if it does find a paragraph match, then this typically does not require any editing and can be incorporated in the translation as it is (Esselink 2000: 363). In the next case, where the system performs sentence-based segmentation (full sentences or clauses), there are more chances of it finding a match from a repository that contains sentences. Whether those matches are correct or not, it depends on the match retrieval mechanism of each system. Finally, in the case where a system segments the text in smaller units (e.g. phrases, words), there are even more chances of it finding matches —as a matter of fact, so many that the system produces the so-called phenomenon of *noise*— but naturally most of them are useless in the context of the source text (Simard 2003).

For the last ten years, many methods have been proposed for the segmentation of texts by researchers in both TM and MT. In recognition of the fact that whole sentences are rarely repeated in a document to be translated (unless it is a manual), and based on the premise that long segments (e.g. full sentences) reduce the chances of the TM system finding matches (Gervais 2002; Hunt 2003), research has been geared in favour of sub-sentence segmentation (see García-Varea et al., 2005; Gotti et al., 2005; Simard 2003; Simard and Langlais, 2000; Macklovitch and Russel, 2000). A major distinction between the proposed methods involves the contrast of approaches based exclusively on the information contained in the text to be segmented (e.g. punctuation marks, spaces, formatting indicators) and those approaches that depend on complementary linguistic knowledge.

4.4.5.3 Data storage

Most TM systems segment the ST before storing it in the database. Each segment is accompanied by contextual information, such as the name of the client, the domain, the name of translator and date. However, some systems (such as MultiTrans and LogiTrans) follow a different approach, called the "full-text approach". Instead of segmenting the texts at the beginning of translation, they store both ST and its translation as full bitexts using the character-string-in-bitext (CSB) technique (Gow 2004). Once the bitexts are in the database, they are aligned at the paragraph level. This approach has two main advantages compared to the conventional method: *a*) the faster creation of a large TM database containing previously translated material and *b*) the retention of the co-text for any match found and suggested to the user (Gervais 2002).

There are also systems that do not require the use of a database for the storage of the previously translated material. STAR Transit, for example, instead of creating a physical TM database, builds and makes use of a 'virtual' translation memory, which is essentially and index of selected reference material residing in any directory on one's computer. The user chooses the reference material she wants to use (i.e. the translated documents that are relevant to her project), and the system, after extracting the text into XML files, creates the index with the associated files. This idea has many advantages over the classic database. Firstly, because the index is resident in RAM, the searches for matches are relatively quicker. Secondly, the user has greater freedom in tailoring this repository according to the needs of each project. In addition, this model of a TM repository works especially well for projects with many updates containing a lot of small changes (Zerfass 2002). However, the greatest advantage of this idea is perhaps the absence of issues related to database maintenance and to the security of data residing in a database (databases are, by nature, prone to crashing or getting corrupted).

4.4.5.4 Match search and retrieval

Returning to the typical TM workflow, after the system has segmented the ST, the translator chooses the segment he wants to start translating and the system automatically looks up this segment in the TM repository. When a match is found, the system retrieves it and suggests it to the translator as a possible translation.

Matching is thus the second key TM process, as it determines the ability of the system to leverage phrases and terms from already existing translations in an effective and efficient way. Overall, however, the retrieval mechanisms in

TM systems build on the basic principles of information retrieval, i.e. the aim is to achieve as high a recall and as high a precision value as possible. TM systems available today seek to achieve this aim by calculating the formal, or more specifically, the orthographic similarity between a given input sentence and sentences stored in the database. Hence the match value is calculated on the basis of the number of identical characters in a specific order in input sentence vs. stored sentences (Reinke 1999: 105).

For a sentence to be retrieved from the TM system, it has to have a similarity of 30-100% compared with the input sentence. It is up to the translator to decide how similar she want a sentence to be in order for the TM system to retrieve it. Generally, translators set the match value to 70%, since lower match values are usually irrelevant.

There are several kinds of matches: *exact matches, fuzzy matches, full matches, sub-segment matches* and *term matches* (Bowker, 2002a: 95-105); yet, recently, most of the TM systems are also able to produce an additional kind of match: an MT match (O'Brien 2006: 187-8). A brief description of each match type is provided in Table 4.1.

Type of match	Description
exact (or perfect) match	The segment in the TM is 100% identical to the source segment in terms of morphology, syntax and sometimes formatting (in other words, it is the same in spelling, punctuation, inflection and numbers). The process followed by the TM system to recognise exact matches is simple string pattern recognition.
full match	The segment in the TM differs from the source segment only in terms of variable elements, such as numbers, dates, times, currencies, measurements, and sometimes proper names.
fuzzy match	The segment in the TM resembles approximately or partially the source segment. The differences between the two segments are usually highlighted by the system. Fuzzy matches are presented according to a similarity degree given by the system. The user usually specifies a threshold for the acceptable similarity degrees.
sub-segment match	The source segment is identical with part of a segment in the TM.
term match	The source segment is identical with an entry in the term base (or the lexicon database).
MT match	When the source segment does not match with any segment in the TM, the system constructs a segment usually by combining sub-segment matches or by generating a new match by means of Machine Translation techniques.

Table 4.1: Types of TM matches

Issues in match search and retrieval (due, for instance, to the inflectional and derivational morphology of words) have been widely discussed (see Bowker 2002a: 72-4; Somers 2003: 37-41) and several matching techniques have been proposed during the past few years (see Hodász and Pohl, 2005; Simard 2003). All matching techniques aim at rendering the TM system efficient not only in retrieving *all available* exact or fuzzy matches for a source segment (match recall), but also in retrieving the *correct* exact or fuzzy matches (match precision).

The two match retrieval techniques employed by current commercial TM systems are: *a*) segment-based matching and *b*) character-string based (CSB) matching (Gow 2003: 22-44). Each of the two techniques is directly related to the way in which the text is stored in the database. More specifically, a system that segments the text in translation units before storing it in the

database is normally using segment-based matching, whereas a system that does not segment the text, but stores it as full text instead, performs a CSB matching.

Most TM systems (e.g. SDL Trados, Wordfast) implement the first technique, which means that they look for matches in the sequence of character strings of each segment in order to identify potential translation equivalents. The similarity between segments is operationalised via the distributed similarity of each word in the segment (Hunt 2003; Simard 2003). Some TM systems are also able to recognise matches not only at segment level but also in sub-parts of the segments that exist in the TM database (e.g. Déjà Vu X3). Alternatively, systems such as MultiTrans and Lingotek use a matching algorithm that calculates the similarity of equivalent continuous character strings in a text, rather than relying on segments and fuzzy matching (Garcia and Stevenson 2006: 24). Both these statistical techniques are based on character n-gramming and are language-independent.

However, the 'second generation' of TM systems have recently opted to use matching techniques that are linguistically enhanced. These can be lexeme-based or grammatical pattern-based techniques (Planas 2005, Gotti et al., 2005). Based on the premise that superficial matching techniques alone may result in a potentially useful match being overlooked, these systems make use of morphological and grammatical information to improve the match coverage.

According to experiments conducted by Carl and Hansen (1999), when comparing matching results form a string-based TM, a lexeme-based TM and an EBMT system, the least generalising system (the string-based TM) achieved higher translation precision when near matches existed in the database. However, when the database did not contain any similar translation examples, the lexeme-based TM performed better in terms of translation converge but it lost in precision (the EBMT system outperformed both in match recall but performed poorly in match precision). Nevertheless, these results were based on a fully automatic evaluation method; hence, they could not establish the superiority of a particular matching technique in real work conditions. Such an evaluation that includes humans is very important as translators are able to assess not only if matches are indeed the *correct* translations for a source segment, but also if they are *suitable* for the context of the ST.

From a general perspective, the main disadvantage of TM systems that use linguistically enhanced matching techniques is that they are language dependent (since they rely on the built-in language resources). Consequently, such systems can work only for a small number of language combinations for which adequate language resources have been developed and incorporated

into the system.

Recent developments in TM match enhancement point to some trends that already play an important role in the localisation industry, i.e. MT matches. This type of match is fully generated by means of machine translation techniques. MT matches are not new, but it is only recently that they are being seriously integrated into the localisation workflow due to the pressing need to lower costs in the localization cycle when internationalizing new products (Guerberof 2009, 2012).

As pointed by García (2009: 208), MT matches were first considered by freelance translators more distracting than helpful. To the point that, some years ago some TM tools started to offer MT plug-ins (Wordfast version 3, SDLX version 4, Trados version 5), but the concept did not find favour and was consequently neglected in subsequent versions. This scenario has changed a lot since then. SDL Trados 2007 first offered access to its in-house SDL Automated Translation feature in late 2008 (SDL 2008), and the feature remains in the latest SDL Trados Studio versions with easier access. WordFast or MemoQ (in all their present versions) also offer the possibility to work with MT matches coming from different MT engines.

Returning to the typical TM workflow, after the system has been able to offer a match, the translator has then to decide whether to reuse the translation example, to adapt it or to ignore it and insert his own translation. Once the segment is translated, the system automatically saves the pair of source and target segments in the repository. As the translator works his way though the source text, each successive segment is looked up automatically in the TM repository, and a translation is proposed (if one is available). By the end of the translation of the source text, each successive segment is looked up automatically in the TM repository, and a translation is proposed (if one is available). By the end of the translation of the source text, the system has stored all pairs of source and target segments in the TM database for future reuse. The following illustration (Figure 3) shows how all the basic TM processes are linked together in a typical TM workflow.

4.4.5.5 Alignment

TM systems usually come with no, or virtually empty, repositories. According to the ICL TM Survey 2006 (Lagoudaki 2006), the most frequent way followed by translators to build a repository is to create a database and have it filled as they translate (*interactive method*). The next most frequent way is to build up a repository with aligned original texts and their translations (*retrospective method*).

Alignment is a feature offered by most TM systems and it constitutes an

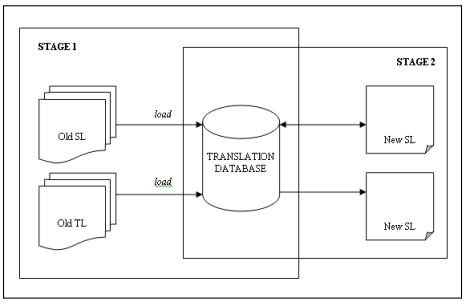


Figure 4.3: Basic processes in a simplified TM workflow (Quah 2006: 104)

additional key process within a TM system. In fact, it impacts directly on the effectiveness of the matching, because if a source segment is not accurately aligned with its translation equivalent, a wrong match is likely to be retrieved. Before the alignment process, the TM system normally segments both source and target texts and then tries to establish correspondences between their segments.[17]

Aligning texts means matching up ST and TT segments and linking them together to form TUs. The task involves certain challenges that inevitably compromise the accuracy of alignment. In addition to the issues of segmentation (mentioned in section 4.4.5.2) usually deriving from non-corresponding punctuation systems and a different notion of a 'sentence' (Somers 2003: 35), a single ST sentence can often be translated by multiple TL sentences or vice versa, or information can be omitted from or added to the TT (e.g. explicitating). Moreover, sometimes ST and TT do not have the same structure, because sentences or whole paragraphs may be in a different order. As a consequence, it is not always easy to establish one-to-one correspondences between sentences. Thankfully, TM systems are interactive tools by nature, which means that automatic alignment can be corrected any time by the user; either immediately after the automatic alignment process by joining or splitting misaligned segments, or during the actual translation by accessing the TM database and by editing the appropriate pair of segments.

Alignment can be performed on various levels, depending on the segmentation output. In other words, if a system segments the ST at a sentence-level only, it will then try to align sentences; if it segments the text in chunks

[17]TM systems that follow the 'full-text' approach do no segment the text prior to alignment and storage. Instead, they store the texts in full and they align them at paragraph level.

(i.e. smaller units, like phrases), it will need to align the chunks. In the latter case, the task of alignment becomes even more challenging because the system needs to identify the similarity between the two chunks, and a mere string-length comparison cannot be much of a help. To this end, an appropriate morpho-syntactic parsing schema and/or detailed tagging is used to identify any similarities at grammatical and syntactic levels. Examples of TM systems that perform alignment at a sub-sentence level are SIMILIS (Planas 2005) and MetaMorpho (Hodász and Pohl 2005).

4.4.5.6 Working with a TM system

Since the TM systems provided by software developers are initially empty shells, the user of a TM system must store TUs in the empty database before any output can be retrieved. Prior to storing sentences in the database, the translator must define certain TM properties: source and target languages, name and description of the TM, etc. Once the framework for a new TM has been set up, the translator can begin storing TUs in the database.

The translator can fill TUs into the TM basically in two different ways. Firstly, when the translator works interactively with the system, sentences are automatically stored one by one as they are translated. Once a segment is stored, it immediately becomes available for retrieval if it matches a subsequent input sentence. Secondly, the translator may fill existing translation material into the TM. Before existing resources can be reused in a TM system, each sentence in the SL must be aligned with the corresponding sentence in the TL.

Once a TM has been created and is ready for use, the translator again has two options for searching and retrieving data from the database. One possibility is to request a batch translation, in which case, sentences in the input source text are automatically replaced in one go by matching TL sentences found in the TM. Input sentences for which no matches are found in the database are translated in the interactive mode, which is the other option available to the translator when working with a TM[18].

When working interactively with *Translator's Workbench*, the TM component in the SDL Trados 2007 suite, the translator's screen is divided into two windows: In one window, the programme is running, providing information on the TUs being translated. The other window is the text editor, i.e. where the translator produces the actual translation. In the text editor window, the translator is presented with one SL sentence at a time in a blue box. For each SL sentence, the system searches the database to find previously translated

[18]Since the focus of our study is on the process of working interactively with a TM system (see chapter 5), the batch translation mode will not be given further consideration

sentences matching the current one. If a full or a fuzzy match is found, the TL sentence will be placed in a green or yellow box below the SL box, and the translator can confirm, adapt or reject the TL sentence as she sees fit. In the *Translator's Workbench* window, the translator can find information on the degree of similarity between the input sentence and the retrieved sentence, i.e. the match value, indicated as a percentage.

If the TM system finds no matching sentences in the database, the yellow box will be empty, and the *Translator's Workbench* window will show the message 'No match'. The translator then writes the TL sentence in the box, stores it, and moves on to the next sentence by clicking on an icon or pressing a specific keyboard combination. The text editor window presented to the translator looks like this (in the example, the system has found no matching sentences):

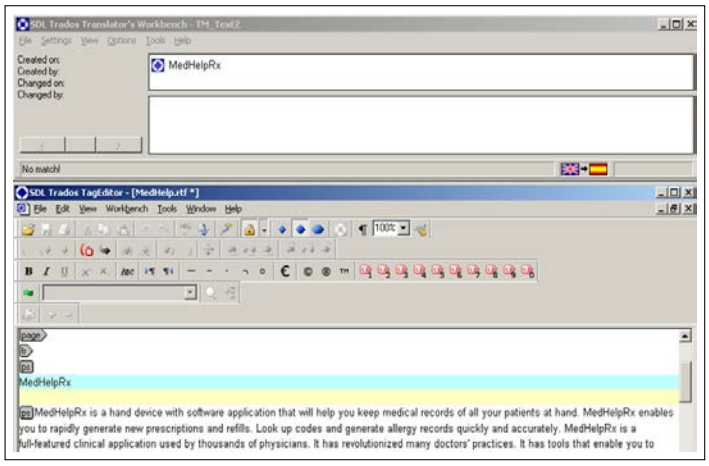


Figure 4.4: GUI of SDL Trados 2007 (Translator's Workbench).

4.5 TM systems and the language industry

So far we have looked at TM systems closely to provide an understanding of the technology involved in its technical dimensions. However, technology is not created in a vacuum. It exists in a social context, which defines its usefulness and proves its importance to society. This context is formed by a constellation of relationships between stakeholders and the TM system, as well as between stakeholders themselves.

TM systems have two primary stakeholders that determine the purpose of these systems: the language services industry (who are also the clients of the TM software developers, as well as the indirect users of the system) and the translation professionals (who are the end-users of the system, but may not be the clients of a TM software developer if the buying decision has been taken by their employer). It is important to analyse this context in order to understand the most important factors that drive the development of TM systems in a business-minded world. Do these factors relate to the needs of translation professionals or to those of the language services industry?

The language services industry, which includes companies in both the translation and localisation sectors, has endured dramatic changes in terms of its needs during the past few decades. These have been induced by a combination of technological, political and social events.

On one hand, the growing penetration and extensive use of the internet, along with technological advances in information systems and telecommunications have turned globalisation into a reality. This practically means that, at least in the developed world, people and businesses are acquiring the means to communicate with each other at an increasing rate, irrespective of their physical location and language. However, no communication can be effective if people are speaking different languages. For this reason, translation has become a necessity that grows as the digital divide gets smaller.

On the other hand, the growing exploitation of the Web as a business model and marketing platform for millions of multilingual consumers has amplified the need for translation and has given birth to a more specialised service that involves translation: the localisation of content and products. Even though English remains the commercial *lingua franca*, its hegemony is clearly eroding as more users from all over the world obtain access to the Internet. The explosion of web content addressed to an increasingly diverse multilingual group of people has highlighted the need for multilingual content delivery. Similarly, in order to meet the demands of a global market, to satisfy customer requirements, to seize opportunities in new markets, and even to gain the advantage of differentiation among their competitors, product manufacturers have resorted to localisation, which they increasingly see as a

strategy for business growth.

Moreover, a further rise in the demand for translations has been encouraged by social trends in the last decade. In the spirit of social corporate responsibility, an increasing number of businesses, especially in the technology sector, attach social value to the effort of reaching people in developing countries. In order to make their products socially inclusive, they turn to localisation which helps them adapt the products linguistically and make them fit for the particular cultural context. In a similar spirit of social inclusiveness, several initiatives for localising open-source software of free content have emerged on the web, in order to encourage accessibility to technology and information. The impact of these initiatives might not be significant for the language services at present, but as they expand in a limitless global platform of information such as the web, one should expect that they will put pressure in the language services industry in the future. In general, multilingualism is increasingly promoted as a social policy, especially by NGOs, governments and the European Union, which means that the social trend of localising content and products can only be amplified in the years to come.

According to Common Sense Advisory, a US-based business consulting firm, the language services market experienced an unprecedented growth with an estimated total of US$23.267 billion in revenue in the worldwide translation and localisation services market in 2009[19]. Their analysis reports an average projected growth rate of 13.15% per year for the next five years, which is undoubtedly an encouraging forecast and suggests even greater demand for translations to come in the near future.

After making a historical overview and description of the technology involved in TMs, the next section will be present a review of empirical studies where the use of TMs by translators is evaluated. The selected list of reference is diverse in nature but, in line with the research that we propose, all of them use an empirical approach in there investigations.

4.6 Empirical research on TM systems

As pointed by Dillon and Fraser (2006: 68) and, more recently, by Christensen and Schjoldager (2010), TM literature generally focuses on business-oriented aspects. Thus translators' professional journals tend to publish TM-product

[19]The full report by Common Sense Advisory can be read at: Kelly, Nataly; Stewart, Robert G. *The Top 35 Language Service Providers.* Common Sense Advisory. Insight for Global Market Leaders. (Available at: http://www.commonsenseadvisory.com/AbstractView.aspx?ArticleID=1160 [Accessed: 22/05/2013])

reviews (Benis 2004a and 2004b in the *ITI Bulletin*; Davies 2004 in *Communicator*) or discussions of general business issues such as rates and copyright on the translations (Enríquez-Veintimilla 2006 in the *ITI Bulletin*, for instance), whereas CAT journals tend to focus on more practical issues in relation to workflow management (Guerberof (2008), Iverson (2003) and Levitt (2003) in *Multilingual Computing and Technology*, for instance) or on comparisons of different TM systems (see Hallett (2006) in *Localisation Focus* and Wassmer (2005) and Zerfass (2002) in *Multilingual Computing and Technology*, or Sánchez-Gijón (2001) in *Tradumàtica: Tecnologies de la Traducció*). However, less research has been carried out on how translators interact with TM and how TM systems affect translation as a product as well as a process. Only few studies approaching the topic of computer-aided translation are empirical investigations.

Along the lines proposed by Garcia (2009) about what specific issues need to be addressed by research and what specific methodologies are required, empirical research on TM can be divided into two main groups: *a*) descriptive studies on the use and impact of TM systems and *b*) (quasi) experimental studies addressing the issues raised by the use of such systems when translating. The first group would basically consist of surveys on TM adoption and satisfaction, while the second group would include a series of studies addressing a number of issues raised by the use of TM systems such as cognifitive segmentation, final TT quality, cognitive effort required to deal with TM fuzzy matches, etc.

Inspired by Mossop's (2007), this section offers a review of empirical TM studies with the aim of finding out what we know about the nature, applications and influences of TM, including translators' interaction with the technology,as well as how we know it. An important part of this analysis is based on Christiensen and Schjoldager (2010), which we assume to be a representative overview of the research field as a whole, but their list of works has been extended from nine to eighteen studies to offer a much broader review including some unpublished works. Since TM technology was not common until the late 1990s, we assume that relevant publications did not appear until the turn of the millennium. The eighteen selected works for review in this section fulfil the following three criteria:

1. *The publication is a research report or dissertation.* We shall focus here on reports that were published or circulated within academia, i.e. primarily aimed at scholars as opposed to being aimed at the profession. As pointed out by Holmes' map of Translation Studies (1972/2000), research is a "knowledge-oriented type of study" aimed at describing, explaining and/or predicting a given phenomenon. Consequently, though

literature on TM technology contains an abundance of texts that convey much interesting and useful information about our topic, few of them are seen as research reports in the academic sense. Thus, though the two *Translation Memory Surveys* that were carried out by the Localization Industry Standards Association (LISA 2002 and 2004) and the reports published by bodies such as Byte Level Research, Common Sense Advisory and the Translation Automation User Society (TAUS) are well founded, well presented and certainly have other academic virtues, these surveys are not considered here because they were carried out for a professional association and aimed at the industry.

2. *The topic of the publication is TM research.* Only those studies that focus on TM technology are considered in this research review. Examples of studies that are excluded from our list below are Mossop (2006), Cruz-Lara et al. (2008) and Gauton (2008), Guerberof (2009), Austermühl and Mirwald (2010) who deal with various aspects of CAT, but do not focus on TM technology as such or have a more specific focus on MT instead of TM.

3. *The methodology is empirical.* By definition, empirical papers analyse and discuss data produced by an experiment or observation. In empirical TM research, relevant data appear to be STs, TTs, surveys and translation processes (both internal and external). While Bowker and Barlow (2008) make an interesting comparison between bilingual concordances and TM systems, their study is theoretical and is therefore excluded from our list below.

As a result of this filter for empirical TM studies, we came up with the following list of eighteen studies, presented in chronological order:

- Lange and Bennett (2000)
- Christensen (2003)
- Dragsted (2004) and (2006)
- Fulford and Granell-Zafra (2005)
- Bowker (2005)
- Bloch (2005)
- Dillon and Fraser (2006)
- Lagoudaki (2006)
- Mandreoli et al. (2006)
- Wallis (2006)
- Vilanova (2006)
- O'Brien (2006) and (2008)

- Biau (2007)
- Colominas (2008)
- Liparini (2010)
- Teixeira (2011)
- Martín Mor (2011)
- Morado Vázquez (2012)

We shall review these studies with a view to discovering their aims, methods, data and findings.

Lange and Bennett (2000)
Using a six-month professional project carried out at Baan Company as a case study, Lange and Bennett (2000) investigate the drawbacks and benefits of combining MT and TM. According to one of its websites, Baan develops automated software solutions for manufacturing and business systems, including "multilingual support with translations of its software in more than 20 languages". The aim of the professional project was to investigate how computer technology may usefully assist the translation of online help texts in order to "produce high-quality results in shorter times" (2000: 203) with a view to reducing "throughput time for translation by 50 percent through the use of automated translation" (2000: 204). The project was carried out in four phases:

1. analysis of MT,
2. analysis of a combination of MT and TM,
3. analysis and readjustment of the translation workflow and
4. enhancement of the translation output.

Though this is not quite clear from the paper itself, Lange and Bennett seem to have employed a mixture of evaluative and descriptive (quantitative) methods.

By way of conclusion, the authors observe that translators' productivity may indeed increase if TM and MT are combined, but perhaps their most interesting observation is this: productivity will only increase in this way if translators are comfortable with their new role as post-editors of machine-controlled translations. One of Lange and Bennett's analyses even suggests that translators' post-editing process may take longer than human translation if the translator involved is negatively disposed towards MT (2000: 209). These observations sound plausible and appear to be well-founded, but Lange and Bennett's paper lacks significant details about the context and analytical

methods of the case study (such as how many translators were involved), which are needed to assess the validity of their findings.

Christensen (2003)

Christensen's (2003) dissertation on TM as a tool for legal translation is based on the assumption that, because of the complexity and the specific culture of legal communication, TM technology will be less useful for legal translation than for technical translation, for which it was first designed. The basic aim of the dissertation is therefore to evaluate the usefulness of a TM for legal translation. Christensen selects and combines relevant theories and methods within legal studies (jurisprudence), translation studies, computer science and text linguistics. Her research questions are answered by means of theoretical and empirical analyses. She asks three general research questions:

1. Is TM technology helpful in connection with those translation problems that typically arise in legal translation?
2. How useful is TM technology for legal translation in general?
3. Is it necessary to combine a TM (parallel corpus) with a reference corpus of authentic target-language texts that serve similar functions?

Christensen's theoretical findings are that, as TM enables translators to access and re-cycle parts of a potentially unlimited number of previous translations within the same genre, this technology will undoubtedly be of some use to legal translators. However, she also finds that TM technology is not well suited for solving those problems that typically arise in legal translation. According to Christensen, the usefulness of TM technology for legal translation should improve considerably if it were combined with a corpus of authentic, functionally equivalent TL segments. TM technology should also become more useful for legal translation if it includes an authoring memory that standardises the ST segments by way of pre-editing before the alignment with TT segments (first suggested by Allen 1999, among others).

Christensen's empirical data derive from two corpora. One corpus comprises a TM of source text segments from the Danish articles of 11 companies and their authentic German translations (2003: 77). Another corpus comprises a reference corpus of model articles, which are taken from a standard German handbook on German company law, and which are assessed as functionally equivalent to a selection of source-text segments in the TM (2003: 89). In the empirical part of her dissertation, Christensen asks four specific questions:

1. Is the wording of Danish company articles sufficiently repetitive — in connection with certain standardised legal formulations that refer to specific legal speech acts, for instance— to be useful as STs in a TM?

2. Can a TM identify segments that are functionally identical?

3. How can the process of finding matches to these source-text segments be improved?

4. Can the TUs in the TM be regarded as functionally equivalent to the segments found in the German model articles?

As far as Christensen's empirical study is concerned, her findings are as follows: the wording of the Danish articles does not show sufficient repetitiveness. The TM consisting of Danish articles and their translations fails to identify sufficient matches of ST segments that are functionally identical. The identification of such matches may indeed be improved by means of an authoring memory, as suggested in her theoretical part. The TUs in the TM cannot be regarded as functionally equivalent, which means that the quality of legal translations may, to some degree, be improved if the translator has access to functionally identical segments in an authentic TL (reference) corpus.

As Christensen points out herself, the results may not be valid for all kinds of legal translation (2003: 299f), but her findings and suggestions are certainly relevant for the application of TM technology in general and definitely deserve further empirical investigation.

Dragsted (2004) and (2006)

Dragsted (2004) is a PhD dissertation on segmentation in human translation and TM systems. Based on data from her PhD dissertation, Dragsted (2006) further investigates how the enforced sentence-based segmentation of the TM system affects the translators' cognitive (internal) process. We shall regard this research as one single study. Dragsted asks three research questions:

1. How do translators segment text naturally?

2. How does the integration of TM systems (with enforced sentence-level segmentation) affect the cognitive translation process?

3. How can TM systems be optimised to conform better to translators' natural segmentation and to render higher match values?

The study comprises data from several experiments involving six professional translators (with at least two years of professional experience) and six students (in their final year of MA studies of specialised translation at the Copenhagen Business School). Two kinds of experiments were carried out for the Danish L1 into English L2 language pair. In one experiment, Dragsted studied human translation, which was recorded by means of key-logging (Translog). In another experiment, she studied TM-assisted translation using Trados' Translator's Workbench.

In addition, Dragsted draws on retrospective verbalisations about the translators' own understanding of their choices and the text that they were given to translate. In her analyses, Dragsted focuses on the translators' revision time, the extent to which the ST sentence structure is changed and the way in which translators appear to segment the ST. Pauses recorded by means of key-logging are seen as indicators of the translators' segmentation.

Dragsted's findings point out: The sentence does not constitute a central unit in translators'cognitive segmentation, though this may be truer for professional translators than for students[20]. In both groups, there were detectable changes in the translators' production and revision time, in the way that they paused during the task (segmentation behaviour) and, in the way that they tended to structure the target-text sentences. Professional translators were much more aware of the effects of the TM on their translation process. Revision behaviour was affected in both groups, but professionals spent relatively more time on revising, compared with what they did during non-TM-assisted translation (2006: 460). TM systems could be modified to re-use translations of sentence fragments by integrating linguistic analysis (syntactical and morphological parsing) and possibly also by semantically based techniques (2004: 302). Consequently, according to Dragsted's results, TM systems need to be adjusted to suit translators' natural segmentation processes.

Fulford and Granell-Zafra (2005)

Fulford and Granell-Zafra (2005) study freelance translators' uptake of information and communication technologies, including TM systems. In their paper, they report on the findings of the first phase of a research project set up to investigate the adoption of information and communication technologies by UK freelance translators in late 2003. The study adopts an exploratory questionnaire survey approach. The data of the study derive from responses

[20]While Dragsted's professional subjects complain that the sentence-by-sentence segmentation enforced by Trados "has a constraining effect on their cognitive behaviour and mental representation of the text and thus changes the translation task", her student subjects are rather unaware of this constraint (2004: 302).

from 591 UK freelancers. The most interesting result is that TM technology and other CAT tools are less widely used than we might expect: just under half of the respondents say that they are not really familiar with CAT tools at all, and only 28% of respondents state that they actually use TMs and other CAT tools.

The survey also found that TM users tend to be specialised in the translation of technical and scientific texts (2005: 4ff). Their main conclusion is that the uptake of general-purpose software applications, such as word processing software, graphical software and desktop publishing software, is more common among UK freelancers than the uptake of special-purpose software applications like TM and terminology management tools.

Bowker (2005)

This article investigates the impact of a TM system (Trados Translator's Workbench) on both speed and quality by presenting the results of a pilot study in which three groups of student translators were asked to translate the same text from French L2 into English L1. Translators in Group A did not use a TM, and while their translations were of relatively high quality, they took longer to produce. Translators in Group B used an "unadulterated" TM, and they were able to translate more quickly, but there were some minor concerns with the quality of their work. Translators in Group C used a TM that had been deliberately "seeded" with a number of translation errors, and while they were able to work quickly, the quality of their translations was lower than that of the other two groups. Despite the small sample in the study (nine participants divided in three groups of three), the results of this experiment seem to indicate that, when faced with the time pressure to translate, translators using TMs may not be critical enough of the proposals offered by the system. This in turn indicates a definite need for proper training in the appropriate use of translation technology.

Bloch (2005)

The study by Bloch (2005) is a seminar paper widely circulated on the Internet and its aim is to study three of the most intensively studied Translation Universals (i.e., simplification, explicitation and normalization) through occurrences of sentence splitting in TM-based translations. Since sentence splitting may be an answer to the needs formulated by each of these three universals (it should be noted that it is a means not an end), this empirical study aims at giving an insight on the implementation of such strategy in the translation of technical texts (software user guide and marketing collaterals). In order to do so, the author composed a parallel translational corpus of technical texts originally written in English and their translations into four European lan-

guages: Dutch, French, German and Italian. It is thus a corpus-based study and, more precisely, a TM-based study. TM systems were used during the translation, with pre-defined segmentation rules. While splitting is an option, sentence combination is impossible, as it involves complete reorganization of the text.

Whether sentence splitting serves the aims of any of these translation universals, it induces simpler syntax and hence a lower level of complexity of the target text, which becomes more readable. The author hypothesis establishes a complexity order between the target languages studied in the following order: French >Italian >German >Dutch. In line with the conclusions of Cosme (2003), Bloch (2005) expects to find the most occurrences of sentence splitting in random samples in the Dutch translations, and fewer in the French translations. Likewise, the author assumes Italian will rank third and German fourth on this decreasing scale.

The results obtained clearly show the existence of split sentences in the translations, as well as a different intensity of the pattern depending on the TL. As pointed out by the author, it is hoped that further work, based on larger, fully qualified corpora, will confirm the results of this pilot-sized study.

Vilanova (2006)

The main aim of this master's dissertation is to investigate the impact of TM on translations on the following two dependent variables: syntactic structures and terminology consistency. Comparing translations done with and without the use of TM systems, she raises the following hypotheses:

1. *Translations done with a TM will have less syntactic variation than translations done without a TM system.*

2. *Translations done with a TM will have more interference from syntactic English patterns than translations done without a TM system.*

3. *Translations done with a TM will have less lexical variation than translations done without a TM system.*

4. *The use of a TM system results in a more consistent use of terminology.*

After performing a series of controlled experiment with three translator trainees and five professional translators, for whom she also compares their performance when working with a TM, Vilanova's results show that syntax is clearly closer to that of the ST in translation done using a TM system. Even in terms of punctuation conventions for SL and TL, the use of TM seems to have a negative effect causing more interference between English and Spanish.

As far as lexical variation and the use of more consistent terminology (hypothesis 3 and 4), Vilanova is not able to find significant differences between translations done with and without TMs. Although the research should be tested with a more representative sample of translators, it can be said that it is a very good attempt to carry out empirical research in the field of TMs from a product-based perspective.

Wallis (2006)
This MA thesis provides background information on TMs use through a literature survey, the findings of which form the basis for three hypotheses concerning the way in which interactive and pre-translation mode when working with a TM system (e.g. Fusion Translate) will impact translation productivity and quality, as well as translator's satisfaction. When working in an interactive mode, translators work one sentence at a time, consulting and evaluating matches proposed by the TM system. While on the pre-translation mode, the entire ST is compared against the TM database and matches are automatically inserted to create a 'hybrid text' which the translator must then edit. These two modes of working with a TM will depend on the client's availability to give free access to their TM database to the translator. Wallis' main aim is to find out which of these two approaches is more beneficial and, for this end, she considers the following three hypotheses:

1. *Translators working with pre-translated texts will have a lower productivity than translators working with TMs in interactive mode* because the former will need to spend more time trying to decipher the hybrid text and finding target language formulations that fit in with those parts of the text that have already been translated.

2. *Translators working with pre-translated texts will produce lower-quality translations than translators working with TMs in interactive mode* because the former are obliged to work with texts that have been partially translated using a variety of different styles, and they do not have access to all the information contained in the TM database.

3. *Translators working with pre-translated texts will have a lower level of job satisfaction than translators working with TMs in interactive mode* because the former are obliged to adapt their style to that which is already contained in the pre-translated.

After designing an experiment with 4 translator trainees, her conclusions demonstrated that interactive and pre-translation modes have no significant effect on productivity. In terms of quality of the output, the interactive mode

produces slightly higher quality than the pre-translation mode according to the evaluation of the output made by experienced professors at the University of Ottawa. As for the translator's satisfaction, there was a general consensus that the interactive mode is superior to pre-translation in terms of job satisfaction. In conclusion, despite working with such a small sample of participants, Wallis' research stands for the idea that using the pre-translation mode and giving translators a hybrid text may not prove to be beneficial for clients.

Dillon and Fraser (2006)
Dillon and Fraser (2006) provide a snapshot of UK-based professional translators' personal views on TM technology. Reporting on one of the very few studies that focus on the translators' perspective, the paper sets up three hypotheses:

1. *Novice translators have more positive perceptions of TM technology than more experienced translators.*
2. *Translators with TM experience have more positive perceptions of the technology than translators without such experience.*
3. *Translators' perceived IT proficiency is not the main influence on their perception of TM technology.*

Data are derived from an online questionnaire survey that was carried out in August 2004. The authors received 59 usable responses (2006: 71). Inspired by Moore and Benbasat's (2001) instrument for measuring personal perceptions, Dillon and Fraser asked translators to respond to 24 statements that expressed various attitudes towards TM technology, such as "I would lose out on work if I did not have TM software" or "The disadvantages of TM far outweigh the advantages". According to their findings, the first two hypotheses may be true. Thus, newly qualified translators and translators with TM experience seem to be more positive towards TM technology than others. The third hypothesis appears to be falsified, as translators with strong IT skills also appear to be more likely to have positive perceptions of TM technology. These results lead the authors to suggest that a lack of understanding and knowledge of TM technology and its possibilities —rather than the nature and applications of TM technology itself— may be an important reason why some translators reject it altogether.

Lagoudaki (2006)
Like Fulford and Granell-Zafra (2005), Lagoudaki (2006) reports on a survey about the adoption of TM technology and, like Dillon and Fraser (2006), she

studies users' attitudes towards TM technology. By means of an online questionnaire, Lagoudaki obtained responses from 699 translation professionals (translators, terminologists, project managers, etc.) from 54 countries. Unlike in Fulford and Granell-Zafra's (2005) survey, the adoption of TM technology appears to be considerable: the percentage of respondents using a TM system is 82.5%. In line with Fulford and Granell-Zafra's (2005) findings, Lagoudaki asserts that those who specialise in technical texts are more likely to use TM tools, followed by those who specialise in financial and marketing content. Those who report a legal specialisation are also likely to use TM tools, but less so than the above-mentioned groups, which concurs with Christensen's (2003) findings. In line with Christensen's expectations, Lagoudaki finds a relationship between high levels of textual repetition and high adoption of TM technology. Unlike Dillon and Fraser (2006), Lagoudaki does not find any striking difference in TM adoption between different age groups and between those with and without work experience. However, like in Dillon and Fraser's study, Lagoudaki finds that high IT proficiency is linked with high adoption of TM technology. When asked why they use a TM, most respondents answer that it saves time (86%), that it ensures consistency in terminology (83%), and that it improves quality (70%). Other benefits are cost savings (34%) and the efficient exchange of resources such as glossaries and TM databases (31%). A rather surprising result is that, though they own a TM tool, some respondents (16%) have not been able to learn how to use it yet.

Mandreoli et al. (2006)

Mandreoli et al. (2006) evaluate the design of their own TM, namely the Example-based Translation Assistant (EXTRA) with the main aim of presenting, analysing and testing the effectiveness and efficiency of the system (2006: 169f). In comparison with most TM systems relying on artificial intelligence, the search engine of the EXTRA system is founded on advanced information retrieval techniques executing two processes: first, the document to be translated undergoes a syntactic analysis, and then it is compared with the TM data using the so-called *edit distance*. This procedure is applied in order to ensure a good trade-off between the effectiveness of the results and the efficiency of the processes involved (2006: 169). The investigation is based on theory and research on Example Based Machine Translation (EBMT). Data derive from statistical simulation experiments (2006: 167), which document that EXTRA is able to support effectively and efficiently the translation of texts in western languages (2006: 194). Based on a test run of the EXTRA system, the authors conclude that their "results show the goodness of EXTRA in retrieving useful suggestions and of the two processes constituting it, suggesting the suitability of their stand-alone employment also in contexts that

are not strictly related to translation" (2006: 194). In their experiments, they considered three scenarios, manual translation with one or two translators and assisted translation with one translator, for each of which they were interested in three figures: 1) the mean, 2) the maximum time required for the translation of one sentence and 3) the total time required for the translation of the whole ST. Their results show that the time needed for one translator to do an assisted translation with their TM system is significantly closer to that of a team of two translators than to that of a single translator. The mean sentence translation time is by far the lowest for this scenario, corresponding to the highest per translator productivity.

O'Brien (2006) and (2008)

Investigating translators' cognitive load in connection with various TM match types, O'Brien's is one of very few TM studies of translators' interaction with TM tools. In her 2006 study, O'Brien sets out to investigate whether eye-tracking in general is a useful research methodology for investigating translators' interaction with TM and whether eye-tracking makes it possible to identify differences in cognitive effort with different TM match types. The study involves four professional translators, who translated a text using a TM (SDL Trados Translator's Workbench) and then commented on their translation process in retrospective verbalisations. The study investigates the cognitive effort required from translators for different TM match types by analysing quantitative data from an eye-tracker (Tobii 1750) supplemented with qualitative screen-capture data (Camtasia) and with subjects' retrospective verbalisations about what they were doing during the translation task (2006: 189). The cognitive effort is measured using processing speed (words per second) and pupil dilation. The analysis is performed as a comparison of processing speed for each match type and the percentage change in pupil dilation for each match type, supplemented by the retrospective verbalisations. The findings suggest a strong correlation between percentage change in pupil dilation and processing speed for different match types. The study also shows that exact matches exert the least cognitive load on translators, while no matches exert the greatest load. Furthermore, though the relationship is not a linear one, it is demonstrated that the cognitive load increases as fuzzy-match values decrease (2006: 199ff). As a general conclusion, O'Brien suggests that eye-tracking in combination with retrospective protocols is well suited for translation process research (2006: 200).

Inspired by her 2006 findings, O'Brien (2008) investigates in more detail why the relationship between fuzzy-match values and cognitive effort is not as linear as one might expect. She carried out an experimental study in which eight students translated a technical text using a TM (SDL Trados

Translator's Workbench). The subjects' eye movements and pupil dilations were recorded again using an eye tracker (Tobii 1750). Because only five subjects' eye movements could be accurately tracked, the study was limited to these five. Once the subjects had finished the translation task, they were presented with a paper-based survey that included the same source segments and fuzzy matches that they had just seen on the screen. Subjects were not shown the fuzzy-match values that were assigned by the TM system and there were no differences between the new ST and the ST in the TM highlighted. Subjects were asked to rate their perceived editing effort for each match using a five-point scale. Based on processing speed alone, the study demonstrates that decreasing fuzzy matches mean increasing effort, whereas the picture that emerges if pupil dilation is used as a measure of cognitive load is less clear. When seen as a median measurement across all subjects, dilations increase as match values decrease until the 60-69% match class is reached. Below this match class, decreased pupil dilation is noted. According to O'Brien, this might be due to the fact that subjects attained a baseline cognitive effort when they reached the 60-69% match class.

Biau (2007)
This unpublished paper was presented in 2007 at the 12th Annual Internationalisation and Localisation Conference in Dublin under the title "What You See Is What You Get? - A Pilot Experiment on Access to Visual Information in Translation Interfaces". In this pilot study, the author tests the main hypothesis that filtering out the non-verbal information of texts when translating using a non-WYSIWYG translation interface negatively affects on the quality of the TTs produced and on the production speed. By 'translation interface' the author means the visual environment that translators see on screen as they edit the text.

This main hypothesis is tested in this study are:

1. *Texts translated using WYSIWYG translation interfaces include fewer errors than those translated using non-WYSIWYG interfaces.*

2. *When translators use WYSIWYG translation interfaces, they work faster than when they use non-WYSIWYG interfaces.*

The two translation interfaces used to test his hypotheses are Word+SDL Trados Translator's Workbench (a WYSIWYG translation interface) and TagEditor+SDL Trados Translator's Workbench (a non-WYSIWYG translation interface). In this pilot study with 6 semi-professional translators (participants in the pilot study were post-graduate students), the author evaluated

the impact of the translators interface in the following terms: punctuation errors and foreign rules, unclear syntax, references to images, homonymy. The results of this pilot study, although limited because the size of the sample used, show that all the informants had the same or fewer errors when they translated with the WYSIWYG interface. In terms of productivity, there was no clear time difference between time needed to complete the task and the interface used. When participants used the non-WYSIWYG interface, informants worked faster in the "easy" parts of the ST and needed extra time to make 'complex' translation decisions. His overall conclusion is that subject-matter knowledge seems to be more relevant than visual information, although little subject-matter knowledge and the use of a non-WYSIWYG interface to translate results in more risk of errors.

Colominas (2008)

Following the principles described here for second generation TM systems (see Section 4.4.2), Colominas (2008) assumes that sentence-based segmentation is unnatural and should at least be supplemented with sub-sentential segmentation, as the repetition of a whole sentence is generally rare. She therefore sets out to investigate the usefulness of sub-sentential segmentation in TMs. With a view to consider different possibilities of segmentation, she evaluates the recall and precision (the usability of these chunks) obtained by noun phrase (NP) chunk segmentation. Two experiments are carried out based on different TMs: a multilingual corpus extracted from the proceedings of the European Parliament (the Europarl corpus) and an English-Spanish corpus compiled from United Nations documents.

Her experiments report that that pre- or post-modified NPs turn out to be especially adequate for pre-translation tasks as they show a minimum cost and a maximum gain. In other words, their translation, on one hand, isn't trivial as it often involves structural divergences between languages and, on the other hand, they are context independent enough so they can be reused without changes in most cases. These findings may prove very useful in future TM software improvements.

Liparini (2010)

From an empirical approach, this PhD dissertation presents a study on the effect of a TM system and time pressure on the translation process of professional Brazilian translators. Drawing on PACTE's chains of cognitive implication (2005) and on Steiner's demetaphorization hypothesis (2001), the performance of 12 professional translators is analysed in terms of decision-making and (de)metaphorization processes.

The independent variables of this research are: i) use of a TM system (i.e.

SDL Trados Translator's Workbench) and ii) the time pressure to complete the task. The contrast between the language pairs German-Brazilian Portuguese and English-Brazilian Portuguese are the dependent variable. The text samples, the language direction, the subjects' experience as professional translators, and their familiarization with the TM system were considered as controlled variables. Data were collected using the programs Translog as a key-logging tool and Camtasia as a screen recorder software. This thesis contributes to previous studies developed under the project SEGTRAD[21], which investigates the impact of TM systems on the cognitive processes of professional translators.

The results presented in Liparini (2010) show that the use of a TM system tends to standardize the translation process and optimize the orientation process, leading to a reduction in the need for online revision. Furthermore, a TM system assists the translator to cope with time pressure. The results of her research show that that time pressure reduces the occurrence of revision pauses both in drafting and revision phases, and indicate that time pressure affects mostly revision processes both with and without the use of a TM system. Liparini's investigation also shows that besides the process of understanding the source text, the option of the translator to produce less ambiguous texts is also a motivation for the occurrence of (de)metaphorization processes (Steiner, 2001a).

Teixeira (2011)

The integration of MT and TM systems in professional translation settings has turned pre-translation and post-editing processes into an attractive alternative in terms of productivity gains for all parties involved in the translation process. In some cases, ST files are pre-translated using a combination of customised MT and TM before reaching the translators, who then become reviewers or post-editors. Nevertheless, the question of how this workflow actually affects productivity and job satisfaction has not extensively been addressed yet.

In order to look for an answer to this question, the author runs a pilot experiment with two subjects who translate two texts (500 words each) in two different environments. The basic difference between the two is the availability of information on the provenance of the suggested translation for a particular segment. Provenance information of translation suggestions is indicated by showing their origin (TM or MT) and, in the case of TM, by displaying its fuzzy-match percentage and highlighting the differences between the actual

[21]See Alves (2006) for a descriptive overview of the SEGTRAD project (Cognitive Segmentation and Translation Memory Systems: investigating the interface between translators' performance and translation technology).

segment and the matching segment in the TM, as it is usually the case in most TM systems.

The two hypotheses tested in this study are:

1. *Translation speed is higher when provenance information is available.*

2. *There is no significant difference in the quality level when provenance information is available.*

Through screen recording and keystroke logging, Teixeira measures the time spent to complete the task depending on the different types of translation suggestions. The final translated texts are assessed for quality by human reviewers. Retrospective interviews complete the data gathering methodology with the aim of obtaining general impressions from the translators in the study.

As pointed by the author himself, the findings reported by this study are very limited due to the size of the sample (only two subjects), but the data show that the overall speed was not significantly different in the two environments and the quality of the TTs was comparable. Looking into individual types of suggestions by the TM, results show that translators spent much longer translating (post-editing) exact matches when they did not know the provenance of the suggestions. Although inconclusive, the results of this study indicate that provenance information is relevant for translators working with translation suggestions from TM and MT, and that this information should be taken into account when analysing and comparing the results of different experiments where the integration of TM and MT is being tested.

Martín Mor (2011)

This PhD dissertation investigates the impact of CAT tools on translations and, specifically, on the appearance of linguistic interference traces in the final TTs. This research is built on the following construct: "Different translation processes lead to different products" and aims at testing the following two overall hypotheses:

1. *In texts translated with CAT tools, linguistic interference shows a different pattern compared with texts translated without CAT tools.*

2. *Globally, one translation environments will show the lowest number of traces of interference while another will show the highest traces of interference.*

Using a multi-methodological approach, nine different indicators of linguistics interference are analyzed: 1) typography and spelling, 2) typography and spelling (complementary), 3) vocabulary, 4) vocabulary (complementary), 5) morphology and syntax, 6) text conventions, 7) encyclopaedic knowledge, 8) coherence, and 9) cohesion. Three different translation environments were used in this study involving a variable degree of translation automation: i) a text processor involving no CAT, i.e. Microsoft Word, ii) SDL Trados 2007 Translator's Workbench used in combination with Microsoft Word, and iii) SDL Trados 2007 Translator's Workbench in combination with TagEditor.

After analysing a sample with more than 100 translators translating three different texts, the results provide interesting data on the distribution of interference according to the environment in which translations are done, as well as on the translator's profile. Results show that typography, text conventions, encyclopedic knowledge and text cohesion are among the interference indicators more sensitive to the introduction of a TM in the translation process. Novice translators are the profile which introduced more traces of interference while translating using a CAT environment[22].

Morado Vázquez (2012)
This PhD dissertion aims to study the effectiveness and importance of the localization metadata associated with the translation suggestions provided by CAT tools. The author analyses the way in which localization data and metadata can be represented in the XLIFF 1.2 specification. For this end, a new format called the Localisation Memory Container (LMC) is designed to organize previously-localized XLIFF files. A prototype (XLIFF Phoenix) is also designed to leverage the data and metadata from the LMC into untranslated XLIFF files in order to improve translation processes by helping CAT tools, not only to produce more translation suggestions easily, but also to enrich those suggestions with relevant metadata. In order to test whether this CAT-oriented enriched metadata has any influence in the behaviour of the translator involved in the localization process, an experimental translation task with translators using a modified CAT tool (Swordfish II) is designed. 33 professional translators divided into three groups took part in the experiments. The analysis of the gathered data indicated that groups which received a TM obtained on average significantly better results (less time and better quality scores) than the group which did not receive any TM. In terms of participants' attitude towards the metadata received, most of the participants did not find

[22]This study shares many aspects of the research design of this PhD dissertion since both investigations belong to the same overall project, i.e. the TRACE (*Traducción Asistida, Calidad y Evaluación*) project.

it distracting, and the majority of them would prefer a TM which contained metadata. Finally, half of participants could mention a case where it was helpful for them.

4.6.1 Discussion

In order to offer an overview of what has been researched so far by means of empirical TM studies, in the second part of this chapter we have review a collection of eighteen empirical TM studies. The aim of this short literature overview was to have a better understanding about the nature, applications and influences of TM technology and the way translators interact with it.

This list of references may not contain all available empirical studies of TM, but we hope that it may be seen as representative of empirical TM research that has been carried out so far. Along with the conclusions reached by Christensen and Schjoldager (2010), we shall now summarise some specific knowledge documented by the empirical studies that were reviewed in this chapter. This review of empirical TM research shows that various methods can be employed to explore the use and impact of TMs. Mandreoli et al. (2006) and Colominas (2008) base their findings on technical test runs. Christensen (2003) combines technical test runs with analyses of textual corpora. Lange and Bennett (2000) conduct a case study, in which they apply a mixture of evaluative and descriptive (quantitative) methods. Fulford and Granell-Zafra (2005), Dillon and Fraser (2006) and Lagoudaki (2006) carry out rather large-scale questionnaire surveys. Dragsted (2004, 2006), Vilanova (2006), Wallis (2006), O'Brien (2006, 2008), Biau (2007), Liparini (2010), Teixeira (2011), Martín Mor (2011) and Morado Vázquez (2012) use experiments with simulated translation situations involving different tools to document translators' performance by means of advanced recording software, namely key-stroke logging (Translog), eye-tracking (Tobii), screen recording (Camtasia/Flash Back Recorder), as well as the use of translators' retrospective verbalisations in some cases in order to triangulate results.

From this literature review, it can be claimed that empirically documented knowledge about the nature and applications of TM systems and translators' interaction with them is still scarce and somewhat fragmented. The translation profession itself will also welcome more knowledge about the translators' perspective on TM technology. In particular, more research is needed on how translators interact with TM technology and on how it influences translators' cognitive processes and outputs.

Following Christensen and Schjoldager (2010) empirical TM research may be divided roughly into three different areas according to authors' interests

and orientation:

1. A *technology-oriented* approach where the main aim of the TM research is to measure and enhance software engines (i.e., Mandreoli et al. (2006) and Colominas (2008)). The focus is on the technology rather than on the human translator.

2. A *workflow-oriented* approach with a view to productivity, management and QA issues when using TM systems (i.e., Lange and Bennett (2000), Wallis (2006), Bowker (2005), Morado Vázquez (2014)). The focus of this line of research is on translation as a profession.

3. A *translation-oriented* approach —named *translation-theoretical* by Christensen and Schjoldager (2010)— where the main aim of the research is to know more about how TM technology shape and affect the way in which human translators actually do their work (i.e., Christensen (2003), Dragsted (2004, 2006), Fulford and Granell-Zafra (2005), Dillon and Fraser (2006), Vilanova (2006), Lagoudaki (2006) and O'Brien (2006, 2008), Biau (2007), Liparini (2010), Teixeira (2011), Martin Mor (2001)). The focus of this line of research is the impact of technology on the translator's work both as a product and as a process. Our study here would belong to this third line of research.

4.7 Conclusions

This chapter has given an account of automated translation and has provided a description of the basic functionalities of TM systems. Based on the literature on TM technology in general, we have sketched the history of the conception of TM tools as an aid for professional translators and we have provided an overview of some basic definitions and applications. While TM systems may differ as far as applications, internal processes and interactive modes are concerned, all TM technology shares the basic function of deploying existing translation resources in a new translation project. Based on the description of TM systems, it seems logical to explore the potential impact that the interaction between the translator and the TM system may have in the translation as a product. A number of references have been presented in the second part of this chapter exploring different aspects of translation automation and TM from an empirical perspective.

The following section presents the set of hypothesis that have been formulated in connection with the research questions presented in the Introduction.

4.7.1 Set of general hypotheses

Resulting from the descriptions and discussions presented in the three first chapters, a set of hypothesis have been generated concerning the potential effects on the final translation of integrating a TM system is the translation process.

The hypotheses presented below are motivated in part by the empirical findings presented by the different research studies presented in section 4.6 and in part by the overview on explicitation shifts in translation presented throughout Chapter 3. They have been formulated in the form of null hypotheses so they can undergo verification to determine whether they should be accepted or rejected in favour of an alternative proposition. These hypotheses will constitute points of departures for the analyses presented in chapter 7.

General hypothesis

H0: The integration of a TM system into the translation process has no impact on translation-inherent explicitation traces in TTs (null hypothesis).

Bearing in mind the kind of interaction taking place when working with a TM system and the set of general assumptions presented in Chapter 3.11.1, the following additional hypotheses will be hold in this study.

The use of TM systems has important implications in terms of text re-use and handling of different TM matches retrieved by the system. As mentioned in section 4.4.5.4, the TM suggestions presented to the translator can be accepted, adapted or rejected at the translator's discretion. Since the focus of this study is on translation-inherent explicitation and the possible effects of the integration of a TM system in the translation process, no text-reuse was included in the experimental task proposed to the translators so they could base their translation options on their own translational criteria, being able to evaluate the actual role played by the TM system and they way they introduce explicitation traces in the translation. For this reason, Among the possible features of TMs for which it could be hypothesized to have an impact on the target texts they produced, only automatic text segmentation and access to visual context have been selected to formulate further hypotheses.

Automatic text segmentation

The strong focus on the sentence while translating associated with the use of a TM to translate can be expected to have different text-related effects. One of this effects could be expected to be observed in the form of different

explicitation shifts as shown in the TT. To investigate whether the TT is indeed affected by the automatic segmentation proposed by a TM system at the sentence level the following hypothesis will be evaluated:

H1: The automatic text segmentation associated to the integration of a TM system into the translation process has no impact on translation-inherent explicitation when it comes to the *addition* of implicit to explicit cultural and contextual references in the TT.

H2: The automatic text segmentation associated to the integration of a TM system into the translation process has no impact on translation-inherent explicitation when it comes to the *specification* of phoric elements by their actual reference (replacement of pronouns) in the TT.

H3: The automatic text segmentation associated to the integration of a TM system into the translation process has no impact on translation-inherent explicitation when it comes to the *addition* of newly cohesive devices in the TT.

H4: The automatic text segmentation associated to the integration of a TM system into the translation process has no impact on translation-inherent explicitation when it comes to the *specification* of lexical items (replacement of hyperonyms by hyponyms nouns) in the TT.

Access to visual context

Different TM systems cope differently with the degree of visual context that they offer to the translator, i.e. removing the layout information of the ST and replacing it by tags surrounding the segment being translated. In order to examine how translators actually handle this when they translate using low visual context translation editing environments the following hypotheses will be evaluated:

H5: The loss of visual context information associated to the integration of a TM system into the translation process has no impact on translation-inherent explicitation when it comes to the *addition* of implicit to explicit cultural and contextual references in the TT.

H6: The loss of visual context information associated to the integration of a TM system into the translation process has no impact on translation-inherent explicitation when it comes to the *specification* of phoric elements by their actual reference (replacement of pronouns) in the TT.

H7: The loss of visual context information associated to the integration of a TM system into the translation process has no impact on translation-inherent explicitation when it comes to the *addition* of newly cohesive devices in the TT.

H8: The loss of visual context information associated to the integration of a TM system into the translation process has no impact on translation-inherent explicitation when it comes to the *specification* of lexical items (replacement of hyperonyms by hyponyms nouns) in the TT.

The first two research questions (R1 and R2), which asked: "Is explicitation is a feature of English into Spanish technical texts (software user guides and marketing collaterals)?" and "do patterns of explicitation vary depending on the translation editing environment used to translate?", will be examined by testing theses hypotheses.

* * *

This and the previous chapters have presented the theoretical framework on which our empirical study is based. Resulting from the descriptions and discussions of previous research, a set of hypotheses have been generated concerning the effect of integrating TM systems into the translation process and how this integration may have an impact on explicitation patterns in translation. These hypotheses have been tested in an empirical investigation, whose design and results will be presented in the following chapters.

Chapter 5

Research design and methods

This chapter describes the methodology that was used in the present study both for the pilot test and the main experiment. To begin with, this chapter introduces de TRACE (*Traducción Asistida, Calidad y Evaluación*) project within which we place our research. The following section is devoted to present the theoretical construct that the present investigation relies upon as well as the research variables under study. A detailed account on the selection of the participants as well as the data collecting instruments (e.g. source texts) in the study is also provided in section 5.3.3. The chapter is closed with an account of the methodology conclusions drawn from the running of a pilot test prior to the main experiment in which the whole of research apparatus was put to test. In the interest of clarity the different has been included in the form of Appendixes and referenced in the body of this chapter when required.

5.1 The TRACE project

Generally speaking, CAT tools have been incorporated into the translation process for the following reasons:

- They can save a significant amount of time compared to translating without CAT tools.
- They facilitate managing projects that involve translating a source text into various languages.
- They allow previous translations to be re-used as a language resource for new translations.

- They simplify the handling of files in different formats and facilitate page layout or DTP and final publication of the translations.
- They systematise the translation process so that it can be standardised and protocols can be implemented.
- They establish different professional roles within the translation process, and thus encourage specialisation among translation professionals.

However, despite the above mentioned advantages of using CAT tools to translate, less is know about the actual impact of such tools on the translations that they produce. Little research has been carried out to determine the differences that may exist between texts translated with and without CAT tools, or the impact that the practice of translating using CAT tools may have on the development of TL usage.

5.1.0.1 Project objectives

The project aimed at evaluation the existing differences between translations done with and without CAT tools from a corpus of translations elaborated in different translation editing environments by different profiles of professional translators.

5.1.0.2 Project outputs

- An English to Spanish multiple translation corpus with over 100,000 words translated in three different environments, together with the key-logging data and the screen recording (data on the product & the process). (see Section 6.2).
- A methodology for the analysis and comparison of translations elaborated in different translation environments (inter-subject and intra-subject approach).
- A set of data collection instruments developed within the Tradumàtica Research group to evaluate and control the quality of the research.
- New knowledge on the differences on target text production depending on the translation editing environment used to translate.

5.1.1 Project stages

- STAGE 1 - Research design and creation of collection instruments (September 2007 - June 2008)
- STAGE 2 - Pilot test (June - October 2008)
- STAGE 3 - Main experiment (January - March 2009)
- STAGE 4 - Annotation and implementation of the online corpus (April 2009 - June 2010)
- STAGE 5 - Analysis and results (April 2009 - September 2010)

5.2 The present investigation: methodology

Any specific research methodology is decided upon depending on the object of analysis or description. Historically, explicitation has been studied from a corpus-based approach, i.e. comparing translations against their source texts or against non-translations in the same language. Many of these studies (Baker, 1993, 1996; Øverås, 1998; Pápai, 2004) have even proposed the status of explicitation as a translation universal when analysing certain selected explicitation phenomena(see chapter 3). However, problems with operationalisation, i.e. basic control of the source and workflow behind the texts that made up the corpus of analysis, continue to limit the results of this kind of research to just some manifestations of explicitational behaviour that may be affected by many possible confounding variables[1].

As pointed by Neunzig and Tanqueiro (2007), TS have only recently adopted the formalism of the social sciences as well as the methodology from other scientific approaches arguing that, even when theoretical principles seem to well explain the phenomena observed within a specific field, theoretical constructs can only acquire a scientific and epistemological status if they can be operationalised, that is, if they can be validated through systematic and experimental observation.

To this end, the present study is based on a series of experiments in which 90 professional translators translated three different texts from English into Spanish under experimental conditions. The experiments were carried out at the Universitat Autònoma de Barcelona from January 2009 to March 2009 on a computer lab. The translations resulting from the experimental sessions (a total of 270 translations) where compiled in an online multiple translation corpus (see chapter 6) and subjected to analysis (see chapter 7) accordingly

[1]Apart from Denver (2007, 2009), we don't know of any other studies which purport to offer new insights into explicitation phenomena analysing translations resulting from a controlled experiment.

with the aims of this study, cf. Introduction.

5.3 Experiment design

Our theoretical hypothesis is that translations done with or without a translation memory-mediated environment differ in terms of linguistic properties, being explicitation traces a possible candidate to discriminate between translations done with or without CAT tools. The aim of our research is not to establish which translation is "better" depending on the amount of explicitation traces that can be found on a text, but *to establish how translations differ in relation to this parameter (i.e. explicitation) on the basis of the editing environment used to translate according to whether a translation memory is used or not.* The ultimate goal is thus to be able to compare translations products resulting from different translation processes (Sánchez-Gijón et al, 2010; Torres-Hostench et al, 2010).

As pointed out in the Introduction, the research in this study was devised with the following aims in relation to explicitation as a deliberate strategy used by professional translators:

1. **R1:** *Is explicitation a feature of translated English to Spanish technical texts (software user guides and marketing collaterals)?*

2. **R2:** *If the answer to R1 is positive, do patterns of explicitation vary depending on the translation editing environment used to translate? In other words, do shifts in explicitation could be used to discriminate between translations done with and without integrating a TM system in the translation process?*

3. **R3:** *Is there a correlation between the tendency towards explicitation and translator's profile depending on the translation editing environment used to translate?*

In designing a research plan to satisfy the above-mentioned aims, a series of methodological decisions were made. 1) Firstly, it was decided to carry out an experiment using professional translators working in a simulated real-world environment. 2) Three different translation editing environments involving a variable degree of translation automation were selected (see Section 5.3.2). 3) Three different texts from the field of localisation (software

user guides and marketing collaterals) were selected as data collection tools. 4) Among the different possibilities to explicitate between ST and TT, a selection of 10 different focus points in each text were selected. 5) In order to measure consistently explicitation traces between translations, a corpus driven methodology was selected in order to retrieve and explore the data collected under experimental conditions.

Further details about the research variables of our research will be presented in the following sections.

5.3.1 Dependent variable: explicitation in translation

Based on the literature review on explicitation in translation presented in chapter 3 and in order to measure explicitation traces in TTs under experimental conditions, the following explicitation-related categories were established to analyse the collected data:

- The proportion of implicit to explicit cultural and contextual referents (*addition*).
- The proportion of phoric to fully lexical (auto-semantic) phrases, i.e. replacement of pronouns (*specification*).
- The number of newly introduced cohesive referents per discourse segment, i.e. introduction of explicit cohesion markers between sentences (*addition*).
- The use of lexical specification; i.e. replacement of general terms for more specific ones (*specification*).

These parameters to measure the appearance of explicitation traces in TTs are the four dependent variables of our study and they are partly based on the previous findings made by the corpus-based project CroCo from Saarland University (Germany)[2]. These parameters aim at providing further data for explicitation research that can also be tested under experimental conditions in technical texts translated both with and without a TM. All four categories can be classified under the translation-inherent explicitation category proposed by Klaudy (1998), since the translators will have to decide (consciously or unconsciously) whether she wants to explicitate.

[2] *Das Projekt CroCo*: Sprachliche Eigenschaften von Übersetzungen - eine korpusbasierte Untersuchung für das Sprachenpaar Englisch-Deutsch (DFG-Projekt), http://fr46.uni–saarland.de/croco/index_en.html [Accessed: 15/12/2013]

A list of examples is provided below for each of the four explicitation-related dependent variables under study (the Spanish target sentences show explicitation traces in underlined text):

1. **Implicit to explicit cultural and contextual referents**[3]:

   [ST – English] Pittsburgh, PA 15260
   [TT – Spanish] Pittsburgh, PA (Pensilvania – EUA) 15260

   Rationale: Cultural information about the state and the country is added in the Spanish translation. Three focus points of this category were measured in a nominal scale of 0 or 1 (absence/presence) for each of the three texts in the experiment.

2. **Phoric to fully lexical (auto-semantic) phrases**[4]:

   [ST – English] SpyPredator [...] It can be downloaded from our website.
   [TT – Spanish] SpyPredator [...] SpyPredator puede descargarse desde nuestro sitio web.

   Rationale: The pronoun *it* is replaced in the Spanish translation by its actual reference (the name of the software product). Only one focus point of this category was measured in a nominal scale of 0 or 1 (absence/presence) for each of the three texts used in the experiment.

3. **Newly introduced cohesive referents per discourse segment**[5]:

   [ST – English] Be sure to un-check "Don't create a Start Menu Folder"; this parameter creates a program group on your start menu.
   [TT – Spanish] Asegúrese de desactivar "No crear una carpeta en el menú Inicio". En caso de que este parámetro este activado, se creará un grupo de programas en el menú Inicio.

   Rationale: The translator makes explicit the cause-and-effect relationship between these two sentences by adding a conditional clause at the beginning of the second sentence. Three focus points of this category were measured in a nominal scale of 0 or 1 (absence/presence) for each of the three texts used in the experiment.

[3]Focus point sample from ST 1 (see Appendix B.1)
[4]Focus point sample from ST 1 (see Appendix B.1)
[5]Focus point sample from ST 1 (see Appendix B.1)

4. **Lexical specification**[6]:

   [ST – English] Spyware refers to...
   [TT – Spanish] El término spyware o software espía hace referencia a...

   Rationale: The Spanish version of this sentence offers, apart from the loanword which is also used in Spanish, a more explicit and transparent equivalent for the English term. Three focus points of this category were measured in a nominal scale of 0 or 1 (absence/presence) for each of the three texts used in the experiment.

For a complete list of focus point and their categorisation in the three STs of this study, please refer to Appendix B.

5.3.1.1 Focus points

After selecting the STs for the study (see Section 5.3.5), which were common for all researchers working in the TRACE project, a first selection of possible triggering explicitation indicators, i.e. focus points, were selected according to the four explicitation-related categories presented above.

An alternative to zooming in on such focus points would have been to analyse all translated segments in the text. However, using only certain focus points, we should be able to evenly correlate the findings of our study among different participants as well as with the findings of future studies involving other variables using the same STs.

In a preliminary phase, the first selection of focus points was based on our personal judgement as a professional translator. In order to test the validity of our own selection of focus points, the three selected STs were sent to be translated by a LSP in Madrid (i.e. Hermes Traducciones y Servicios Lingüísticos, SL) giving them instructions of the translation editing environment (see Section 5.3.2) that the translator should use to complete the translation assignment.

The resulting translations provided by this LSP made it possible to validate our initial proposal of focus points, since many of them proved to trigger explicitation traces on the part of the translators three translators who completed the task. Moreover, other focus points which had not originally been considered and which also proved to be highly informative were accordingly introduced in order to fine-tune the final selection of explicitation-related focus points in the STs.

[6]Focus point sample from ST 1 (see Appendix B.1)

On a final stage, all focus points chosen in the three STs were submitted for external evaluation by university lecturers in Translation (language pair English to Spanish). Using a questionnaire, these lecturers from four different universities[7] were invited to validate whether or not each of the focus points selected was appropriate for measuring any of the four dependent variables under study. Appendix C shows the questionnaire that the seven university lecturers in Translation had to complete in order to validate our final selection of focus points. The results of this external validation also supported our proposal of focus points and no further changed had to be introduced.

5.3.2 Independent variable: translation editing environments

In order to investigate the impact of CAT tools in translated texts, the following three conditions were selected as independent variables of our research:

1. **Condition 1**: Translation task without using a CAT environment. The translation task was performed using Microsoft Word 2003, the most commonly used word processor in the translation field at the time of the study (summer 2008 for the pilot test and winter 2009 for the final experiment). This translation editing environment will be referred to as E1 henceforth.

2. **Condition 2**: Translation using a CAT environment. With respect to this condition the following distinction was made:

   (a) *Condition 2.1*: Translation task using a CAT environment with a WYSIWYG[8] interface. Translation under this condition was performed using a combination of SDL Trados Translator's Workbench 2007 and Microsoft Word 2003. This translation editing environment will be referred to as E2 henceforth.

   (b) *Condition 2.2*: Translation task using a CAT environment without a WYSIWYG interface. Translation under this condition was performed using a combination of SDL Trados Translator's Workbench

[7] The university lecturers involved in the final validation of the focus points were: Carlos Gómez, Dr Anna Matamala and Dr Mariana Orozco from the Universitat Autònoma de Barcelona; Dr Eduard Bartoll from the Universitat Pompeu Fabra; Dr Ricardo Muñoz from the Universidad de Las Palmas de Gran Canaria; Dr Míriam Seghiri from the Universidad de Málaga.

[8] Acronym for "What You See Is What You Get"

2007 and SDL Trados TagEditor. This was the usual combination of tools when translating tagged files using SDL Trados 2007 or previous versions of the tool. When using TagEditor as a translation editing environment, translators do not necessarily see the layout of the ST, but only plain text surrounded by tags. This translation editing environment will be referred to as E3 henceforth.[9]

The distinctive features of the three conditions of our independent variable manipulated are presented in Table 5.1:

	Automatic segmentation	**Layout information**
E1: MS Word 2003 text processor	–	+
E2: MS Word + SDL Trados TWB 2007	+	+
E3: TagEditor + SDL Trados TWB 2007	+	–

Table 5.1: Distinctive features of the three translation editing environments in the experiment

As can be seen in Table 5.1, automatic text segmentation while translating and the degree of visual layout information to which the translator has access while editing the translation are the two main features that differentiate these three conditions in the experiment. Both E2 and E3 are translation memory-mediated environments while E1 is just a traditional text processor with no specific features for translation automation.

It is important to note that the use of a TM in either E2 or E3 did no imply any kind of text re-use from previously translated sentences. The TMs provided in this experiment for E2 and E3 were completely empty, so translators could not base their translations on previously translated segments that might affect or restrict their own approach to translation and the translation editing environment being used. Should this have been the case, it would have been impossible to determine whether more or less cases of explicitation were attributable to the translation editing environment used or the role played by any possible reference material coming from the TM.

[9]Depending on the format of the source file, TagEditor also offers a preview option to view in context the segments that are being translated (i.e. HTML files). However, this was not the case for E3 in the experiment, since the three STs used in E3 were ready-made translatable *.ttx files converted from FrameMaker files (*.mif) for which TagEditor does not offer full layout preview without a subsequent conversion.

5.3.3 Controlled variables

Theoretical science has defined criteria based on experimental accuracy that must be observed when considering an experiment to ensure the validity of the results. Controlled variables must remain constant and must be observed as carefully as the dependent variables in order to guarantee the validity of the results derived from our research.

Experiments in the field of TS usually take participants and STs as two of the main variables that must be controlled in order to guarantee the internal validity of the study.

5.3.4 Participants

The analyses of the present study were based on data from a fairly high number of participants, i.e. 90 professional translators. It is assumed that the higher the number of participants in a study is, the more likely it is that the findings can be interpreted as correlates of real-world circumstances. Having decided to carry out an experiment using professional translators as experimental subjects, the following selection criteria were established:

- All participants in the study should have formal training in translation (e.g. a university degree);
- English into European Spanish[10] should be among their main professional language combination.
- They should have experience in translating technical texts in the field of localisation (i.e. software user guides and software marketing collaterals)
- They should be familiar with the use of a CAT tools —particularly with SDL Trados 2007 software—, so as to be able to translate in any of the three environments proposed in the experiment with no external assistance.

The selection of participants was made on the basis of their replies when completing a selection questionnaire (see Appendix E)[11].

[10]It was considered important that all participants should have the same Spanish language variety (Peninsular Spanish) since the inclusion of Latin American Spanish speakers in the sample could certainly work as a confounding variable for the manifestations of some of the dependent variables in the study.

[11]The on-line version of the selection questionnaire can be accessed from the following URL: http://www.surveymonkey.com/s.aspx?sm=z3rh7kuKbzGRJkSpFZKPfw_3d_3d [Accessed: 20/05/2013]

As expected from the selection criteria presented above, the four main blocks of information gathered from this selection questionnaire for the selection of participants were: 1) personal data, 2) years of experience as professional translators, 3) fields of specialization in translation, and 4) instrumental competencies using CAT tools. This questionnaire was circulated over the Internet by three translation mailing lists (e.g. Tradumàtica, INFOLING and Zèfir) as well as by direct professional contacts in the main LSPs[12] in Barcelona area.

The information collected from these four blocks in the questionnaire was used to define the three subject profiles in our study (see Section 5.3.4.1). A total of 186 translators replied to our call from which a group of 106 finally came to university to translate under experimental conditions for the TRACE project. From those 106 a final sample of 90 translators was selected for this study, since they were the one who fitted best in the three subject profiles in the study and for whom we could fully gather information on both the process and product of translation (see Section 5.5.4), i.e. no data were lost. Each participant taking part in the experiment was paid 100 euros for completing the three tasks included in the experiment.

5.3.4.1 Translator profiles

As noted above, the study analysed data from 90 professional translators with varying degrees of experience. No attempt was made at recruiting and equal number of men and women. Recruitment of professional translators is a difficult task in itself due to time and agenda constrains and, in a profession which is dominated primarily by women, a recruitment requirement which stipulates an equal number of men and women would have made recruitment even more problematic. Although the possibility could exist that gender imbalance may affect the results, it was not anticipated that these differences would be decisive to our results.

This study makes a distinction among three groups of translators which is mainly based on two sets of distinctive features: 1) translation expertise in terms of years of experience translating as a professional translator, 2) revenues derived from professional translation services. The purpose of having three groups of participants was to make observations on potential differences on the product by different levels of experience (novice) and different working conditions (freelance/in-house) within the language industry.

[12]The list of LSPs in Barcelona which helped in the call for participants were: Alpha CRC, Ampersand, iDisc Information Technologies, INK Catalunya, Logoscript, MSS and T&I Traducciones y Tratamiento de la Documentación.

Given the above selection criteria the differences between the three profiles of translators in this study can be defined according to the distinctive features shown in table 5.2:

Definition of profiles	Novice (n=18)	In-House (n=18)	Freelance (n=54)
– Formal translator training	+	+	+
– English into European Spanish as main language combination	+	+	+
– Acquaintance with translation of software guides and marketing collaterals	+	+	+
– Proficient use of SDL 2007 Trados CAT tool	+	+	+
– At least 3 years of professional experience	–	–	+
+ 50% of income from professional translation services	–	+	+

Table 5.2: Definition of subject profiles in the TRACE study

The novice profile consisted of 18 translators[13], being their distinct feature the fact of having less than 3 years of experience, yet already working as professional translators (none of them were translation students), but not having still a minimum amount of 50% income deriving from translation jobs. The in-house translator profile also consisted of 18 translators, all of them making a living out of translation as a full-time job but not always having more than 2 years of experience as in-house translators. Finally, the biggest sample of translators in the study is that made up by freelance translator with a total of 54 participants[14]. These professional translators had more than 3 years of experience and translation was the main source for their income.

5.3.5 Source texts

The corpus compiled in this study (see chapter 6) originates from translating three different STs from English into Spanish under three different translation editing environments. These three texts belonged to the following two genres: software user guides and software marketing collaterals. Any of the three selected texts for the study had a known Spanish translation as of January 2009.

[13] 18 participants was the minimum amount of subjects required in the study in order to fully randomize the tool order presentation in the experimental task (3 STs to be presented under 3 translation editing environments, repeating this measure at least 3 times for each tool order combination).

[14] 54 participants is a sample consisting of three times the minimum amount of participants to fully test a complete range of text/environment order combination, i.e. 18x3 participants.

Text 1 (T1) presents the instructions issued by the computer service at the University of Pittsburgh about how to install spyware protector software. Text 2 (T2) is an extract of the instructions accompanying a palm software application used in medical settings to control and issue prescriptions to patients. Text 3 (T3) is the marketing text accompanying the user guide for a handheld device to keep stock data in business (Full texts are presented in Appendix A).

Despite being considered specialized texts, both genres (i.e. software user guides and marketing collaterals) don't make use of highly specialized language and are persuasive in nature, being their overarching communicative goal to build up trust among potential customers and users. As to their communicative purpose, this type of texts typically serve to:

- Get across potential customers and users.
- Transmit a positive and trustful image about the product.
- Provide an account of the main features of the software in question.

Both genres are also comparable in terms of authorship. No author is not known and elaborate non-literal language models should not be found. Denotation is thus the main linguistic function present in these kinds of texts.

The reason why these two genres were chosen as STs in the present study is a practical one: texts belonging to these genres are generally translated making use of CAT tools, but it can also be imagined a scenario where they are translated without any kind of translation automation (e.g., a word processor - E1).

The classical translation approach taken to translate these texts was also taken into account when selecting the STs for the experiment. House (1997) famously distinguishes between two different modes of translation, overt and covert[15]. The distinction between overt and covert should not be seen as a strict dichotomy. Overt and covert should be seen as the two endpoints of a line ranging from rather 'literal' translations on the one end (as it should be expected for the genres used in this study) to rather 'free' (non-literal) translations on the other end (House 1997). The two genres in

[15]To put it in short, overt translations are characterized by an effort to the translator to stay as close to the ST as possible. When translating overtly, the translator will not have to look for a match between the communicative function of the ST in the SL community and the communicative function of the TT community, since both tend to be exactly the same. This contrasts with a covert translation approach, where the translator tries to produce a TT that fulfils in the source culture. In order to achieve this, the translator may apply a "cultural filter" that brings the TT in line with the communicative conventions of the target culture. In this way, the process of covert translation often results in a TT that deviates considerably from the ST. In overt translation, on the other hand, no cultural filter is applied.

the STs selected for the study were also chosen because they are located somewhere in the middle between overt and covert. This characteristic makes our STs good candidates for an investigation of explicitation shifts depending on the translation editing environment used to translate. If a TT deviates considerably from its ST, as it is the case in 'purely covert' translations, it won't be a good candidate to be translated using any kind of translation automation tool, since there will be many passages where sentences or parts of sentences have been omitted, added or rearranged, making the identification of shifts difficult or even impossible.

The three STs in the study were manipulated with two aims in mind. Firstly, the experimental texts had to be comparable with respect to the total number of words. Secondly, the levels of text difficulty should also be comparable in order not to make the text difficulty a confounding variable which could compromise the results of study. Thus, the three texts used in the experiment had to be comparable in length and complexity in order to provide a uniform framework for comparison.

The experimental texts were made rather short, but long enough to include enough focus points of the dependent variables under study (see Section 5.3.1). The word-counts for each of the three texts in the experiment are as follows: T1: 528 words, T2: 472 words and T3: 418 words. An average of 500 words was considered not to be a too demanding task for professional translators used to translating technical texts with CAT tools.

5.3.5.1 Source text complexity

The comparable levels of complexity of the experimental texts were established using two quantitative indicators: 1) measurements of readability, and 2) calculations of word frequency.

When it comes to not highly specialized texts, it is assumed that these objective measurements, to some extent, indicate the level of difficulty experienced by the participants when comprehending for translation. While readability indices have traditionally focused on difficulties related to certain aspects of text comprehension only (Nation 2001: 161), Jensen (2009) suggests how readability indices can also be used to assess the relative amount of both production and comprehension effort needed during translation.

5.3.5.1.1 Readability measurement :

Readability indexes measure how easy to read and comprehend a document is, assuming the readers are identical in understanding of the subject matter. The ease with which the text is likely to be understood has attracted the attention of many scholars as early as the 1930s (Gray and Leary 1935). More

recently, Nation (2001: 161-162) pointed out that readability formulas mostly focus on what is easily measurable, i.e. word length and sentence length. Factors such as prior knowledge, motivation, rhetorical structures, etc., would certainly be valuable for assessing text comprehensibility but such factor are not easy to include into an algorithm as they are difficult to quantify. For this reason most readability indexes are only based on counts of syllables, words and sentences.

Four reading index formulas were used in this study to measure the level of readability for the three experimental texts: the Automated Readability Index[16] (ARI), the Coleman-Liau index[17], Gunning Fog index[18], and the SMOG index[19]. These four indexes return the U.S. grade level that the reader must have completed in order to fully understand the text.

All four readability indexes for Text 1, Text 2 and Text 3 showed a relatively similar score, yet not identical, in the level of complexity. The U.S. grade level indexes revealed that an average of 11 years of schooling was needed to successfully comprehend Text 1; 8,8 years of schooling was needed to successfully comprehend Text 2, while 11,9 years of schooling was needed to successfully comprehend Text 3. According to these measures Text 2 would be the easiest to understand and Text 3 would be the more difficult[20].

[16]Automated Readability Index: ARI = 4.71*characters/words+0.5*words/sentences-21.43. Unlike the other indices, the ARI, along with the Coleman-Liau, relies on a factor of characters per word, instead of the usual syllables per word. Although opinion varies on its accuracy as compared to the syllables/word and complex words indices, characters/word is often faster to calculate, as the number of characters is more readily and accurately counted by computer programs than syllables

[17]Like the ARI but unlike most of the other indices, Coleman–Liau index relies on characters instead of syllables per word. Coleman-Liau Formula = *5.89*characters/words-0.3*sentences/(100*words)-15.8.*

[18]Gunning-Fog Readability Formula: FOG Index = 0.4 (ASL + TSW), where ASL is the Average Number of Words in a sentence and TSW is the Number of Trisyllabic Words per 100 words. The trick in counting TSW is that proper words, compound nouns, and verb conjugations do not count. For example "determination" is a trisyllabic word but "opening" is not.

[19]The SMOG-Grading for English texts was developed by McLaughlin in 1969. Its result is a school grade. SMOG index Formula: *SMOG-Grading = square root of (((wds <= 3 syll)/sent)*30) + 3.*

[20]Averages from *Online-Utility.org* (http://www.online–utility.org/text/analyzer.jsp) and *Editcentral* (http://www.editcentral.com) were used to calculate these index scores. Both websites return the complexity scores of a text which is entered into an online query box by the user, but since the results for some of the indexes were not the same between these two tools, we decided to work with the means of each index resulting from these two utilities.

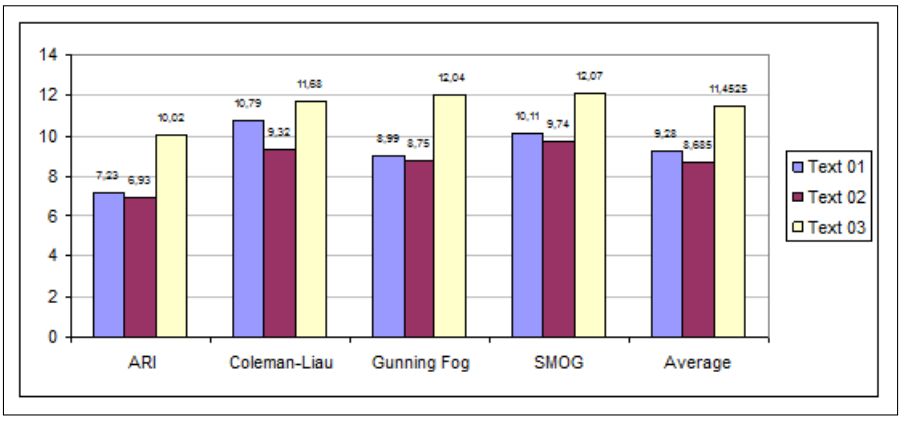


Figure 5.1: Source text complexity automatic scores

It is important to notice here that readability indexes are only sensitive to the surface structure of a text (Jensen 2009: 68) and they don't fully grasp all the complexities surrounding technical texts as it is the case. These indexes were developed with text comprehension in mind and they cannot give us conclusive evidence of how difficult a translator perceives a text to be or how much translation effort is needed to translate it. However, one could hypothesise that these indexes can provide us with some idea of the amount of effort that will be invested in the production of a TT, assuming that text comprehension and text production (and memory) are inseparable parts of the translation process (Gile 1995: 162-169).

As noted before, the indexes reported above base their scores on calculations of character length, sentence length and syllable length, and they fall short of making predictions about the perceived difficulty of single words or compounds.

5.3.5.1.2 Word frequency : Based on the common assumption in cognitive psychology that there is a relationship between word frequency and word familiarity, Jensen (2009: 69) suggests that word frequency can also be used to estimate the relative amount of effort needed to process a given word. The frequency with which a word appears in the real world as reflected through corpora such as the British National Corpus is assumed to mirror the amount of effort that a translator will have to put into the processing of it (Read 2000: 160).

Less frequent words, i.e. words that occur less often than high-frequency words, are expected to demand more cognitive resources than high-frequency words, which are more familiar to the reader. Evidence from psycholinguistic experiments has shown that lexical retrieval time and word frequency correlate

as less frequent words are retrieved more slowly than high-frequency words. In the present study, the words in the experimental texts were grouped according to frequency: one group consisted of high-frequency words and one group consisted of less frequent words.[21] Less frequent words were defined as words that are among 1,001-10,000 most frequent words (K2-K10 words). High-frequency words were defined as words that are among the 1-1,000 most frequent words (K1 words). In Figure 5.2 below, the number of less frequent words is compared with the number of high-frequency word in the three experimental texts.

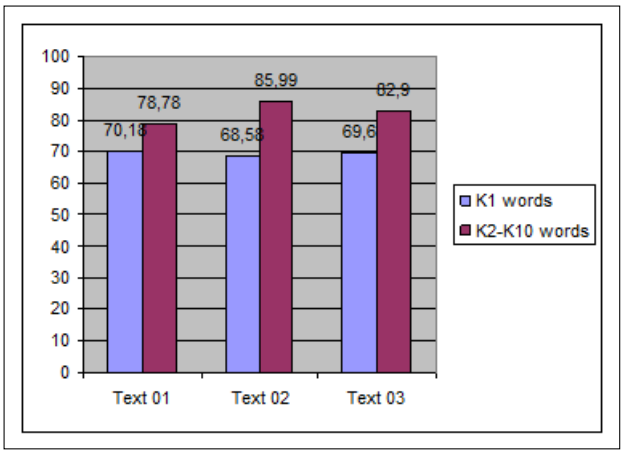


Figure 5.2: Source text word frequency scores

As shown in Figure 5.2, the word frequency measurements show that the three texts are comparable in terms of word frequency and thus in terms of processing effort. However, it should also be mentioned that the use of these two groups of frequency bands (K1 and K2-K10) as a reflection of ST difficulty is not entirely unproblematic since words that belong to the K2-K10 bands may indeed not be perceived as being difficult compared to words which belong to the K1 band, but still an external validation is provided to prove that there is at least a formal similarity among the three texts in the experiment.

5.3.5.1.3 Summary and discussion of source text complexity : As pointed by Hvelplund (2011: 93), the level of difficulty of a text is inherently problematic to gauge, as the experience of a text's level of difficulty varies between individuals. A complex text is not necessarily difficult to translate by everyone —it depends very much on the previous projects, skills and

[21] Word frequencies are based on the British National Corpus as a reference.

specialisation of the translator (e.g. Jensen 2009: 62-63). However, since a complex text is often experienced as a difficult text, these relatively crude measurements can be proposed as indicators of anticipated ST difficulty when designing an experiment.

Indicator	**Text 01**	**Text 02**	**Text 03**
Readability	9.6	7.2	11.2
Word frequency K1	70.18	68.58	69.9
Word frequency K2-K10	78.78	85.99	82.9

Table 5.3: Summary of source text complexity indicators

We are aware that the set of indicators discussed above in relation to the measurement of ST complexity is not exhaustive. Other indicators could have been employed in order to further gauge the anticipated comparability of STs used in this study. For instance, syntactic structures could have been compared among texts instead of limiting to the word surface. Nonetheless, the two indicators used in the present study are expected in principle to provide a good general indication of ST similarity and complexity.

5.3.6 Presentation sequence of source texts

A randomised presentation sequences of the ST were introduced in order to minimise the risk that significant observations had to do (in part) with a repeated presentation sequence. In the presentation sequence design used in this study, each of the three experimental texts under each of the three translation editing environments conditions was systematically presented an equal number of times in different positions. The design used in the present study was decided heuristically after testing and rejecting other potential presentation designs. The first design that was tested was the so-called 'default' design:

Participant	1	2	3	4	5	6	7	8	9	10	...
Initial	T1	T1	T1	T1	T1	T1	T1	T1	T1	T1	...
Medial	T2	T2	T2	T2	T2	T2	T2	T2	T2	T2	...
Final	T3	T3	T3	T3	T3	T3	T3	T3	T3	T3	...

Table 5.4: Default presentation sequence for a full set of 18 participants

Colour codes: *white background* = E1, *light grey background* = E2, *dark grey background* = E3. Character codes: T1 = text 01, T2 = text 02, T3 = text 03.

In the 'default' design shown in Table 5.4 above, all participants would translate T1 first (task 1) and finish by translating T3 (task 3). The translation editing environment conditions would be introduced so that the first text would always be translated in E1, the second under E2 and the third under E3. This design was rejected since the three experimental texts would always be translated under the same environment and it would be impossible to evaluate how the use of different translation editing environments affects the translation of the same ST. Under this design it would also be impossible to control potential confounding variables derived from translating always under the same environment in the same position. Another design was therefore considered. The model below illustrates the presentation sequence in which the text order presentation was rotated: each text was rotated clockwise one step from one participant to the next, and each translation editing environment was rotated counter-clockwise on step from one participant to the next.

Participant	1	2	3	4	5	6	7	8	9	10	...
Initial	T1	T3	T2	T1	T3	T2	T1	T3	T2	T1	...
Medial	T2	T1	T3	T2	T1	T3	T2	T1	T3	T2	...
Final	T3	T2	T1	T3	T2	T1	T3	T2	T1	T3	...

Table 5.5: Rotation of individual presentation sequences for a full set of 18 participants

Each experimental text as well as each translation edition environment would now be presented in initial, medial and final positions a number of times. This design was nevertheless also considered flawed as each translation editing environment is not distributed evenly across initial, medial and final positions. For instance, Text 01 translated under E1 would always be presented in initial position, Text 02 translated in E2 would always be presented in medial position, etc.

A third design was therefore considered, which takes into account this flaw; 'blocks' of 18 translators were rotated clockwise as illustrated in Table 5.6. In this design, texts/environments interactions would occur not only in initial, medial or in final positions, but also occur in the three possible positions. In order to control the environment-order and the text-order variables, a complete environment-order combination was trialled in the pilot study (a total of six) and a simplified text-order combination (a total of three). Not all possible text-order combinations were tested for two reasons: texts are not our independent variable and a full text-order randomisation would have made impossible to handle such a large sample of participants in the study. Thus the number of participants in the pilot study (see 1.3.4 Participants) was determined by the minimum number required to work with all the six possible combinations of translation editing environments (E1/E2/E3) and a minimum of three possible text combinations (T1/T2/T3), i.e. 6x3 (n=18).

Participant	1	2	3	4	5	6	7	8	9	10	...
Initial	T1	T3	T2	T2	T1	T3	T3	T2	T1	T1	...
Medial	T2	T1	T3	T3	T2	T1	T1	T3	T2	T2	...
Final	T3	T2	T1	T1	T3	T2	T2	T1	T3	T3	T2

Table 5.6: Rotation of groups of presentation sequences

By applying the above design, Tex 01 under E1 would then occur in initial position twice, in medial position twice, and again twice in final position for every block of 18 translators. Text 01 under E2 would occur twice initial, medial and final position, etc. Ideally, each combination of text and environment would have occurred in each position three times. However, the current design is considered sufficiently reliable in providing a general framework in which combinations of texts and translation editing environments used to translate are randomised across all participants. This experimental design is expected to yield comparable data when it comes to environment and text interactions.

5.4 Task

The participants in the present study were each tasked with translating three texts under three different translation editing environments (see Section 5.3.2). The participants were informed that data from all three texts would be subjected to analysis by the Translation Service of the university looking for potential contacts to add to their database as well as by researchers at the Department of Translation and Interpreting for research purposes.

A factor which might have contributed negatively to the validity of the data collected would had been to make translators think that their translations would only served as material for the analyses of the present study. As pointed out by Dragsted (2004: 126), this potential problem is probably less of an issue with student translators, who are used to translating for the purpose of having the translation evaluated by a teacher. With respect to professional translators, it could be the case that they feel less responsible for producing a translation that meets their usual quality criteria knowing that their translations would not be applied in a real-life setting. However, the fact it was going to be a paid assignment used also as a translation test by the Translation Service Bureau at the university seemed to be two good reasons to motive participants to come to university to take part in the experiment.

No warm-up texts were introduced in the translation task so as not to increase the time of the whole translation sessions in the interest of the overall ecological validity of the experiment. Furthermore, the choice of not using any warm-up text was reinforced by the fact it was on our own interest not to introduce any translation editing environment prior to the three ones being tested in the experiment. The use of a warm-up text could have certainly acclimatised translators to translate under experimental conditions, but would have also introduced the possible confounding variable of prioritizing one translation editing environment prior to the translation task.

None of the three experimental texts were translated with a time constraint. Each translation session lasted a maximum of one hour and a half and it was more than enough for participants to complete each translation without time pressure regarding the length of the ST. Table 5.7 below show the time schedule for each of the translation sessions that we had to replicate a total of 6 (sometimes in the morning and sometimes in the afternoon) in order to run the experiment among the 90 participants in the final sample under study.

Morning sessions	Afternoon sessions	Agenda (venue)
09:30 h	15:30 h	Welcoming and presentation(common room)
10:00 h	16:00 h	First translation task (computer lab)
11:10 h	17:10 h	Coffee break (common room)
11:30 h	17:30 h	Second translation task (computer lab)
12:40 h	18:40 h	Coffee break (common room)
13:00 h	19:00 h	Third translation task (computer lab)
14:10 h	20:10 h	Signing of informed consent/Payment form and post-translation questionnaire

Table 5.7: Time schedule and task distribution for every translation session

No specific online or offline translation aids were introduced in the task, but they were made available for potential use in the computer. It was assumed that the accessibility to Internet and online dictionaries was part the naturalistic work environment that the translators needed to translate as if they would have done under no experimental conditions. Translators were only advised not to use webmail services during the translation session, because the session was being monitored both in the form of screen recording and key-logging (see Section 5.5.3) and we would have had access to personal data from the participants in the form of passwords and private information in e-mails.

5.4.1 Translation brief

Prior to the running of the experiments in the computer lab of the university, the participants were told that a total of three texts were to be translated from English into Spanish. Prior to every translation session, each participant received a paper hand-out with specific instructions about the location in the computer of the text to be translated and the tool (i.e. the translation editing environment) that they should use to translate. Instructions were also given about how to open, name and save the files in the computer. Appendix G includes an example of the translation briefs that participants could read at the beginning of each translation session can be seen in. The sequence in which this translation briefs were presented to every participant in the study matched the randomisation procedure for STs and the translation editing environments presented in section 5.3.6). The participants were asked to produce translations that would satisfy their usual quality as professional translators.

5.5 The pilot study: methodology aspects

The following section focuses on the methodology conclusions drawn from a pilot test run prior to the final experiments. The aim of running such a pilot test was to guarantee the successful deployment of the subsequent main study as well promoting methodological rigour and scientific validity in experimental research in the field of translation studies, since it is often a phase in research that almost all research know but sometimes far too many seem to ignore. In studies involving experimental interventions, it is essential to conduct these interventions provisionally with a limited number of participants to ensure

both their feasibility and the appropriateness of the various components that make them up.

In this context, a pilot or a feasibility study is a stand-alone experiment designed to test logistics and gather information prior to a larger study, in order to improve its quality and reliability. A pilot study is normally small in comparison with the main experiment and therefore can provide only limited information on the sources and magnitude of variation of response measures. However, the ultimate focus of a pilot study should not be on the results themselves but on the information/insight provided to facilitate the successful running of a full-blown study. Based on the findings from this pilot study, some methodological changes were made in the subsequent main experiment. The data collected in the pilot test was not included in the final findings discussed in chapter 7 because the sample of participants in the pilot study did not fully match the profiles under study in the final experiments. The following methodological criteria were used to assess the successful running of the pilot study: 1) sample size in the pilot test, 2) testing of data collection instruments and hand-outs, 3) testing of measuring instruments and data tabulation, 4) integrity of the experiment protocol, 5) acceptability of intervention.

Each of the above mentioned criteria will be discussed separately in the following sections.

5.5.1 Sample size and randomization procedures

Once the texts and focus points to be used in the experiment had been chosen and validated both internally and externally (see Section 5.3.3), the experiments for the pilot study were conducted. To do this, 18 postgraduate students having English into European Spanish as their main language direction from the master's degree courses in translation technologies at the Universitat Autònoma de Barcelona were invited to participate in the pilot study. These students had received extensive training in the use of SDL Trados 2007 during the previous months as part of their master's degree. Their translator profile was thus similar to that of novice professional translators in the study, i.e. a professional translator with less than three years' experience.

For obvious experimental reasons, none of the participants translated the same text twice or used the same translation editing environment twice in the experimental task assigned following to the experimental design and text rotation discussed in section 5.3.6). The number of participants in the pilot study was determined by the minimum number required to work with all the six possible combinations of translation editing environments (E1/E2/E3) and a minimum of three possible text combinations (T1/T2/T3), i.e. 6x3 (n=18). In order to control the tool-order and the text-order variables, in the pilot study a complete tool-order combination was trialled (a total of six) and a simplified text-order combination (a total of three). Not all possible text-order combinations were tested, since texts are not our independent variable.

5.5.2 Informed consent

With regard to obtaining informed consent from the participants, all of them agreed to donate their translation for research purposes after the running of the pilot test. In order to preserve the ecological validity of the experiment, participants in the pilot study were informed that they were going to take part in an experiment on the use of CAT tools, but no extra information was provided about the actual research object, i.e. explicitation, so as to avoid unnatural behaviour on the part of the participants in regard to this variable. In

the ethical consent form, it was also stated that their participation was voluntary and they had the right to withdraw their consent or discontinue participation at any time. Their individual privacy was also guaranteed in the ethical consent form in all published and written data resulting from the study. Appendix H shows the ethical consent form used both in the pilot test and the final experiment. No changes had to be made in the ethical consent sheets after testing them in the pilot study. Appendix I shows the research ethics approval issued by the research committee at the university (CEEAH - *Comité d'ètica en l'experimentació animal i humana*) taking care of all the experiments that are run at the Universitat Autònoma de Barcelona involving human participants.

5.5.3 Testing of data collection tools and hand-outs

When conducting research where participants are asked to perform a task using software, it is of paramount importance to check that the participants are sufficiently skilled in the use of the software. In the context of this research, it was important to check that the actual impact of the translation editing environment on the translation was due to the environment itself and not to the lack of familiarity on the participants' part with each of the three translation editing environments included in the study. Participants in the pilot study demonstrated sufficient skill in the use of SDL Trados Translator's Workbench 2007, both when used in combination with Microsoft Word 2003 (E2) and with TagEditor (E3) (see Section 5.3.2).

Participants both in the pilot study and the final experiment used clone computers in the same computer lab, with exactly the same hardware and software. Apart from the translation technology that was going to be used in the experiments, other data collection tools (see Section 5.5.4) were also tested in the pilot study to collect data not only about the translation product but also about the translation process. Two methods were used:

1. **Direct human observation**: Participants were supervised without intervention while performing the three translation tasks and the activity in the whole room was logged (answering queries, solving technical problems, control of beginning and end of the session, etc.) while the experiment was being run.
2. **Recording software**: Each computer was equipped with a screen-recording tool (FlashBack Recorder v.2.3) and a keyboard-logging tool (InputLog v. 3.0) to record everything that appeared on the screen or was typed on the keyboard during the pilot study. Mouse activity during translation was also tracked both thanks to FlashBack Recorder and InputLog. These videos and key-logs were subsequently used to ensure that each participant had followed the instructions given for each text (basically, the translation environment used for each translation according to the translation task assigned) as well as to gather information about translation as a process to be included in the corpus derived from this research[22]. This recording software was also used to measure the time needed to translate each of the texts.

From performing the pilot study, we learnt that InputLog software did not work properly in combination with E3 (i.e. SDL Trados Translator's Workbench 2007 + TagEditor). Some participants reported problems with the configuration of their keyboards when typing

[22]The reader should remember that although this is a product-based research, information about the translation process was also gathered and made available for the research community as part of the outputs of this study (see Chapter 6).

accents in Spanish. For this reason, the decision was made to avoid key logging recording in the full-blown study whenever E3 was used. We would lose information about the key-logging process during translation in E3, but it was essential not to compromise the natural running of the translation task. Process data would only be used to triangulate results found on translations as a product.

A pilot study is also the best way to check if the instructions given to the participants for the experimental task are unambiguous and easy to understand. In regard to this point, instructions were successful and the pilot study could be run as planned (see Appendix G). No changes were made in the instructions hand-outs except from asking the participants not to send their translations by e-mail but to save them on the computer. We realised that it was in our own interest to avoid the circulation of translations by e-mail in order to prevent future participants in the final experiment having access to the STs. In order to prevent the ecological validity of the main study, none of the participants should have seen any of the three texts before they were asked to translate them and, since the sample is quite big (n=90) it was likely that participants knew some of the other participants and could circulate the STs prior to coming to university to translate.

5.5.4 Testing of measuring instruments and data tabulation

Piloting the coding protocol for data tabulation is no less essential than piloting the correct functioning of the software used in the experiment. Firstly, it supplies the researcher with first hand experience in applying the conventions and decision rules of the process prior to coding the main sample. Secondly, it assesses whether the researcher's basic interpretations of conventions and decision rules are consistent. Thirdly, the pilot study can identify inadequacies in the protocol itself, such as the need for additional categories for particular variables or additional variables to adequately map the object of research.

For our research, a nominal scale was proposed for measuring explicitation in translations done with different translation editing environments. This scale measured the presence or absence (1 or 0) of explicitation in the 10 possible focus points previously chosen for each of the three texts (see Section 5.3.1.1 and Appendix B). A value to represent if the focus point was not measurable (99) was also predicted. In relation to this, no major problems were found in the coding of data resulting from the pilot study and there was no noteworthy use of 99 in the data collecting file. The coding protocol for data tabulation was thus validated prior to the tabulation of results from the final experiment.

5.5.5 Integrity of the experiment protocol

In order to ensure the replicability required by the scientific method, an experiment protocol which describes all the steps in detail is always necessary so that other researchers can independently perform the experiment and expect to get similar results to the original experiment.

The experiment protocol used in the pilot study was devised in order to test logistics in regard to: *a*) software to be used, *b*) distribution of participants in the computer lab depending on the tool-order and text-order assigned, and *c*) data handling and storage after each translation task.

The experiment did not include any kind of time pressure as an independent variable, but time constraints had to be determined in order to control and handle the three

translation tasks of the experiment. For this reason, a timing track of one hour and a half was assigned per translation assignment. No participant in the pilot study required any extra time to complete their translations. In fact, after the pilot study, we were convinced that participants in the final study (i.e. professional translators) could translate each text in no more than one hour and ten minutes, as that was the mean time used by participants in the pilot study (postgraduate students with a profile similar to that of novice translators).

Time needed to translate in the pilot study was one of the reasons for modifying the experiment protocol in regard to the time allocated for each translation task so the three translation tasks could be done in just one session. The second reason for changing the experiment protocol into a single translation session were the results coming from the statistical analysis performed on the translations resulting from the pilot study. In the pilot study, because of students' schedule incompatibilities, two translation sessions were needed to complete the three translation tasks (two translations on one day and the third the day after). Although the data collected in the pilot study was not finally included in the main experiment results, even with such a small sample in the pilot study (n=18), deviating results were found for the single translation task carried out in the second session, independent of the text translated and the tool used. This would therefore support the belief that all three translation tasks should be carried out in one session in order to preserve the ecological validity of the main experiment.

5.5.6 Acceptability of intervention

A pilot study is also the ideal context to measure if the level of intervention from the researcher during the performance of the experimental task is appropriate. Given the large sample of participants anticipated for the main study –a total of 90 professional translators– it was decided that the final experiment should be undertaken in different sessions. The level of intervention from supervisors during the experiment would thus be the same in all sessions, and their intervention should not compromise the results of the experiment.

Although the experiment did not include any kind of human intervention after the experiment had started (all information gathered about the translation process was being monitored by the screen-recording and the keyboard-logging software), the pilot study was useful in testing the role of the experiment supervisors in the computer lab to help with any queries the participants might have without compromising the ecological validity of the experiment. The protocol stated that, since all the instructions about the experimental task were clearly explained in the hand-outs (see Section 5.4.1), no extra information should be provided by the experiment supervisors in the room. Their role was basically to assist participants in case of software failure or any other kind of help needed by the participants beyond the experimental task. No linguistic queries were answered either, in order not to alter the translation solutions offered by the participants.

In the light of the results obtained in the pilot study, no changes were to be introduced to this end. Questions from the participants in the pilot study did not require any extra intervention from the researchers during the study and no extra questions had to be answered once the experimental task was presented and the translation assignment hand-outs were distributed.

5.5.7 Methodology conclusions from the pilot test

This section devoted to the pilot test have provided a framework to test the appropriateness of an experimental pilot study in the field of translation studies and have suggested several

methodological reasons why a pilot study should always be conducted prior to the final experiment. Regardless of the results obtained from a pilot study (which may or may not be taken into account as part of the main study depending on the experimenter's choice), a number of methodological objectives can always be met in order to ensure methodological rigour and scientific validity. As a result of this pilot study, some changes were made to the way in which the final experiment was to be conducted. Firstly, it was observed that too much time had been allocated for the three translation assignments. Thus, the decision was made to reduce the allocated time so that each text could be translated in a single session, and not in two, in order to reduce the presence of possible external variables that may compromise the ecological validity of the experiment. Secondly, some participants in the pilot study complained about keyboard performance. It was then discovered that only those using E3 were affected, and that the problem disappeared when InputLog, the key-logging software used to record the translation process, was not activated. For that reason the decision was made not to use InputLog software in combination with E3 for the main experiment to collect process data information in the form of key-logging. Finally, the running of a pilot study proved to be highly relevant for improving some organisational aspects of the experiment (i.e. validity of the ethical consent form, hand-outs with the translation assignment, and the role of the experimental supervisors in the computer room).

All in all, it can be said that clear aims and objectives in a well-conducted pilot study will promote the need for these preliminary studies from which the whole research community can learn.

5.6 Conclusions

This chapter has discussed the experimental set-up of the present investigation outlining the main variables under study. Comments and explanations on how the research design was devised when selecting the data collection instruments as well as the participants in the study have also been provided in order to guarantee both the external and the internal validity of the research. In the last section of this chapter a detailed account of the methodology conclusions derived from a pilot test have been presented with the overall aim of fully justifying the choices made in this study.

Chapter 6

Data collection, preparation, coding and analysis

This chapter offers an overview of the corpus derived from the experimental setting of this research. The specific steps taken to assemble the corpus resulting from our research, as well as the data preparation and processing prior to it analysis, are also presented and discussed. The corpus compiled is a multiple parallel corpora formed by several translations for each ST in the experiment, i.e. multiple translation corpora. This type of corpus is presented as a very useful resource to make comparisons for translated texts not only against comparable non-translated texts (as it is the case in many traditional corpus-based studies), but also also against concurrent translations for the same ST. The novelty of the TRACE corpus is that it offers 90 translations for the same three STs with information on both the process and the product of translation, as well as information on the profile of the translators who have contributed to feed the corpus under experimental conditions.

Any corpus study of explicitation has to rely on a number of choices, for example as to which phenomena to exclude from analysis and, as a result, a number of assumptions have to be made, many of which are of an intuitive nature. In the present study, a lot of choices concerning the identification and classification of explicitating shifts had to be made for practical purposes. It is thus important that these choices can be made as transparent as possible. This is also one of the major goals of the present chapter.

6.1 Multiple Translation Corpora

Multiple translation corpora (MTCs) represent a special kind of parallel corpora which contain several translations into the same language for each source text, aligned so as to be searchable in a one-to-many relationship. Like traditional "one-to-one" parallel corpora, they make it possible to observe strategies adopted by previous translators, but whereas traditional parallel corpora provide only one translation solution for each SL unit (which Malmkjær (1998) defines as the result of one individual's introspection —thus concealing the variation that would inevitably emerge if translations produced by different translators were available), MTCs offer a range of solutions for each ST item. As such, they represent a more reliable resource to investigate both regular patterns in translational behaviour and variation/translator style. Besides a few small-scale studies based on the

comparison of two/more translations of the same literary ST (e.g. Malmkjær 1998 and 2003, Winters 2004 and 2007, and some studies of student translations such as Tirkkonen-Condit 1986, Puurinen 2003b), the first and most representative example of this innovative corpus design is —to my knowledge— the multiple-translation component of the Oslo Multilingual Corpus, first mentioned in Johansson (1998: 10) and described in greater detail in Johansson (2004). The Oslo MTC contains ten translations into Norwegian of two English STs (a short story and a scientific article), commissioned from ten established professionals, with a view to examining the range of variation across the translations and, more specifically, to what extent variation is connected to specific linguistic features, text types or individual translators (Johansson 2004: 30). So far data from the corpus have been mainly analysed from the perspective of contrastive linguistics. For instance, Johansson (2004) sets out to investigate to what extent translators choose to change ST subjects in their translations and depending on which factors, such as differences in lexis between the two languages and relative preferences concerning the use of nominalisations in subject position, impersonal subjects, active/passive voice, etc. The author finds that subjects are left unaltered in about 9 out of 10 cases, and comments that when changes in subject selection occur, they can most often be ascribed to differences between the two languages (ibid.: 49). However, the borderline between structural and stylistic differences is by no means clear: on the one hand, the corpus does not contain instances of identical behaviour across the ten translators as regards the feature under examination, which would possibly point to systemic differences. On the other hand, Johansson reports examples both of changes which he considers linked to the translator's search for more idiomatic forms (ibid.: 36), and of cases in which the choice to reproduce the ST structure leads to "awkward" TL constructions (ibid.: 37), without unfortunately making reference to a TL corpus to support these claims. As for the possibility to exploit the corpus to study translator style, the author suggests that it should be possible to identify translator profiles by analysing whether translational choices are guided by adequacy (vis-à-vis the ST) or acceptability (vis-à-vis the TL), but no mention is made of the possible impact of translation-inherent phenomena. Following Castagnoli (2009), our hypothesis is that for research focusing on presumed common features of translated texts, as is the case e.g. of explicitation, it is precisely the analysis of the interplay between variation and regularities that may offer insights which were not available with traditional resources. For instance, MTCs may help understand whether a particular instance of explicitation should be treated as obligatory or optional in regard to translation norms, depending on the proportion of translators who adopt it and on a comparison with other translation solutions: if all translators decide to explicitate one specific ST passage or item, that might point to a case of obligatory explicitation, while explicitation due to TL preferences or to the translation process should arguably be decreasingly less regular. Overall, MTCs should help differentiate between norm-governed, ST-induced and idiosyncratic behaviour, along the lines suggested by Baker (2000: 261).

In spite of their potential, MTCs are still exceptions in DTS research for one obvious practical reason: there exist very few texts with several translations into the same TL, with the exception of classic literary texts which may get retranslated over time. Moreover, even when re-translations of literary texts exist, a number of variables should be taken into account which might make their comparison problematic: first, being produced at different points in time, the target language may have changed, and the various translators may have been constrained by different norms; second, subsequent translations may have been influenced by previous versions, so the several TTs available may hardly be considered as fully independent texts. In order to create a MTC, therefore, researchers usually cannot

but resort to learner translation corpora (students at university) or commission translations (as it is the case of our research).

MTCs are far easier to assemble in educational settings, because it is common to have many students translating the same ST. The idea that collecting and studying the output of trainee translators can provide useful information with applications to both translation teaching and research, as it was first put forward at the end of the 1990s by pioneering projects such as Bowker and Bennin's (2003) Student Translation Archive and the PELCRA project (Uzar and Wali ski 2001). In addition to this applications, MTCs assembled by professional translators' production can also envisage applications such as Machine Translation training.

6.2 The TRACE corpus

In following sections outline the main considerations made during the desing and compilation of the TRACE corpus, a MTC specially assembled in the framework of this research. The corpus investigated here can be fully accessible at the following URL: http://tradumatica.uab.cat/trace/trace,en/

6.2.1 Corpus design

The design of any corpus needs to take into account some criteria and the first major step in corpus building is the determination of the criteria on which the texts that form the corpus will be selected. Common criteria in translation corpora include the mode and type of texts, their domain or the languages involved. Only in few cases translation corpora include information in regard to the translators who produced the translations in the corpus such as their professional role in the industry, L1, L2, education level, age, sex, etc.

The TRACE corpus contains both translation product and process information for each of the three tasks performed by the translators. However, it should be noted that only the product data collected (e.g. translations) are the object of analysis of this study.

6.2.2 Corpus contents and structure

The TRACE corpus originates from the three translations done by each of the 90 participants within the TRACE project. Each of the three ST in the study was translated by each participant in one of the three environments, what makes up a total of 270 translations (90 translations for each ST). More translations where collected in the experimental sessions from other participants, however, since we did not succed in collecting all process data related to the products (e.g. the translation themselves), those translation where not included the corpus. Only the translations produced by the 90 translation finally included in the sample were uploaded to the TRACE corpus. Using the simple search functions of the query interface, the TRACE corpus can be seen as a monolithic and static corpus. However, using the advance search, it can can also be queried so as to give rise to different subcorpora depending on the analyses to be carried out, such as a) ST-TT(s) comparisons, b) TT-TT(s) comparisons, c) translations done under the same/different enviroment, d) translations done by different professional profiles of translators, e) an individual translator's whole production through the different environments, f) translations produced by different productivity profiles of translator (e.g. fast, average, slow).

Table 6.1 below illustrates the overall corpus structure.

TRACE corpus	Number of STs	Total ST words	Number of TTs	Number of TTs types	Number of TTs tokens
English to Spanish	T1	528	90	1,146	42,248
	T2	472	90	1,012	30,125
	T3	418	90	1,080	35,686
TOTAL	**3**	**1,418**	**270**	**3,238**	**107,059**

Table 6.1: Corpus content - summary for product-based data

6.3 Corpus preparation and setup

6.3.1 The collection procedure

All the data in the TRACE corpus come from the TMs that the translators fed while translating the three STs under experimental conditions. Translations done under E2 (MS Word + SDL Trados 2007) and E3 (TagEditor + SDL Trados 2007) didn't need extra editing before adding metadata to the TUs. However, translations done under E1 (MS Word with no translation memory) had to be aligned against their STs in order to build a TM from which to proceed with further processing. The tool used for aligment was SDL Trados WinAlign, a tool available in the SDL Trados suite to create TMs recycling previously translated texts. After collecting all the TMs resulting form the experiment (*.tmw files) , all the TMs had to be exported to text format (*.txt).

Once in plain text format, the corpus files were first edited at the file name level prior to adding metadata to each TU in the TMs. Both the file names and the metada information is used for indexing the files in the corpus query interface.

6.3.2 Conventions

During the basic editing phase the following conventions were adopted:

- TUs in the TMs were left unaltered (i.e. no spelling mistakes, fomating, etc., were corrected).
- The TMs resulting from subsequent alignment for translations done under E1 kept the same automatic text segmentation as translations directly done under E2 and E3.
- Encoding: texts were saved as plain text (UTF-8) as to facilitate corpus annotation.
- For classifing each of the 90 translators in the study in regard to their productivity profile, the total amount of time spent in the task by the translators was divided by three and then grups of 30 translators were made for each of the three time slots.
- File-naming:

– Each TMs exported in txt fomat bear reference to the following parameters in the experiment from which the TM resulted from. Table X.X. shows the parameters that all the files building up the corpus encode in the file name:

Attributes coded in the file name	Admitted values	Description
<translator_id >	id_F_id	F=freelance
	id_N_id	N=novice
	id_I_id	I=in-house
		The first ID stands for the tool/text combination used (a total of 18), while the second ID stands for the number of the translator perfoming the task for that combination.
<environment_during_translation >	E1	Environment 1
	E2	Environment 2
	E3	Environment 3
<source_text >	T1	Source text 1
	T2	Source text 2
	T3	Source text 3
<task_position >	P1	First position
	P2	Second position
	P3	Third position
<text_position >	X1	First position
	X2	Second position
	X3	Third position
<previous_environment_used >	C0	no previous
	C1	environment E1
	C2	environment E2
	C3	environment E3
<productivity_profile >	W1	fast
	W2	average
	W3	slow

Table 6.2: Corpus file annotation scheme

The following file name 06F2_E2_T3_P1_X2_C0_W1.txt would contain all the TUs resulting from the second freelance translator translating the tool/text order combination number 6. The text translated would be T3 under the second environment (E2) in first position in the experimental tasks and the ST would be in second position in the text order combination. No previous environment would have been used prior to this task and the translator would have been classified as fast in relation to the total amount of time spent by the sample of translators.

6.3.3 Metada

A second level of annotation performed on the corpus files consisted in adding basic metadata. The level of annotation performed on the corpus files consisted in adding basic metadata about each translator and the translation tasks they performed. These details were manually encoded in the form of attributes of a <text>value tag, inserted in the heading of each translation unit <TU>in the translation memories that every translator in the study fed while translating under experimental conditions. Following the specification for SDL TRADOS 2007 exported translation memory files, the tag <Att L=XXX>value was used to add metadata attributes to the files of our corpus.

A list of attributes and admitted values is provided in Table 6.4 below:

Attribute	Admitted values	Description
<CrU>	open value	(Creation User) ID name for the translator using that translation memory
<ChU>	TRACE (HUM2006-04349/FIL)	(Change User) Name of the funded research project behind this corpus development innitiative.
<Att L=Profile>	InHouse/Freelance/Novice	(Attribute) Participant's profile: In-house translator Freelance translator Novice translator
<Att L=Enviroment>	E1/E2/E3	(Attribute) Translation editing environment used to translate. E1: Microsoft Word 2003 text processor E2: MS Word 2003 text processor + SDL Trados 2007 Professional Translator's Workbench E3: TagEditor text processor + SDL Trados 2007 Professional Translator's Workbench
<Att L=Source>	T1/T2/T3	(Attribute) Source text translated. T1: text 1 T2: text 2 T3: text 3
<Att L=Target>	open value	(Attribute) Name of the file for the translated text. The corpus contains PDF and RTF files for every translation.
<Att L=EPosition>	P1/P2/P3	(Attribute) Position for the environment in the translation task performed by the participant. P1: first position P2: second position P3: third position
<Att L=TPosition>	X1/X2/X3	(Attribute) Position for the text in the translation task performed by the participant. X1: first position X2: second position X3: third position

Table 6.3: Corpus content annotation scheme (part 1)

Attribute	Admitted values	Description
<Att L=Context>	C0/C1/C2/C3	(Attribute) Number of the translation editing environment used previously to the one used to translate the one being marked. C0 stands for no previous translation editing environment used (first translation task). X1: first position X2: second position X3: third position
<Att L=Time>	W1/W2/W3	(Attribute) Time group assigned to every translation task depending on how fast/slow every translator performed their tasks. W1: Fast translators W2: Medium translators W3: Slow translators
<Att L=Explicitation>	K1/K2/K3/K4	(Attribute) Any of the four categories of explicitation phenomena described in the corpus: K1: introduction of contextual references K2: pronouns specification K3: introduction of cohesive devices K4: lexical specification
<Att L=Interference>	I11a/I11c/I10a/I10c/ I21a/I21c/I20a/I20c/ I31a/I31c/I30a/I30c/ I41a/I41c/I40a/I40c/ I51a/I51c/I50a/I50c/ I61a/I61c/I60a/I60c/ I71a/I71c/I70a/I70c/ I81a/I81c/I80a/I80c	Making the distinction between "close" (a) or "far" (c) interference options: I1: Typography and spelling interference I2: Lexical I3: Lexical transference I4: Morphology & Syntax I5: Text conventions interference I6: Encyclopaedic knowledge I7: Coherence I8: Cohesion

Table 6.4: Corpus content annotation scheme (part 2)

Metadata can be used during the analysis in order to restrict searches to tailor-made corpora consisting of TUs which match a set of predefined attributes. The atributte for

explicitation phenomena in the corpus (e.g. <Att L=Explicitation>) was used to build the different subcopora to perform the analysis described in Chapter 7. The content of this different subcopora were the different TUs containing the four focus points under analysis (e.g. values K1: introduction of contextual references; K2: pronouns specification; K3: introduction of cohesive devices; K4: lexical specification).

Figure 6.1 below show what the content of the TMs look like at the TU level once this metadata layer of annotation was added.

<TrU>
<ChU>TRACE (HUM2006-04349/FIL)
<CrD>20022009, 17:53:47
<CrU>05H
<Att L=Profile>InHouse
<Att L=Environment>E3
<Att L=Source>T3
<Att L=Target>05H_E3_T3_P2_X2_C1_W2.pdf
<Att L=EPosition>P2
<Att L=TPosition>X2
<Att L=Context>C1
<Att L=Time>W2
<ChD>20022009, 18:25:29
<Att L=Explicitation>0
<Seg L=EN-US>*When the Off key is pressed, all stock details are backed-up.*
<Seg L=ES-EM>*Además, cuando se pulsa la tecla Off (Apagado), el sistema efectúa una copia de seguridad de toda la información del stock.* </TrU>

Figure 6.1: Metadata represention in a translation unit <TrU>of the corpus

6.3.4 Translation process data

One of the pecularies of the TRACE corpus is that it comprises both product and process information. For each of the TUs in the corpus two types of translation process related files can be retrieved. This translation process information in the corpus consists of a video file showing the screen recording of the text retrieved while being translated and a keylogging file containing a summary of the keyboard and mouse activity for that particular translation. The screen recordings were made with BB FlashBack recorder software (v. 2) while the keylogging files were tracked with Inputlog (v.3).

Figure 6.2 below presents the process data in the TRACE corpus as it is shown after retrieving a segment.

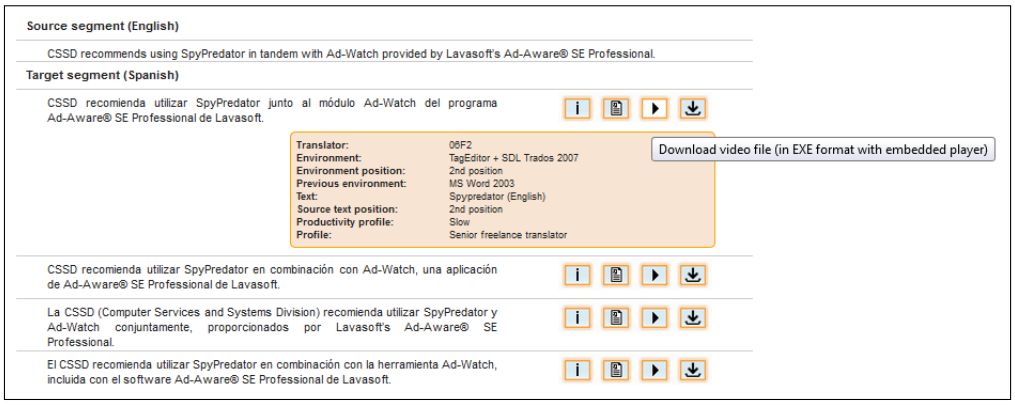


Figure 6.2: Advanced search GUI of the TRACE corpus (Explicitation study)

6.3.5 Corpus alignment and indexing

The final steps in the construction of the TRACE corpus consisted in its alignment and indexing. The two processes, normally distinct and independent of each other, are presented together here because the main particularity of the corpus —namely, its being a multiple translation corpus, where each ST needs to be aligned to several TTs— requires an unusual procedure for encoding/indexing as well.

The fact of working from TMs were ST and TT were already aligned sentence by sentence facilitated the process of alignment. No extra tools were thus required to make possible to perform multiple alignments (i.e. aligning a number of files/corpora to the same number of files/corpora). The process of indexing all the files in the corpus consisted of two steps programmed in a script written in Perl . First all the TMs containing all the metadata in TXT format were converted to XML files. Secondly, those XML files were indexed both at the metadata and STs and TTs words level in order to make possible queries through a web interface written in PHP.

Figure 6.3 below shows the web interface from which corpus queries can be carried out:

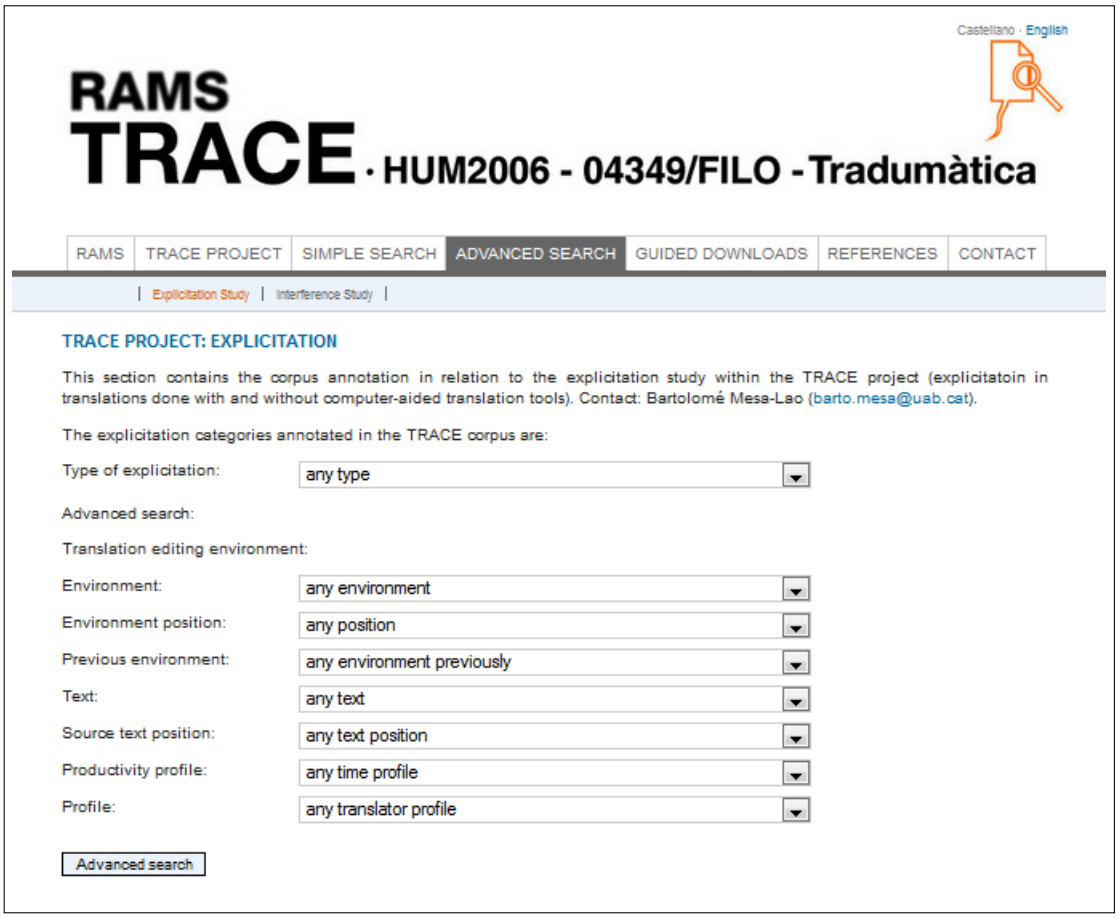


Figure 6.3: Advanced search GUI of the TRACE corpus (Explicitation study)

6.4 Conclusions

This chapter has presented a description of the data preparation and coding derived from the experimental setting of this research. The specific steps taken to assemble the TRACE corpus have been presented, including metadata enrichment, process data addition and TUs alignment and indexing. The corpus compiled is a multiple parallel corpora formed by several translations for each ST in the experiment, i.e. multiple translation corpora.

Chapter 7

Results and discussion

This chapter examines the study's three research questions by examining the hypotheses presented at the end of Chapter 4. As emphasised, the study's hypotheses constitute points of departure for further analysis and discussion as interactions between one dependent variable and multiple independent variables will be considered.

In this chapter we will present the quantitative results obtained from the project, including a brief description of the statistical analysis. For the statistical analysies on database was created with the information contained in the TRACE corpus (see Chapter 6). The database contained 90 registers with 54 fields (i.e. translator ID, professional profile, gender, shift in the experiment, text number, translation editing environment used to translate, task position in the experiment (tool/environment combination), familiarity with Trados Translator's Workbench (E2 and E3), preferred environment, experience translating marketing texts, experience translating technical texts, focus points activation (10 per each text), satisfaction scores for each translation, difficulty evaluation for each translation, and productivity profile).

7.1 Statistical Methods

The statistical analysis were made with SAS v9.2 statistical software. A p-value of <0.05 was set as the level of significance used to justify that a claim can be considered as statistically significant.

7.1.1 Descriptive summary

For each of the indicators frequency table with absolute and relative frequencies were represented using bar graphs. For each of the four categories and for the total number of indicators have been calculated summary statistics: mean, median, minimum and maximum were represented using bar graphs.

7.2 Results

7.2.1 General results

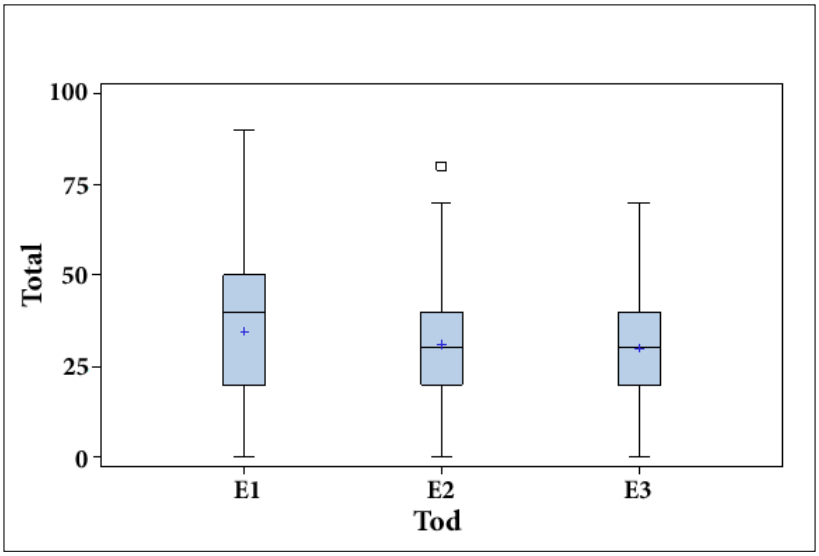


Figure 7.1: Overall explicitation traces per translation editing environment

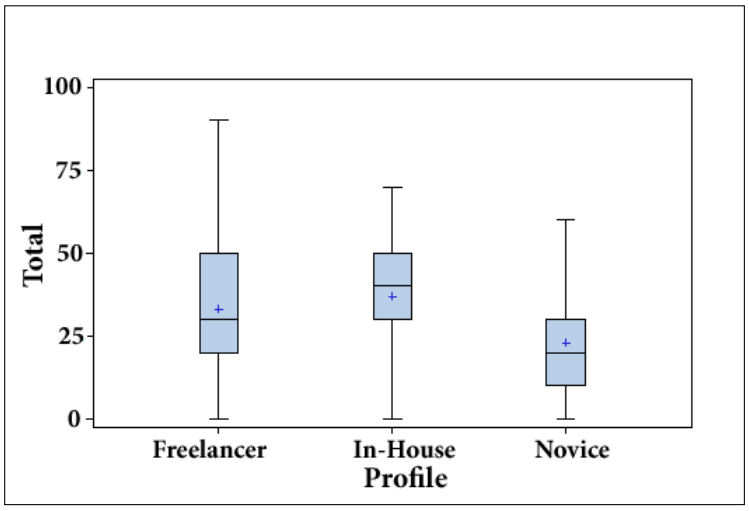


Figure 7.2: Overall explicitation traces per translator profile

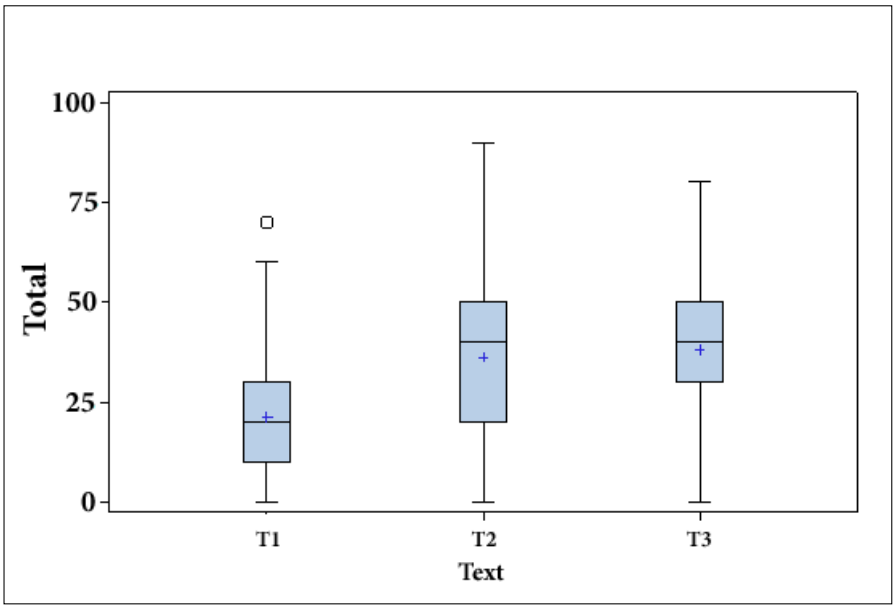


Figure 7.3: Overall explicitation traces per text

7.2.2 Bivariate analysis

Bivariate analysis is the simultaneous analysis of two variables or attributes. It explores the relationship between two variables in order to identify whether there exists an association and the strength of this association, or whether there are differences between two variables and the significance of these differences. In the bivariate analyses each of the explicitation indicators has been compared with each of the following variables: i) translation editing environment, ii) text, iii) position of the translation editing environment used to translate, iv) gender of the translator, v) translator profile and vi) translation shift in the experiment. Stacked Column charts were used to visualize the relationship between two categorical variables (presence or absence of the explicitation indicator), comparing the percentage that each category from one variable contributes to a total across categories of the second variable. The analyses were performed using logistic regression models considering repeated measurements of individuals.

For the sum of indicators of each category and the total number of indicators summary statistics have been calculated and plotted graphically using box diagrams. The analyses were performed using generalized linear regression models considering repeated measurements of individuals.

For the analysis of translation time linear mixed models with repeated measures were considered for the following the explanatory variables: i) translation editing environment, ii) text, iii) position of the translation editing environment used to translate, iv) gender of the translator, v) translator profile and vi) translation shift in the experiment. Time has also been plotted using box diagrams.

User satisfaction and ratings of perceived difficulty as collected in the post-translation questionnaire were process using non-parametric test (Mann-Whitney-Wilcoxon and Kruskal-Wallis) for the following the explanatory variables: : i) translation editing environment, ii) text, iii) position of the translation editing environment used to translate, iv)

gender of the translator, v) translator profile and vi) translation shift in the experiment. Time has also been plotted using box diagrams.

7.2.2.1 Summary and discussion (Hypothesis H1)

7.2.3 Implicit to explicit cultural and contextual references

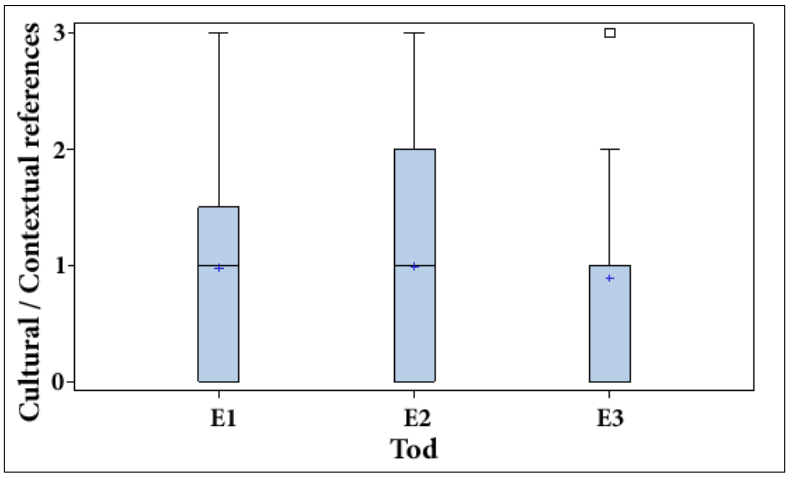


Figure 7.4: Implicit to explicit cultural/contextual referents per environment

p-value <0.64 (not statistically significant)

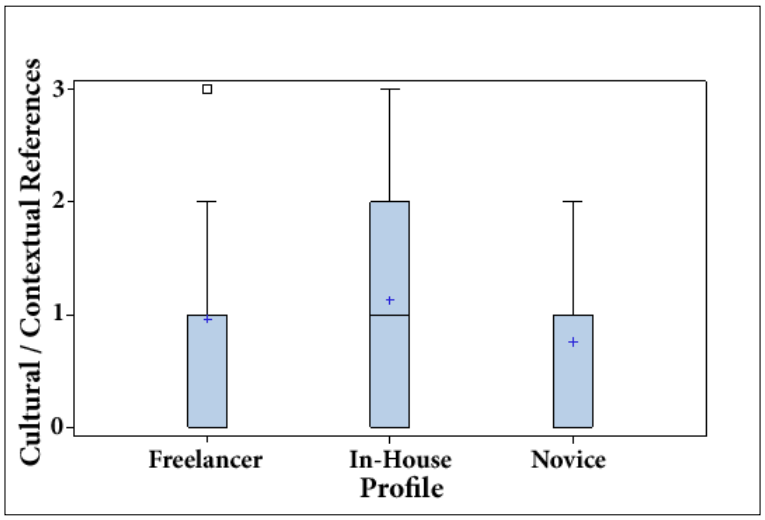


Figure 7.5: Implicit to explicit cultural/contextual referents per translator profile

p-value <0.23 (not statistically significant)

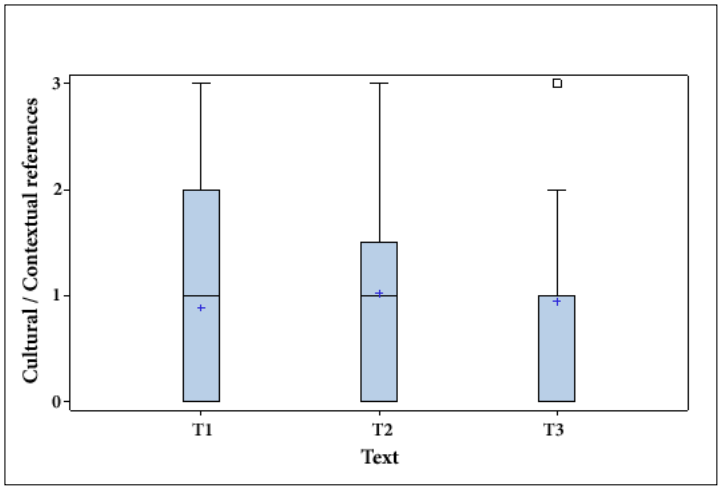


Figure 7.6: Implicit to explicit cultural/contextual referents per text

p-value <0.48 (not statistically significant)

7.2.4 Phoric to fully lexical phrases

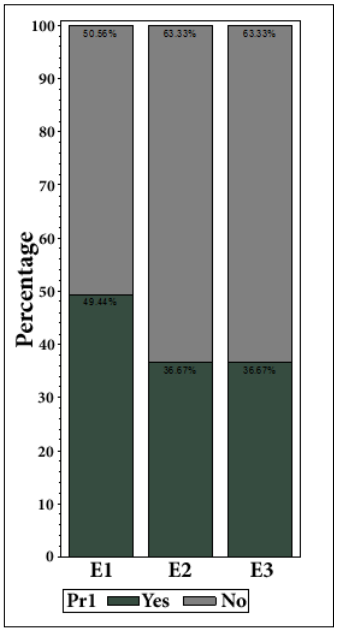


Figure 7.7: Phoric to fully lexical phrases per environment

p-value <0.20 (not statistically significant)

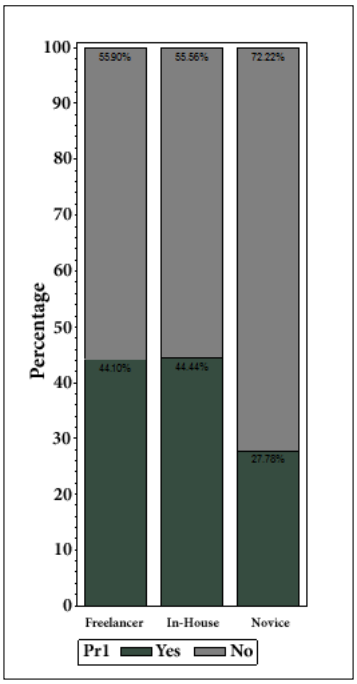


Figure 7.8: Phoric to fully lexical phrases per translator profile

p-value <0.078 (not statistically significant)

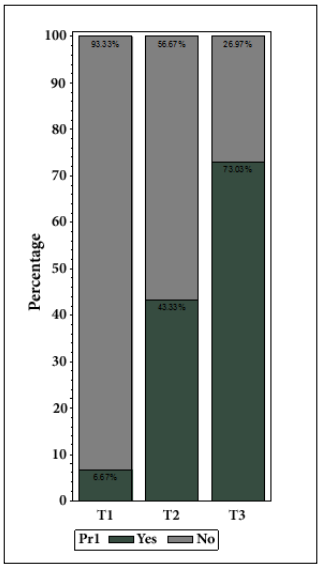


Figure 7.9: Phoric to fully lexical phrases per text

p-value <0.0001 (highly statistically significant)

7.2.5 Newly introduced cohesive referents per discourse segment

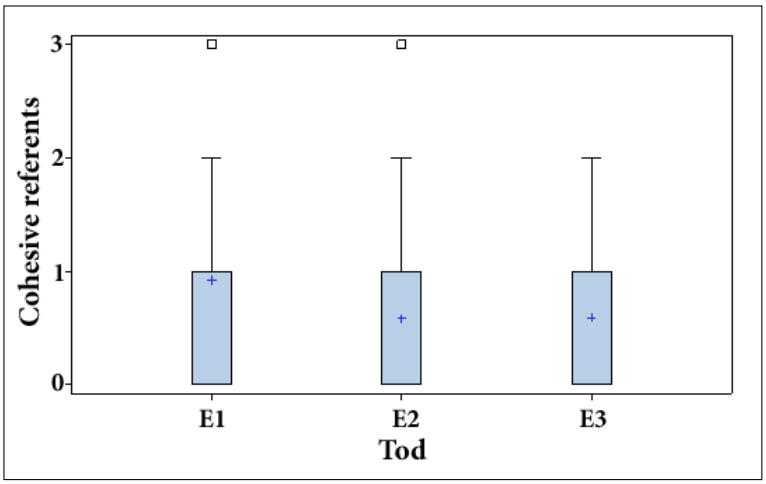


Figure 7.10: Newly introduced cohesive referents per environment

p-value <0.0034 (statistically significant)

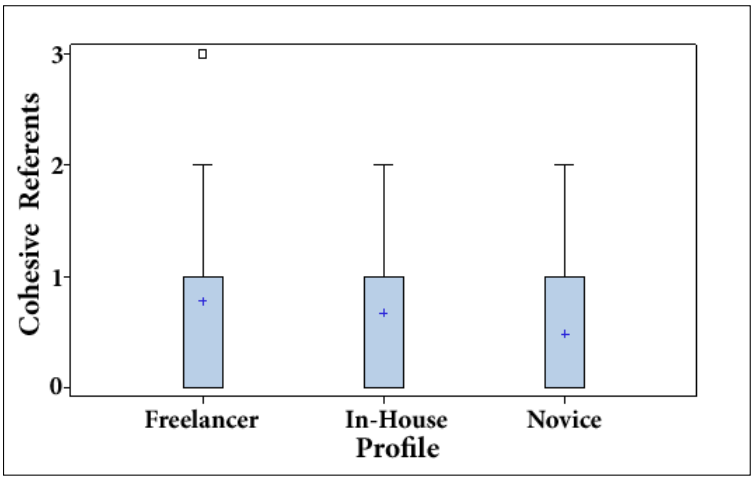


Figure 7.11: Newly introduced cohesive referents per translator profile

p-value <0.0496 (statistically significant)

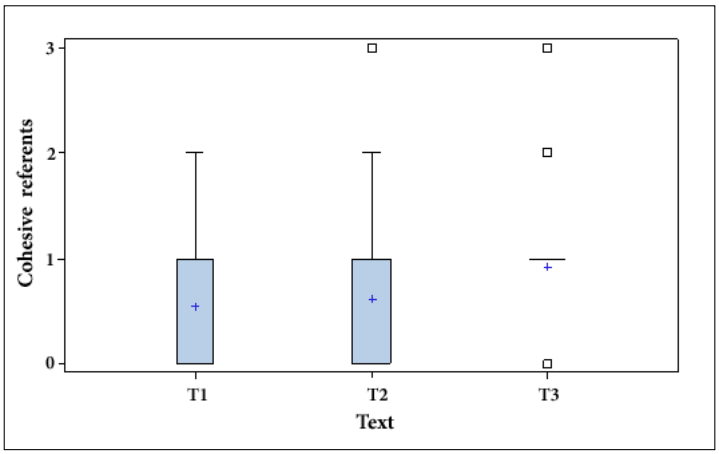


Figure 7.12: Newly introduced cohesive referents per text

p-value <0.0002 (highly statistically significant)

7.2.6 Lexical specification

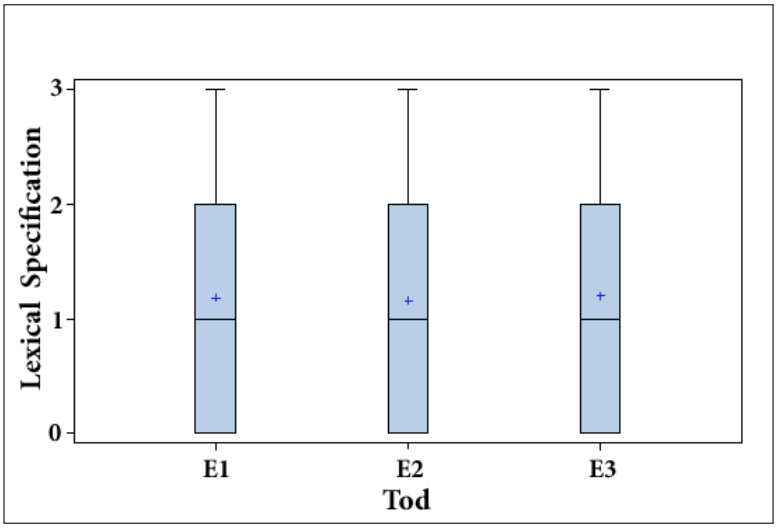


Figure 7.13: Lexical specification traces per environment

p-value <0.1555 (not statistically significant)

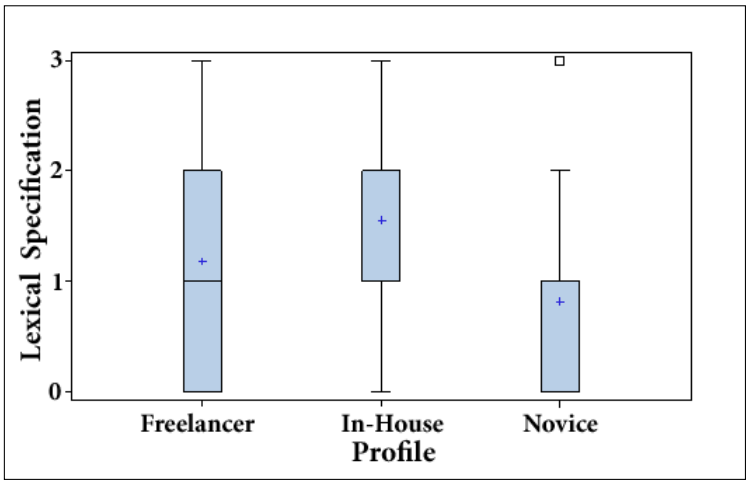


Figure 7.14: Lexical specification traces per translator profile

p-value <0.0013 (statistically significant)

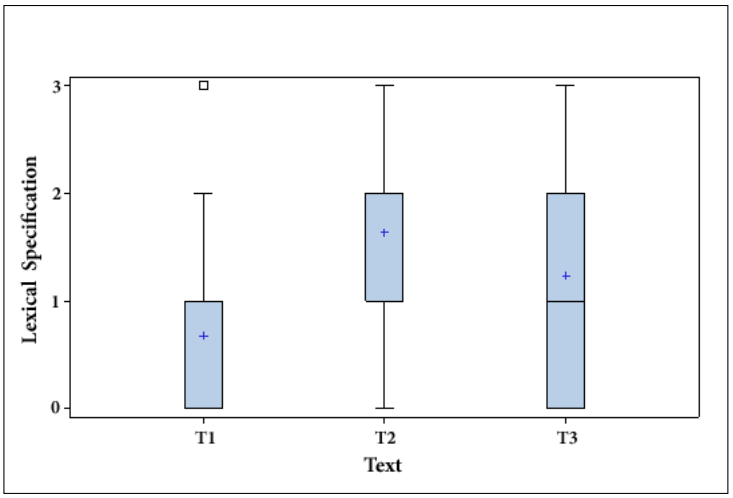


Figure 7.15: Lexical specification traces per text

p-value <0.0001 (highly statistically significant)

7.2.7 Time and translation editing environment

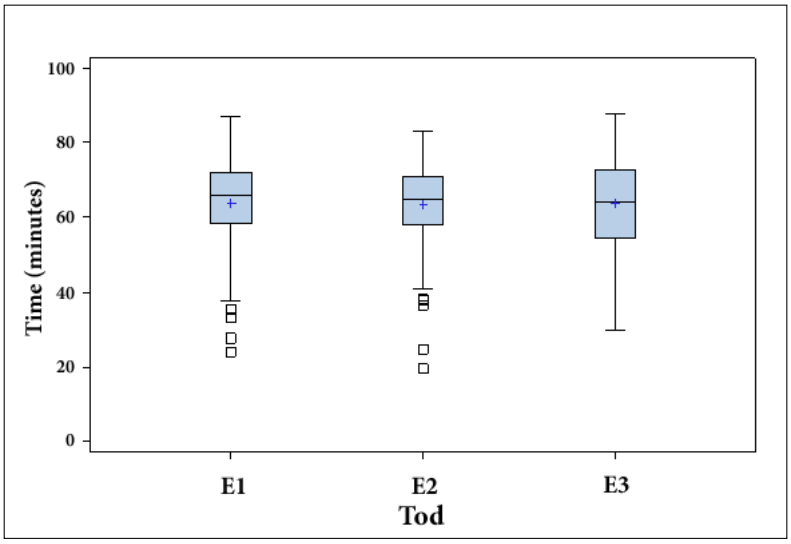


Figure 7.16: Overall time to complete the task per translation editing environment

p-value <0.9728 (not statistically significant)

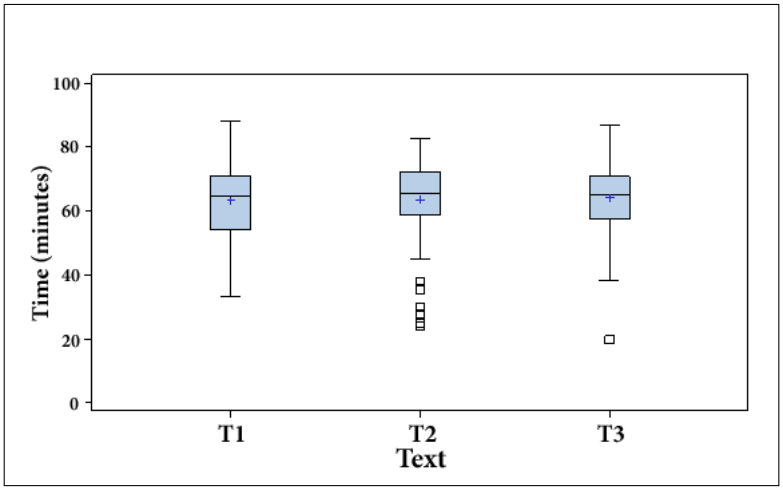


Figure 7.17: Overall time to complete the task per text

p-value <0.8879 (not statistically significant)

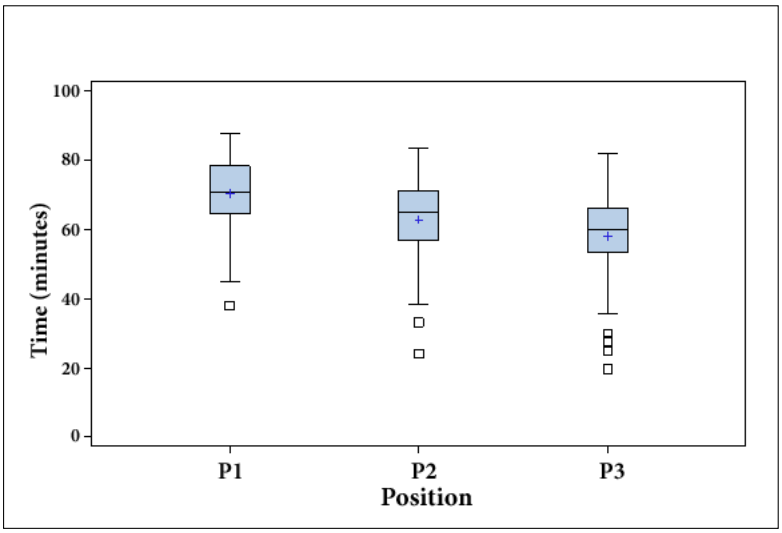


Figure 7.18: Overall time to complete the task per text/environment position

p-value <0.0001 (not statistically significant)

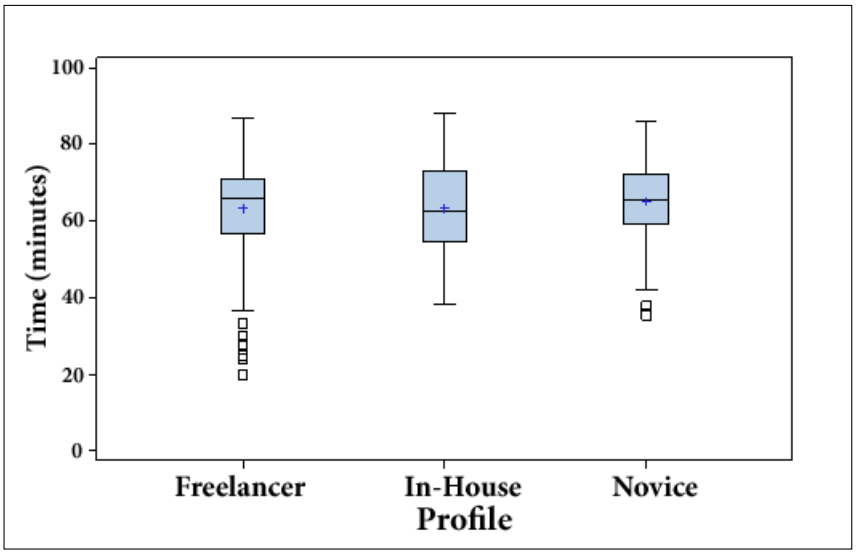


Figure 7.19: Overall time to complete the task per translator profile

p-value <0.7028 (not statistically significant)

The following interactions in the bivariant analyses did not turn to be statically significant:

- time and gender: p-value <0.3476.

- user satisfaction and environment used to translate: p-value <0.7518.
- user satisfaction and position of the text/environment: p-value <0.6684.
- user satisfaction and translator gender: p-value <0.1141.
- user satisfaction and translator profile: p-value <0.7818.
- user satisfaction and translation shift in the experiment: p-value <0.1989.
- text difficulty and environment used to translate: p-vale <0.6622.
- text difficulty and position of the text/environment: p-value <0.0954.
- text difficulty and translator gender: p-value <0.8181.
- text difficulty and translator profile: p-value <0.1348.
- text difficulty and translation shift in the experiment: p-value <0.0681.

7.2.8 User satisfaction evaluation

For the interaction between user satisfaction and translated text there is a a significant different among texts (p-value <0.0497):

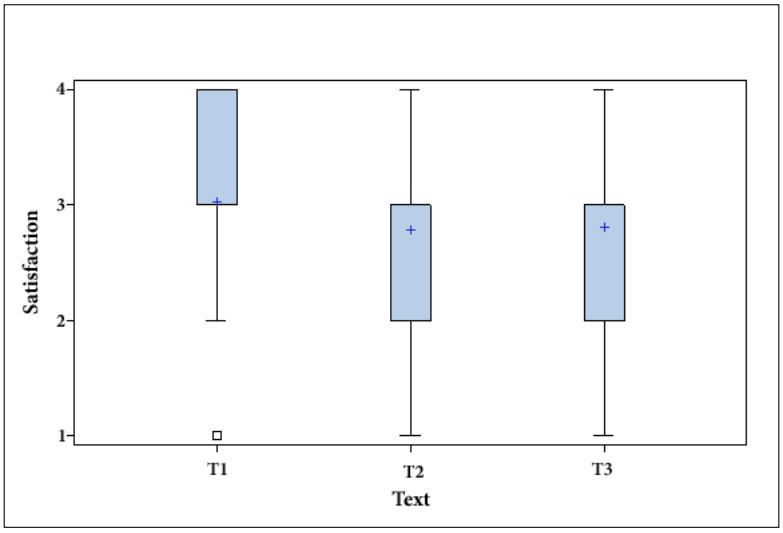


Figure 7.20: Satisfaction rate per text

7.2.9 Text difficulty evaluation

For the interaction between text difficulty as perceived by the translator and the three text there are significant differences being text 2 the most difficult to translate according to the feedback provided by the translator in the post-translation questionnaire:

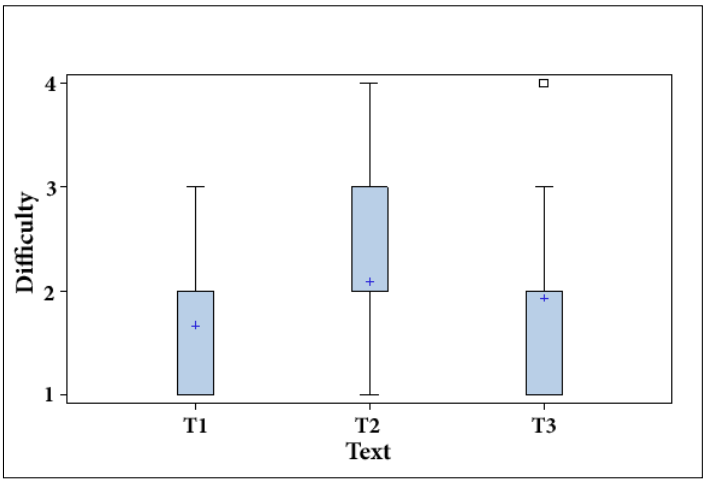


Figure 7.21: Text difficulty per translated text

7.2.10 Multivariate analysis

Multivariate statistical analysis refers to multiple advanced techniques for examining relationships among multiple variables at the same time. This type of analysis is desirable because researchers often hypothesize that a given outcome of interest is effected or influenced by more than one thing. Multiple regression analysis, often referred to simply as regression analysis, examines the effects of multiple independent variables (predictors) on the value of a dependent variable, or outcome. We analyzed the different indicators using generalized linear regression models with repeated measures considering the environment as explanatory variables for the following the explanatory variables: i) translation editing environment, ii) text, iii) position of the translation editing environment used to translate, iv) gender of the translator, v) translator profile and vi) translation shift in the experiment, vii) translation time, viii) satisfaction and ix) perceived text difficulty.

We have also considered interaction between translation editing environment and text position in the translation task. For each category of the explanatory variables were calculated odds ratios (OR) or relative risk (RR) with respect to the other categories at a confidence interval of 95

7.2.11 Implicit to explicit cultural and contextual references

In terms of implicit to explicit cultural and contextual references, the multivariate analysies did not found statistically significant differences for the variables under analyses.

7.2.12 Phoric to fully lexical phrases

The multivariant analyses performed for this category turned to show significant differences depending on the environment and the text used to translate.

	OR	Standard Error	Confidence Limits		Chi-Square	Pr >ChiSq
E1	22.268	0.7424	11.585	42.803	5.77	**0.0163**
E2	0.6636	0.1971	0.3708	11.877	1.91	0.1674
E3	0.6767	0.2093	0.3691	12.406	1.59	0.2067
T1	0.0456	0.0210	0.0185	0.1124	44.97	**<.0001**
T2	17.583	0.5767	0.9245	33.441	2.96	0.0853
T3	124.844	41.031	65.556	23.775	59.00	**<.0001**

Table 7.1: Environment vs text interaction for phoric to fully lexical phrases category

Translators as a whole introduced made more phoric to fully lexical replacements in E1 as compared with E2 and E3. When examining the interaction between environment and texts, T3 was the one with more phoric to fully lexical replacements and T1 recorded less.

7.2.13 Newly introduced cohesive referents per discourse segment

The interaction for newly introduced cohesive referents per discourse segment showed a significant difference when comparing translation environment, text and translator profile as shown in table 7.2

	RR	Standard Error	Confidence Limits		Chi-Square	Pr >ChiSq
E1	17.080	0.1255	13.356	21.841	18.20	**<.0001**
E2	0.7085	0.1570	0.5208	0.9637	4.82	0.0281
E3	0.8264	0.1366	0.6323	10.801	1.95	0.1628
T1	0.7169	0.1471	0.5373	0.9566	5.12	0.0237
T2	0.8260	0.1557	0.6087	11.209	1.51	0.2198
T3	16.886	0.1175	13.414	21.258	19.89	**<.0001**
Freelancer	13.461	0.1455	10.121	17.903	4.17	0.0411
In-House	11.177	0.1776	0.7891	15.832	0.39	0.5309
Novice	0.6646	0.1819	0.4653	0.9493	5.04	**0.0247**

Table 7.2: Environment/Text/Profile interaction for Newly introduced cohesive referents per discourse segment category

- Translators produce more newly cohesive reference for E1 and E2.
- Translators have introduced more cohesive devices in T3 and less in T1.
- Freelancer translators have introduced more cohesive devices while novice translators have introduced less.
- For the interaction between translation environment and text, E2 and E3 have lesss cohesive devices for T3 than for T1 and T2.

Entorn	Text	Text	Estimate	Lower Confidence Limit	Upper Confidence Limit	ChiSquare	Pr>Chi
E1	T1	T2	12.775	0.7696	21.207	0.90	0.3435
E1	T1	T3	11.057	0.7196	16.989	0.21	0.6465
E1	T2	T3	0.8655	0.5685	13.177	0.45	0.5006
E2	T1	T2	0.9478	0.4631	19.394	0.02	0.8832
E2	T1	T3	0.5318	0.2905	0.9735	4.19	**0.0407**
E2	T2	T3	0.5611	0.3279	0.9599	4.45	**0.0349**
E3	T1	T2	10.965	0.4836	24.866	0.05	0.8254
E3	T1	T3	0.4070	0.2315	0.7155	9.75	**0.0018**
E3	T2	T3	0.3711	0.1925	0.7158	8.75	**0.0031**

Table 7.3: Environment/Text interaction for Newly introduced cohesive referents per discourse segment category

7.2.14 Lexical specification

The total number of cases of lexical specifications show significant differences depending on the text and the translator profile.

Text 2 recorded more explicitation traces of this kind while T1 received less.

Novice translators have introduced less traces for this category while in-house translators have introduced more.

	RR	Standard Error	Confidence Limits		Chi-Square	Pr >ChiSq
T1	0.4754	0.1237	0.3731	0.6058	36.14	**<.0001**
T2	18.024	0.0822	15.341	21.176	51.32	**<.0001**
T3	11.670	0.0959	0.9670	14.083	2.59	0.1073
Freelancer	10.548	0.1134	0.8446	13.173	0.22	0.6380
In-House	16.179	0.1054	13.158	19.893	20.82	**<.0001**
Novice	0.5860	0.1649	0.4241	0.8096	10.50	0.0012

Table 7.4: Text/Profile interaction for Lexical specification category

7.2.15 Summary of multivariant analyses

	RR	Standard Error	Confidence Limits		Chi-Square	Pr >ChiSq
E1	11.628	0.0547	10.446	12.943	7.61	**0.0058**
E2	0.9437	0.0578	0.8427	10.568	1.01	0.3158
E3	0.9113	0.0555	0.8174	10.161	2.80	0.0944
T1	0.5772	0.0744	0.4989	0.6678	54.57	**<.0001**
T2	12.708	0.0541	11.429	14.131	19.61	**<.0001**
T3	13.632	0.0582	12.161	15.280	28.29	**<.0001**
Freelancer	11.445	0.0848	0.9693	13.513	2.53	0.1114
In-House	13.402	0.0930	11.169	16.083	9.91	**0.0016**
Novice	0.6520	0.1163	0.5190	0.8189	13.52	**0.0002**

Table 7.5: Environment/Text/Profile interaction summary

Translators have more indicators for E1.

Translators have introduced more explicitation traces for T2 and T3 than in T1.

In-House Translators have introduced more explicitation traces while novice translators have used less.

7.2.16 Correlations

The different categories of explicitations[1] have been associated (in general and for the three experimental texts using Spearman's rank correlation coefficient. The different focus points have been represented graphically using scatter plots.

Spearman Correlation Coefficients Prob >(r) under H0: Rho=0 Number of Observations			
	Co	Cu	Le
Co	100.000 263	**0.17915** 0.0037 261	0.06261 0.3127 262
Cu		100.000 267	**0.20575** 0.0007 266
Le			1.00000 268

Table 7.6: Correlation indexes for three of the categories in the study

The results of the statistical analysis do not show real correlation patters between the different pairs of categories when taking all texts together or looking in to the three

[1] the phoric to fully lexical phrases explicitaion category was not taken into account for the correlation analyses since each text only have one focus point of this category

different text separately. No real correlations were either found when looking into the different translator's profiles. Values range between 0.35 and 0.09 far away form values 1 or -1 to show a perfect positive or negative correlation.

The same procedure has been followed to correlate translation speed with the total amount of indicators.

7.2.16.1 Explicitation traces and translator satisfaction

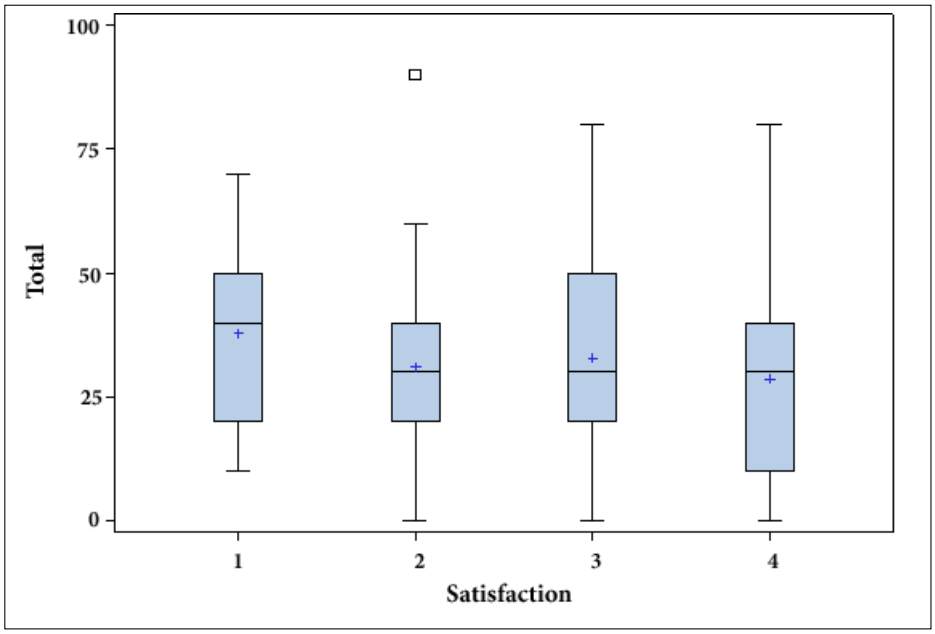


Figure 7.22: Satisfaction scores and explicitation marks in TTs

1: very easy and 4: very difficult.

No statistically significant differences were found between the total amount of explicitation indicators and the level of satisfaction with the final target text reported by the translators in the post-task questionnaire (p-value=0.3365).

The same lack of statistically significance was found when looking at the three text separately.

7.2.16.2 Explicitation traces and text difficulty

When trying to detect if text difficulty as perceived by the translators have an impact in the appearance/absence of explicitation traces in the target text, no statistically difference were found (p-value=0.1354).

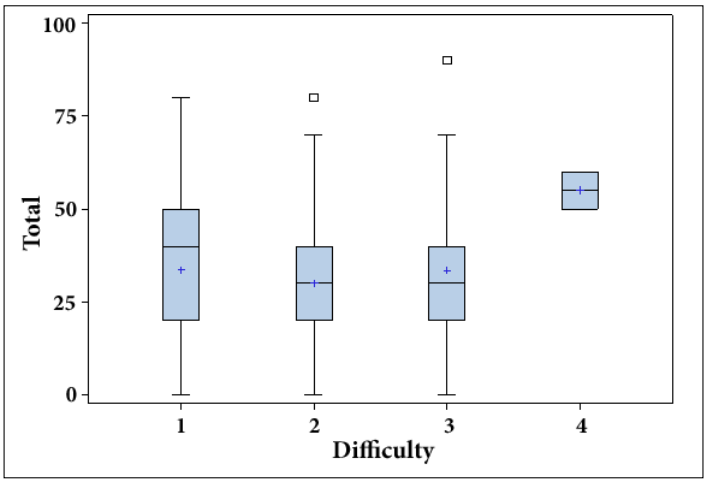


Figure 7.23: Difficulty scores and explicitation marks in TTs

As show in Figure 7.23 higher valuers for explicitations marks are on both extremes (translators rating texts as 1 (very easy) and translators rating texts as 4 (very difficult).

Bivariant analyses did not turn to be significant when considering any of the dependent variables for explicitation in relation to environment/text position, gender of the translator or translation shift in the experimental design. Such result point to the good design of the experiment since text/environment position were counterbalance across participant to avoid any order effect in the task and we did not expect to have different results despite the fact of having to run some of the experiments in the morning and some of the experiments in the afternoon for different participants.

The bivariant analyses comparing explicitation variables and translator profile turn to be significant (p= 0.0069). Novice translators introduced less explicitation.

The Kruskal-Wallis is a non-parametric test used for comparing two or more samples that are independent, and that may have different sample sizes, and extends the Mann–Whitney U test to more than two groups. The null hypothesis is that the medians are the same as that for the population. The data are assumed to be at least ordinal and there is a single underlying continuous distribution.

Chapter 8

Conclusions

This chapter introduces in Section **??** the conclusions to the research question stated in Section **??**, plus it lists the contributions of this thesis beyond answering the research questions. Lastly, Section **??** outlines the future work lines that can be followed to complement the results of this dissertation.

8.1 Explicitation - A universal in translation?

One of the aspects studied in this dissertation was the textual phenomenon of explicitation as it is shown in the final product.

As shown in the literature (see Chapters 3), it has been suggested that explicitation is a universal in translation. It has been claimed to be a (function of a) translation norm, or the result of processing, the translator's interpretation process. Furthermore, it has been suggested that it is typical either of translation produced either by professional translators, or of those produced by learners. Can these apparently contradictory observations be accommodated within one coherent framework? On the basis of the analyses of this thesis, we propose the following explanations. It can be claimed that in translation there are at least two different types of explicitation, ocurring for different reasons in the process: *norm-governed explicitations* and *strategic explicitations*. In transalted texts (within a certain language pair and group of text types), certain kinds of explicitations occur with such a frequency and regularity from a textual point of view that htye can be claimed to be norm-governed. In the present data, this was found mostly for the category phoric to fully lexical item regardless of the translation editing environment used to translate. Furthermore, this type was norm-governed both in the novice's target texts and in those produces by freelance/in-house translators. The norm-governed nature of the explicitation of additive links was evidenced not only by their frequency in the TTs, but also by the process leading to the explicitation, which was, for all participants, characterized mainly by non-problematic processing.

For the category lexical specification, explicitation was found to be non-governed only in the novice translators target texts. Both the textual patterns and the characteristics of their process point towards a norm-governed solution. In the collected data, this type of explicitation does not appear as a norm-governed solution. Either it is not found at all in any version of the target text or . It seems as if they have not internalized this norm.

Strategic explicitations, on the other hand, occur in order to solve a problem in the

process. To solve the problem, the translating individual reformulates a tentative target text solution in the target language. As pointed by Englund-Dimitrova (2005), strategic explicitations can be assumed to be of an ad hoc nature, being more varied than the norm-governed explicitations. These types of explicitations are, as a matter of fact, the result of the translator's process of interpretation, but in a specific way, namely the interpretative process that usually consists in reformulating segments of the target text in the target language. It seems therefore reasonable to suggest that many cases of explicitation in translation arise as a consequence of an "observable behavioural regularity" (Cherterman 1997: 71) in the translation process. This regularity can be formulated

> When translators evaluate a tentative TT solution negatively, they tend to resort in the first place to reformulation in the TL, rather than engaging in renewed processing of the corresponding ST chunk and subsequent renewed transfer into the TL.

The existence of this regularity was evidenced in the present study by the examples of strategic explicitation and by the analysis of the product data. This was the case for all participants, regardless of their previous translation experience. This statement is probabilistic, but whether if it also qualifies as a translation law (Toury 2004) is not possible to state without further research.

The various ways in which a target text segment can be reformulated in the TL ofthen entail different types of explicitation, when compared with the source text. Exchanging for a synonym can lead to specification of meaning, changing a grammatical construction can involve (obligatory) specification of something which is implicit in the source text, etc. Explicitation can be viewed as a form of paraphrasing, and the ability to paraphrase is part of the individual's linguistic and semantic competence, both in the individual's L1 and in the L2. (Blum-Kulka and Levenston 1983).

Explicitation is indeed a broad concept (Klaudy 2000,2001). The distinction proposed here (*norm-governed* vs. *strategic explicitations*) does not mean, hoever, that we should discard altogether textually based typologies and frameworks like the one proposed by Klaudy (1998). Norm-governed explicitations can be expected to fit within several of those categories fairly well. In the case of strategic explicitations, we may assume that once a problem occurs in the process and i (tentatively) solved by a target language reformulation, such as an explicitation, then factors such as the textually based hypothetical explanation can have an influence on the actual formulations produced. However this can only be determined by further research.

It is a fact, however, that not all participants explicitated. The less experienced participants, the novice translators, can be assumed simply to be unaware of the possibility of adding connectives when translating, especially intersentential participants. Text structure and cohesive patterns are difficult to master for writers.

How do translation solutions become translation norms –and how do certain values lead to translation solutions? For a given individual, certain types of explicitations may very well first occur as strategic problem-solving procedures.

8.2 Overview of the research

This thesis has investigated the use of explicitation technique in a corpus of translations done with and without the use of MAHT with the twofold aim of testing the widely held hypothesis that translated texts tend to show higher explicitness compared to their source

texts, and of assessing the value of the multiple translation corpus methodology for that purpose. In particular, the research set out to put to the test the suggested tendency for translations to be more explicit than their STs , which some scholars within TS have elevated to the status of translation universal (see chapter 2) insofar as it would be the result of non-linguistic but possibly cognitive constraints inherent in the process of translation. The viewpoint adopted here is that the analysis of explicitation –i.e. of shifts between STs and TTs– cannot be severed from considerations about language-specific relative degree of explicitness, that is about language-specific preferred conjunctive patterns. The present research has aimed at investigating whether new insights into explicitation can be obtained by turning to a fairly innovative and largely unexplored corpus resource, presented in the literature as multiple translation corpus (MTC), that is a subtype of parallel corpus in which several translations into the same TL are available for each ST. More precisely the hypothesis has been put forward that, by allowing researchers to observe variation as well as regularities in several translators' renditions of one and the same ST, MTCs may help differentiate between i) TL-norm-governed, ii) ST-induced and iii) idiosyncratic behaviour, based on the proportion of translators opting for similar translation solutions within the same MTC. A multiple translation corpus was assembled in the context of the TRACE project. The experiment design described in chapter 5 has represented a good way to collect multiple translations of the same STs, produced independently by different profiles of translators and under comparable conditions using different translation editing environments. Details about the development and contents of the corpus have been provided in chapter 6, together with information about the technical solutions devised for its creation and consultation. The analyses for the collected data have been proposed in chapter 7. Quantitative investigations aimed at detecting the presence of explicitating shifts in TTs have been carried out on the whole corpus using inferential statistics (bivariant and multivariant analyses) to test our hypotheses.

8.2.1 Comment on the methodology and findings

A number of interesting findings have emerged from this research, some of which can contribute to the ongoing debate on the existence of universal features or tendencies in translated texts,, while others are more relevant from the point of view of the refinement of the research methodology and the use of different translation editing environments in the localisation industry (e.g. translation of software user guides and their marketing collaterals). Regarding the attempt to find evidence supporting the explicitation hypothesis, while the results of the quantitative analyses seem to confirm that the trend towards explicitation is stronger than the opposite trend in the translations under scrutiny, they also suggest that explicitating shifts may not necessarily have to be the result of translation-inherent cognitive constraints. Translations of software guides and marketing collaterals, in particular (Text 3), display explicitation patters in all conditions; this suggests that the explicitating shifts observed in those TTs may result from the translators' attempt to conform to standard TL preferences, i.e. to a process of normalisation. Even if evidence was found of explicitating shifts which cannot be ascribed to a normalising intent in translation from English to Spanish, on the whole the findings challenge the idea that explicitation, as common as it may be, can be considered as a universal feature of translation. The comparison of multiple translations of the same ST has proved an effective method for distinguishing shifts in explicitation linked to TL norms or preferences from non-linguistically-motivated shifts. Moving to insights gained from more qualitative investigations, the analyses have indicated that it is not necessary that all the translations of a source text –and arguably not even

the majority of them– display identical patterns for MTCs to yield interesting insights: when patterns are observed, rather than just counted, similarities between two or more TTs can be used as a starting point to investigate the reasons behind such similarities and their relationship with other translation solutions under the light of the translation editing environment used.

8.2.2 Relevance for applied translation studies

In mapping the discipline of Translation Studies into three main branches –theoretical, descriptive and applied– Holmes (1972) stressed that the relationship between them is not unidirectional but dialectical, with each branch both providing and using insights to/from the others. Descriptive work on translations from the translation editing enviroment used may thus not be just an end in itself. In the first place, insights gained from MTC can first of all serve as input for the didactics of translation. According to what was observed during the analyses, for instance, it may be hypothesised that translation students would benefit from a discussion on the consequences of explicitating and implicitating shifts on the textual –and even on the ideational– meaning of texts. Secondly, data extracted from the MTC could be used for the creation of corpus-based materials focused in teaching practices: the concordance function in the TRACE corpus, for instance, might be presented in the form of multi-parallel concordance lines to students, who could be asked to compare different ways to translate the same source text –focusing on conjunction (or more generally on cohesion), introduction of cultural/contextual references, replace of pronouns, etc.– and evaluate the positive and negative aspects of alternative solutions. Alternatively, they may be turned into revision exercises aimed at enhancing the students' revision skills, which also form an important part of general translation competence. Finally, from different renditions in the TT many exercises on back translation can be prepared for advanced students to ensure the acquisition of contrastive discourse features for English-Spanish. Thinking about the applicability of the by-product generated by the experiment deployed in this study, the TMs resulting from the experimental design can be used in the translation technologies class for a number of activities. Working with a TM coming from real professional translators can be used in the class to simulate real-world translation assignment where the use of an existing TM can be incorporated to work with different types of fuzzy matches. Performing different concordance searches on the linguistic data contained in the TM can also be used in class to teach students how to work with this feature. Exporting and importing translated segments within any TM can also be a good opportunity to comment on TM file formats and the meta-data associated to them.

8.2.3 Further research

The methodology proposed in this thesis proved promising in several respects, and certainly deserves more in-depth investigation. As has been pointed out in the introduction and on several occasions during the analysis, this investigation could be developed further taking into account all the data that has been collected about the translation process (i.e., screen recordings and key-logging). Triangulating the product with the information about the process already would certainly be a good way for further development of the research questions proposed here. Also the implementation of new methodologies into the same research in the form of an eye-tracking study would certainly help to further develop from a process-based perspective. In regard to the corpus-based methodology adopted here it could be said that it could to be refined in various regards, and most notably with respect

to the way generalisations can be drawn by comparing concurrent translation solutions. An open question is, for instance, how many translations for each ST would be needed in order to be able to talk about particular trends in a reliable way. In addition, an attempt could be made to achieve higher comparability between the different multi-parallel subcorpora, with respect to both text types (genres and domains) and the number of TTs available for each ST, in order to verify whether the results obtained by replicating the analyses on larger and more comparable samples confirm those presented in this study or bring to light different patterns. As a last point, it would be advisable to carry out new analyses based on different indicators to seek further evidence of the validity of the MTC methodology. Opening up to other research strands in the field of Translation Studies, it might be interesting to compare MTC data with translations produced by non-professionals (a learner's translation corpora) in order to detect specific translation competence-related shifts. Using the data provided by the present study, another obvious extension for future research would be to replicate the experiment using a different language pair in order to compare results and test again the hypothesis proposed in this investigation. Testing the experimental design in new translation editing environments (i.e. latest GUI for SDL Trados 2014) using the same dependent variables could also be a natural extension of this study and the best way to know more about the actual impact of translation technologies on the texts that they produce. Finally, following the new research trends in the area of Translation Technologies, the integration of crowdsourcing and into the would also be a good way to gain insights into explicitation techniques so as to test if specific shifts can be observed in the translations done by non-professional translators and see in which way technology makes them interact with the ST.

Chapter 9

Bibliography

Abaitua, J. 2001. "Memorias de traducción en TMX compartidas por Internet". *Revista Tradumàtica, número 0* <http://www.fti.uab.es/tradumatica/revista/num0/articles/jabaitua/art.htm>[Accessed: 25/09/2009].

ACT - Asociación de Centros Especializados en Traducción. 2005. *Primer estudio de mercado de los servicios de traducción profesional en España de la Asociación de Empresas de Traducción* (ACT). Madrid: ACT.

Allen, J. 1999: Adapting the concept of 'Translation Memory' to 'Authoring memory' for a Controlled Language writing environment. In: *Proceedings of the 21st Conference of Translating the Computer, sponsored by ASLIB, 10-11 November 1999* [online]. <http://www.mt-archive.info/Aslib-1999-Allen.pdf>[Accessed 15/06/2011].

Allen, J. 2003. "Post-editing". In: Somers, H. (ed.) *Computers and Translation: A Translator's Guide.* Amsterdam/Philadelphia: John Benjamins, 297-317.

ALPAC. 1966. *Languages and machines: computers in translation and linguistics. A report by the Automatica Language Processing Advisory Committee, Division of Behavioral Sciences, National Academy of Sciences, National Research Council. Publication 1416.* Washington, D.C.: National Academy of Sciences and National Research Council.

Al-Qinai, J. 2001. "Explicitation vs. Implication in English-Arabic Translation". In: Thelen, M.; Lewandowska-Tomaszczyk, B. (eds.). *Translation and Meaning.* Part 5. Maastricht: Hogeschool Zuyd. Maastricht School of Translation and Interpreting, 409-423.

Alcina, A. 2008. "Translation technologies. Scope, tools and resources". *Target* 20(1), 79-102.

Alves, F. 2006. "Tradução, cognição e tecnologia: investigando a interface entre o desempenho do tradutor e a tradução assistida por computador". *Cadernos de tradução*, vol. 2: 14.

Anobile, Michael. 2000. "Foreword". In: Sprung, Robert C. (ed.) *Translating into Success: Cutting-edge Strategies for Going Multilingual in a Global Age*. Amsterdam/Philadelphia: John Benjamins, 2000, vii.

Archibal, J. (ed.) 2004. *La localisation: problématique de la formation*. Montreal: Linguatec Editeur.

Arnau, J. 1990. "Metodologia experimental". In: Arnau, J. ; Anguera, M.T. ; Gómez, J. (ed.) *Metodologia de la investigación en ciencias del comportamiento*. Murcia: Compobel.

Arnau, J. 1995. *Mètodes, dissenys i tècniques en investigació psicològica*. Barcelona: Universitat Oberta de Catalunya.

Arnold, D.; Balkan, L.; Humphreys, R.L.; Meijer, S.; Sadler, L. 1995. *Machine Translation - An Introductory Guide*. Oxford: NCC Backwell Ltd.

Arrouart, Catherine. 2003. "Les mémoires de traduction et la formation universitaire: quelques pistes de réflexion" [online]. *Méta*, 48:3. URL: <http://www.erudit.org/revue/meta/2003/v48/n3/007615ar.html>[Accessed: 15/07/2009].

Arthern, Peter. 1979. "Machine translation and computerised terminology systems: a translator's viewpoint." In Snell, Barbara (ed.) *Translating and the Computer, Proceedings of a Seminar, London 14th November 1978*. Amsterdam: North-Holland Publishing Company, 77-108.

Atlas, J.D. and Levinson, S.C. 1981. "It-clefts, informativeness, and logical form: Radical pragmatics (revised standard version)". *Radical pragmatics*, 1:1(61).

Austermühl, F. 2001. "Déjà Vu? – Translation memories and localization tools". *Electronic Tools for Translators*. Manchester: St. Jerome.

Austermühl, F. 2006. "Training Translators to Localize". In: Pym, A.; Perekstenko, A.; Starink, B. (eds.). *Translation Technology and its Teaching*. Tarragona: Intercultural Studies Group, 69-81.

Austermühl, F.; Mirwald, Chr. 2010. "Images of translators in localization discourse" [online]. *T21N, Translation in Transition*, 8. Available from: http://www.t21n.com [Accessed: 10/07/2011].

Bajo, T. 1999. "Procesos de compresnión y memoria en traducción e interpretación". *First PACTE Seminar on Empirical-Experimental Research in Translation*. Bellaterra: Universitat Autònoma de Barcelona.

Baker, M. 1993. "Corpus Linguistics and Translation Studies: Implications and Applications". In: Baker, M.; Francis, G.; Tognini-Bonelli, E. (eds.). *Text and Technology: In Honour of John Sinclair*. Amsterdam/Philadelphia: John Benjamins, 233-250.

Baker, M. 1995. "Corpora in Translation Studies: An Overview and Some Suggestions

for Future Research". *Target*, 7: 2. Amsterdam: Benjamins. 223-243.

Baker, M. 1996. "Corpus-Based Translation Studies: The Challenges that Lie Ahead". In: Somers, H. (ed.) *Terminology, LSP and Translation. Studies in Languages Engineering in Honour of Juan C. Sager.* Amsterdam/Philadelphia: John Benjamins, 175-186.

Baker, M. 1997. *Routledge Encyclopedia of Translation Studies.* London: Routledge.

Baker, M. 2000. "Towards a Methodology for Investigating the Style of a Literary Translator". *Target*, 12: 2, 241-266.

Baker, M. 2004. "A Corpus-based View of Similarity and Difference in Translation". *International Journal of Corpus Linguistics* 9: 2. 167–193.

Baroni M.; Bernardini, S. 2006. "A New Approach to the Study of Translationese: Machine-Learning the Difference between Original and Translated Text". *Literary and Linguistic Computing*, 21(3), 259-274.

Barzilay, R.; McKeown, K.R. 2001. "Extracting paraphrases from a parallel corpus". *Proceedings of the 39th Annual Meeting of the Association for Computational Linguistics.* Toulouse, 6-11 July, 2001, 50–57.

Batista, B. 2007. *O impacto dos sistemas de Memória de Tradução nos Processos de Revisáo de Tradutores Profissionais Brasileiros.* Belo Horizonte: Faculdade de Letras da Universidade Federal de Minas Gerais/PosLin (Dissertation - Mestrado em Lingüística Aplicada).

Baumgarten, N. et al. 2008. "Explicitness in Translation and Interpreting: a critical review and some empirical evidence (of an elusive concept)". *Across Languages and Cultures* 9 (2), 177–203

Becher, V. 2010a. "Abandoning the notion of 'translation-inherent' explicitation. Against a dogma of translation studies". *Across Languages and Cultures* 11:1. 1–28.

Becher, V. 2010b. "Towards a more rigorous treatment of the Explicitation Hypothesis in translation studies". *Trans-Kom* 3:1. 1–25.

Becher, V. 2010c. "Differences in the use of deictic expressions in English and German texts." *Linguistics* 48(4). 1309–1342.

Becher, V. 2011. "When and why do translators add connectives? A corpus-based study". *Target* 23(1).

Bédard, C. 1998a. "Ce qu'il faut savoir sur les mémoires de traduction", *Circuit*, vol. 60, 25-26.

Bédard, C. 1998b. "'Jamais plus vous ne traduirez…' ou les mémoires des traduction,

deuxième partie", *Circuit*, vol. 61, 23.

Bédard, C. 2000. "Mémoire de traduction cherche traducteur de phrases". *Traduire*, 2000, 186, 41-49.

Bédard, C. 2001. "Une nouvelle profession: traducteur de phrases". *Circuit*, vol. 70, 29.

Belda Medina, J.R. 2003. *El lenguaje de la informática e Internet y su traducción.* Alicante: Universidad de Alicante.

Benis, M. 1999. "Translation memory from O to R" [online]. TransRef – The Translation Reference Center. URL: <http://transref.org/default.asp?docsrc=/u-articles/Benis3.asp>[Accessed: 12/02/2009].

Benis, M. 2003. "Much more than memories." *ITI Bulletin*, November-December, 24-29.

Benis, M. 2004a: The leader's progress. Review of Trados TM 6.5.5 and Trados TM Freelance. In *ITI Bulletin* (Sept/Oct), 26-32.

Benis, M. 2004b: A mixed bag of tricks. In *ITI Bulletin* (Mar/Apr), 22-27.

Benito, D. 2009. "Future Trends in Translation Memory". *Revista Tradumàtica – Traducció i Tecnologies de la Informació i la Comunicació, Núm. 7.* <http://webs2002.uab.es/tradumatica/revista/num7/articles/07/07art.htm>[Accessed: 25/09/2009].

Berk-Seligson, S. 1987. "The intersection of testimony styles in interpreted judicial proceedings: Pragmatic alterations in Spanish testimony". *Linguistics*, 25, 1087-1125.

Bermúdez Bausela, M. 2005. "Teaching Localization in Spanish Universities". *Localisation Focus - The International Journal of Localisation.* Limerick: Localisation Research Centre.

Bernardini, S. 2005a. "Reviving old ideas: parallel and comparable analysis in translation studies - with an example from translation stylistics" In Aijmer, K.; Alvstad, C. *New tendencies in translation studies.* Gothenburg: University of Gothenburg, 5-18.

Bernardini, S. 2005b. "Tools for translators: Machine readable corpora as resrources for transaltors". In K. Brown (ed.). *Encyclopedia of Language & Linguistics 2nd Edition.* London: Elsevier.

Bernardini, S. 2008. *Collocations in translated text. A corpus-based study.* Unpublished PhD dissertation. Middlesex University.

Bernardini, S.; Zanettin, F. 2004. "When is a universal not a universal? Some limits of current corpus-based methodologies for the investigation of translation universals". In: Mauranen, A.; Kujamäki, P. (eds.). *Translation universals: Do they exist?* Amsterdam: John Benjamins, 51-62.

Biau Gil, J.R. 2005. "'Please translate close to the source text, i.e. deliver a good translation' – Trust and Technology Problems Related to Literal or Free Translation". *Génesis. Revista Científica do ISAI*, 5, 77-82.

Biau Gil, J.R.; Pym, A. 2003. "Las memorias de traducción y el olvido del traductor. Apuntes para la pedagogía de un avance pedagógico imperfecto". In: Corpas Pastor, Gloria; Varela Salinas, María José. (eds.). *Entornos informáticos de la traducción profesional. Las memorias de traducción.* Granada: Atrio.

Biber, D. 1988. *Variation Across Speech and Writing.* Cambridge: Cambridge University Press University Press.

Bloch, I. 2005. "Sentence Splitting as an Expression of Translationese" [online]. Seminar paper, Bar Ilan University. URL: <http://www.biu.ac.il/hu/stud-pub/tr/tr-pub/bloch-split.htm#_Toc123889309>[Accessed: 12/06/2008].

Blum-Kulka, S. 1986. "Shifts of Cohesion and Coherence in Translation". In: House, J.: Blum-Kulka, S. (eds.). *Interlingual and Intercultural Communication. Discourse and Cognition in Translation and Second Language Acquisition Studies.* Tübingen: Gunder Narr Verlag, 17-35.

Blum-Kulka, S. 1986b. "Shifts of Cohesion and Coherence in Translation". In: Venuti, L. (ed.) 2000. *The Translation Studies Reader.* London/New York: Routledge, 298-313.

Blum-Kulka, S., Levenston, Eddie A. 1983. "Universals of lexical simplification". In: Færch, C.; Kasper, G. (eds.)., *Strategies in Interlanguage Communication.* London: Longman, 119-139.

Borin, L., Prütz, K. 2001. "Through a glass darkly: Part of speech distribution in original and translated text". In W. Daelemans, K. Sima'an, J. Veenstra and J. Zavrel (eds.)., *Computational linguistics in the Netherlands 2000.* Amsterdam: Rodopi, 30-44.

Bosseaux, C. 2001. "A Study of the Translator's Voice and style in the French translations of Virginia Woolf's The Waves". In: Olohan, Maeve. (ed.) *CTIS Occasional Papers, Volume 1.* Manchester: Centre for Translation & Intercultural Studies, UMIST, 55-75.

Bosseaux, C. 2006. "Who's Afraid of Virginia's You: a Corpus-Based Study of the French Translations of the Waves". *Meta* 51: 3, 599-610.

Bowker, L. 2002a. *Computer-Aided Translation Technology: A Practical Introduction.* Ottawa: University of Ottawa Press.

Bowker, L. 2002b. "Information Retrieval in Translation Memory Systems: Assessment of Current Limitations and Possibilities for Future Development". *Knowledge Organization Journal*, 29:3, 4, 198-203.

Bowker, L. 2003. "Investigating 'reversible' translation resources: Are they equally useful in both directions?". In: Pérez-González, L. (ed.) *Speaking in Tongues: Language across contexts and users.* Valencia: Universidad de Valencia, 201-224.

Bowker, L. 2005. "Productivity vs Quality? A Pilot Study on the Impact of Translation Memory Systems". *Localisation Focus - The International Journal of Localisation*, 4(1): 2005, 13-20.

Bowker, L. 2006. "Translation memory and "text" ". In: L. Bowker (ed.). *Lexicography, terminology and translation.* Ottawa: University of Ottawa Press.

Bowker, L.; Barlow, M. 2004. "Bilingual concordancers and translation memories: A comparative evaluation" [online]. In: *Proceedings of the Second International Workshop on Language Resources for Translation Work, Research and Training*, 2004, 52-61. URL: <http://www.ifi.unizh.ch/cl/yuste/lr4trans-2/WKS_PAPERS/8.pdf>[Accessed: 15/10/2008].

Bowker, L.; Barlow, M. 2008. "A comparative evaluation of bilingual concordancers and translation memory systems". In: Yuste, Elia. (ed.) *Topics in Language Resources for Translation and Localisation.* Amsterdam/Philadelphia: John Benjamins, 1-22.

Bowker, L.; Cronin, M.; Kenny, D.; Pearson, J. (eds.). *Unity in Diversity? Current Trends in Translation Studies.* Manchester: St. Jerome.

Cámara, L. 2001. "El papel de las herramientas TAO en la documentació técnica multilingüe". *Revista Tradumàtica – Traducció i Tecnologies de la Informació i la Comunicació, Núm. 0.* <http://www.fti.uab.es/tradumatica/revista/num0/articles /lcamara/art.htm>[Accessed: 25/09/2009].

Capellas, G. 2001. "El proceso de traducción y el papel de la terminología en el sistema de las Naciones Unidas". *Revista Tradumàtica, número 0* <http://www.fti.uab.es/tradumatica/revista/ 25/09/2009].

Carl, M.; Hansen-Schirra, S. "Linking translation memories with example-based machine translation". *Machine Translation Summit VII*, 617-624.

Carston, R. 2002. *Thoughts and utterances: the pragmatics of explicit communication.* Oxford: Blackwell.

Castagnoli, S. 2009a. *Regularities and variations in learner translations: A corpus-based study of conjunctive explicitation* Ph.D. dissertation. Pisa: Università di Pisa.

Castagnoli S. 2009b. "A New Approach to the Analysis of Explicitation in Translation: Multiple (Learner) Translation Corpora". *International Journal of Translation* 21(1). 89-105.

Castellanos, C.; Piqué, R. 2002. "Els avantatges i servituds de la traducció assistida per ordenador". J. Mallafré (ed.) *Actes de les II Jornades per a la Cooperació en*

l'Estandardització Lingüística. Barcelona: Secció Filològica de l'Institut d'Estudis Catalans, 143-156.

Chen, W. 2004. "Investigating explicitation of conjunctions in translated Chinese: A corpus-based study". *Language Matters* 35(1), 295–312.

Cheng, S. 2000. "Globalizing an e-Commerce Web Site". In: Sprung, Robert C. (ed.) *Translating into Success: Cutting-edge Strategies for Going Multilingual in a Global Age*. Amsterdam/Philadelphia: John Benjamins, 29-42.

Cheong, H-J. 2006. "Target Text Contraction' in English-into-Korean Translations: A Contradiction to presumed translation universals". *Méta*, 51:2, 33-69.

Chesterman, A. 1997. *The Memes of Translation. The spread of ideas in translation theory*. Amsterdam/Philadelphia: John Benjamins.

Chesterman, A. 2004a. "Beyond the particular". In Mauranen, A.; Kujamäki, P. (eds.). *Translation Universals. Do they exist?* Amsterdam/Philadelphia: John Benjamins.

Chesterman, A. 2004b. "Hypotheses about translation universals". Hansen, G.; Malmkjær, K. and Gile, D. (eds.). *Claims, changes and challenges in Translation Studies*. Amsterdam/Philadelphia: John Benjamins, 2004. 1–13.

Christensen, T.P. 2003. *Translation memory-systemer som værktøj til juridisk oversættelse. Kritisk vurdering af anvendeligheden af translation memory-systemer til oversættelse af selskabsretlig dokumentation*. Ph.D. dissertation. Syddansk Universitet.

Christensen, T.P., Schjoldager, A. 2010. "Translation-Memory (TM) Research: What Do We Know and How Do We Know It?', *Hermes–Journal of Language and Communication Studies*, 44, 89–101.

Christensen, T.P., Schjoldager, A. 2011. "The Impact of Translation-Memory (TM) Technology on Cognitive Processes: Student-Translators' Retrospective Comments in an Online Questionnaire", *Human-machine Interaction in Translation*, 119–130.

Circé, K. 2005. *Traduction automatique, mémoire de traduction ou traduction humaine? Proposition d'une approche pour déterminer la meilleure méthode à adopter selon le texte*. MA Thesis. University of Ottawa.

Colominas, C. 2008. "Towards chunk-based translation memories". *Babel* 54(4), 343-354.

Corpas Pastor, G; Varela Salinas, M.J. (eds.). 2003. *Entornos informáticos de la traducción profesional. Las memorias de traducción*. Granada: Atrio.

Corpas Pastor, G. 2008. *Investigar con corpus en traducción: los retos de un nuevo paradigma*. Peter Lang: Berlin & New York.

Corpas Pastor, G., Mitkov, R., Afzal, N., Pekar, V. 2008. "Translation universals: Do they exist? A corpus-based NLP study of convergence and simplication". *Proceedings of the AMTA*.

Cruz-Lara, S.; Bellalem, N.; Ducret, J.; Kramer, I. 2008. Standardising the management and the representation of multilingual data: The Multi Lingual Information Framework. In Yuste Rodrigo, E. (ed.), *Topics in Language Resources for Translation and Localisation*. Amsterdam/Philadelphia: John Benjamins, 151-172.

Dancette, J.; Ménard, N. 1996. "Modèles empiriques et expérimentaux en traductologie: questions d'épistémologie". *Méta*, 41:1, 139-156.

Dancette, J. 1997. "Mapping Meaning and Comprehension in Translation. Theoretical and Experimental Issues". In: Danks, J.H.; Shreve, G.M.; Fountain, S.B.; McBeath, M.K. (eds.). *Cognitive Processes in Translation and Interpreting*. Thousand Oaks, London/New Delhi: Sage, 77-103.

Danielsson, P. 2007. "In other words: Using paraphrases in translation". *Proceedings of the Twentyninth International Conference on Translating and the Computer*, 29-30 November 2007, London. London: ASLIB.

Davies, I. 2004. SDLX 2004 TM and Trados 6.5 TM. In *Communicator* (Autumn), 32-36.

de Vries, A-S. 2002. "Getting Full or Fuzzy? The payment issue with full matches generated by translation memory systems", *Language International*, june, 44-47.

Delisle, J., Lee-Jahnke, H.; Cormier, M.C. 1999. *Terminologie de la traduction*. Amsterdam/Philadelphia: John Benjamins.

Denver, L. 2002. "On the Translation of Semantinc Relations: An empirical study". *Revista Brasileira de Lingüística Aplicada*, 2(2), 25-46.

Denver, L. 2007. "Translating the Implicit: On the inferencing and transfer of semantic relations". In: Gambier, Y.; Shlesinger, M.; Stolze, R. (eds.). *Doubts and Directions in Translation Studies: Selected contributions from the EST Congress*. Lisbon 2004. Amsterdam/Philadelphia: John Benjamins, 223-235.

Denver, L. 2009. "Unique Items in Translations". In: *Behind the Mind Methods, models and results in translation process research*. Copenhagen: Samfundslitteratur. Copenhagen Studies in Language, 37, 125-147.

Dillon, S.; Fraser, J. 2006. "Translators and TM: an investigation of translators' perspectives of translation memory adoption". *Machine Translation*, 20(2): 67-79.

Doherty, M. 1987. *Epistemic Meaning*. Berlin: Springer Verlag.

Dragsted, B. 2004. *Segmentation in translation and translation memory systems - An empirical investigation of cognitive segmentation and effects of integrating a TM*

system into the translation process. Copenhagen: Samfundslitteratur.

Dragsted, B. 2005. "Segmentation in translation: Differences across levels of expertise and difficulty". *Target*, 17: 1, 49-70.

Dragsted, B. 2006. "Computer-aided Translation as a Distributed Cognitive Task". *Pragmatics & Cognition*, 14(2), 443-464.

eCoLoRe. 2003. *Translation Memory Survey* [online]. URL: <http://ecolore.leeds.ac.uk /xml/project/news.xml?lang=en>[Accessed: 15/10/2013].

Englund Dimitrova, B. 1993. "Semantic change in translation – a cognitive perspective". In: Gambier, Y.; Tommola, J. (eds.). *Translation and knowledge*. Turku: Centre for Translation and Interpreting. University of Turku, 285-296.

Englund Dimitrova, B. 1994. "Statistical Analysis of Translations (On the basis of translations from and to Bulgarian, Russian and Swedish)". *Scandinavian Working Papers on Bilingualism*, 9, 87-103.

Englund Dimitrova, B. 2003. "Explicitation in Russian-Swedish Translation: Sociolinguistic and Pragmatic Aspects". In: Englund Dimitrova, B.; Pereswetoff-Morath, A. (eds.). *Swedish Contributions to the Thirteenth International Congress of Slavists, Ljublijana, 15-21 August 2003*. Lund: Lund University, 21-31.

Englund Dimitrova, B. 2005a. "Literal translation in the translation process of professional translators". In: *New Tendencies in Translation Studies* 12. December 2003, eds. K. Aijmer & C. Alvstad, Göteborg University: Department of English, 29-39.

Englund Dimitrova, B. 2005. *Expertise and Explicitation in the Translation Process*. Amsterdam/Philadelphia: John Benjamins.

Englund Dimitrova, B. 2006. "Segmentation of the writing process in translation: Experts vs. novices". Sullivan, K.; Lindgren, E. (eds.). *Computer key-stroke logging: Methods and Applications*. Amsterdam: Elsevier.

Enríquez-Veintimilla, N. 2006. Translation memory issues – ownership and discounts. In *ITI Bulletin* (Jan/Feb), 32-36.

Eskola, S. 2004. "Untypical frequencies in translated language: A corpus-based study on a literary corpus of translated and non-translated Finnish". In Mauranen, Anna and Pekka Kujamäki (eds.). *Translation Universals*, 83–99.

Esselink, B. 2000. *A Practical Guide to Localization*. Amsterdam/Philadelphia: John Benjamins.

Esselink, B. 2002. "From translation to localization – and back". *Translating Science. 2nd International Conference on Specialized Translation. Barcelona, 28 February-2 march, 2002*. Barcelona: Universitat Pompeu Fabra.

Fabricius-Hansen, C. 1996. "Informational density: a problem for translation theory". *Linguistics* 34(3): 521–565.

Fabricius-Hansen, C. 1998. "Informational Density and Translation, with Special Reference to German–Norwegian–English". In: Johansson, S.; Oksefjell, S. (eds.). *Corpora and Crosslinguistic Research. Theory, Method, and Case Studies.* Amsterdam/Atlanta: Rodopi, 197–234.

Fabricius-Hansen, C. 1999. "Information packaging and translation: Aspects of translational sentence splitting (German – English/ Norwegian)". In Doherty, M. (ed.), *Sprachspezifische Aspekte der Informationsverteilung.* Berlin: Akademie-Verlag. 175-214.

Fabricius-Hansen, C. 2005. "Elusive Connectives. A Case Study on the Explicitness Dimension of Discourse Coherence". *Linguistics*, 43 (1), 17-48.

Fernández-Rodríguez, M. 2010. "Evolución de la traducción asistida por ordenador: de las herramientas de apoyo a las memorias de traducción". *Sendebar: Revista de la Facultad de Traducción e Interpretación.* Granada: Universidad de Granada, 201-230.

Frankenberg-Garcia, A. 2009. "Are translations longer than source texts? A corpus-based study on explicitation". In: *Beeby, Allison; Rodríguez-Inés, Patricia; Sánchez-Gijón, Pilar. Corpus Use and Translating.* Amsterdam/Philadelphia: John Benjamins, 47-58.

Fraser, J. 1996. "The Translator Investigated: learning from translation process analysis". *The Translator*, vol.2, 1, 65-79.

Frawley, W. 1984. "Prolegomenon to a Theory of Translation." William Frawley (ed.): *Translation: Literary, Linguistic, and Philosophical Perspectives.* London/Toronto: Associated University Press, 159-175.

Freigang, K.H. 2001. "Automation of Translation: Past, Presence, and Future". *Revista Tradumàtica, número 0* <http://www.fti.uab.es/tradumatica/revista/num0/articles/khfreigang/art.htm>[Accessed: 25/09/2013].

Freigang, K.H. 1998. "Machine-aided translation". In: Baker, M. (ed.) *Routledge Encyclopedia of Translation Studies.* London/New York: Routledge. 134-136.

Fulford, H.; Granell-Zafra, J. 2005. "Translation and Technology: A Study of UK Freelance Translators". *The Journal of Specialised Translation.* Issue 4, 2-17.

Fustegueres, S. 2001. "Qui té por de les memòries de traducció?". *Revista Tradumàtica, número 0* <http://www.fti.uab.es/tradumatica/revista/num0/articles/ sfustegueres/art.htm>[Accessed: 25/09/2009].

García, M. 1995. "Notes of the Epistemology of Translation Theory". *Méta*, 40: 3, 388-405.

García, I., Stevenson, V. 2006. "Lingotek. Introducing a new web-based 'language search engine'". *Multilingual* 17(8):22-25.

García, I. 2005. "The Bottom Line: Does Text Reuse Translate into Gains in Productivity?". *Proceedings of The Second International Conference on Technology, Knowledge and Society.* Hyderabad (India), 12-15 December 2005.

García, I. 2007. "Power shifts in web-based translation memory". *Machine Translation*, 21(1), 55-68.

García, I. 2009. "Research on translation tools". In: Pym, Anthony; Perekrestenko, Alexander (eds.). *Translation Research Projects 2.* Tarragona: Intercultural Studies Group, Universitat Rovira i Virgili.

García-Varea, I., Ortiz, D.; Nevado, F.; Gómez, P.; Casacuberta, F. 2005. "Automatic Segmentation of Bilingual Corpora: A Comparison of Different Techniques". *Ib-PRIA* (2), 614–621.

Garzone, G. 2004. "Traduzione e interferenza linguistica: il punto di vista della traduttologia". In Garzaone, G.; Cardinaletti (eds.). *Lingua, mediazione linguistica e interferenza.* Milano: Franco Angeli.

Gauton, R. 2008. The use of corpora in translator training in the African language classroom: A perspective from South Africa. In Yuste Rodrigo, E. (ed.), *Topics in Language Resources for Translation and Localisation.* Amsterdam/ Philadelphia: John Benjamins, 90-106.

Gellerstam, M. 1986. "Translationese in Swedish novels translated from English". In: Wollin, L.; Landquist, H. (eds.) *Translation Studies in Scandinavia, Proceedings from the Scandinavian Symposium on Translation theory*, 88-95.

Gervais, D. 2002. *The Full-Text Multilingual Corpus: Breaking the Translation Memory Bottleneck.* Hull: MultiCorpora R&D Inc. White Paper.

Gerzymisch-Arbogast, H.; Mudersbach, K. 1998. *Methoden des wissenschaftlichen. Übersetzens.* Tübingen: Francke.

Gile, D. 1990a. "Research Proposals for Interpreters". In: Gran, L; Taylor, C. (eds.). *Aspects of Applied and Experimental Research on Conference Interpretation.* Campanotto: Udine, 42-53.

Gile, D. 1990b. "Scientific Research vs. Personal Theories in the Investigation of Interpretation". In: Gran, L; Taylor, C. (eds.). *Aspects of Applied and Experimental Research on Conference Interpretation.* Campanotto: Udine, 28-41.

Gile, D. 1991. "Methodological Aspects of Interpretation and Translation Research". *Target*, 3: 2, 153-174.

Gile, D. 1995a. *Regards sur la Recherche en Interprétation de Conférence.* Lille: Presses Universitaires de Lille.

Gile, D. 1995b. *Basic Concepts and Models for Interpreter and Translator Training.* Amsterdam/Philadelphia: John Benjamins.

Gile, D. 1998. "Observational Studies and Experimental Studies in the Investigation of Conference Interpretation", *Target*, 10: 1, 69-93.

Gordon, I. 1996. "Letting the CAT out of the bag – or was it MT?". In: *Translating and the Computer 18: Papers from the Aslib conference held on 14 & 15 November 1996.* London: ASLIB.

Gordon, I. 1997. "The TM Revolution – What does it really mean?". In: *Translating and the Computer 19: Papers from the Aslib conference held on 13 & 14 November 1997.* London: ASLIB.

Goris, O. 1993. "The Question of French Dubbing: Towards a Frame for Systemactic Investigation". *Target*, 5(2): 169-190.

Gotti, F., Langlais, P., Macklovitch, E., Bourigault, D., Robichaud, B., & Coulombe, C. 2005. "3GTM: A third-generation translation memory". In: *Proceedings of the 3rd Computational Linguistics in the North-East (CLiNE) Workshop.* Gatineau, QC, August 26, 8-15.

Gouadec, D. 2007. *Translation as a profession.* Amsterdam/Philadelphia: John Benjamins.

Gow, F. 2003. *Metrics for Evaluating Translation Memory Software.* MA thesis [online]. University of Ottawa. URL: <http://www.chandos.ca/thesis.html>[Accessed: 15/10/2013].

Graesser, A. C., Singer, M., Trabasso, T. (1994). "Constructing inferences during narrative text comprehension". *Psychological Review*, 101(3), 371–395.

Gray, W.S.; Leary, B.E. *What makes a book readable.* Chicago: University of Chicago Press, 1935.

Grönroos, M.; Becks, A. 2005. "Bringing Intelligence to Translation Memory Technology". In: *Proceedings of the International Conference Translating and the Computer 27, 24-25 November 2005.* London: ASLIB.

Guerberof, A. 2008. "Post-editing MT and TM. A Spanish case". *Multilingual*, 19(6), 45-50.

Guerberof, A. 2009. "Productivity and quality in the post-editing of outputs from translation memories and machine translation". *Localisation Focus. The International Journal of Localisation.* Vol. 7 Issue 1, 11-21.

Guerberof, A. 2012. *Productivity and quality in the post-editing of outputs from translation memories and machine translation.* PhD dissertation. Tarragona: Universitat Rovira i Virgili. URL: <http://www.tdx.cat/bitstream/handle/10803/90247/ Guerberof%20Thesis%20Final.pdf?sequence=1>[Accessed: 15/01/2013].

Gotti, F., P. Langlais, E. Macklovitch, D. Bourigault, B. Robichaud, and C. Coulombe. 2005. "3GTM: a third-generation translation memory". In: *Proceedings of the 3rd Computational Linguistics in the North-East* (CLiNE) Workshop, Gatineau, Quebec.

Grice, H.P. 1975. "Logic and conversation". In: Cole, P.; Morgan, J.L. (eds.). *Syntax and Semantics 3: Speech Acts*, New York: Academic Press, 41-58.

Gumul, E. 2004. *Cohesion in Interpreting.* Ph.D Thesis. University of Silesia.

Gumul, E. 2006. "Explicitation in Conference Interpreting" In: Thelen, M.; Lewandowska-Tomaszczyk, B. (eds.). *Translation and Meaning. Part 7.* Maastricht: Department of Translation and Interpreting, Maastricht School of International Communication, Zuyd University.

Gumul, E. 2006. "Explicitation in Simultaneous Interpreting" In: *Across Languages and Cultures*, 7(2), 171-190.

Gumul, E. 2007. "Explicitation in Conference Interpreting". In: Thelen, M.; Lewandowska-Tomaszczyk, B. (eds.). *Translation and Meaning, Part 3.* Maastricht: Hoogeschool Maastricht, 449-456.

Hallett, T. 2006. "Transit and TRADOS: Converging functions, diverging approaches". *Localisation Focus* 5 (4), 9-11.

Halliday, M.A.K.; Hasan, R. 1976. *Cohesion in English.* London: Longman.

Halverson, S.L. 1998. "Translation studies and representative corpora: establishing links between translation corpora, theoretical/descriptive categories and a conception of the object of study". *Meta* 43:4. 494–514.

Hansen, G et al. 1998. "The translation process from source text to target text". In: G. Hansen (ed.) *Copenhagen Working Papers in LSP*, 1/1998, 59-71.

Hansen, S. 2003. *The Nature of Translated Text. An interdisciplinary methodology for the investigation of the specific properties of translations.* Saarbrücken: Saarbrücken Dissertations in Computational Linguistics and Language Technology.

Hansen-Schirra, S.; Neumann, S.; Steiner, E. 2007. "Cohesive explicitness and explicitation in an English-German translation corpus". *Languages in Contrast* 7(2), 241-266.

Hansen, S., Teich, E. 2001. "Multi-layer analysis of translation corpora: methological issues and practical implications". In: Cristea, D.; Ide, N.; Marcu, D.; Poesio, M.

(eds.)., *Proceedings of EUROLAN 2001 Workshop on Multi-Layer Corpus-based Analysis*. Iasi. 44-55.

Harris, B. 1988. "Bi-text, a new concept in translation theory". *Language Monthly* 54, 8-10.

Hatim, B.; Mason, I. 1997. *Translator as a Communicator*. Amsterdam/Philadelphia: John Benjamins.

Hatim, B.; Munday, J. 2004. *Translation. An advanced resource book*. London/New York: Routledge.

Haynie, M. 2008. "Enterprise Cloud Services: Deriving Business Value from Cloud Computing. White paper." *MicroFocus*.

Heltai, P. 2005. "Explicitation, Redundancy, Ellipsis and Translation". In: Károly, K.; Fóris, Á. (eds.). *New Trends in Translation Studies. In Honour of Kinga Klaudy*. Budapest: Akadémiai Kiadó, 45-74.

Heyn, M. 1998. "Translation Memories: Insights and Prospects". In: Bowker, L.; Cronin, M.; Kenny, D.; Pearson, J. (eds.). *Unity in Diversity? Current Trends in Translation Studies*. Manchester: St. Jerome, 123-126.

Hirsch, G. 2001. "Explicitations and other types of shifts in the translation of irony and humor". *Target*, vol 23(2): 178-205

Hjort-Pedersen, M.; Faber, D. "Explicitation and Implicitation in Legal Translation – A Process Study of Trainee Translators". *Meta*, 55: 2, 2010, 237-250.

Hodász, G.; Pohl, G. 2005. "MetaMorpho TM: a linguistically enriched translation memory". In: *International Workshop, Modern Approaches in Translation Technologies* (eds: W. Hahn, J. Hutchins, and C. Vertan,), Borovets, Bulgaria, 26-30.

Höge, M. 2002. *Towards a Framework for the Evaluation of Translators' Aids Systems*. PhD Tthesis. Helsinki: Helsinki University.

Holmes, J. S. 1988. *Translated!* Amsterdam: Rodopi.

Holmes, J. S. 1972/2000. "The name and nature of translation studies". In Venuti, Lawrence (ed.) *The Translation Studies Reader*. London/New York: Routledge, 172-185.

Horn, L. 1984. "Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature". In Deborah Schiffrin (ed.), *Meaning, form, and use in context: Linguistic applications*. Washington: Georgetown University Press, 11-42.

House, J. 1977. *A Model for Translation Quality Assessment*. Tübingen: Narr.

House, J. 1997. *Translation Quality Assessment. A Model Revisited.* Tübingen: Gunter Narr.

House, J. 2004. "Explicitness in Discourse across Languages". House, J.; Koller, W.; Schubert, K. (eds.). *Neue Perspektiven in der Übersetzungs- und Dolmetschwissenschaft. Festschrift für Heidrun Gerzymisch-Arbogast zum 60.* Geburtstag. Bochum: AKS-Verlag, 185-207.

House, J. 2006. "Text and context in translation". *Journal of Pragmatics*, 38(2): 338–358.

House, J. 2008. "Beyond intervention: Universals in translation?". *Trans-Kom* 1(1). Hutchins, J. 2004. "The Georgetown-IBM experiment demonstrated in January 1954". In: Frederking, R.E. and Taylor, K.B. (eds.). *Machine translation: from real users to research.* 6th Conference of the Association for Machine Translation in the Americas, AMTA 2004, Washington, DC, USA, September 28 – October 2, 2004.Berlin: Springer Verlag, 102-114.

Hunt, T. 2003. "Translation Technology Failures and Future". In: *Lisa Newsletter*, vol XII nr. 1.4.

Hunt, T. 2006. "Will Language Search Engines replace Translation Memory Systems?". Article available on Lingotek's website at: http://www.lingotek.com/lsereplacetm.pdf [Accessed: 14/11/2011]

Hurtado Albir, A. 2001. *Traducción y traductología: introducción a la traductología.* Madrid: Cátedra.

Hutchins, J. 1998. "The Origins of the Translator's Workstation". *Machine Translation*, 13, 4, 287-307.

Hutchins, J. 2003. "ALPAC: the (in)famous report". In: Nirenburg, S.; Somers, H; Wilks, Y. (eds.). *Readings in Machine Translation.* Cambridge, Mass: The MIT Press, 131-135.

Hutchins, J; Somers, H. L. 1992. *An Introduction to Machine Translation.* London: Academic Press.

Isabelle, P. et al. 1993. "Translation Analysis and Translation Automation". In: *Proceedings of the Fifth International Conference on Theoretical and Methodological Issues in Machine Translation.* Kyoto.

Ishikawa, L. 1999. "Cognitive Explicitation in Simultaneous Interpreting". In: Álvarez Lugris, A.; Fernández Ocampo, A. (eds.). *Anovar/Anosar estudios de traducción e interpretación*, 1. Vigo: Universidade de Vigo. 231-257.

Iverson, S.P. 2003. "Working with translation memory: When and how to use TM for a successful translation project". *Multilingual Computing and Technology* 14(7), 35-37.

Jantunen, J.H. 2001. Synonymity and lexical simplication in translations: A corpus based approach. *Across Languages and Cultures* 2(1), 97-112.

Jantunen, J.H. 2004. Untypical patterns in translations: Issues on corpus methodology and synonymity. In Mauranen, A., Kujamaki, P. (eds.). *Translation Universals: Do They Exist?* Volume 48. John Benjamins, 101-126.

Jääskeläinen, R. 1998. "Think-aloud protocols", In: Baker, M. (ed.). *Encliclopedia of Translation Studies*. London/New York: Routledge, 265-269.

Jakobsen, A.L. 2002. "Translation drafting by Professional translators and by translation students". *Empirical Translation Studies: Process and Product*, 27, 191-204.

Jensen, K.T.H. 2009. Indicators of text complexity. In: S. Göpferich, A. L. Jakobsen & I. M. Mees (eds.). *Behind the Mind: Methods, Models and Results in Translation Process Research*. Copenhagen Studies in Language 36. Copenhagen: Samfundslitteratur, 61-80.

Jiménez-Crespo, M.A. 2011a. "The future of general tendencies in translation: Explicitation in web localization". *Target*, 23:1, 3–25.

Johansson, S. 1998. "On the role of corpora in cross-linguistic research". In: S. Johansson and S. Oksefjell, *Corpora and Cross-linguistic Research: Theory, method, and case studies*. Amsterdam: Rodopi, 1-24.

Johansson, S. 2003. "Reflections on corpora and their uses in cross-linguistic research". In: F. Zanettin, S. Bernardini, and D. Stewart (eds.). *Corpora in Translator Education*. Manchester: St. Jerome Publishing, 135-144.

Johansson, S. 2004. "Why change the subject? On changes in subject selection in translation from English into Norwegian." In: *Target* 16.1 29-52

Johansson, S. 2005. "Sentence openings in translations from English into Norwegian", in: *Norsk Lingvistik Tidsskrift* 23. 2005 3-35.

Kamenická, R. 2008. "Explicitation profile and translator style". In: Pym, A.; Perekrestenko, A. *Translation Research Projects 1*. Tarragona: Intercultural Studies Group. Universitat Rovira i Virgili, 117-130.

Kay, M. 1980/1997. The proper place of Men and Machines in Language Translation. In Research Report CSL-80-11, Xerox Palo Alto Research Center, Palo Alto, CA. Reprinted in *Machine Translation*, 12, 3-23.

Kenny, D. 1998. "Creatures of habit? What translators usually do with words". *Meta*, 43, 515-523.

Kenny, D. 1999. "CAT Tools in and Academic Environment: What are they good for?". *Target*, 11: 1, 65-82.

Kenny, D. 2001. *Lexis and Creativity in Translation. A Corpus-based Study.* Manchester: St. Jerome.

Kenny, D. 2005. "Parallel Corpora and Translation Studies: Old Questions, New Perspectives? Reporting that in GEPCOLT: a Case Study". Barnbrook, Geoff; Danielsson, Pernilla; Mahlberg, Michaela. (eds.). *Meaningful Texts: The Extraction of Semantic Information from Monolingual and Multilingual Corpora.* London/New York: Continuum, 154-165.

Kerlinger, F.N. 1987. *Investigación del comportamiento. Técnicas y metodologia.* México: Interamericana.

King, M. 1998. "Workflow, Computer Aids and Organisational Issues". In: *1998 EAMT Workshop, Translation Technology: Intergration in the Workflow Environment*, Geneva, 29-39.

Kiraly, D. 2000. *A Social Constructivist Approach to Translator Education. Empowerment from Theory to Practice.* Manchester: St Jerome.

Klaudy, K.; Károly, K. 2005. Implicitation in Translation: Empirical Evidence for Operational Asymmetry in Translation. *Across Languages and Cultures*, 6:1, 13-28.

Klaudy, K., Károly, K. 2007. "The Asymmetry Hypothesis further developed: the asymmetry of upgrading and downgrading in translation". Paper presented at the 5th EST Congress. Ljubljana, Slovenia.

Klaudy, K. 1993. "On the explicitation hypothesis". In: Klaudy, K. et al. (eds.). *Transferre necesse est... Current issues of translation theory.* Szombathely: Dániel Berzsenyi College. 66-77.

Klaudy, K. 1996. "Back-Translation as a Tool for Detecting Explicitation Strategies in Translation". In: Klaudy, K.; Lambert, J.; Sohár, A. (eds.). *Translation Studies in Hungary.* Budapest: Scholastica, 99-114.

Klaudy, K. 1998. "Explicitation". In: Baker, M. (ed.). *Encyclopedia of Translation Studies.* London: Routledge. 80-85.

Klaudy, K. 2000. "Explicitation Strategies within Lexical and Grammatical Translational Operations". In: Lendvai, E. (ed.), *Applied Russian Studies in Hungary* (p. 101-103). Pécs: Krónika Kiadó.

Klaudy, K. 2001a. "Grammatical Specification and Generalisation in Translation". In: Andor, J.; Szüts, T.; Terts, I. (eds.). *Színes eszmék nem alszanak. In honour of György Szépe on his 70th birthday.* Péchs: Lingua Franca, 679-690.

Klaudy, K. 2001b. "The Asymmetry Hypothesis. Testing the Asymmetric Relationship between Explicitations and Implicitations". Paper presented to the Third International Congress of the European Society for Translation Studies, *Claims, Changes*

and Challenges in Translation Studies, Copenhagen 30 August – 1 September 2001.

Klaudy, K. 2003. *Languages in Translation* [transl. by K. Károly and T. DeKornfeld]. Budapest: Scholastica.

Klaudy, K. 2009. "The asymmetry hypothesis in translation research". In Rodica Dimitriu & Miriam Shlesinger (eds.). *Translators and their readers. In Homage to Eugene A. Nida*, 283–303. Brussels: Les Editions du Hazard.

Klaudy, K. 2009. "Explicitation". In: Baker, M.; Saldanha, G. (ed.), *Routledge's Encyclopedia of Translation Stugies, 2nd Edition.* London/New York: Routledge, 104.

Koller, W. 1983. *Einführung in die Übersetzungswissenschaf.* Heidelberg: Quelle und Meyer.

Konšalová, P. 2007. "Explicitation as a universal in syntactic de/codification". *Across Languages and Cultures*, 8(1), 17-32.

Koppel, M.; Schler, J. 2003, "Exploiting Stylistic Idiosyncrasies for Authorship Attribution". In *Proceedings of IJCAI'03 Workshop on Computational Approaches to Style Analysis and Synthesis.* Acapulco, Mexico, 69-72.

Kreutzer, M.; Neunzig, W. 1998. "En torno a la investigación empírica en el campo de la Traductología". *Quaderns. Revista de Traducció*, 1, 127-134.

Kreckwitz, S. 2007. "Future Web-Based Translation Environments". Presentation held at the Lo calisation Research Forum (Dublin) (Available at http://www.across.net/presentations/LRC_0 [Accessed: 27/01/2011]).

Kugler, M. et al. 1995. "Translator's workbench - tools and terminology for translation and text processing". *Research Reports Esprit.* Berlin: Springer.

Kujamäki P. 2004. "What happens to "unique items" in learners' translations? "Theories" and "concepts" as a challenge for novices' views on "good translation"". In Mauranen, A.; Kujamäki, P. (eds.). 2004. *Translation Universals. Do they exist?* Amsterdam/Philadelphia: John Benjamins.

Kunz, K. 2009. *Variation in English and German Nominal Coreference: A Study of Political Essays.* PhD dissertation. Universität des Saarlandes.

Kunzli, A. 2006. "Translation revision - A study of the performance of ten professional translators revising a technical text". Gotti, M.; Šarčević, S. (eds.). *Insights into specialised translation*, MBern/Frankfurt: Peter Lang, 195-214.

Kussmaul, P. 1993. "Mental processes in creativity training". *First PACTE Seminar on Empirical-Experimental Research in Translation.* Bellaterra: Universitat Autònoma de Barcelona.

L'Homme, M-Cl. 1999. *Initiation à la traductique*. Brossard, Québec: Linguatech.

Lagoudaki, E. 2006a. "Translation Memories Survey 2006: Users' perceptions around TM use". In: *Proceedings of the International Conference Translating and the Computer* 28. London: ASLIB.

Lagoudaki, E. 2006b. *Translation Memories Survey 2006. Translation Memory systems: Enlightening users' perspective*. Imperial College London [online]. http://www3.imperial.ac.uk/portal/pls/portalli [Accessed 8/06/2011].

Lagoudaki, E. 2009. *Expanding the Possibilities of Translation Memory Systems: From the Translator's Wishlist to the Developer's Design*. PhD dissertion. London: Imperial College.

Lambert, J. 1995. "Shifts, Oppositions and Goals in Translation Studies: Towards A Genealogy of Concepts". In: van Leuven-Zwart, K.M.; Naaijkens, T. (eds.). *Translation Studies: The State of the Art*. Amsterdam/Atlanta: Rodopi, 25-38.

Lambert, S.; Moser-Mercer, B. (eds.). 1994. *Bridging the Gap: Empirical Research in Simultaneous Interpretation*. Amsterdam/Philadelphia: John Benjamins.

Langé, J-M. et al. 1997. "Bricks and Skeletons: Some ideas for the Near Future of MAHT". *Machine Translation*, 12. The Netherlands: Kluwer Academic Publishers, 39-51.

Lange, C. A.; Bennett, W. S. 2000. "Combining machine translation with translation memory at Baan". In Sprung, Robert C. (ed.) *Translating into success*. Amsterdam/Philadelphia: John Benjamins, 203-218.

Laviosa, S. 1996. "Comparable corpora: towards a corpus linguistic methodology for the empirical study of translation". In: Thelen, M., Lewandoska-Tomaszczyk, B. (eds.). *Translation and Meaning III. Proceedings of the Maastricht Session of the 2nd International Maastricht-Lodz Duo Colloquium on "Translation and Meaning"*, Maastricht: UPM, 153-163.

Laviosa, S. 1997. "How Comparable Can 'Comparable Corpora' Be?". *Target* 9 (2): 289-319.

Laviosa, S. 1998. "Universals of Translation". In: Baker, M. (eds.). *Routledge Encyclopaedia of Translation Studies*. London/New York: Routledge, 288-291.

Laviosa, S. 2002. *Corpus-based Translation Studies: Theory, Findings, Applications*. Amsterdam/New York: Rodopi.

Lehrberger, J.; Bourbeau, L. 1988. *Machine Translation. Linguistic characteristics of MT systems and general methodology of evaluation*. Amsterdam/Philadelphia: Benjamins.

Levitt, G. 2003. "Internet-based sharing of translation memory: New solutions that

are changing translation and localization workflows". *Multilingual Computing and Technology* 14(5), 38-41.

Levitt, G. 2004. "New Developments in TM Sharing". *Multilingual Computing & Technology*, 67:15, issue 7.

Levý, J. 1965. "Will Translation Theory be of Use to Translators?". In: Italiaander, R. (ed.) *Übersetzen. Vorträge und Beiträge vom Internationalen Kongress literarischer Übersetzer in Hamburg 1965.* Frankfurt-am-Main: Athernäum, 77-82.

Lippmann, E.O. 1971. "An approach to computer-aided translation", *IEEE Transactions on Engineering Writing and Speech* 14 (1), 10-33.

LISA 2002: LISA Translation Memory Survey 2002. *LISA The Localization Industry Standards Association* [online]. http://www.lisa.org/Translation-Memory-S.523.0.html [Accessed: 8/10/2009), 19 pages.

LISA 2004: LISA Translation Memory Survey 2004. *LISA The Localization Industry Standards Association* [online]. http://www.lisa.org/Translation-Memory-S.518.0.html Accessed 8/10/2009), 22 pages.

Lockwood, R. 2000. "Machine Translation and Controlled Authoring at Caterpillar". Sprung, Robert C. (ed.) *Translating into Success. Cutting-edge strategies for going multilingual in a global age.* Amsterdam/Philadelphia: John Benjamins, 187-202.

Macklovitch, E., Simard, M. and Langlais, Ph. 2000. "TransSearch: A Free Translation Memory on the World Wide Web". In: *LREC 2000 Second International Conference on Language Resources and Evaluation.* Athens, 1201 1208.

Macklovitch, E.; Russell, Gr. 2000. "What's Been Forgotten in Translation Memory". White, John S. (ed.) *Envisioning Machine Translation in the Information Future: Proceedings of the 4th Conference of the Association for Machine Translation in the Americas (AMTA 2000), October 10-14 2000, Cuernavaca, Mexico*, 137-146.

Macklovitch, E. 2000. "Two Types of Translation Memory". In: *Translating and the Computer 22: Proceedings from the Aslib conference, 16 & 17 November 2000.* London: ASLIB.

Macklovitch, E. 2006. "TransType2: The Last Word". In: *Proceedings of LREC 2006, Genoa, Italy.*

Malmkjær, K. 1998. "Love thy neighbour: Will parallel corpora endear linguists to translators?". *Meta*, 43: 4, 534–541.

Malmkjær, K. 2003. "On a pseudo-subversive use of corpora in translator training". In Zanettin, F.; Bernardini, S. and Stewart, D., (eds.). *Corpora in translator education.* St. Jerome: Manchester, 119-134.

Malmkjær, K. 2004. "Translational stylistics: Dulcken's translations of Hans Christian

Andersen". *Language and Literature* 13(1), 13-24.

Malmkjær, K. 2005. *Linguistics and the language of translation.* Edinburgh: Edinburgh University Press.

Malmkjær, K. 2007. "Norms and Nature in Translation Studies". In Anderman, Gunilla; Rogers, Margaret (eds.). *Incorporating Corpora - Corpora and the Translator.* Clevedon: Multilingual Matters, 49-59.

Mandreoli, F.; Martoglia, R.; Tiberio, P. 2006. "EXTRIn: a system for example-based translation assistance". *Machine Translation* 20, 167-197.

Marco, J. 2004. "Translating style and styles of translating: Henry James and Edgar Allan Poe in Catalan". *Language & Literature*, 13: 1, 73-90.

Marcos, J. 2001. "Un enfocament jurídic de les memòries de traducció". *Revista Tradumàtica, número 0* <http://www.fti.uab.es/tradumatica/revista/num0/articles/jmarcos/art.htm>[Accessed: 25/09/2009].

Martín Mor, A. 2011. *La interferència lingüística en entorns de traducció assistida per ordinador: recerca empíricoexperimental.* PhD dissertation. Bellaterra: Universitat Autònoma de Barcelona.

Martín, A.; Biau, J. R.; Cid, P.; Mesa-Lao, B.; Orozco, M.; Sánchez-Gijón, P.; Torres-Hostench, O. 2009. "La interferencia lingüística en la traducción con y sin herramientas TAO: resultados preliminares del estudio piloto del proyecto TRACE". *Actas de las Segundas Jornadas Internacionales de Traductología. Una mirada interdisciplinaria de la traducción.* Córdoba: Centro de Investigación en Traducción.

Mason, I. 2001. "Translator behaviour and language usage: Some constraints on constrastive studies". *Hermes, Journal of Linguistics*, 26, 65-80.

Mauranen, A. 2000. "Strange strings in translated language: A study on corpora". In Olohan, M., ed.: *Intercultural Faultlines. Research Models in Translation Studies I: Textual and Cognitive Aspects.* St. Jerome, Manchester, 119-141.

Mauranen, A. 2005. "Contrasting languages and varieties with translational corpora". *Languages in contrast* 5, 1, 73-92.

Mauranen, A. 2007. "Universal tendencies in translation", in M. Rogers and G. Anderman (eds.). *Incorporating Corpora. The Linguist and the Translator.* Clevedon: Multilingual Matters, 24, 32-48.

Mauranen, A.; Kujamäki, P. (eds.). 2004. *Translation Universals. Do they exist?* Amsterdam/Philadelphia: John Benjamins.

Mutesayire, M. 2004. Apposition markers and explicitation: A corpus-based study. *Language Matters: Studies in the Languages of Southern Africa: 35(1), Special Issue: Corpus-Based Translation Studies - Research and Applications*: 54-69

McEnery, T.; Xiao, R. 2007. "Parallel and Comparable Corpora: What is Happening?". In In Anderman, Gunilla; Rogers, Margaret (eds.). *Incorporating Corpora - Corpora and the Translator*. Clevedon: Multilingual Matters.

McTait, K. et al. 1999. "A Building Blocks Approach to Translation Memory". *Proceedings of the 21st ASLIB International Conference on Translating and the Computer*. London: ASLIB.

Melby, A. K. 1981: A Bilingual Concordance System and its Use in Linguistic Studies. In Gutwinski, Waldemar/Jolly, Grace (eds.). *The Eighth LACUS Forum 1981*, Columbia, SC: Hornbeam Press, 541-549.

Melby, A. K. 1982. "Multi-level Translation Aids in a Distributed System". *COLING 82, Proceedings of the Ninth International Conference on Computational Linguistics, Praga, Juliol 5-10, 1982*. Amsterdam: NorthHolland, 215-220.

Melby, A. K. 1992. "The Translator Workstation". In Newton, John (ed.) *Computers in Translation: A Practical Approach*. London/New York: Routledge, 147-165.

Melby, A. K. 1998. "Eight Types of Translation Technology" [online]. Paper originally presented at ATA, Hilton Head, November 1998. URL: <http://www.ttt.org/technology/8types.pdf>[Accessed: 02/04/2008].

Melby, A. K.; Warner, C. Terry. 1995. *The Possibility of Language*. Amsterdam/Philadelphia: John Benjamins.

Melby, A. K. 2006. "MT+MT+QIn: The Future is Ours". *Revista Tradumàtica - Traducció i Tecnologies de la Informació i la Comunicació*. Núm. 4. <http://www.fti.uab.es/tradumatica/revista/num4/articles/04/04art.htm>[Last Accessed: 12/05/2011]

Melby, A. K., & Foster, C. 2010. Context in translation: Definition, access and teamwork. *Translation & Interpreting 2*(2), 1-15. <http://www.trans-int.org/index.php/transint/article/viewFile/87/70>[Last Accessed: 12/05/2011]

Merkel, M. 1998. "Consistency and Variation in Technical Translation: A Study of Translators' Attitudes". In: Bowker, Lynne; Cronin, Michael; Kenny, Dorothy; Pearson, Jennifer. (eds.). *Unity in Diversity? Current Trends in Translation Studies*. Manchester: St. Jerome, 137-149.

Mesa-Lao, B. 2011. "Explicitation in translation memory-mediated environments. Methodological conclusions from a pilot study". *Translation & Interpreting - The International Journal of Translation and Interpreting Research*, Vol. 3 (1): 44–57.

Mikhailov, M.; Villikka, M. 2001. "Is there such a thing as a translator's style?".In: *Proceedings of Corpus Linguistics 2001*, Birmingham, 378-385.

Mikheev, A. 2003. "Text segmentation". In: Mitkov, R. (ed.). *The Oxford Handbook of Computational Linguistics*. Oxford: Oxford University Press, 376-394.

Mitkov, R; Corpas, G. 2008. "Improving Third Generation Translation Memory systems through identification of rhetorical predicates". In: *Proceedings of LangTech'2008*. Rome.

Mogensen, E. 2000. "Orwellian Linguistics: How using computer-aided translation tools impacts the target language". *Language International*, 12: 5, 28-31.

Molina, L. 2001. *Análisis descriptivo de la traducción de los culturemas árabe-español*. PhD disertation. Barcelona: Universitat Autònoma de Barcelona.

Molina, L.; Hurtado, A. 2002. "Translation Techniques Revisited: A Dynamic and Functionalist Approach", *Meta*, 47: 4.

Moore, G.C.; Benbasat I. 2001. Development of an instrument to measure the perceptions of adopting an information technology innovation. *Inform Sys Res* 2, 192-221.

Moorkens, J. 2011. "Translation Memories guarantee consistency: Truth or fiction?". *ASLIB Translating and the Computer 33*, 17-18 November, London, UK.

Morado Vázquez, L. 2012. *An empirical study on the influence of translation suggestions' provenance metadata*, PhD dissertation. Limerick: University of Limerick.

Mossop, B. 2006. "Has Computerization Changed Translation?". *Meta*, 51: 4, 787-793.

Mossop, B. 2007. "Empirical studies of revision: what we know and need to know" [online]. *Journal of Specialised Translation*. Issue 8. URL: <http://www.jostrans.org/issue08/art_mossop.pdf>[Accessed: 25/11/2008].

Munday J. 1998. "A Computer-Assisted to the Analysis of Translation Shifts". *Meta*, 43: 4, 542-556.

Musale, Sh. 2004 "Getting More From Translation Memories". *Localisation Focus - The International Journal of Localisation*. Limerick: Localisation Research Centre.

Naghipoor, M.; Abedini, F.2013. "Emergence of Computer-Assisted Translation Tools: The Human Role in Human-Machine Translation". *International Researchers*, Volume No.2 (2).

Nation, I.S.P. 2001. *Learning Vocabulary in Another Language*. Cambridge: Cambridge University Press.

Neumann, S.; Hansen-Schirra, S. 2005. "The CroCo Project. Cross-linguistic corpora for the investigation of explicitation in translations". In: *Proceedings from the Corpus Linguistics Conference Series*. Vol. 1 no. 1, ISSN 1747-9398

Neunzig, W. 1999. *Sobre la investigación empírica en traductología – Cuestiones epistémicas y metodológicas*. Treball de recerca. Programa de Doctorat 'Teoria de la Traducció'. Departament de Traducció i d'Interpretació - Universitat Autònoma

de Barcelona.

Neunzig, W. 2001. *La intervención pedagógica en la enseñanza de la traducción on-line. Cuestiones de método y estudio empírico.* PhD dissertation. Bellaterra: Universitat Autonoma de Barcelona.

Neunzig, W. 2002. "Estudios empíricos en traducción: apuntes metodológicos". *Cadernos de Tradução*, 10:2, 75-96.

Neunzig, W.; Orozco, M. 2001. "El enfoque experimental en traductología: resumen y perspectivas". *Quaderns. Revista de Traducció*, 6, 54-56.

Neunzing, W.; Kreutzer, M. 1998. "Fundamentos de una Teoría ludológica de la Traducción". *Vasos comunicantes. Revista de la Sección Autónoma de Traductores de Libros de la Ace*, 10, 11-17.

Newmark, P. 1988. *A textbook of Translation.* New York: Prentice Hall.

Newmark, P. 1989. "Paragrah I" In: Newmark, P. *Paragraphs on translation.* Clevedon: Multilingual Matters, 1-6.

Nida, E. A. 1964. *Towards a Science of Translating. With Special Reference to Principles and Procedures Involved in Bible Translating.* Leiden: E.J. Brill.

Nilsson, P. 2002. "An Assessment of the Translation-specificity of Over-represented Multi-word Patterns in Swedish Fiction Texts Translated from English". *Linguistica Antverpiensia*, NS 1, 407-417.

Nilsoon, P. 2004. "Translation-specific lexicogrammar? Characteristic lexical and collocational pattering in Swedish texts translated from English". In Mauranen, A.; Kujamäki, P. (eds.). *Translation Universals. Do they exist?* Amsterdam/Philadelphia: John Benjamins, 129-141.

Nirenburg, S.; Beale, S.; Mahesh, K.; Onyshkevych, B.; Raskin, V.; Viegas, E.; Wilks, Y.; Zajac, R. 1996. "Lexicons in the MicroKosmos project". In: Cahill, L.; Evans, R. (eds.). *Proceedings of AISB Workshop on Multilinguality in the Lexicon.* England: Brighton.

Noguerol, A. 1998. "Investigación y Didáctica de la lengua y la literatura". In: Mendoza, A. [Coord.] *Conceptos clave en Didáctica de la lengua y la literatura.* Barcelona: SEDDL, ICE, Horsori, 61-74.

O'Brien, S. 1998. "Practical Experience of Computer-Aided Translation Tools in the Software Localization Industry". In: Bowker, Lynne; Cronin, Michael; Kenny, Dorothy; Pearson, Jennifer. (eds.). *Unity in Diversity? Current Trends in Translation Studies.* Manchester: St. Jerome, 115-122.

O'Brien, S. 2006a. "Controlled Language and Post-editing". *Multilingual - Writing for Translation - Getting Started Guide*, 17:7, 17-19.

O'Brien, S. 2006b. "Eye-Tracking and Translation Memory Matches". *Perspectives: Studies in Translatology*, 14:3, 185-204.

O'Brien, S. 2008. "Processing fuzzy matches in translation memory tools: an eye-tracking analysis". In: Göpferich, S.; Jakobsen, A.L.; Mees, I.M. (eds.). *Looking at eyes. Eye-tracking studies of reading and translation processing.* Copenhagen: Samfundslitteratur, 79-102.

O'Brien, S. 2012. "Translation as human-computer interaction". *Translation Spaces*, 1, 101-122.

O'Hagan, M. 2009. "Computer-aided translation (CAT)". In: Baker, M.; Saldanha, G. (eds.). *Routledge Encyclopedia of Translation Studies.* London/New York: Routledge, 48-51.

O'Hagan, M.; Ashworth, D. 2003. *Translation-Mediated Communication in a digital World: Facing the Challenges of Globalization and Localization.* Clevedon: Multilingual Matters.

Olohan, M. 2001 "Spelling out the optionals in translation: a corpus study", in: *UCREL Technical Paper No. 13. Special Issue: Proceedings of the Corpus Linguistics 2001 Conference.* Lancaster. UK. 29 March – 2 April 2001, 423 – 432

Olohan, M. 2000. "Investigating Domain Conceptualisation and Scene Construal in Trainee Translations". *Meta*, 45: 4, 593-608.

Olohan, M. 2002. "Comparable corpora in Translation Research: Overview of Recent Analyses Using the Translational English Corpus". *LREC Language Resources in Translation Work and Research Workshop Proceedings*, 5-9.

Olohan, M. 2003. "How frequent are the contractions?: A study of contracted forms in the Translational English Corpus". *Target* 15:1, 59–89.

Olohan, M. 2004. *Introducing corpora in translation studies.* London: Routledge.

Olohan, M.; Baker, M. 2000. "Reporting 'that' in Translated English. Evidence for Subconscious Processes of Explicitation?". *Across Languages and Cultures*, 1:2, 141-158.

Orozco, M. 1999a. "La metodología de la investigación en Traductología". In: *Perspectives: Studies in Translatology. Hispanic Translation Studies*, 7:2, 189-198.

Orozco, M. 1999b. "Medir la adquisición de la competencia traductora en los estudiantes de traducción: un experimento". In: Álvarez Lugris, A.; Fernández Ocampo, A. (eds.). *Anovar / Anosar. Estudios de Traducción e Interpretación, volumen II.* Vigo: Servicio de Publicacións Universidade de Vigo, 121-128.

Orozco, M. 2000a. "Building a Measuring Instrument for the Acquisition of Translation Competence in Trainee Translators". In: Schaeffner, Ch.; Adabs, B. (eds.). *Developing Translation Competence.* Amsterdam/Philadelphia: John Benjamins, 199-214.

Orozco, M. 2000b. *Instrumentos de medida de la adquisición de la competencia traductora: construcción y validación.* PhD dissertation. Bellaterra: Universitat Autònoma de Barcelona.

Orozco, M. 2001a. "Vías de investigación en Traductología". In: *Cinquenes Jornades de Foment de la Investigació.* Castellón: Publicaciones de la Universitat Jaume I.

Orozco, M. 2001b. "Métodos de investigación en traducción escrita: ¿qué nos ofrece el método científico?". *Sendebar*, 12, 95-115.

Orozco, M. 2002. "Revisión de investigaciones empíricas en traducción escrita" *Trans*, 6, 63-85.

Øverås, L. 1998. "In search of the third code: An investigation of norms in literary translation". *Meta*, 43:4, 571-588.

PACTE. 2000. "Acquiring Translation Competence: Hypotheses and Methodological Problems in a Research Project". In: Beeby, A., Ensinger, D., Presas, M. (eds.). *Investigating Translation.* Amsterdam/Philadelphia: John Benjamins, 99-106.

PACTE. 2005. "Investigating Translation Competence: Conceptual and Methodological Issues", *Meta*, 50: 2, 609-619.

PACTE. 2007. "Une recherche empirique expérimentale sur la competence de traduction". In: Gouadec, D. (ed.) *Quelle qualification les traducteurs?* Paris: Maison du Dictionnaire, 95-116.

Padilla, P.; Bajo, M.T.; Padilla, F. 1999. "Proposal for a Cognitive Theory of Translation and Interpreting. A Methodology for Future Empirical Research". *The Interpreters' Newsletter*, 9. Trieste: Universitá degli Studi di Trieste.

Pápai, V. 2004. "Explicitation: A universal of translated text?" In: Mauranen, A.; Kujamäki, P. (eds.). *Translation Universals. Do they exist?* Amstermdam/ Philadelphia: John Benjamins, 143-164.

Papp, F. 1984. "The Russian of Hungarian People Whose Russian Is First-Rate." Ferenc. Papp (ed.). *Contrastive Studies Hungarian-Russian.* Budapest: Akadémiai Kiadó, 139-154.

Pavesi, M.; Tomasi, A. 2001. "Per un'analisi degli universali della traduzione in testi scientifici: l'esplicitatazione e la semplificazione". In: C. Bettoni, A. Zampolli and D. Zorzi (eds.). *Atti del 2º congresso di studi dell'Associazione Italiana di Linguistica Applicata: Foli 12-13 ottobre 2000.* Perugia: Guerra Edizioni, 129-149.

Pekar V.; Mitkov R. 2007. "New Generation Translation Memory: Content-Sensivite Matching". *Proceedings of the 40th Anniversary Congress of the Swiss Association of Translators, Terminologists and Interpreters.* Bern: ASTTI, 2007.

Peral, F. 2002. "The Impact of New Technologies on Language Services: Productivity Issues in Translation". Paper presented at *Joint Inter-Agency Meeting on Computer-assisted Translation and Terminology (JIAMCATT), 24th-26th April 2002. World Meteorological Organisation.* Geneva.

Perego, E. 2003. "Evidence of Explicitation in Subtitling: Towards a Categorisation". *Across Languages and Cultures*, 4:1, 63-88.

Piqué, R. 2005. "La importància de les memòries de traducció en els processos traductius automatitzats". *Llengua i ús, Revista tècnica de política lingüística.* Barcelona: Secretaria de Política Lingüística de la Generalitat de Catalunya, vol. 32, 21-26.

Planas, E. 2000. "Extending Translation Memories". In: *Proceedings of the 5th European Association for Machine Translation (EAMT), European Association for Machine Translation.* (11-12/05/2000 - Ljubljana, Eslovenia)

Planas, E. 2005. "SIMILIS: Second-generation translation memory software". In: *Proceedings of the International Conference Translating and the Computer 27, 24-25 November 2005.* London: ASLIB.

Portell, M. 2001. *Introducció a l'Estadística Aplicada.* Bellaterra: UAB. (hand-out)

Puurtinen, T. 2003a. 'Genre-specific features of translationese? Linguistic differences between translated and non-translated Finnish children's literature.' *Literary and Linguistic Computing* 18(4), 389–406.

Puurtinen, T. 2003b. "Explicitating and Implicitation Source Text Ideology". *Across Languages and Cultures*, 4:1, 53-62.

Puurtinen, T. 2004. "Explicitation of clausal relations: A corpus-based analysis of clause connectives in translated and non-translated Finnish children's literature". In: Mauranen. A.; Kujamäki, P. (eds.). *Translation Universals. Do they exist?* Amsterdam/Philadelphia: Benjamins.

Pym, A., Perekrestenko, A.; Starink, B. (eds.). 2006. *Translation Technology and its Teaching (with much mention of localization).* Tarragona: Intercultural Studies Group.

Pym, A. 2002. "Localization and the dehumanization of discourse" [online]. Tarragona: Intercultural Studies Group. URL: <http://www.tinet.org/apym/online/dehumanization.pdf>[Accessed: 15/12/2013].

Pym, A. 2003. "What localization models can learn from Translation Theory". *The LISA Newsletter. Globalization Insider*, 12:2/4.

Pym, A. 2004a. *The Moving Text: Localization, Translation and Distribution.* Amsterdam/Philadelphia: John Benjamins.

Pym, A. 2004b. "Localization from the Perspective of Translation Studies: Overlaps in the digital divide?" [online]. Paper presented at SCALLA 2004. Khatmandu. URL: <http://www.elda.org/en/proj/scalla/SCALLA2004/Pymv2.pdf>[Accessed: 15/12/2008].

Pym, A. 2005. "Explaining explicitation". In: Károly, K.; Fóris, Á. (eds.). *New Trends in Translation Studies. In Honour of Kinga Klaudy.* Budapest: Akadémiai Kiadó, 29-43.

Pym, A. 2007. "Translation technology as rupture in the philosophy of dialogue".In: Ian Kemble, (ed.) *Translation Technologies and Culture.* Portsmouth: University of Portsmouth, 1-9.

Pym, A. 2008. "On Toury's laws of how translators translate". In Pym, Anthony, Miriam Shlesinger and Daniel Simeoni (eds.). *Beyond Descriptive Translation Studies.* Amsterdam/Philadelphia: John Benjamins, 311–328.

Pym, A. 2012. "Democratizing translation technologies – the role of humanistic research". In: Cannavina, V.; Fellet, A. (eds.). *Language and Translation Automation Conference.* Rome: The Big Wave, 14-29.

Quah, Ch.K. 2006. *Translation and Technology.* Hampshire/New York: Palgrave Macmillan.

Quirion, M. 2003. "La formation en localisation à l'université: pour quoi faire?" [online]. *Meta*, 48: 4, 546-558. URL: <http://www.erudit.org/revue/meta/2003/v48/n4/008725ar.html>[Accessed: 12/12/2008].

Read, J. 2000. *Assessing Vocabulary.* Cambridge: Cambridge University Press.

Recker, J. I. 1974. "Generating think-aloud protocols: Impact on the narrative writing of college students". *American Journal of Psycology*, 108, 89-98.

Reinke, U. 1999. "Evaluierung der linguistischen Leistungsfähigkeit von Translation Memory Systemen – Ein Erfahrungsbericht". *LDV-Forum* 16: 100-117.

Reinke, U. 2004: *Translation memories. Systeme – Konzepte – linguistische Optimierung.* Frankfurt am Main: Peter Lang.

Reiss, K.; Vermeer, H.J. 1996. *Fundamentos para una teoría funcional de la traducción.* Madrid: Akal.

Ribas López, C. 2007. *Translation Memories as Vehicles for Error Propagation. A Pilot Study.* Unpublished Minor dissertation, Universitat Rovira i Virgili, Tarragona.

Rico, C. 2000. "Evaluation Metrics for Translation Memories". *Language International*, 12: 6, 36-37.

Risku, H. 2010. "A cognitive scientific view on technical communication and translation: Do embodiment and situatedness really make a difference?". *Target* 22(1), 94-111.

Robinson, D. 1999/2000. "Cyborg Translation". *La Traduzione. Athanor*, vol. 2.

Rode, T. 2000. "Translation Memory: Friend or Foe?". *International Journal for Language and Documentation*, 12-13.

Rodríguez-Castro, Mónica. 2011. "Translationese and punctuation: An empirical study of translated and non-translated international newspaper articles (English and Spanish)". *Translation and Interpreting Studies. The Journal of the American Translation and Interpreting Studies Association*, Volume 6 (1): 40–61.

Rosel, J. 1986. *Metodología experimental en psicología*. Barcelona: Alamex.

Sager, J.C. 1983. "Quality and Standards: The Evaluation of Translations". In: Picken, C. (ed.) *The Translator's Handbook*. London: ASLIB.

Sager, J.C. 1994. *Language Engineering and Translation: Consequences of Automation*. Benjamins Translation Library. Vol.1 Amsterdam: John Benjamins.

Sager, J.C. 1997. "Text types and translation". In: Trosborg, A. (ed.) *Text Typology and Translation*. Amsterdam/Philadelphia: John Benjamins, 25-41.

Saldanha, G. 2005. *Style of Translation: An Exploration of Stylistic Patterns in the Translations of Margaret Jull Costa and Peter Bush*. PhD dissertation. Dublin: School of Applied Language and Intercultural Studies, Dublin City University.

Saldanha, G. 2008. 'Explicitation revisited: bringing the reader into the picture', *Trans-Kom* 1(1): 20-35.

Samuelson-Brown, G. 1996. "New technology for translators". In: Owens, R. (ed.) *The translator's handbook*. London: ASLIB.

Samuelsson-Brown, G. 2004. *A Practical Guide for Translators*. Clevedon: Multilingual Matters. 4th revised edition.

Sánchez-Gijón, P. 2001. "Catàleg de sistemes de memòries de traducció". *Revista Tradumàtica - Traducció i Tecnologies de la Informació i la Comunicació. Núm. 0* <http://www.fti.uab.es/tradumatica/revista/num0/articles/psanchez/art.htm>[Accessed: 25/09/2009].

Sánchez-Gijón, P. 2003. "Los sistemas de traducción asistida por ordenador menos conocidos a examen". In: Corpas Pastor, G.; Varela Salinas, M.J. (eds.). *Entornos informáticos de la traducción profesional. Las memorias de traducción*. Granada: Atrio.

Sánchez-Gijón, P. 2004. "The Translators' Workbench". *LIWURAM, Journal of Humanities*. Vol. 11. Faculty of Arts, University of Maiduguri.

Sánchez-Gijón, P.; Fernàndez, M.; Parra, J. 2002. "Tradumática: las TCI y la traducción". In: Alcina Caudet, A.; Gamero Pérez, S. (eds.). *La traducción científico-técnica y la terminología en la sociedad de la información. VI Jornadas sobre la traducción.* Castelló: Universitat Jaume I.

Sánchez-Gijón, P.; Biau, J.R.; Cid, P.; Martín, A.; Mesa-Lao, B.; Orozco, M.; Torres-Hostench, O. 2010. "Traducción asistida, calidad y evaluación". In: Edo Marzá, N., Ordóñez López, P. (eds.). *El lenguaje de la ciencia y la tecnología.* Castelló de la Plana: Publicacions de la Universitat Jaume I.

Sans Martín, A. 1997. *La investigació d'enfocament experimental.* Barcelona: Universitat Oberta de Catalunya.

Savourel, Y. 2001. *XML Internationalization and Localization.* Indianapolis: Sams.

Scarpa, F. 2006. "Corpus-based Quality Assessment of Specialist Translation: a Study Using Parallel and Comparable Corpora in English and Italian". In Gotti and Šarčević (eds.). *Insights into Specialized Translation.* Bern: Peter Lang, 156-172.

Schäler, R. 2001. "Beyond Translation Memories". In *Proceedings of the Workshop on Example-Based Machine Translation*, held at the Machine Translation Summit VIII in Santiago de Compostela, Spain, 18 September 2001 [online]. http://www.eamt.org/events/summitVIII/papers/schaeler.pdf [Accessed 16/06/2011].

Schäler, R. 2002. "The cultural dimension in software localisation". *Localisation Focus*, Vol 1-2, p.21-23.

Schäler, R. 2008. "Linguistic resources and localisation". Yuste Rodrigo, Elia (ed.) *Topics in Language Resources for Translation and Localisation.* Amsterdam/Philadelphia: John Benjamins, 195-214.

Schmied, J.; Schëffler, H. 1997. "Explicitness as a universal feature of translation". In: M. Ljung (ed.), *Corpus-based Studies in English. Papers from the seventeenth International Conference on English Language Research on Computerized Corpora.* Amsterdam/Atlanta: Rodopi, 21-34.

SDL Research. 2008. "Trends in automated translation in today's global business. White Paper" [online]. URL: <http://www.sdl.com/en/globalization-knowledge-centre/whitepapers/>[Accessed: 15/12/2008].

Séguinot, C. 1985. "Translating Implication". *Meta*, 30: 3, 295-298.

Séguinot, C. 1988. "Pragmatics and the Explicitation Hypothesis". *TTR Traduction, Terminologie, Rédaction*, 1:2, 106-114.

Selinker, L. 1972. Interlanguage. *IRAL*, 10, (3), 209-231.

Serón Ordóñez, C. 2004. *Integración de la traducción automática y las memorias de*

traducción. Estudio de caso de KbTS. Minor dissertation. Universidad de Granada.

Shields, M. 1999. "Slaves to the Computer". *Institute of Translation and Interpreting Bulletin*. October, 4-5.

Shlesinger, M. 1995. "Shifts in Cohesion in Simultaneous Interpreting". *The Translator*, 1 [2], 193-214.

Shuttleworth, M.; Cowie, M. 1997. *Dictionary of Translation Studies*. Manchester: St. Jerome.

Sidiropoulou, M. 1995. "Causal shifts in news reporting: English vs Greek press". *Perspectives: Studies in Translatology*, 3:1, 83-98.

Simard, M. 2003. *Mémoires de traduction sous-phrastiques*. PhD Thesis, département d'informatique et de recherche opérationnelle. Montréal: Université de Montréal.

Simard, M.; Langlais, P. 2000. "Sub-sententail Explotation of Translation Memories". *LREC 2000 Second International Conference on Language Resources and Evaluation*. Athens.

Sinclair, J.M. 1984. "Naturalness in Language." In: Jan Aarts, Willem Meijs (eds.). *Corpus Linguistics: Recent Developments in the Use of Computer Corpora in English Language Research*. Amsterdam: Rodopi, 203-210.

Smith, R. 2001. "Using information technology to optimise translation processes at PricewaterhouseCoopers Madrid". In: *MT Summit VIII: Machine Translation in the Information Age, Proceedings, Santiago de Compostela, Spain, 18-22 September 2001*, 341-344.

Snell-Hornby, M.; Hönig, H.G.; Kussmaaul, P.; Schmitt, P.A. (eds.). 1999. *Handbuch Translation (2a ed.)*. Tübingen: Stauffenburg.

Snell-Hornby, M. 2006. *The Turns of Translation Studies*. Amsterdam/Philadelphia: John Benjamins.

Somers, H. (ed.) 2003. *Computers and Translation: A Translator's Guide*. Amsterdam/Philadelphia: John Benjamins.

Somers, H. 1998. "Machine translation". In: Mona, Baker. (ed.) *Routledge Encyclopedia of Translation Studies*. London/New York: Routledge, 136-139.

Steiner, E. 2001. "Translations English–German: Investigating the Relative Importance of Systemic Contrasts and of the Text-type 'Translation'" [online]. *Sprik Reports*, 7. URL: http://www.hf.uio.no/german/sprik [Accessed: 03/04/2011].

Steiner, E. 2004. *Translated Texts: Properties, Variants, Evaluations*. Frankfurt: Perter Lang.

Steiner, E. 2005. "Explicitation, Its Lexicogrammatical Realization, and Its Determining (independent) Variables – Towards an Empirical and Corpus-based Methodology" [online]. *Sprik Reports, 36.* URL: http//www.hf.uio.no/german/sprik [Accessed: 23/04/2011].

Steiner, E. 2008. "Empirical studies of translations as a mode of language contact - 'explicitness' of lexicogrammatical encoding as a relevant dimension". In: Siemund, P.; Kintana, N. (eds.). *Language Contact and Contact Languages.* Amsterdam/Philadelphia: John Benjamins, 317-346.

Strandvik, I. 2001. "Las memorias de traducción en la Comisión Europea". *Revista Tradumàtica, número 0* <http://www.fti.uab.es/tradumatica/revista/num0/articles/istrandvik/art.htm>[Accessed: 25/09/2011].

Taravella, A. and Villeneuve, A.O. 2013. "Acknowledging the needs of computer-assisted translation tools users: the human perspective in human - machine translation". *Jostrans - The Journal of Specialised Translation.* Issue 19: 62-73.

Teixeira, C. 2011. 'Knowledge of Provenance and its Effects on Translation Performance in an Integrated TM/MT Environment'. *Proceedings of the 8th International NLPCS Workshop - Special theme: Human-Machine Interaction in Translation.* Copenhagen: Samfundslitteratur. Studies in Language 41.

Thibodeau, R.P. 2000. "Making a Global Product at MapInfo Corporation". In: Sprung, Robert C. (ed.) *Translating into Success: Cutting-edge Strategies for Going Multilingual in a Global Age.* Amsterdam/Philadelphia: John Benjamins, 127-146.

Tirkkonen-Condit, S. 1986. "Text Type Markers and Translation Equivalence". In: House, J.; Blum-Kulka, S. (eds.). *Interlingual and Intercultural Communication: Discourse and Cognition in Translation and Second Language Acquisition Studies.* Tübingen: Narr, 95-113.

Tirkkonen-Condit, S. 2002. "Translationese – a myth or an empirical fact? A study into the linguistic identifiability of translated language". *Target* 14(2), 207-220.

Tirkkonen-Condit, S. 2004. "Unique items — over- or under-represented in translated language?". In Mauranen, A.; Kujamäki, P. (eds.). *Translation Universals*, Amsterdam/Philadelphia: John Benjamins, 177–184.

Topping, S. 2000. "Sharing Translation Database Information". *MultiLingual Computing & Technology*, 33:11, Issue 5, 59-61.

Torres del Rey, J. 2003. *Nuevas tecnologías y enseñanza de la traducción: límites y posibilidades de los modelos de aplicación tecnológica para la formación de traductores.* PhD dissertation. Salamanca: Universidad de Salamanca.

Torres del Rey, J. 2005. *La interfaz de la traducción. Formación de traductores y nuevas tecnologías.* Granada: Comares.

Torres-Hostench, O.; Biau, J.R.; Cid, P.; Martín, A.; Mesa-Lao, B.; Orozco, M.; Sánchez-Gijón, P. 2010. "TRACE: Measuring the impact of CAT tools on translated texts". In: *Linguistic and Translation Studies in Scientific Communication*, edited by María-Lluisa Gea-Valor, Isabel García-Izquierdo, María-José Esteve. Bern: Peter Lang. Linguistic Insights, Volume 86, 255-276.

Toury, G. 1979. "Interlanguage and its Manifestations in Translation". *Meta*, 24: 2, 223-231.

Toury, G. 1980. *In Search of a Theory of Translation.* Tel Aviv: Tel Aviv University.

Toury G. 1981. "Translated Literature: System, Norm, Performance. Toward a TT-Oriented Approach to Literary Translation". *Poetics Today* 2(4). 9-27.

Toury, G. 1995. *Descriptive Translation Studies and Beyond.* Amsterdam/Philadelphia: Benjamins.

Toury, G. 2004. "Probabilistic explanations in translation studies: Welcome as they are, would they qualify as universals?". In: Mauranen, A.; Kujamäki, P. (eds.). *Translation universals: Do they exist?* Amsterdam: John Benjamins, 15-32.

Tymoczko, M. 1998. "Computerized Corpora and the Future of Translation Studies" *Meta* 43: 4, 652-659.

Tymoczko, M. 2005. "Trajectories of research in Translation Studies". *Meta* 50:4. 1082–1097.

Ulrych, M. 1997. "The impact of multilingual parallel concordancing on translation". In Lewandowska-Tomaszczyk, B.; Melia, P.J. (eds.). *PALC'97: practical applications in language corpora.* Lodz: Lodz University Press. 421-435.

Ulrych, M. 2002. "An evidence-based approach to applied translation studies". In: Riccardi, A. (ed.). *Translation Studies. Perspectives on an Emerging Discipline.* Cambridge: Cambridge University Press, 198-213.

Ulrych M., Anselmi, S. 2008. "Towards a corpus-based distinction between language-specific and universal features of mediated discourse". In Martelli A.; Pulcinia, V. (eds.). *Investigating English with Corpora. Studies in Honour of Maria Teresa Prat.* Monza: Polimetrica, 257-273.

Valderrábanos, A.S.; Esteban, J.; Iraola, L. "TransType2 - A New Paradigm for Translation Automation". *Proceedings of the MT Summit IX.* New Orleans, Louisiana, 2003, 498-501.

Van der Meer, J. 2009. 'Google Translator Toolkit. What you don't (want to) know'. [online] <http://translationautomation.com/technology/google-translation-toolkit.html>[Accessed: 03/06/2009].

Van Leuven-Zwart, K. 1990. "Translation and Original: Similarities and Dissimilarities

I, II". *Target*, 1: 2, 151-181; 2:1, 69-95.

Vandepitte, S. 2008. "Remapping Translation Studies: Towards a Translation Studies Ontology". *Meta* 53: 3, 569-588.

Vanderauwera, R. 1985. *Dutch Novels Translated into English: The Transformation of a 'Minority' Literature*. Amsterdam/Atlanta: Rodopi.

Vaseva, I. 1980. *Teoriya i praktika perevoda [The Theory and Practice of Translation]*. Sofia: Nauka i isskustvo.

Vehmas-Lehto, I. 1989. *Quasi-Correctness: A Critical Study of Finnish Translations of Russian Journalistic Texts*. Helsinki: Neuvostoliittoinstituutin.

Vehmas-Lehto, I. 2001a. "Explicitation as a translation strategy". In: Kukkonen, P.; Hartama-Heinonen, R. (eds.). *Mission, Vision, Strategies, and Values: A Celebration of Translator Training and Translation Studies in Kouvola*. Helsinki: Helsinki University Press. 221-229.

Vehmas-Lehto, I. 2001b. "Translation-proper explicitations – a fallacy or reality?". In: *Fifth International Conference on Translation. Interculturality and Translation: Less-Translated Languages. Barcelona 29-31*.

Venuti, L. 1995. *The Translator's Invisibility: A History of Translation*. London: Routledge.

Venuti, L. (ed.) 2000. *The Translation Studies Reader*. London and New York: Routledge.

Vilanova, S. 2006. *L'impacte de les tecnologies de traducció en el català tècnic* [online]. URL: <http://isg.urv.es/publicity/doctorate/ tribunal_unic_2006/ Vilanova_research_design_v021.pdf>[Accessed: 03/06/2009].

Vinay, J.P.; Darbelnet, J. 1958. *Stylistique comparée du français et de l'anglais*. Paris: Didier.

Vinay, J.P.; Darbelnet, J. 1995. *Comparative Stylistics of French and English: A Methodology for Translation*. Amsterdam/Philadelphia: John Benjamins.

Wassmer, T. 2005. "Trados 7 and SDLX 2005". *MultiLingual Computing and Technology* 16 (8), 27-32.

Wallis, J. 2006. *Interactive Translation vs. Pre-translation in the Context of Translation Memory Systems: Investigating the effects of translation method on productivity, quality and translator satisfaction*. MA Thesis. Ottowa: University of Ottawa.

Webb, L.E. 1998. *Advantages and Disadvantages of Translation Memory: A Cost/Benefit Analysis*. MA Thesis [online]. Monterey, CIn: Monterey Institute of International Studies, 1998. URL: <http://www.webbsnet.com/translation/thesis.html>[Accessed:

15/10/2008].

Weissbrod, R. 1992. "Explicitation in Translations of Prose-fiction from English to Hebrew as a Function of Norms". *Multilingua*, 11(2). 153-171.

Wheatley, A. 2003. "eCoLoRe (eContent Localization Resources for Translator Training) A Major Breakthrough for Translator Training". In *TranslationDirectory.com* [online]. http://www.translationdirectory.com/article450.htm [Accessed: 18/05/2011].

Whittaker, S. 2004. "Etude contrastive des syntagmes nominaux démonstratifs dans des textes traduits du français en norvégien et des textes sources norvégiens: stratégie de traduction ou translationese?". *Forum*, 2(2), 221-240.

Williams, J.; Chesterman, A. 2002. *The Map. A beginner's Guide to Doing Research in Translation Studies.* Manchester, U.K./Northampton MIn: St. Jerome.

Wilss, W. 1988. *La ciencia de la traducción. Problemas y métodos.* México: Universidad Nacional Autónoma de México.

Wilss, W. 1996. *Übersetzungsunterricht. Eine Einführung. Begriffliche Grundlagen und methodische Orientierungen.* Tübingen: Narr.

Winters, M. 2004. "German translations of F. Scott Fitzgerald's The Beautiful and Damned: A corpus-based study of modal particles as features of translators' style". In: Kemble, I. (ed.) *Using Corpora and Databases in Translation.* Portsmouth: University of Portsmouth, 71–88.

Winters, M. 2007. "F. Scott Fitzgerald's *Die Schönen und Verdammten*: A corpus-based study of speech-act report verbs as a feature of translators' style". *Meta* 52: 3, 412-425.

Yamada, M. 2011. "The effect of translation memory databases on productivity". *Tranlsation Research Project 3*, 63.

Yunker, J. 2003. *Beyond Borders: Web globalization strategies.* Indianapolis: New Riders.

Yuste, E. 2004. "Corporate Language Resources in Multilingual Content Creation, Maintenance and Leverage". In: *Proceeding of LRTWRT '04 Proceedings of the Second International Workshop on Language Resources for Translation Work, Research and Training.* Geneva, 9-15.

Zerfass, A. 2002a. "Evaluating Translation Memory Systems". In: *LREC 2002: Language Resources in Translation Work and Research, May 28 2002.* Las Palmas de Gran Canaria, 49-52.

Zerfass, A. 2002b. "Comparing Basic Features of TM Tools". *MultiLingual Computing and Technology*, 51: 13 (7), 11-14.

Zetzsche, J. 2005. "Translation memories: the discovery of assets". *Multilingual Computing and Technology*, 16: 4, 43-45.

Zetzsche, J. 2005. *The Translator's Tool Box. A Computer Primer for Translators*. Oregon: International Writers' Group.

Zetzsche, J. 2007. "Translation memories: estate of the technology". *Multilingual Computing and Technology*, 18: 6, 34-38.

Appendices

Appendix A

Experimental texts

A.1 Source Text 1

Computing Services and Systems Development
Pittsburgh, PA
Document released on 5/10/2007

Using SpyPredator to Protect Your Computer Against Spyware

This document explains how to use SpyPredator 1.4 to identify and remove spyware applications from your computer. It is a software application available at no cost to University of Pittsburgh students. It can be downloaded from software.pitt.edu. New releases are: Version 1.4 for XP, and a beta version for Windows Vista.

What is Spyware?

Spyware refers to software installed on your computer —often without your knowledge or consent— that is used to collect and distribute information about you. Most spyware applications are often downloaded when you download and install certain programs from the Internet. P2P file sharing applications, which can be used to illegally share copyrighted music and movies, are one of the most common sources of spyware.

Once installed on your computer, spyware consumes your computer's memory and other resources. The increased burden on it can make other programs run slowly and cause your computer to crash frequently. You may also notice increased advertising pop-up windows and new toolbars that appear on your computer.

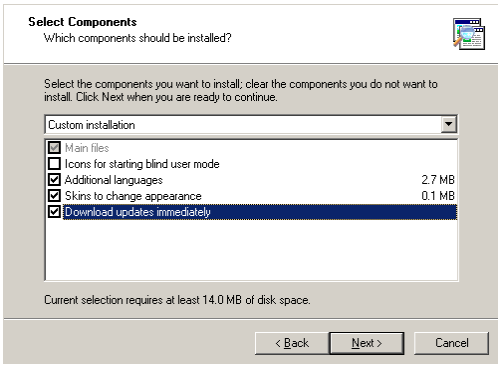
SpyPredator 1.4 is a software tool that allows you to detect and remove spyware. CSSD recommends using SpyPredator in tandem with Ad-Watch provided by Lavasoft's Ad-Aware® SE Professional.

Downloading SpyPredator 1.4

1. Open a Web browser to software.pitt.edu site and login with your username.
2. Click on the **spypredator14.exe** link, and choose **Save to Desktop**. The file is 13.7 MB: It may take some minutes to download with a modem connection. From here, you can also download a copy of this sheet, *Using SpyPredator*.

Installing SpyPredator 1.4

1. Double-click the SpyPredator icon on your desktop and click the **Run** button to proceed.
2. The **SpyPredator Setup Wizard** window will appear. Click **Next** to proceed.
3. Read the license agreement, then click the circle next to **I accept the agreement**. Click **Next**.
4. The **Select Components** window allows you to choose which components to install with SpyPredator 1.4. Select the components you would like to install (make sure you download updates immediately) and click **Next**. Additional skins for this software can be also downloaded from our website.



Note: Be sure to un-check *Don't create a Start Menu Folder* if it is checked; this parameter creates a program group on your start menu.

The Recovery Feature

Click the Recovery button located on the menu on the left side of the screen. 
Note: Use caution in selecting what problems you wish to restore. Restoring previously fixed spyware problems will re-install the spyware programs on your computer.

The Parental Control Feature

SpyPredator includes ParentWatch, a parental control (PC) feature that blocks pornographic online content. This feature has three password-protected control levels.

Display Properties

When SpyPredator detects a spyware file, SpyPredator can display the spyware properties so that you know whether the application is low, mid or high risk

Getting Help

If you have any comments, do please contact the author of this help sheet. You can also get more information via the Web at http://technology.pitt.edu. The author and her team will kindly address our comments.

Specifications
Virus database: >120,150 (on May 2008)
Average download time: 3.5s (actual download time will depend on your Internet connection)
File size: 13.7 MB
PC: 3 preset levels

A.2 Source Text 2

MedHelpRx

MedHelpRx is a hand device with software application that will help you keep medical records of all your patients at hand. MedHelpRx enables you to rapidly generate new prescriptions and refills. Look up codes and generate allergy records quickly and accurately. MedHelpRx is a full-featured clinical application used by thousands of physicians. It has revolutionized many doctors' practices. It has tools that enable you to import patient data from most patient management systems.

Basics of MedHelpRX

Your MedHelpRX handheld device will normally have 4 keys: If you are in a window with a number of icons, the general rule is that the left most key is mapped to the left most icon.

Main Window

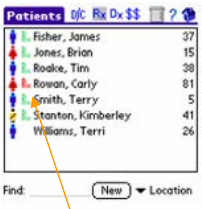
Tap Patient to view or edit patient information

Tap Find and enter a letter to narrow results by last name. Use the drop down menus for easy input of patient details.

When Rx is highlighted, selecting a patient will take you to the drug list. Highlighting Dx by tapping the icon will take you to the patient problem.

Sort patient list by selecting a Location from the drop down menu.

Be careful with the Trashcan feature. Tapping the Trashcan will permanently delete the patients record.



NOTE: The icon means Patient Rx history is on record. Red means allergies on record.

Writing Prescriptions for a Patient

- Tap the Patient field on the Home page and then select a patient name from the list. You can sort your patients by location by tapping the location dropdown in the bottom right corner.
- If you want to write a prescription, highlight the Rx icon at the top of the patient window. Tap the patient name and you will be taken to the drug list. This icon will be highlighted by default.
- Tap the drug name to select it.
- Adjust the dose, route and any other Rx information as required.

Printing Prescriptions

- Tap Print to print the prescription via IR. Most devices can print via Bluetooth if your handheld device and printer support it. To switch between printers tap the upside triangle to the left of the Print text and you will get to a list of available network and IR printers.
- You can generate multiple prescriptions for the same patient. Tap the Multi button in the top of the Rx window. Alternatively check multiple boxes to the left of the drug names stored in the Favourites screen.

Printing Preferences

Tap Print on the Patient drug tab to print a report with the drug preferences for that patient and allergies on record.

Technical Specifications

Weight	225g
Dimensions	111 x 58 x 22.1 mm
Key	1,024 bits
Battery	Li-Ion

For more information on your device and on the License Agreement, send us an e-mail. No cost. No obligation. No Hassle.

Document version 6.70
Released on 2/11/2007
Copenhagen, DK

A.3 Source Text 3

STOCK TERMINAL

Stock Terminal is the ultimate handheld device to keep your stock data. With Stock Terminal, keeping your stock lists updated is easier than ever. Stock Terminal will save you expensive training courses and tedious data-entering hours. Stock Terminal is a great way to speed up efficiency in your business.

Increasing your productivity

Businessmen all have different opinions about productivity. They would all agree that Stock Terminal has some attractive features that are unlike any other handheld devices. Case studies prove that with Stock Terminal most businessmen increase their productivity by 150 %. When your business runs short of a specific product it will beep and display a warning message.

Protecting your work

Stock Terminal is fully protected against water and dust penetration. Indeed, using it is the safest way to work: In case of fatal error, pressing the Function key for two seconds restarts the system and retrieves the data entered in the previous session. When the Off key is pressed, all stock details are backed-up.

Controlling your stocks

Devote your time to making business, not to control stock lists

Monitoring stock data with Stock Terminal is the best option: Stock controllers can move from one data item to the next simply by pressing the plus key.

Test Port

Test the IR port of your Stock Terminal easily and quickly. This feature shortens device downtime and boosts your productivity.

Serial Number

Each device has a unique serial number. If your device is lost or stolen, please refer to our contact below; she will deal with the deactivation of the serial number (we will not take charge of lost devices without a signed license agreement).

Product names are either trademarks or registered trademarks of the respective owners. We are not responsible for changes in product specifications and/or design.

For further information, please contact Dr. Alex Smith.

PRODUCT SPECIFICATIONS			
OS (language)			English/Spanish
Display	Screen compositions		480 x 640 dots VGA (1:1 VGA size)
Input	Touch panel		Analogue plastic touch panel
	Other		Pen (soft keyboard, image input)
	Keyboard		24 keys (keypad 19, Function key, On key, Off key, 2 programmable) LED lightning
Interface	RS Interface	Communication speed	110-115,100 bps
	Bluetooth	Frequency range	2.4GHz (2.400-2.485 GHz)
		Compatible regulation	Bluetooth standard ver. 2.0 + EDR (Power Class 2)
Power	Applied power		Approx. 8 hours/ 16 hours (2 batteries) (depends on application)
Environment	Temperature and humidity		-10°C to 50°C and 5 to 90% RH
Size	Size (w x d x h mm)		80 x 183 x 25mm

Document released on 09/04/08

Madison, WI 53726

Appendix B

Experimental texts with focus points

B.1 Source Text 1

Computing Services and Systems Development

Pittsburgh, PA[1]

Document released on 5/10/2007

Using SpyPredator to Protect Your Computer against Spyware

This document explains how to use SpyPredator 1.4 to identify and remove spyware applications from your computer. It[2] is a software application available at no cost to University of Pittsburgh students. It can be downloaded from software.pitt.edu[3]. New releases are: Version 1.4 for XP, and a beta version for Windows Vista.

1.1. What is Spyware?

Spyware[4] refers to software installed on your computer —often without your knowledge or consent— that is used to collect and distribute users' personal details. Most spyware applications are often downloaded when you download and install certain programs from the Internet. P2P[5] file sharing applications, which can be used to illegally share copyrighted music and movies, are one of the most common sources of spyware.

Once installed on your computer, spyware consumes your computer's memory and other resources. The increased burden on it can make other programs run slowly and cause your computer to crash frequently. You may also notice increased advertising pop-up windows and new toolbars that appear on your computer.

SpyPredator 1.4 is a software tool that allows you to detect and remove spyware. CSSD[6] recommends using SpyPredator in tandem with Ad-Watch provided by Lavasoft's[7] Ad-Aware® SE Professional.

---

[1] **FOCUS POINT 1** – Category: proportion of implicit to explicit cultural/contextual referents.

[2] **FOCUS POINT 2** – Category: proportion of phoric to fully lexical phrases.

[3] **FOCUS POINT 3** – Category: proportion of implicit to explicit cultural/contextual referents.

[4] **FOCUS POINT 4** – Category: use of lexical specification.

[5] **FOCUS POINT 5** – Category: use of lexical specification.

[6] **FOCUS POINT 6** – Category: use of lexical specification.

[7] **FOCUS POINT 7** – Category: proportion of implicit to explicit cultural/contextual referents.

1.2. Downloading SpyPredator 1.4

1. Open a Web browser to software.pitt.edu site and login with your username.

2. Click on the **spypredator14.exe** link, and choose **Save to Desktop**. The file is 13.7 MB:[8] It may take some minutes to download with a modem connection. From here, you can also download a copy of this sheet, *Using SpyPredator*.

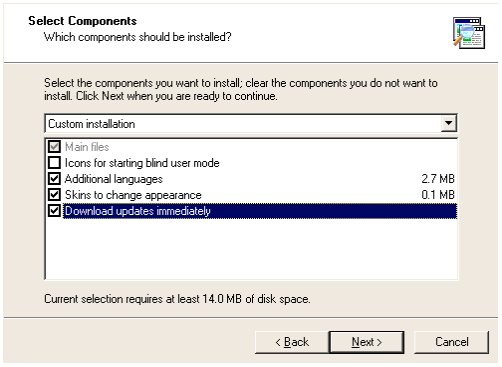
1.3. Installing SpyPredator 1.4

1. Double-click the SpyPredator icon on your desktop and click the **Run** button to proceed.

2. The **SpyPredator Setup Wizard** window will appear. Click **Next** to proceed.

3. Read the license agreement, then click the circle next to **I accept the agreement**. Click **Next**.

4. The **Select Components** window allows you to choose which components to install with SpyPredator 1.4. Select the components you would like to install (make sure you download updates immediately) and click **Next**. Additional skins for this software can be also downloaded from our website.



Note: Be sure to un-check *Don't create a Start Menu Folder* if it is checked;[9] this parameter creates a program group on your start menu.

1.4. The Recovery Feature

Click the Recovery button located on the menu on the left side of the screen. 

---

[8] **FOCUS POINT 8** – Category: newly introduced cohesive referents per discourse segment.

[9] **FOCUS POINT 9** – Category: newly introduced cohesive referents per discourse segment.

Note: Use caution in selecting what problems you wish to restore.[10] Restoring previously fixed spyware problems will re-install the spyware programs on your computer.

1.5. The Parental Control Feature

SpyPredator includes ParentWatch, a parental control (PC) feature that blocks pornographic online content. This feature has three password-protected control levels.

1.6. Display Properties

When SpyPredator detects a spyware file, SpyPredator can display the spyware properties so that you know whether the application is low, mid or high risk

1.7. Getting Help

If you have any comments, do please contact the author of this help sheet. You can also get more information via the Web at http://technology.pitt.edu. The author and her team will kindly address our comments.

Specifications
Virus database: >120,150 (on May 2008)
Average download time: 3.5s (actual download time will depend on your Internet connection)
File size: 13.7 MB
PC: 3 preset levels

[10] **FOCUS POINT 10** – Category: newly introduced cohesive referents per discourse segment.

B.2 Source Text 2

MedHelpRx

MedHelpRx is a hand device with software application that will help you keep medical records of all your patients at hand.MedHelpRx enables you to rapidly generate new prescriptions and refills. Look up codes and generate allergy records quickly and accurately. MedHelpRx is a full-featured clinical application used by thousands of physicians. It[1] has revolutionized many doctors' practices.[2] It has tools that enable you to import patient data from most patient management systems.

Basics of MedHelpRX

Your MedHelpRX handheld device will normally have 4 keys: If you are in a window with a number of icons, the general rule is that the left most key is mapped to the left most icon.

Main Window

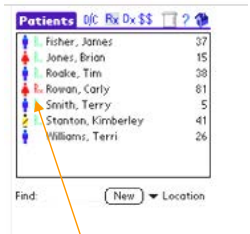
Tap Patient to view or edit patient information

Tap Find and enter a letter to narrow results by last name. Use the drop down menus for easy input of patient details.

When Rx[3] is highlighted, selecting a patient will take you to the drug list. Highlighting Dx by tapping the icon will take you to the patient problem.

Sort patient list by selecting a Location from the drop down menu.

Be careful with the Trashcan feature.[4] Tapping the Trashcan will permanently delete the patients record.



NOTE: The icon means Patient Rx history is on record. Red means allergies on record.

Writing Prescriptions for a Patient

- Tap the Patient field on the Home page and then select a patient name from the list. You can sort your patients by location by tapping the location[5] dropdown in the bottom right corner.
- If you want to write a prescription, highlight the Rx icon at the top of the patient window. Tap the patient name and you will be taken to the drug list. This icon will be highlighted by default.
- Tap the drug name to select it.
- Adjust the dose, route and any other Rx[6] information as required.

---

[1] **FOCUS POINT 1** – Category: proportion of phoric to fully lexical phrases.

[2] **FOCUS POINT 2** – Category: use of lexical specification.

[3] **FOCUS POINT 3** – Category: proportion of implicit to explicit cultural/contextual referents.

[4] **FOCUS POINT 4** – Category: newly introduced cohesive referents per discourse segment.

[5] **FOCUS POINT 5** – Category: proportion of implicit to explicit cultural/contextual referents.

[6] **FOCUS POINT 6** – Category: use of lexical specification.

Printing Prescriptions

- Tap Print to print the prescription via IR[7]. Most devices can print via Bluetooth if your handheld device and printer support it. To switch between printers tap the upside triangle to the left of the Print text and you will get to a list of available network and IR printers.
- You can generate multiple prescriptions for the same patient.[8] Tap the Multi button in the top of the Rx window. Alternatively check multiple boxes to the left of the drug names stored in the Favorites screen.

Printing Preferences

Tap Print on the Patient drug tab to print a report with the drug preferences for that patient and allergies on record.

Technical Specifications

Weight	225g
Dimensions	111 x 58 x 22.1 mm
Key	1,024 bits
Battery	Li-Ion

For more information on your device and on the License Agreement, send us an e-mail. No cost. No obligation. No Hassle.[9]

Document version 6.70
Released on 2/11/2006
Copenhagen, DK[10]

[7] **FOCUS POINT 7** – Category: use of lexical specification.

[8] **FOCUS POINT 8** – Category: newly introduced cohesive referents per discourse segment.

[9] **FOCUS POINT 9** – Category: newly introduced cohesive referents per discourse segment.

[10] **FOCUS POINT 10** – Category: proportion of implicit to explicit cultural/contextual referents.

B.3 Source Text 3

STOCK TERMINAL

Stock Terminal is the ultimate handheld device to keep your stock data. With Stock Terminal, keeping your stock lists updated is easier than ever. Stock Terminal will save you expensive training courses and tedious data-entering hours. Stock Terminal is a great way to speed up efficiency in your business.[1]

Increasing your productivity

Businessmen all have different opinions about productivity.[2] They would all agree that Stock Terminal has some attractive features that are unlike any other handheld devices. Case studies prove that with Stock Terminal most businessmen increase their productivity by 150 %. When your business runs short of a specific product it[3] will beep and display a warning message.

Protecting your work

Stock Terminal is fully protected against water and dust penetration. Indeed, using it is the safest way to work: In case of fatal error, pressing the Function key for two seconds restarts the system and retrieves the data entered in the previous session. When the Off key is pressed, all stock details are backed-up.

Controlling your stocks

Devote your time to making business, not to control stock lists

Monitoring stock data with Stock Terminal is the best option: Stock controllers can move from

one data item to the next simply by pressing the plus key[4].

[1] **FOCUS POINT 1** – Category: newly introduced cohesive referents per discourse segment.

[2] **FOCUS POINT 2** – Category: newly introduced cohesive referents per discourse segment.

[3] **FOCUS POINT 3** – Category: proportion of phoric to fully lexical phrases.

[4] **FOCUS POINT 4** – Category: proportion of implicit to explicit cultural/contextual referents.

Test Port

Test the IR port of your Stock Terminal easily and quickly. This feature shortens device downtime and boosts your productivity.

Serial Number

Each device has a unique serial number. If your device is lost or stolen, please refer to our contact below; she will deal with the deactivation of the serial number (we will not take charge of lost devices without a signed license agreement)[5].

Product names are either trademarks or registered trademarks of the respective owners. We are not responsible for changes in product specifications and/or design.

For further information, please contact Dr.[6] Alex Smith.

PRODUCT SPECIFICATIONS			
OS (language)[7]			English/Spanish
Display	Screen compositions		480 x 640 dots VGA (1:1 VGA size)
Input	Touch panel		Analogue plastic touch panel
	Other		Pen (soft keyboard, image input)
	Keyboard		24 keys (keypad 19, Function key, On key, Off key, 2 programmable) LED lightning
Interface	RS Interface	Communication speed	110-115,100 bps
	Bluetooth	Frequency range	2.4GHz (2.400-2.485 GHz)
		Compatible regulation	Bluetooth standard ver. 2.0 + EDR[8] (Power Class 2)
Power	Applied power		Approx. 8 hours/ 16 hours (2 batteries) (depends on application)
Environment	Temperature and humidity		-10°C to 50°C and 5 to 90% RH
Size	Size (w x d x h[9] mm)		80 x 183 x 25mm

[5] **FOCUS POINT 5** – Category: newly introduced cohesive referents per discourse segment.

[6] **FOCUS POINT 6** – Category: proportion of implicit to explicit cultural/contextual referents.

[7] **FOCUS POINT 7** – Category: use of lexical specification.

[8] **FOCUS POINT 8** – Category: use of lexical specification.

[9] **FOCUS POINT 9** – Category: use of lexical specification.

Document released on 09/04/08
Madison, WI[10] 53726

[10] **FOCUS POINT 10** – Category: proportion of implicit to explicit cultural/contextual referents.

Appendix C

Focus points validation questionnaire

C.1 External evaluation - Part 01

CUESTIONARIO DE VALIDACIÓN DE INDICADORES: EXPLICITACIÓN

Datos personales del evaluador

Nombre y apellidos

Dirección de correo electrónico	Teléfono móvil [1]	Teléfono fijo [1]

Experiencia en traducción con la combinación EN>ES (selecciona una opción)	Experiencia docente con la combinación EN>ES (selecciona una opción)	Conocimientos de herramientas TAO (selecciona una opción)

[1] Agradecemos que nos facilites tu teléfono por si necesitamos comentarte alguna de tus respuestas en la parte del cuestionario.
Todos los datos personales del evaluador serán tratados de manera confidencial.

INTRODUCCIÓN

El siguiente cuestionario tiene como objetivo validar los indicadores textuales que utilizaremos en un experimento para medir cuándo y cómo los traductores introducen marcas de explicitación en sus traducciones (inglés > español). Antes de presentarte el cuestionario de validación, podrás encontrar una pequeña descripción de lo que consideramos como *explicitación* en este estudio y de qué manera la analizaremos.

¿EN QUÉ CONSISTE LA EXPLICITACIÓN DE INFORMACIÓN?

De acuerdo con Shuttleworth y Cowie (1999:55), explicitación es «the phenomenon which frequently leads to target text stating source text information in a more explicit form than the original», por ejemplo, añadiendo sintagmas explicativos y conectores o bien explicando explícitamente implicaturas del texto original. Delisle et al (1999:139), por su parte, definen la explicitación como una estrategia de traducción a partir de la cual «the translator introduces precise semantic details into the target text». La estrategia de la explicitación también ha sido denominada *ampliación* o *adición de información* por otros estudiosos.

Para trabajar sobre una lista cerrada de tipos posibles de explicitación de información, proponemos la siguiente clasificación a partir de la cual analizaremos los diferentes casos que presenta este cuestionario.

1. ADICIÓN DE REFERENTES CULTURALES/CONTEXTUALES
Bajo esta categoría recogemos los casos en los que el traductor añade información que resulta evidente para el lector del texto original, pero no para el lector de la traducción. Se trata normalmente de información cultural, pragmática o de conocimiento del mundo que el traductor quiere hacer explícita en la traducción. Ejemplo:

- Inglés: *He was borne en Alburquerque.*
- Español: *Nació en Alburquerque* ***(Nuevo México)***

2. SUSTITUCIÓN DE FORMAS PRONOMINALES
Bajo esta categoría recogemos los casos en los que las formas pronominales del original pasan a realizarse como formas plenas (sus referentes explícitos) en las traducciones.

- Inglés: *This document explains how to use Panda Antivirus to identify and remove virus from your computer. It is a software application available at no cost to Chicago University students.*
- Español: *Este documento explica cómo utilizar Panda Antivirus para identificar y eliminar virus del ordenador.* ***Panda Antivirus*** *es un programa gratuito para los estudiantes de la Universidad de Chicago.*

3. INTRODUCCIÓN DE MECANISMOS DE COHESIÓN
Bajo esta categoría recogemos los casos en los que el traductor cohesiona de manera explícita oraciones independientes en el texto original. Los mecanismos cohesivos de la lengua de partida se hacen explícitos en la lengua de llegada mediante la adición de conectores.

- Inglés: *Use caution in selecting what virus you wish to remove. Removing previously fixed virus will re-install them on your computer.*
- Español: *Tenga cuidado a la hora de seleccionar los virus que quiere eliminar,* ***ya que*** *si vuelve a seleccionar virus previamente eliminados éstos volverán a reinstalarse en su equipo.*

4. TRATAMIENTO DEL LÉXICO
Bajo esta categoría recogemos los casos en los que el traductor emplea en su traducción términos más específicos. También se aplica esta categoría a los casos en los que el traductor introduce sinonimia o usa sintagmas desarrollados para las siglas que recoge el original.

- Inglés: *Freeware refers to...*
- Español: *El* ***freeware*** *o* ***software gratuito*** *hace referencia a...*

EN LA PÁGINA SIGUIENTE ENCONTRARÁS EL CUESTIONARIO QUE TE PEDIMOS RELLENAR.

ANOTA, POR FAVOR, EL TIEMPO QUE TARDAS EN RELLENARLO.

CUESTIONARIO

FRAGMENTOS PERTENECIENTES AL TEXTO 1: UNA GUÍA RÁPIDA DE INSTALACIÓN DE UN PROGRAMA INFORMÁTICO

1.1. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como ADICIÓN DE REFERENTES CONTEXTUALES (referencia explícita al estado/país de esta dirección postal)?

Pittsburgh, **PA** 15260

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

1.2. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como SUSTITUCIÓN DE FORMAS PRONOMINALES (sustitución del pronombre por su referente explícito)?

This document explains how to use SpyPredator 1.4 to identify and remove spyware applications from your computer. **It** is a software application available at no cost to University of Pittsburgh students. **It** can be downloaded from software.pitt.edu.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

1.3. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como ADICIÓN DE REFERENTES CONTEXTUALES (especificación del formato habitual de una dirección de Internet: `http://`)?

This software can be downloaded from **software.pitt.edu**.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

1.4. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO (mantenimiento del término en inglés además de su equivalente español, por ejemplo)?

Spyware refers to software installed on your computer —often without your knowledge or consent— that is used to collect and distribute information about you.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

1.5. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO (mantenimiento del término inglés, traducción, ambas opciones, etc.)?

P2P file sharing applications, which can be used to illegally share copyrighted music and movies, are one of the most common sources of spyware.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

1.6. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO (referencia directa al sintagma desarrollado al cual hace referencia la sigla)?

CSSD recommends using SpyPredator in tandem with Ad-Watch provided by Lavasoft's Ad-Aware SE Professional.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

1.7. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como ADICIÓN DE REFERENTES CONTEXTUALES (referencia directa a Lavasoft como una empresa de desarrollo de software)?

CSSD recommends using SpyPredator in tandem with Ad-Watch provided by **Lavasoft**'s Ad-Aware SE Professional.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

1.8. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como INTRODUCCIÓN DE MECANISMOS DE COHESIÓN ENTRE ESTAS DOS FRASES?

The file is 13.7 MB**:** It may take some minutes to download with a modem connection.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

1.9. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como ADICIÓN DE REFERENTES CONTEXTUALES (referencia directa al contexto de instalación del programa)?

Double-click the SpyPredator icon on your desktop and click the Run button **to proceed**.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

1.10. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como INTRODUCCIÓN DE MECANISMOS DE COHESIÓN ENTRE ESTAS DOS FRASES?

Note: Be sure to un-check *Don't create a Start Menu Folder* if it is checked**;** this parameter creates a program group on your start menu.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

1.11. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como INTRODUCCIÓN DE MECANISMOS DE COHESIÓN ENTRE ESTAS DOS FRASES?

Use caution in selecting what problems you wish to restore**.** Restoring previously fixed spyware problems will re-install the spyware programs on your computer.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

FRAGMENTOS PERTENECIENTES AL TEXTO 2: UN MANUAL DE USUARIO SOBRE UNA PROGRAMA INFORMÁTICO PARA GENERAR INFORMES MÉDICOS

2.1. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como INTRODUCCIÓN DE MECANISMOS DE COHESIÓN ENTRE ESTAS DOS FRASES?

MedHelpRx enables you to rapidly generate new prescriptions and refills**.** Look up codes and generate allergy records quickly and accurately

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.2. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO (introducción de sinonimia, hiperonimia, etc.)?

MedHelpRx is a full-featured clinical application used by thousands of **physicians**. It has revolutionized many **doctors**' practices.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.3. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como SUSTITUCIÓN DE FORMAS PRONOMINALES (sustitución del pronombre por su referente explícito)?

MedHelpRx is a full-featured clinical application used by thousands of physicians. **It** has revolutionized many doctors' practices. **It** has tools that enable you to import patient data from most patient management systems.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.4. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como ADICIÓN DE REFERENTES CONTEXTUALES (referencia al dibujo que muestra el icono – una imagen que acompaña al texto)?

This icon means Patient Rx history is on record.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.5. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como ADICIÓN DE REFERENTES CONTEXTUALES (referencia a una imagen que acompaña al texto)?

Red means allergies on record.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.6. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como ADICIÓN DE REFERENTES CONTEXTUALES (referencia a una imagen que acompaña al texto)?

When **Rx** is highlighted, selecting a patient will take you to the drug list.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.7. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como INTRODUCCIÓN DE MECANISMOS DE COHESIÓN ENTRE ESTAS DOS FRASES?

Be careful with the Trashcan feature**.** Tapping the Trashcan will permanently delete the patients record.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.8. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO (se mantiene el símbolo, se traduce, ambas opciones, etc.)?

Adjust the dose, route and any other **Rx** information as required.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.9. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO (se mantiene la sigla, se traduce, ambas opciones, etc.)?

Tap Print to print the prescription via **IR**.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.10. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como INTRODUCCIÓN DE MECANISMOS DE COHESIÓN ENTRE ESTAS TRES FRASES?

You can generate multiple prescriptions for the same patient**.** Tap the Multi button in the top of the Rx window.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.11. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como INTRODUCCIÓN DE MECANISMOS DE COHESIÓN ENTRE ESTAS TRES FRASES?

No cost**.** No obligation**.** No Hassle.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

2.12. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como ADICIÓN DE REFERENTES CONTEXTUALES (referencia explícita al estado/país de esta dirección postal)?

Stockton, **CA**

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

FRAGMENTOS PERTENECIENTES AL TEXTO 3: UN FOLLETO INFORMATIVO SOBRE UN DISPOSITIVO PARA EL CONTROL DE EXISTENCIAS

3.1. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como INTRODUCCIÓN DE MECANISMOS DE COHESIÓN ENTRE LAS FRASES?

Stock Terminal is the ultimate handheld device to keep your stock data. With **Stock Terminal**, keeping your stock lists updated is easier than ever. **Stock Terminal** will save you expensive training courses and tedious data-entering hours. **Stock Terminal** is a great way to speed up efficiency in your business.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

3.2. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como INTRODUCCIÓN DE MECANISMOS DE COHESIÓN ENTRE ESTAS DOS FRASES?

Businessmen all have different opinions about productivity**.** They would all agree that Stock Terminal has some attractive features that are unlike any other handheld devices.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

3.3. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como SUSTITUCIÓN DE FORMAS PRONOMINALES (sustitución del pronombre por su referente explícito)?

Case studies prove that with Stock Terminal most businessmen increase their productivity by 150%. When your business runs short of a specific product **it** will beep and display a warning message.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

3.4. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como SUSTITUCIÓN DE FORMAS PRONOMINALES (sustitución del pronombre por su referente explícito)?

Stock Terminal is fully protected against water and dust penetration. Indeed, using **it** is the safest way to work.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

3.5. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO (se mantiene la sigla, se traduce, ambas opciones, etc.)?

Test the **IR** port of your Stock Terminal easily and quickly.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

3.6. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO (se mantiene la sigla, se traduce, etc.)?

OS (language)

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

3.7. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO (se mantienen los símbolos o se traducen)?

Size (**w** x **d** x **h** mm)

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

3.8. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO (se mantiene la sigla, se traduce, se incluye el sintagma desarrollado, etc.)?

Bluetooth standard ver. 2.0 + **EDR** (Power Class 2)

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

3.9. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como TRATAMIENTO DEL LÉXICO?

Product names are either **trademarks** or **registered trademarks** of the respective owners.

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

3.10. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como ADICIÓN DE REFERENTES CONTEXTUALES (referencia explícita al estado/país de esta dirección postal)?

Madison, **WI** 53726-2398

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

3.11. ¿Consideras que el siguiente fragmento de texto puede inducir al traductor a introducir marcas de explicitación clasificables como INTRODUCCIÓN DE MECANISMOS DE COHESIÓN ENTRE ESTAS FRASES?

Each device has a unique serial number**.** If your device is lost or stolen, please refer to our contact**;** she will deal with the deactivation of the serial number (we will not take charge of lost devices without a signed license agreement).

☐ **SÍ** ☐ **SÍ, y también de esta otra categoría: (selecciona una categoría)** ☐ **NO**

Tiempo promedio de realización de este cuestionario: (minutos)

IMPORTANTE

CUANDO HAYAS RELLENADO ESTE CUESTIONARIO, ENVÍANOSLO, POR FAVOR, A LA SIGUIENTE DIRECCIÓN: barto.mesa@uab.cat.

EN MENOS DE 24 HORAS TE CONFIRMAREMOS LA RECEPCIÓN Y TE ENVIAREMOS UNA SEGUNDA ACTIVIDAD RELACIONADA CON LOS INDICADORES QUE HAS EVALUADO EN ESTE CUESTIONARIO.

ESTA SEGUNDA ACTIVIDAD CONSISTIRÁ EN UN EJERCICIO DE LECTURA CRÍTICA DE TRES TEXTOS (UN TOTAL DE 1.500 PALABRAS APROXIMADAMENTE).

¡MUCHAS GRACIAS POR TU COLABORACIÓN!

C.2 External evaluation - Part 02

LECTURA CRÍTICA DE TEXTOS – EXPLICITACIÓN

Datos personales del evaluador

Nombre y apellidos

INSTRUCCIONES

En esta segunda actividad —complementaria a los cuestionarios que nos has enviado— te pedimos que leas los tres textos que has recibido por correo electrónico junto con este documento (se trata de los textos a los cuales pertenecen los fragmentos que has evaluado en los cuestionarios de esta semana):

- **TEXTO 1**: UNA GUÍA RÁPIDA DE INSTALACIÓN DE UN PROGRAMA INFORMÁTICO (528 palabras)
- **TEXTO 2**: UN MANUAL DE USUARIO SOBRE UNA PROGRAMA INFORMÁTICO PARA GENERAR INFORMES MÉDICOS (472 palabras)
- **TEXTO 3**: UN FOLLETO INFORMATIVO SOBRE UN DISPOSITIVO PARA EL CONTROL DE EXISTENCIAS (418 palabras)

En los textos podrás ver marcados los indicadores que evaluaste en el cuestionario. Ahora te pedimos que los leas atentamente e intentes marcar **nuevos** indicadores.

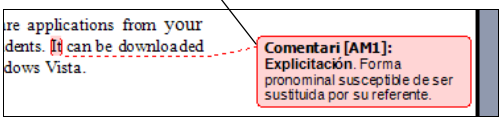
Los nuevos indicadores relacionados con la explicitación de información que deberías identificar en los tres textos son:

EXPLICITACIÓN DE INFORMACIÓN
Fragmentos susceptibles de recoger nuevos elementos contextuales en la traducción. Por ejemplo, adición de elementos culturales que resultan evidentes para el lector del texto original, pero no para el lector de la traducción.
Fragmentos susceptibles de sustituir las formas pronominales por sus referentes plenos en la traducción.
Fragmentos susceptibles de recoger nuevos mecanismos de cohesión entre las frases de la traducción. Adición de conectores, por ejemplo.
Fragmentos susceptibles de tratar de manera diferente el léxico de la traducción (uso de sinonimia, combinación del término en inglés y su equivalente en español, etc..).

Puedes incorporar tus nuevos indicadores en los textos utilizando cualquiera de estas tres opciones:

- **Cambios resaltados** de Word (barra de herramientas Revisión)
- **Comentarios** de Word (barra de herramientas Revisión)
- Texto con una **tipografía y un color diferente**

Un ejemplo:



IMPORTANTE: **en caso de que no detectes ningún nuevo indicador, te pedimos que nos lo indiques al final de cada texto**.

ANOTA, POR FAVOR, EL TIEMPO QUE HAS TARDADO EN REALIZAR ESTA ACTIVIDAD.

Tiempo promedio de realización de esta actividad: (minutos)

CUANDO HAYAS ACABADO ESTA ACTIVIDAD, ENVÍANOS, POR FAVOR, ESTE DOCUMENTO JUNTO CON LOS TRES TEXTOS MODIFICADOS A LA SIGUIENTE DIRECCIÓN: barto.mesa@uab.cat.

¡MUCHAS GRACIAS POR TU COLABORACIÓN!

Appendix D

Target text segments

This annex presents the list of concordances extracted from the TRACE multiple translation corpus.

These TT segments are the base of the analyses presented in chapter 6.

D.0.1 Implicit to explicit cultural and contextual references

D.0.1.1 Text 1 – Focus point 1

Source segment (*English*)

- Pittsburgh, **PA**

Target segment (*Spanish*)

1. Pittsburgh, PA
2. Pittsburgh, PA
3. Pittsburgh, PA
4. Pittsburgh, PA
5. Pittsburgh, PA
6. Pittsburgh, PA
7. Pittsburgh, Pensilvania
8. Pittsburgh, PA
9. Pittsburgh, Pensilvania
10. Pittsburgh, Pensilvania
11. Pittsburgh, PA
12. Pittsburgh, PA
13. Pittsburgh, PA
14. Pittsburgh, PA
15. Pittsburgh, PA (EE.UU.)
16. Pittsburgh, PA
17. Pittsburgh, PA
18. Pittsburgh, PA (EE.UU)
19. Pittsburgh, PA
20. Pittsburgh, PA
21. Pittsburg (Pensilvania)
22. Pittsburgh, PA
23. Pittsburgh, Pensilvania (EE.UU.)
24. Pittsburgh, PA

25. Pittsburgh, Pennsylvania, EE.UU.
26. Pittsburgh, PA
27. Pittsburgh, PA
28. Pittsburgh, PA
29. Pittsburgh, Pensilvania
30. Pittsburgh, PA
31. Pittsburgh, Pensilvania
32. Pittsburgh, PA
33. Pittsburgh, PA
34. Pittsburg, Pensilvania
35. Pittsburgh, PA
36. Pittsburgh, PA
37. Pittsburgh, PA
38. Pittsburgh, PA
39. Pittsburgh, PA
40. Pittsburgh, PA (EE.UU.)
41. Pittsburgh, PA
42. Pittsburgh, PA
43. Pittsburgh, PA (EE. UU.)
44. Pittsburgh, PA, EEUU
45. Pittsburgh, PA
46. Pittsburgh, PA
47. Pittsburgh (Pensilvania, EE.UU.)
48. Pittsburgh, PA
49. Pittsburgh, PA
50. Pittsburgh, PA
51. Pittsburgh, PA
52. Pittsburgh, PA
53. Pittsburgh, Philadelphia
54. Pittsburgh, PA
55. Pittsburgh, Pensilvania
56. Pittsburgh, PA
57. Pittsburgh, PA (EE. UU.)
58. Pittsburg, PA
59. Pittsburg (Pensilvania)
60. Pittsburgh, PA
61. Pittsburgh, PA
62. Pittsburgh, PA, EE.UU.
63. Pittsburgh, PA
64. Pittsburgh, PA
65. Pittsburgh, PA
66. Pittsburgh, PA (EUA)
67. Pittsburgh, PA
68. Pittsburgh, PA
69. Pittsburgh, PA
70. Pittsburgh, PA
71. Pittsburgh, PA
72. Pittsburgh, PA
73. Pittsburgh, PA
74. Pittsburgh, PA
75. Pittsburgh, PA (EUA)
76. Pittsburgh, PA
77. Pittsburgh, PA
78. Pittsburgh, Pennsylvania (EE. UU.)
79. Pittsburgh, PA
80. Pittsburgh, PA
81. Pittsburgh, PA (Estados Unidos)
82. Pittsburgh, PA
83. Pittsburgh, PA
84. Pittsburgh, PA
85. Pittsburgh, PA
86. Pittsburgh, PA

87. Pittsburgh, PA
88. Pittsburgh, PA
89. Pittsburgh, PA
90. Pittsburgh, PA

D.0.1.2 Text 1 – Focus point 2

Source segment (*English*)

- CSSD recommends using SpyPredator in tandem with Ad-Watch provided by **Lavasoft**'s AdAware®SE Professional.

Target segment (*Spanish*)

1. CSSD recomienda el uso de SpyPredator en combinación con el programa Ad-Watch que se incluye en el paquete AdAware®SE Professional de Lavasoft.
2. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, disponible en la aplicación AdAware®SE Professional de Lavasoft.
3. CSSD recomienda usar SpyPredator junto con la aplicación antiadware AdAware®SE Professional de Lavasoft.
4. CSSD recomienda el uso de SpyPredator junto con Ad-Watch, que se incluye con la aplicación AdAware®SE Professional de Lavasoft.
5. CSSD te recomienda utilizar SpyPredator junto con Ad-Watch, de Lavasoft's AdAware®SE Professional.
6. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, que se suministra con Lavasoft's AdAware®SE Professional.
7. El departamento de Servicios informáticos y desarrollo de sistemas recomienda el uso de SpyPredator junto con Ad-Watch, proporcionado por Lavasoft's AdAware®SE Professional.
8. CSSD recomienda el uso de SpyPredator conjuntamente con Ad-Watch, programas de Lavasoft's AdAware®SE Professional.
9. CSSD le recomienda utilizar SpyPredator conjuntamente con Ad-Watch, proporcionado por Lavasoft's AdAware®SE Professional.
10. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, que se proporciona con AdAware®SE Professional de Lavasoft.
11. El departamento de Servicios informáticos y desarrollo de sistemas recomienda el uso de SpyPredator junto con Ad-Watch, ofrecido por AdAware®SE Professional de Lavasoft.
12. CSSD (Servicios Informáticos y Desarrollo de Sistemas) recomienda utilizar SpyPredator en combinación con Ad-Watch proporcionado por Lavasoft's AdAware®SE Professional.
13. La entidad CSSD recomienda utilizar SpyPredator junto con Ad-Watch, un programa de AdAware®SE Professional de Lavasoft.
14. CSSD recomienda utilizar SpyPredator juntamente con Ad-Watch, distribuido por Lavasoft's AdAware®SE Professional.
15. CSSD recomienda utilizar SpyPredator junto con el programa Ad-Watch, suministrado por Lavasoft's AdAware®SE Professional.
16. Computing Services and Systems Development (CSSD) recomienda utilizarla de forma conjunta con Ad-Watch, una aplicación incluida en AdAware®SE Professional de Lavasoft.
17. CSSD recomienda la utilización de SpyPredator en combinación con Ad-Watch, de Lavasoft's AdAware®SE Professional.
18. CSSD recomienda utilizar SpyPredator en combinación con Ad-Watch de Lavasoft, función incluida en AdAware®SE Professional.
19. CSSD recomienda usar SpyPredator conjuntamente con la solución Ad-Watch suministrada por Lavasoft AdAware®SE Professional.
20. CSSD recomienda que SpyPredator se utilice junto a Ad-Watch, distribuido por AdAware®SE Professional de Lavasoft.
21. CSSD recomienda la utilización en tándem de SpyPredator con Ad-Watch, disponible en AdAware®SE Professional de Lavasoft.
22. CSSD le recomienda utilizar SpyPredator en conjunción con Ad-Watch, ambos sistemas ofertados por Lavasoft's AdAware®SE Professional.
23. El departamento de desarrollo de sistemas y servicios informáticos (CSSD, Computing Services and Systems Development) recomienda el uso de SpyPredator junto con Ad-Watch suministrado con AdAware®SE Professional de Lavasoft.

24. CSSD recomienda el uso de SpyPredator en conjunción con Ad-Watch, suministrado por Lavasoft's AdAware®SE Professional.
25. CSSD recomienda utilizar el SpyPredator junto con el Ad-Watch de Lavasoft's AdAware®SE Professional.
26. CSSD recomienda el uso de SpyPredator en combinación con Ad-Watch de Lavasoft's AdAware®SE Professional.
27. El departamento de Servicios Informáticos y Desarrollo de Sistemas recomienda utilizar SpyPredator junto con Ad-Watch proporcionado por Lavasoft's AdAware®SE Professional.
28. CSSD recomienda utilizar SpyPredator junto con Ad-Watch proporcionado por AdAware®SE Professional de Lavasoft.
29. El Departamento de Sistemas y Servicios Informáticos (CSSD, por sus siglas en inglés) recomienda que se use SpyPredator junto con Ad-Watch, suministrado por AdAware®SE Professional de Lavasoft.
30. CSSD recomienda utilizar SpyPredator junto con Ad-Watch de Lavasoft AdAware®SE Professional.
31. CSSD recomienda utilizar SpyPredator junto con Ad-Watch de Lavasoft's AdAware®SE Professional.
32. CSSD recomienda usar SpyPredator junto con Ad-Watch proporcionado por Lavasoft's AdAware®SE Professional.
33. El CSSD recomienda la utilización de SpyPredator junto con Ad-Watch suministrado por Lavasoft's AdAware®SE Professional.
34. CSSD recomienda utilizar SpyPredator junto con Ad-Watch suministrado por Lavasoft's AdAware®SE Professional.
35. CSSD recomienda el uso de SpyPredator junto con el programa Ad-Watch que se proporciona con AdAware®SE Professional de Lavasoft.
36. CSSD recomienda el uso de SpyPredator combinado con Ad-Watch producido por Lavasoft's AdAware®SE Professional.
37. CSSD (siglas de Computing Services and Systems Development) recomienda el uso de SpyPredator combinado con la aplicación Ad-Watch que incorpora el software AdAware®SE Professional de Lavasoft.
38. El CSSD recomienda el uso de SpyPredator en combinación con la aplicación Ad-Watch de Lavasoft AdAware®SE Professional.
39. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, un producto de Lavasoft's AdAware®SE Professional.
40. El CSSD recomienda el uso de SpyPredator junto con la aplicación Ad-Watch de Lavasoft's AdAware®SE Professional.
41. CSSD recomienda el uso de SpyPredator junto con el programa Ad-Watch de Lavasoft's AdAware ®SE Professional.
42. CSSD recomienda utilizar SpyPredator junto con Ad-Watch de Lavasoft's AdAware®SE Professional.
43. CSSD recomienda el uso de SpyPredator en combinación con Ad-Watch de Lavasoft AdAware®SE Professional.
44. El CSSD recomienda el uso de SpyPredator junto con Ad-Watch de AdAware®SE Professional de Lavasoft.
45. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, que se suministra con AdAware®SE Professional de Lavasoft.
46. CSSD recomienda utilizar SpyPredator en combinación con el programa Ad-Watch suministrado por Lavasoft's AdAware®SE Professional.
47. CSSD recomienda utilizar SpyPredator juntamente con la aplicación Ad-Watch, incluida en el paquete AdAware®SE Professional de Lavasoft.
48. CSSD recomienda el uso de SpyPredator junto con Ad-Watch de Lavasoft's AdAware®SE Professional.
49. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, suministrado por Lavasoft's AdAware®SE Professional.
50. El CSSD recomienda el uso de SpyPredator junto a Ad-Watch proporcionado por AdAware®SE Professional de Lavasoft.
51. Desde CSSD le recomendamos utilizar SpyPredator junto a Ad-Watch, software que proporciona Lavasoft's AdAware®SE Professional.
52. CSSD le recomienda que utilice SpyPredator junto con Ad-Watch, de Lavasoft's AdAware®SE Professional.
53. El CSSD recomienda el uso SpyPredator junto con Ad-Watch, proporcionado por el AdAware®SE Professional de Lavasoft.

54. CSSD recomienda utilizar SpyPredator junto con el programa Ad-Watch proporcionado por AdAware®SE Professional de Lavasoft.
55. La división CSSD recomienda utilizar SpyPredator junto con Ad-Watch, suministrado por AdAware®SE Professional de Lavasoft.
56. CSSD recomienda el uso de SpyPredator junto Ad-Watch, facilitado por Lavasoft's AdAware®SE Professional.
57. CSSD recomienda utilizarlo en conjunción con Ad-Watch, un producto de Lavasoft's AdAware®SE Professional.
58. CSSD recomienda el uso de SpyPredator junto a Ad-Watch suministrado por Lavasoft's AdAware®SE Professional.
59. El Servicio de Informática y Desarrollo de Sistemas de la Universidad (CSSD) recomienda el uso combinado de Spypredator y Ad-Watch, suministrado por AdAware®SE Professional de Lavasoft.
60. CSSD le recomienda que utilice SpyPredator junto con Ad-Watch, proporcionado por AdAware®SE Professional de Lavasoft.
61. CSSD recomienda la utilización de SpyPredator junto con Ad-Watch, proporcionado por AdAware®SE Professional, de Lavasoft.
62. CSSD recomienda utilizar SpyPredator junto con Ad-Watch de AdAware®SE Professional, de Lavasoft.
63. CSSD recomienda el uso de SpyPredator junto con Ad-Watch ofrecido por AdAware®SE Professional de Lavasoft.
64. CSSD recomienda utilizar SpyPredator junto con la aplicación Ad-Watch de AdAware®SE Professional de Lavasoft.
65. CSSD recomienda utilizar de forma simultánea SpyPredator y Ad-Watch, incluido en el AdAware®SE Professional de Lavasoft.
66. CSSD recomienda utilizar SpyPredator junto al módulo Ad-Watch del programa AdAware®SE Professional de Lavasoft.
67. CSSD recomienda utilizar SpyPredator en combinación con Ad-Watch, una aplicación de AdAware®SE Professional de Lavasoft.
68. CSSD recomienda el uso de SpyPredator junto con Ad-Watch, que se proporciona con AdAware®SE Professional de Lavasoft.
69. La CSSD (Computer Services and Systems Division) recomienda utilizar SpyPredator y Ad-Watch conjuntamente, proporcionados por Lavasoft's AdAware®SE Professional.
70. El CSSD recomienda utilizar SpyPredator en combinación con la herramienta Ad-Watch, incluida con el software AdAware®SE Professional de Lavasoft.
71. Computing Services and Systems Development recomienda utilizar SpyPredator junto con Ad-Watch (integrado en AdAware®SE Professional de Lavasoft).
72. CSSD recomienda utilizar el SpyPredator en asociación con el Ad-Watch, que es una aplicación del programa AdAware®SE Professional de Lavasoft.
73. CSSD recomienda el uso de SpyPredator junto con Ad-Watch de AdAware®SE Professional de Lavasoft.
74. CSSD le recomienda utilizar el SpyPredator junto con Ad-Watch, suministrado por Lavasoft's AdAware®SE Professional.
75. CSSD recomienda usar SpyPredator en combinación con Ad-Watch, suministrado por Lavasoft's AdAware®SE Professional.
76. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, proporcionado por Lavasoft's AdAware®SE Professional.
77. Computing Services and Systems Development (CSSD) recomienda la utilización de SpyPredator junto con Ad-Watch, proporcionado por AdAware®SE Professional de Lavasoft.
78. El departamento de SIDS recomienda utilizar el programa SpyPredator en tándem con el Ad-Watch, facilitado por el AdAware®SE Professional de Lavasoft.
79. Servicios Informáticos y Desarrollo de Sistemas recomienda utilizar SpyPredator en combinación con Ad-Watch, distribuido por Lavasoft's AdAware®SE Professional.
80. CSSD recomienda utilizar SpyPredator en combinación con Ad-Watch, proporcionado por AdAware®SE Professional de Lavasoft.
81. CSSD recomienda utilizar SpyPredator junto con Ad-Watch proporcionado por Lavasoft's AdAware®SE Professional.
82. CSSD recomienda el uso de SpyPredator junto con la solución Ad-Watch de AdAware®SE Professional de Lavasoft.
83. CSSD recomienda usar SpyPredator en conjunción con Ad-Watch, suministrado con AdAware®SE Professional de Lavasoft.
84. CSSD recomienda el uso de SpyPredator junto con el uso de Ad-Watch suministrado por Lavasoft's AdAware®SE Professional.

85. La organización CSSD (Computer Supported Spiritual Development) recomienda utilizar SpyPredator en combinación con Ad-Watch, un producto de Lavasoft's AdAware®SE Professional.
86. CSSD recomienda el uso de SpyPredator junto con la solución Ad-Watch de AdAware®SE Professional de Lavasoft.
87. CSSD recomienda el uso conjunto de SpyPredator y Ad-Watch, distribuido por AdAware®SE Professional de Lavasoft.
88. El Departamento de Servicios de Informática y Desarrollo de Sistemas recomienda usar SpyPredator junto con Ad-Watch, ofrecido por AdAware ®SE Professional de Lavasoft.
89. CSSD recomienda utilizar SpyPredator en combinación con Ad-Watch suministrado por Lavasoft's AdAware®SE Professional.
90. CSSD recomienda el uso de SpyPredator conjuntamente con un Ad-Watch de Lavasoft's AdAware®SE Professional.

D.0.1.3 Text 1 – Focus point 3

Source segment (*English*)

- It can be downloaded from **software.pitt.edu**.

Target segment (*Spanish*)

1. Se puede descargar desde software.pitt.edu.
2. Es posible descargarla desde la dirección software.pitt.edu.
3. Se puede descargar desde software.pitt.edu.
4. Se puede descargar desde software.pitt.edu.
5. Se puede descargar desde software.pitt.edu.
6. Descárgalo en software.pitt.edu.
7. Puede descargarse de software.pitt.edu.
8. Puede descargarse en http://software.pitt.edu.
9. Puede descargarse desde el sitio software.pitt.edu.
10. que se puede descargar desde la página software.pitt.edu.
11. Puede descargarse desde software.pitt.edu.
12. Se puede descargar desde software.pitt.edu.
13. Puede descargarse en la dirección software.pitt.edu.
14. Se puede descargar desde software.pitt.edu.
15. Se puede descargar desde el sitio software.pitt.edu.
16. Puede descargarse desde software.pitt.edu.
17. que se puede descargar desde software.pitt.edu.
18. que puede descargarse desde el sitio software.pitt.edu.
19. Se puede descargar desde software.pitt.edu.
20. La aplicación puede descargarse de la página software.pitt.edu.
21. Se puede descargar desde el enlace software.pitt.edu.
22. Puede descargarse desde software.pitt.edu.
23. Puede descargarse desde la siguiente dirección: software.pitt.edu.
24. Puede descargarse desde software.pitt.edu.
25. Puede descargarse desde software.pitt.edu.
26. Se puede descargar desde software.pitt.edu.
27. que se puede descargar desde la página software.pitt.edu.
28. Se puede descargar de la página http://software.pitt.edu.
29. Se puede descargar de software.pitt.edu.
30. Se puede descargar desde software.pitt.edu.
31. Se puede descargar desde la página software.pitt.edu.
32. Puede descargarse de: software.pitt.edu.
33. Se puede descargar desde la página web software.pitt.edu.
34. Puede descargarse desde software.pitt.edu.
35. Se puede descargar desde software.pitt.edu.
36. Está disponible en la página software.pitt.edu,
37. Puede descargarse en la página software.pitt.edu.
38. Puede descargarse desde software.pitt.edu.
39. Se puede descarcar desde software.pitt.edu.
40. Puede descargarse desde software.pitt.edu.

41. Puede descargarse en la dirección software.pitt.edu.
42. Puedes descargársela de software.pitt.edu.
43. Se puede descargar desde software.pitt.edu.
44. Puede descargarse desde software.pitt.edu.
45. Se puede descargar en software.pitt.edu.
46. Puede descargarse desde software.pitt.edu.
47. Puede descargarse en la dirección software.pitt.edu.
48. Puedes descargársela de software.pitt.edu.
49. Se puede descargar desde software.pitt.edu.
50. Puede descargarse desde http://software.pitt.edu.
51. que puede descargarse desde software.pitt.edu.
52. Se puede descargar en www.software.pitt.edu.
53. Puede descargarse desde software.pitt.edu.
54. Puede descargarse de la siguiente dirección: software.pitt.edu.
55. Puede descargarse en software.pitt.edu.
56. Puede descargarse en software.pitt.edu.
57. Puede descargarse desde software.pitt.edu.
58. Se puede descargar desde software.pitt.edu.
59. Se puede descargar desde software.pitt.edu.
60. Puede descargarse en software.pitt.edu.
61. Se puede descargar desde software.pitt.edu.
62. Puede descargarse en software.pitt.edu.
63. Puede descargarse del sitio software.pitt.edu.
64. Se puede descargar de software.pitt.edu.
65. Se puede descargar desde software.pitt.edu.
66. Se puede descargar accediendo a software.pitt.edu y:
67. Se puede descargar de software.pitt.edu.
68. Se puede descargar desde software.pitt.edu.
69. Puede descargarse desde software.pitt.edu.
70. Se puede descargar desde la página web software.pitt.edu.
71. Puede descargarse desde software.pitt.edu.
72. se puede descargar del sitio software.pitt.edu.
73. y se puede descargar desde software.pitt.edu.
74. Puede descargarse desde software.pitt.edu.
75. Se puede descargar en software.pitt.edu.
76. Puede descargarse en software.pitt.edu.
77. Puede descargarse desde software.pitt.edu.
78. Se puede descargar desde software.pitt.edu.
79. Se puede descargar en software.pitt.edu.
80. Puede descargarse del sitio web software.pitt.edu.
81. Puede descargarse desde la página web http://www.software.pitt.edu.
82. Puedes descargarlo desde software.pitt.edu.
83. Puede descargarse de software.pitt.edu.
84. Puede descargarse del sitio software.pitt.edu.
85. Se puede descargar de software.pitt.edu.
86. Se puede descargar desde el sitio software.pitt.edu.
87. Puede descargarse desde software.pitt.edu.
88. que se puede descargar desde software.pitt.edu.
89. que puede descargarse desde el sitio software.pitt.edu.
90. La aplicación puede descargarse de la página software.pitt.edu.

D.0.1.4 Text 2 – Focus point 1

Source segment (*English*)

- When **Rx** is highlighted, selecting a patient will take you to the drug list.

Target segment (*Spanish*)

1. Si Rx se encuentra resaltado, al seleccionar un paciente accederá a la lista de fármacos. Si Rx aparece resaltado, al seleccionar un paciente accederá a la lista de medicamentos.

2. Si se resalta Rx, al seleccionar un paciente se abrirá la lista de fármacos.
3. Cuando está resaltada la opción Rx (receta médica), la selección de un paciente le llevará a la lista de medicamentos.
4. Cuando Rx esté subrayado, seleccionando un paciente se te mostrará su lista de medicamentos.
5. Cuando "Rx" aparece resaltado, si selecciona un paciente, irá directamente a la lista de medicamentos.
6. Cuando se destaque Rx, al escoger un paciente, aparecerá la lista de medicamentos.
7. Si el icono Recetas está marcado, al seleccionar un paciente se irá a la lista de medicamentos.
8. Cuando se resalta Rx y se selecciona un paciente, aparecerá la lista de fármacos.
9. Si la opción "Rx" (Receta) está marcada, al seleccionar un paciente se le conducirá directamente a la lista de medicamentos.
10. Si Rx aparece resaltado, al seleccionar un paciente, se le remitirá a la lista de fármacos.
11. Si Rx se encuentra marcado, al seleccionar un paciente accederá automáticamente a la lista de medicamentos.
12. Cuando Rx está resaltado, la selección de un paciente le permitirá ver la lista de medicamentos.
13. Cuando la opción Rx (Receta) esté resaltada, si selecciona un paciente, accederá a la lista de medicamentos.
14. Cuando Rx aparezca subrayado, si selecciona un paciente se mostrará la lista de medicamentos.
15. Cuando Rx está resaltado, la selección de un paciente lleva a la lista de medicamentos.
16. Cuando se resalta Rx, si selecciona un paciente irá a la lista de fármacos.
17. Al resaltar Rx y seleccionar un paciente, podrá acceder a su lista de medicamentos.
18. Cuando el icono Rx está resaltado, al seleccionar un paciente se abrirá la lista de medicamentos.
19. Cuando Rx esté marcado, la selección de un paciente le dará acceso a la lista de medicinas.
20. Cuando la opción Rx aparece marcada, accederá a la lista de fármacos si selecciona un paciente.
21. Cuando la opción Rx (Receta) aparezca resaltada y seleccione un paciente, el dispositivo le llevará a la lista de fármacos.
22. Cuando aparezca el símbolo Rx, al seleccionar un paciente le llevará al listado de medicamentos.
23. Si selecciona un paciente cuando la opción Rx esté resaltada, aparecerá la lista de medicamentos.
24. Cuando Rx aparece resaltado, al seleccionar un paciente aparecerá la lista de fármacos.
25. Si marca Rx (prescripción), al seleccionar un paciente accederá a la lista de fármacos.
26. Si Rx está resaltado, al seleccionar un paciente irá a la lista de medicamentos.
27. Cuando Rx está resaltado, al seleccionar un paciente le llevará al listado de medicamentos.
28. Cuando Rx está resaltado, al seleccionar un paciente aparecerá la lista de medicamentos.
29. Si Rx está resaltado y selecciona un paciente, accederá a la lista de medicamentos.
30. Cuando Rx aparezca resaltado, seleccione a un paciente para ver el listado de medicamentos.
31. Si la opción Rx (Receta) está marcada, al seleccionar un paciente se accederá a la lista de medicamentos.
32. Cuando Rx está marcado, al seleccionar un paciente le llevará a la lista de medicamentos.
33. Al seleccionar la opción Rx, si selecciona un paciente irá a la lista de medicamentos.
34. Si selecciona un paciente cuando Rx está resaltado, aparecerá en pantalla la lista de medicamentos.
35. Si Rx está resaltado, al seleccionar un paciente accederá a la lista de medicamentos.
36. Cuando el icono Rx se encuentre resaltado, al seleccionar un paciente podrá acceder al listado de medicamentos.
37. Cuando Rx esté resaltado, seleccionando un paciente le llevará a la lista de medicamentos.
38. Si la opción Rx está resaltada, cuando seleccione un paciente el sistema le llevará directamente a la lista de medicamentos.
39. Para acceder a la lista de medicamentos asociados a un determinado paciente, seleccione Rx y, a continuación, el nombre del paciente.
40. Cuando el botón 'Rx' (prescripción) se encuentra resaltado, al seleccionar un paciente se abrirá la lista de fármacos.
41. Cuando Rx se encuentra resaltado, si selecciona un paciente accederá a la lista de fármacos.
42. Si Rx apareciese destacado, al seleccionar al paciente irá a su lista de medicinas.
43. Si Rx está marcado y selecciona un paciente, el dispositivo le mostrará la lista de medicamentos.
44. Si selecciona un paciente cuando Rx (Receta médica) esté resaltado, accederá a la lista de medicamentos.
45. Cuando Rx (receta) aparece resaltado, si selecciona un paciente accederá a la lista de medicamentos.
46. Cuando Rx aparezca resaltado, al seleccionar un paciente, se desplegará la lista de medicamentos.
47. Cuando Rx esté marcado, si usted selecciona un paciente, será redirigido a la lista de medicamentos.
48. Cuando Rx aparezca resaltado, al seleccionar un paciente se accederá a la relación de medicamentos.
49. Cuando Rx aparece resaltado, si selecciona a un paciente, aparecerá la lista de fármacos.

50. Cuando se resalta Rx, al seleccionar un paciente pasará a la lista de fármacos.
51. Cuando aparezca el texto Rx resaltado, seleccione un paciente para que se muestre la lista de medicamentos.
52. Cuando Rx esté iluminado, al seleccionar un paciente se mostrará el listado de medicamentos.
53. Si Rx aparece resaltado, al seleccionar un paciente se abrirá la lista de medicamentos.
54. Cuando aparece "Rx" sobre un fondo gris, la selección le llevará a la lista de fármacos.
55. Cuando se resalta Rx (Receta), al seleccionar un paciente aparece la lista de medicamentos.
56. Si Rx está resaltado, al seleccionar un paciente se mostrará la lista de medicamentos.
57. Si Rx está marcado, cuando seleccione un paciente irá al listado de medicamentos.
58. Si resalta Rx (Medicamento con receta), cuando seleccione un paciente se le mostrará la lista de medicamentos.
59. Cuando "Rx" aparece resaltado, si selecciona un paciente, irá directamente a la lista de medicamentos.
60. Con la opción Rx (Receta) resaltada, si selecciona un paciente, accederá a la lista de fármacos.
61. Cuando Rx está resaltado, la lista de medicamentos se visualiza al seleccionar al paciente.
62. Cuando Rx esté resaltado, la selección de un paciente le llevará a la lista de medicamentos.
63. Si Rx aparece resaltado, al seleccionar un paciente, accederá a la lista de medicamentos.
64. Cuando se resalte Rx , al seleccionar a un paciente le mostrará la lista de medicamentos.
65. Si Rx aparece resaltado, al seleccionar un paciente podrá consultar la lista correspondiente de fármacos.
66. Cuando Rx está subrayado, seleccionar un paciente le llevará a la lista de medicamentos.
67. Cuando el icono Rx aparezca resaltado, seleccione un paciente para ir a la lista de fármacos.
68. Cuando Rx está resaltado, la selección de un paciente le llevará a la lista de medicamentos.
69. Si Rx (Prescripción) está resaltado, cuando seleccione un paciente pasará al listado de medicamentos.
70. Si Rx está resaltado, seleccione el paciente para acceder a la lista de medicamentos.
71. Si selecciona un paciente cuando Rm está resaltado, visualizará la lista de medicamentos.
72. Cuando Rx esté destacado, si selecciona un paciente accederá a la lista de medicamentos.
73. Si Rx (Prescripción) está resaltado, cuando seleccione un paciente pasará al listado de medicamentos.
74. Si selecciona un paciente cuando "Rx" (Recetas) aparezca destacado, aparecerá la lista de medicamentos.
75. Cuando esté marcado Rx (Medicación=, seleccionar un paciente le llevará a la lista de medicación.
76. Si selecciona un paciente cuando está resaltada la opción Rx (Receta médica), visualizará la lista de medicamentos.
77. Cuando Rx está resaltado, seleccionar un paciente le llevará a la lista de fármacos.
78. Si el icono Rx (Receta) aparece resaltado, se abrirá la lista de medicamentos cuando seleccione un paciente.
79. Si Rx esta destacado, al seleccionar un paciente irá a la lista de medicamentos.
80. Si Rx aparece resaltado, al seleccionar un paciente accederá a la lista de medicamentos.
81. Si Rx (receta médica) se encuentra resaltado, al seleccionar un paciente aparecerá la lista de medicamentos.
82. Cuando el icono Rx aparezca resaltado, podrá acceder a la lista de medicamentos seleccionando un paciente.
83. Cuando se resalte Rx, seleccionar un paciente le llevará hasta la lista de medicamentos.
84. Si la sigla Rx (receta) está sombreada, al seleccionarla le aparecerá la lista de medicamentos del paciente.
85. Si Rec está resaltado, al seleccionar un paciente obtendrá un listado de medicamentos.
86. Cuando Rx esté marcado, al seleccionar el paciente aparecerá la lista de medicamentos.
87. Cuando se resalta ≪Rx≫ (recetas), la selección del paciente te llevará a la lista de medicamentos.
88. Si se resalta Rx, al seleccionar un paciente aparecerá la lista de fármacos; en cambio, al resaltar Dx con un toque en este icono aparecerá el problema del paciente.
89. Cuando Rx está resaltado, al seleccionar un paciente irá a la lista de medicamentos Si resalta Dx pulsando en el icono, irá al problema del paciente.
90. Cuando Rx aparece sombreado, la selección de un paciente desplegará la lista de fármacos. cuando Dx aparece sombreado, la selección del icono le mostrará la afección del paciente.

D.0.1.5 Text 2 – Focus point 2

Source segment (*English*)

- You can sort your patients by location by tapping the **location** dropdown in the bottom right corner.

Target segment (*Spanish*)

1. Puede ordenar sus pacientes por ubicación si hace clic en el menú desplegable de ubicación que se encuentra en la esquina inferior derecha.
2. Si desea ordenar los pacientes según la ubicación, puntee en el menú desplegable Location en la esquina inferior derecha.
3. Puede ordenar los pacientes por ubicación si pulsa el menú desplegable Location en la esquina inferior derecha.
4. Puede clasificar los pacientes por localidad tocando la lista desplegable de localidades que está situada en la esquina inferior derecha.
5. Puedes clasificar a los pacientes por ubicación clicando sobre la ubicación desplegable en la parte inferior derecha.
6. Puede ordenar los pacientes por ubicación pulsando en el menú desplegable de ubicación que aparece en la esquina inferior derecha.
7. Puede ordenar a los pacientes según su ubicación seleccionando el menú desplegable Location, situado en la esquina inferior derecha de la pantalla.
8. Puede ordenar los pacientes por ubicación pulsando el menú desplegable de ubicaciones situado en la esquina inferior derecha.
9. Puede ordenar los pacientes por ubicación seleccionando la lista desplegable de ubicación en la esquina inferior derecha.
10. Puede clasificar sus pacientes por localidad introduciendo el nombre de una localidad en el extremo inferior derecho del menú desplegable.
11. Podrá clasificar los pacientes por ubicación pulsando en el menú desplegable de ubicaciones en el extremo inferior derecho.
12. Puede organizar sus pacientes por ubicación tecleando la ubicación en la esquina inferior derecha.
13. Puede ordenar los pacientes por ubicación punteando la lista desplegable de ubicaciones situada en la esquina inferior derecha.
14. Puede ordenar los pacientes por ubicación pulsando en el cuadro desplegable Location (Ubicación) situado en la esquina inferior derecha.
15. Puede ordenar sus pacientes por ubicación, desde el menú desplegable situado en la esquina inferior derecha.
16. Para ordenar la lista de pacientes por su ubicación, pulse el menú desplegable Location (Ubicación) en la esquina superior derecha.
17. Puede ordenar los pacientes por ubicación si punteando el menú desplegable de ubicación en la esquina inferior derecha.
18. Puede ordenar los pacientes por ubicación si puntea en el menú desplegable situado en la esquina inferior derecha.
19. Puede organizar los pacientes por ubicación pulsando el menú desplegable Location, situado en la esquina inferior derecha de la pantalla.
20. Puede clasificar sus pacientes por ubicación desplegango el menú ubicación (location) con el botón de la esquina inferior derecha.
21. Para ordenar los pacientes por ubicación, toque la lista desplegable de ubicaciones que aparece en la esquina inferior derecha.
22. Para ordenar los pacientes por ubicación, sólo tiene que seleccionar el menú desplegable de ubicaciones denominado Location situado en la esquina inferior derecha.
23. Puede ordenar a los pacientes por ubicación pulsando en el menú desplegable Location en la esquina inferior derecha.
24. Puede ordenar la lista de pacientes por ubicación pulsando en el menú desplegable Location (Ubicación) situado en la esquina inferior derecha de la pantalla.
25. Podrá ordenar sus pacientes por ubicación al pinchar sobre la opción de ubicación en el extremo derecho inferior.
26. Para ordenar los pacientes por situación, seleccione el menú desplegable Location (Situación) situado en la esquina inferior derecha.
27. Puede clasificar a los pacientes por ubicación si toca en la opción desplegable de ubicación (Location) que se encuentra en la esquina inferior derecha.
28. Si lo desea puede ordenar los pacientes por ubicación presionando la lista desplegable de la esquina inferior derecha.
29. Puede ordenar los pacientes por ubicación pulsando el menú desplegable de la ubicación, situado en la esquina inferior derecha.

30. Puede ordenar sus pacientes por ubicación pulsando el menú desplegable de ubicaciones en la esquina inferior derecha.
31. Si desea ordenar los pacientes por ubicación, puntee en la lista desplegable de ubicaciones situada en la esquina inferior derecha.
32. Puede ordenar los pacientes por localidad seleccionando el menú desplegable ≪Location≫, situado en la parte inferior derecha.
33. Puede ordenar los pacientes según la ubicación desplegando el menú de ubicaciones de la parte inferior derecha de la pantalla.
34. Los pacientes se pueden ordenar por posición, al pulsar el menú desplegable de posición en la esquina inferior derecha.
35. Puede clasificar a sus pacientes por ubicación, haciendo clic en el menú desplegable Location en la parte inferior derecha de la pantalla.
36. Puede ordenar los pacientes por ubicación pulsando la lista de ubicaciones desplegable que se encuentra en la esquina inferior derecha.
37. Puede ordenar los pacientes por ubicación; para ello, pulse el menú desplegable de la ubicación, situado en la esquina inferior derecha.
38. Puede clasificar los pacientes por ubicación pulsando sobre el menú desplegable Ubicación en la esquina inferior derecha.
39. Podrá organizar a sus pacientes por ubicación seleccionando el menú desplegable Location situado en la esquina inferior derecha.
40. Puede ordenar sus pacientes por ubicación pulsando el desplegable de ubicación en la esquina inferior derecha.
41. Podrá ordenar los pacientes según su lugar de residencia pulsando el botón del menú desplegable Location (Ubicación), en la esquina inferior derecha de la pantalla.
42. Si desea ordenar los pacientes por zona geográfica, acceda al menú desplegable Location (Ubicación) situado en la esquina inferior derecha.
43. Puede ordenar los pacientes por ubicación presionando el menú desplegable de 'Location'(ubicación) situado en la esquina inferior derecha de la pantalla.
44. Puede ordenar los pacientes según su ubicación tocando en el menú desplegable Location en la esquina inferior derecha.
45. Puede ordenar a sus pacientes por localidad, seleccionando dicha localidad en el menú desplegable en la esquina inferior derecha.
46. Puede clasificar sus pacientes por ubicación tocando la lista desplegable de ubicación situada en la esquina inferior derecha.
47. Puede clasificar a los pacientes por ubicación pulsando la lista desplegable de ubicaciones de la esquina inferior derecha.
48. Puede ordenar los pacientes por ubicación, pulsando el menú desplegable Location, que se encuentra en la esquina inferior derecha.
49. Puede clasificar los pacientes por lugar al pinchar en el menú desplegable que figura en la esquina inferior derecha.
50. Puede organizar sus pacientes por procedencia pulsando el menú desplegable de lugar de residencia en la esquina inferior derecha.
51. Puede clasificar a sus pacientes por ubicación, pulsando sobre el desplegable destinado a tal efecto que se encuentra en la esquina inferior derecha.
52. Puede ordenar a sus pacientes por localización clicando el menú desplegable de localización de la esquina inferior derecha.
53. Puede clasificar los pacientes por ubicación pulsando el desplegable de ubicaciones de la esquina derecha inferior.
54. Puede ordenar los pacientes de acuerdo con su ubicación seleccionado la lista desplegable de ubicaciones de la esquina inferior derecha.
55. Puedes buscar tus pacientes por su localización seleccionando con el puntero el desplegable Location en la esquina inferior derecha.
56. Para ordenar los pacientes por ubicación, pulse en el desplegable de ubicaciones de la esquina inferior derecha.
57. Puede ordenar sus pacientes por lugar si abre la lista desplegable "Location" por el botón inferior a la derecha.
58. Puede ordenar los pacientes por ubicación si puntea en la lista desplegable de ubicaciones situada en la esquina inferior derecha.
59. Puede ordenar los pacientes por ubicación pulsando el menú desplegable Location, que se encuentra en la esquina inferior derecha.
60. Puede hallar al paciente por localización introduciendo la localización en el desplegable del rincón derecho inferior de la pantalla.

61. Puede organizar sus pacientes por ubicación pulsando el desplegable Location que aparece en la esquina inferior derecha.
62. Puede ordenar los pacientes por ubicación si pulsa el desplegable de ubicación de la esquina inferior derecha.
63. Puede ordenar los pacientes por ubicación pulsando en el menú desplegable de ubicación que aparece en la esquina inferior derecha.
64. Puede ordenar los pacientes por ubicación si toca la lista desplegable Location (Ubicación) del extremo inferior derecho.
65. Los pacientes también pueden ordenarse por ubicación pulsando en el desplegable de ubicación, situado en la esquina inferior derecha.
66. Es posible ordenar los pacientes por ubicación si pulsa el menú desplegable de ubicaciones situado en la esquina inferior derecha.
67. Puede clasificar los pacientes por ubicación pulsando el menú desplegable “Location” que aparece en la parte inferior derecha de la pantalla.
68. Puede ordenar a sus pacientes por lugar haciendo clic en el desplegable del botón de la esquina derecha.
69. Puede ordenar sus pacientes según su ubicación, pulsando en el menú desplegable Location que encontrará en la esquina inferior derecha.
70. Puede ordenar sus pacientes por localización yendo al menu de localización en la esquina inferior derecha.
71. Puede ordenar los pacientes por ubicación punteando el desplegable de ubicaciones que se halla en la esquina inferior derecha de la pantalla.
72. Puede clasificar sus pacientes por ubicación con ayuda de la lista desplegable Location de la esquina inferior derecha.
73. Puede ordenar los pacientes por ubicación pulsando la lista desplegable Location situada en la esquina inferior derecha.
74. Puede organizar los pacientes por ubicación si puntea el menú desplegable de ubicación en la esquina inferior derecha.
75. Puede organizar sus pacientes según su ubicación tocando la ubicación desplegable que hay en la esquina inferior derecha.
76. Puede ordenar los pacientes por ubicación; para ello, pulse la lista desplegable de ubicaciones en el ángulo inferior derecho.
77. Puede ordenar los pacientes por ubicación seleccionando ”Location” en el menú desplegable de la esquina inferior derecha.
78. Puede ordenar sus pacientes por ubicación pulsando en la lista desplegable Location (Ubicación) en la esquina inferior derecha.
79. Puede clasificar los pacientes por ubicación tocando el menú desplegable de ubicaciones que se encuentra en la esquina inferior derecha.
80. Puede organizar sus pacientes por ubicación seleccionando el menú de localización desplegable que hallará en la esquina derecha, abajo.
81. Si desea ordenar los pacientes por ubicación, pulse el menú desplegable Location (ubicación), en la esquina inferior derecha.
82. Para ordenar sus pacientes por ubicación, pulse la lista desplegable de ubicaciones que hay en la esquina inferior derecha.
83. Puede ordenar los pacientes por ubicación; para ello, pulse la lista desplegable Location (Ubicación) situada en el ángulo inferior derecho.
84. Puede clasificar los pacientes según su ubicación tocando el menú desplegable Ubicación que se encuentra en la esquina inferior derecha.
85. Puede seleccionar al cliente por localización escribiendo la localización en el botón derecho del menú desplegable.
86. Puede ordenar sus diferentes pacientes según ubicación pulsando el desplegable de la esquina derecha inferior.
87. Puede clasificar sus pacientes por ubicación, haciendo clic en el menú desplegable de ubicaciones situado en la esquina inferior derecha.
88. Puede ordenar la lista de pacientes según su ubicación abriendo el menú desplegable de la esquina inferior derecha.
89. Puede organizar los pacientes por ubicación pulsando en el menú desplegable Location que se encuentra en la parte inferior derecha.
90. Puedes clasificar a tus pacientes según la localización tocando en el menú desplegable ≪Location ≫(localización) situado en la esquina inferior derecha.

D.0.1.6 Text 2 – Focus point 3

Source segment (*English*)

- Copenhagen, **DK**

Target segment (*Spanish*)

1. Copenhague, DK
2. Copenhagen, DK
3. Copenhague, Dinamarca
4. Copenague, DK
5. Copenhague, DK
6. Copenhague, Dinamarca
7. Copenague (Dinamarca)
8. Copenhague, Dinamarca
9. Copenhague, Dinamarca
10. Copenhagen (Dinamarca)
11. Copenhage, Dinamarca
12. Copenhagen, DK
13. Copenhagen, DK
14. Copenhague, Dinamarca
15. Copenhague, DK
16. Copenhague, Dinamarca
17. Copenhague, Dinamarca
18. Copenhague, Dinamarca
19. Copenhagen, Dinamarca
20. Copenhague, DK
21. Copenhague, Dinamarca
22. Copenhagen, DK
23. Copenhague, Dinamarca
24. Copenague, Dinamarca
25. Copenhague, DK
26. Copenhague (Dinamarca)
27. Copenhagen, DK
28. Versión del documento 6.70 Fecha de publicación: 2/11/2007 Copenhague, Dinamarca
29. Versión del documento 6.70 Fecha de publicación: 2/11/2007 Copenhague, DK
30. Versión del documento 6.70 Publicado el 11/2/2007 Copenhague, Dinamarca
31. ersión del documento 6.70 Publicado el 2/11/2007 Copenhague (Dinamarca)
32. Versión del documento 6.70Publicado el 2/11/2007Copenhague, DK
33. Versión del documento 6.70 Presentado el 11/02/2007 Copenhague, DK
34. Versión del documento: 6.70 Fecha de publicación: 2/11/2007 Copenhague, Dinamarca
35. Document version 6.70 Released on 2/11/2007 Copenhagen, DK
36. Versión del documento 6.70 Publicado el 11/02/2007 Copenhage, Dinamarca
37. Versión 6.70 del documento Publicado el 2/11/2007 Copenhague, Dinamarca
38. Versión del documento 6.70 Publicado el 2/11/2007 Copenhague, Dinamarca
39. Versión del documento 6.70 Publicado en 2/11/2007 Copenhague, DK
40. Documento versión 6.70 Publicado el 2/11/2007 Copenhague, DK
41. Versión del documento 6.70 Publicado el 2/11/2007 Copenhague, DK
42. Versión 6.70 Publicado el 2/11/2007 Copenhague, Dinamarca
43. Versión del documento nº 6.70 Emitido a 2/11/2007 Copenague, DK
44. Versión 6.70 del documento Publicado el 11 de febrero de 2007 Copenhague, Dinamarca
45. Versión del documento 6.70 Creado el 11 de febrero de 2007 Copenhague (Dinamarca)
46. Versión de documento 6.70 Creado el día 2/11/2007 Copenhage, DK
47. Versión del documento 6.70 Publicado el 11/02/2007 Copenhague, DK
48. Versión del documento 6.70 Publicado el 2/11/2007 Copenhague, Dinamarca
49. Versión del documento 6.70 publicado el 2/11/2007 Copenhague, Dinamarca
50. Versión del documento 6.70 Fecha de publicación 2/11/2007 Copenhague, Dinamarca
51. Versión 6.70 del documento Publicado el 2/11/2007 Copenhague, DK
52. Versión de documento 6.70 Publicado el 2/11/2007 Copenhagen, DK
53. Versión del documento 6.70 Publicado el 2/11/2007 Copenhague, Dinamarca
54. Versión del documento 6.70 Publicado el 2/11/2007 Copenhague, DK

55. Versión del documento 6.70 Publicado el 11 de febrero de 2007 Copenhagen, Dinamarca
56. Versión del documento 6.70 Fecha de publicación: 2 de noviembre de 2007 Copenhague, Dinamarca
57. Versión del documento: 6.70 Publicado el 02/11/2007 Copenhague, DK
58. Versión del documento 6.70 Fecha de publicación: 11/02/2007 Copenhague, Dinamarca
59. Versión del documento 6.70 Emitido el 2/11/2007 Copenhague, Dinamarca.
60. Versión del documento 6.70 Publicado el 2/11/2007 Copenhage, DK
61. Versión del documento 6.70 Publicado el 2/11/2007 Copenhague, Dinamarca
62. Versión del documento: 6.70 Fecha de publicación: 2/11/2007 Copenhague (Dinamarca)
63. Documento versión 6.70 Publicado el 2/11/2007 Copenhague, Dinamarca
64. Versión del documento 6.70 Lanzado el 2/11/2007 Copenhague, DK
65. missing translation
66. Versión del documento 6.70 Publicado el 2/11/2007 Copenhague, DK
67. Versión de documento: 6.70 Publicado el 2/11/2007 Copenhague (Dinamarca)
68. Versión del documento: 6.70 Fecha de publicación 2/11/2007 Copenhague, DK
69. Versión 6.70 Publicado el 2/11/2007 Copenhagen, DK
70. Versión del documento 6.70 Emitido el 2/11/2007 Copenhague, DK
71. Versión del documento 6.70 Fecha de publicación 2-11-2007 Copenhague, DK
72. Versión del documento 6.70 Presentado el 11/02/2007 Copenhague, DK
73. Versión del documento 6.70 Publicado el 11/02/2007 Copenhague, Dinamarca
74. Versión del documento 6.70 Publicado el 2 de enero de 2007 Copenhague, Dinamarca
75. Versión de documento 6.70 Publicado el 2/11/2007 Copenhage, DK
76. Versión del documento 6.70 Publicado el 11/2/2007 Copenhagen, DK
77. Versión del documento 6.70 Publicado el 2/11/2007 Copenague
78. Versión de documento 6.70 Publicado el 2/11/2007 Copenhague, Dinamarca
79. Versión del documento 6.70Presentada el 2/11/2007Copenhague, Dinamarca
80. Versión del documento: Publicado el 02/11/2007 Copenhague, DK
81. Versión del documento 6.70 Publicada el 2/11/2007 Copenhague (Dinamarca)
82. Versión del documento 6.70 Publicado el 2/11/2007 Copenhague, DK
83. Versión del documento 6.70 Publicado el 11/2/2007 Copenhague, Dinamarca
84. Versión de documento 6.70 Publicado el 11 de febrero de 2007 Copenhague, Dinamarca
85. Versión del documento 6.70 Publicado el 2/11/2007 Copenhague, DK
86. Versión de documento 6.70 Publicado en fecha 2/11/2007 Copenhague, Dinamarca
87. Versión del documento 6.70 Actualizado el 2/11/2007 Copenhagen, DK
88. Versión del documento: 6.70 Publicado el: 11/2/2007 Copenhague, DK
89. Versión 6.70 del documento Publicado el 2/11/2007 Copenhague, Dinamarca
90. Versión del documento 6.70Publicadp el 02/11/2007Copenhague, DK

D.0.1.7 Text 3 – Focus point 1

Source segment (*English*)

- Monitoring stock data with Stock Terminal is the best option: Stock controllers can move from one data item to the next simply by pressing the **plus key**.

Target segment (*Spanish*)

1. La supervisión de datos de inventario es mejor con Stock Terminal, ya que los controladores de inventario pueden desplazarse de un elemento de datos al siguiente con tan solo presionar la tecla con el signo +.
2. Stock Terminal es la mejor opción para el control de datos de existencias, ya que permite desplazarse de un elemento al siguiente con sólo pulsar la tecla más (+).
3. Supervisar los datos de stocks con Stock Terminal es la opción más rápida de hacerlo, ya que los controladores pueden avanzar de un dato a otro pulsando simplemente la tecla ≪+≫.
4. los controladores del dispositivo permiten desplazarse de un elemento de datos al siguiente con solo pulsar la tecla "+".
5. para pasar de un elemento de datos al siguiente, los controladores de existencias simplemente deben pulsar la tecla más.
6. los encargados de controlar las existencias se pueden desplazar de un elemento al siguiente con tan solo pulsar la tecla +.
7. los controladores de existencias pueden pasar de un elemento de información al siguiente simplemente pulsando la tecla más.

8. Los controladores de existencias pueden ir de unos datos a otros sólo presionando la tecla +.
9. Basta pulsar la tecla más para pasar de un elemento al siguiente.
10. los controladores de stocks pueden pasar de una posición de datos a la siguiente con sólo pulsar la tecla Más.
11. los controladores de existencias pueden desplazarse de un elemento de datos al siguiente simplemente pulsando la tecla Más.
12. Los controladores de inventario pueden cambiar de un elemento de datos al siguiente con tan solo pulsar la tecla más.
13. El personal encargado del control de stock puede desplazarse de un elemento a otro con solo pulsar la tecla "Plus" (más).
14. los controladores de stocks pueden desplazarse de un artículo de datos al siguiente tan sólo pulsando la tecla del signo más (+).
15. para desplazar los controladores de stock de un artículo, basta con pulsar la tecla "más".
16. los controladores de Stock pueden moverse de un elemento de datos al siguiente con sólo pulsar la tecla de signo más.
17. los controladores de existencias pasan de un elemento de datos a otro con tan sólo pulsar la tecla +.
18. los controladores de stocks pueden desplazarse desde un dato hacia otro, simplemente pulsando la tecla con el signo más.
19. para pasar de un dato al siguiente, los controladores del almacén sólo tienen que pulsar la tecla del signo más.
20. los controladores de existencias pueden pasar de un artículo al siguiente pulsando simplemente la tecla Más.
21. Los controladores de existencias pueden pasar de un elemento de datos a otro con sólo pulsar la tecla del signo más.
22. los sistemas de control de existencias pueden pasar de un elemento de datos al siguiente con sólo pulsar la tecla del signo +.
23. Los controladores de almacén pueden ir de un artículo al siguiente sencillamente presionando el botón "plus".
24. los controladores de existencias pueden pasar de un elemento al siguiente con sólo pulsar la tecla más (+).
25. los controladores de existencias sólo tienen que pulsar la tecla más para desplazarse de un elemento al siguiente.
26. Los controladores de existencias pueden pasar de un elemento de datos al siguiente con sólo pulsar la tecla más.
27. Las personas encargadas del control del stock sólo tienen que pulsar la tecla con el símbolo más (+) para desplazarse al siguiente elemento de stock.
28. los controladores de existencias pueden cambiar de un elemento de datos al siguiente simplemente pulsando la tecla más.
29. las personas encargadas de controlar el inventario pueden pasar de un dato a otro simplemente pulsando la tecla más (+).
30. los controladores de inventario pueden pasar de un elemento de datos al siguiente simplemente con pulsar la tecla +.
31. el controlador de stocks puede desplazarse de los datos de un artículo a otro simplemente pulsando la tecla más.
32. los supervisores de stock pueden desplazarse de un artículo al siguiente pulsando simplemente la tecla más.
33. los controladores de stock pueden ir de un dato a otro simplemente presionando la tecla "+".
34. los controladores de stock pueden moverse, de un elemento de datos al siguiente, con solo pulsar la tecla más.
35. sus mandos le permitirán pasar de los datos de un producto al siguiente con tan sólo un clic en el signo más.
36. Los controladores de existencias pueden desplazarse de un elemento de datos al siguiente simplemente pulsando la tecla +.
37. Los controladores de existencias pueden pasar de un dato a otro con tan sólo pulsar la tecla +.
38. Los controladores de almacén podrán pasar de un elemento de datos al siguiente presionando sobre la tecla +.
39. Los controladores de stock podrán pasar de un campo al siguiente con tan sólo pulsar la tecla más.
40. Los controladores de estoc pueden pasar de un campo de datos al siguiente simplemente pulsando la tecla más.
41. los encargados de controlar las existencias podrán pasar de un elemento al otro simplemente pulsando la tecla +.

42. Los responsables de las existencias pueden pasar de los datos de una unidad a la siguiente con sólo pulsar la tecla '+' (más).
43. el usuario puede desplazarse de un elemento a otro simplemente pulsando la tecla más (+).
44. los controladores de inventario pueden pasar de un elemento al siguiente simplemente pulsando la tecla +.
45. los controladores de stock pueden moverse de un dato al siguiente simplemente presionando la tecla "+".
46. los supervisores del almacén pueden desplazarse de una unidad de información a la siguiente con sólo pulsar la tecla más.
47. el personal encargado del control de existencias puede desplazarse de un dato al siguiente con sólo pulsar la tecla más (+).
48. podrá visualizar toda la información, simplemente, pulsado la tecla "+".
49. Los controladores de stock pueden pasar de los datos de un producto al siguiente, simplemente pulsando la tecla Más (+).
50. los controladores de existencias pueden desplazarse desde un elemento de datos al siguiente simplemente pulsando la tecla con el símbolo "+".
51. Los controladores de stock pueden ir de un elemento de datos a otro sólo con pulsar la tecla de suma (plus key).
52. Los controladores de stocks se pueden desplazar desde una posición de datos a la siguiente simplemente pulsando la tecla plus (+).
53. Los controladores de extencias pueden pasar de un elemento de datos al siguiente con tan solo pulsar la tecla de adición (+).
54. Los controladores de existencias pueden saltar de un elemento del inventario al siguiente con una simple presión de la tecla de suma.
55. Los controladores de inventario pueden pasar de un elemento de datos al siguiente con solo pulsar la tecla "más".
56. Las funciones de control de stocks pueden pasar de una entrada a otra con tan sólo pulsar la tecla más.
57. los encargados del control de inventario pueden pasar de un elemento de datos a otro con solo pulsar la tecla de suma.
58. Los encargados de controlar el inventario pueden pasar de un artículo a otro con solo pulsar la tecla más (+).
59. Los controladores de stock permiten pasar de un elemento al siguiente pulsando la tecla "+".
60. Los controladores de existencias pueden pasar de un dato al siguiente simplemente pulsando la tecla +.
61. Los controladores de existencias pueden desplazarse de un elemento de datos al siguiente con solo pulsar el signo +.
62. los encargados del inventario pueden ir de una partida de datos a la siguiente simplemente pulsando la tecla "más".
63. las personas encargadas de controlar las existencias pueden desplazarse de un elemento de datos al siguiente con tan solo pulsar la tecla más.
64. Los controladores de existencias pueden pasar de un elemento de datos al siguiente con solo pulsar la tecla más.
65. los controladores de almacén pueden desplazarse de un dato al siguiente pulsando simplemente la tecla +.
66. los controladores de stock pueden desplazar los datos de una unidad a la siguiente, pulsando simplemente la tecla con el signo más.
67. El personal encargado de controlar las existencias puede pasar de un artículo a otro con tan sólo pulsar la tecla con el símbolo más.
68. los controladores del inventario pueden pasar de un artículo al otro con tan sólo pulsar la tecla con el signo más.
69. los controladores de existencias pueden pasar de un dato al siguiente simplemente pulsando la tecla +.
70. para desplazarse de un elemento de datos al siguiente, sólo deberá pulsar la tecla de más.
71. los encargados de controlar las existencias pueden pasar de una entrada a la siguiente simplemente pulsando la tecla con el signo de más.
72. Los controladores de stocks pueden desplazarse de un elemento al siguiente simplemente pulsando la tecla "más".
73. los controladores de stocks pueden desplazarse de un dato al siguiente con tan sólo pulsar la tecla más.
74. los controladores de stock pueden moverse de un elemento de datos a otro pulsando simplemente la tecla más.

75. los controladores de stocks pueden pasar de un registro al siguiente con sólo pulsar la tecla de suma (+).
76. Los responsables de stock pueden pasar de un dato al siguiente con tan solo pulsar la tecla más.
77. Los controladores de existencias pueden ir de un elemento de datos al siguiente pulsando la tecla más (+).
78. los controladores de existencias pueden pasar de un dato a otro pulsando simplemente la tecla del signo más.
79. Los controladores de existencias pueden moverse de un artículo al siguiente simplemente pulsando la tecla más.
80. para pasar de un dato a otro, los controladores de inventario sólo tienen que pulsar la tecla del signo más (+).
81. los controladores de existencias se pueden mover de un elemento de datos al siguiente con sólo presionar la tecla +.
82. para pasar de un elemento de datos al siguiente, los controladores de existencias simplemente deben pulsar la tecla más (+).
83. los controladores de stock se pueden mover de un elemento de datos al siguiente con sólo pulsar la tecla de suma.
84. Los controladores de stock pueden moverse de un ítem de datos a otro simplemente presionando la opción +.
85. Los controladores de existencias pueden desplazarse de un elemento de datos al siguiente simplemente presionando la tecla +.
86. Los encargados del inventario pueden pasar de un producto al siguiente pulsando simplemente la tecla "más".
87. Los controladores de stock pueden pasar de una unidad de datos a otra simplemente pulsando la tecla "más".
88. las personas encargadas de controlarlo podrán desplazarse de un dato al siguiente simplemente pulsando la tecla más.
89. Los controladores de acciones se pueden desplazar de un dato a otro con tan sólo pulsar la tecla ≪+≫.

D.0.1.8 Text 3 – Focus point 2

Source segment (*English*)

- For further information, please contact **Dr.** Alex Smith.

Target segment (*Spanish*)

1. Para obtener más información, consulte la Dra. Alex Smith.
2. Para obtener más información, póngase en contacto con Dr. Alex Smith.
3. Para más información, póngase en contacto con la Dra. Alex Smith.
4. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
5. Para más información, por favor póngase en contacto con Dr. Alex Smith.
6. Para más información, póngase en contacto con Dr. Alex Smith.
7. Si desea obtener más información, póngase en contacto con el Dr. Alex Smith.
8. Para más información, póngase en contacto con el Dr. Alex Smith.
9. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
10. Si desea obtener más información, póngase en contacto con el Dr. Alex Smith.
11. Para obtener más información, póngase en contacto con el Sr. Alex Smith.
12. Para más información, puede ponerse en contacto con el doctor Alex Smith.
13. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
14. Si desea obtener más información, póngase en contacto con el doctor Alex Smith.
15. Para más información, póngase en contacto con el Dr. Alex Smith.
16. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
17. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
18. Para obtener más información, póngase en contacto con la Dra. Alex Smith.
19. Para obtener más información, póngase en contacto con la Dra. Alex Smith.
20. Si desea obtener más información, póngase en contacto con el Dr. Alex Smith.
21. Para obtener más información, póngase en contacto con el señor Alex Smith.
22. Para obtener más información, póngase en contacto con Alex Smith.
23. Si desea más información, póngase en contacto con el Dr. Alex Smith.

24. Para obtener más información, póngase en contacto con Alex Smith.
25. Para más información, rogamos se ponga en contacto con el Dr. Alex Smith.
26. Si desea obtener más información, póngase en contacto con el Dr. Alex Smith.
27. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
28. Si necesita más información, no dude en ponerse en contacto con Alex Smith.
29. Para obtener más información, póngase en contacto con Alex Smith.
30. Para más información contacte con Alex Smith.
31. Si desea obtener más información, póngase en contacto con la Dra. Alex Smith.
32. Si desea más información, póngase en contacto con el Sr. Alex Smith.
33. Para más información, póngase en contacto con el Sr. Alex Smith.
34. Si desea obtener más información, póngase en contacto con el Dr. Alex Smith.
35. Para obtener más información por favor póngase en contacto con la Dra. Alex Smith.
36. Si desea obtener más información, póngase en contacto con la doctora Alex Smith.
37. Para más información, póngase en contacto con el Dr. Alex Smith.
38. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
39. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
40. Para más información, por favor contacte con el Dr. Alex Smith.
41. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
42. Si desea obtener más información, póngase en contacto con el Dr. Alex Smith.
43. Si desea obtener más información, póngase en contacto con el Dr. Alex Smith.
44. Para obtener más información, póngase en contacto con la Dra. Alex Smith.
45. Para más información, contacte con Dr. Alex Smith.
46. Para más información, póngase en contacto con Dr. Alex Smith.
47. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
48. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
49. Si desea más información, póngase en contacto con el Dr. Alex Smith.
50. Para más información, por favor, contacte con Dr. Alex Smith.
51. Para más información, pónganse en contacto con el Dr. Alex Smith.
52. Para más información, póngase en contacto con Dr. Alex Smith.
53. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
54. Si desea más información, póngase en contacto con la Dra. Alex Smith.
55. Para más información, contacte con el Dr. Alex Smith.
56. Si desea obtener más información, póngase en contacto con el Dr. Alex Smith.
57. Para más información, contacte con la Sra. Alex Smith.
58. Para obtener más información, póngase en contacto con Alex Smith.
59. Si necesita más información, póngase en contacto con Dr. Alex Smith.
60. Para mayor información contacten al señor Alex Smith.
61. Para más información, póngase en contacto con Dr. Alex Smith.
62. Para obtener más información, póngase en contacto con la Dra. Alex Smith.
63. Para obtener más información, póngase en contacto con la Dra. Alex Smith.
64. Para obtener más información, póngase en contacto con Alex Smith.
65. Para más información, póngase en contacto con la Sra. Alex Smith.
66. Para recibir información adicional, póngase en contacto con el Dr. Alex Smith.
67. Si desea ampliar esta información. póngase en contacto con el Sr. Alex Smith.
68. Para obtener más información, póngase en contacto con Alex Smith.
69. Si desea obtener información adicional al respecto, póngase en contacto con Dr. Alex Smith.
70. Para más información, por favor póngase en contacto con el Dr. Alex Smith.
71. Si desea más información, contacte con el Dr. Alex Smith.
72. Para obtener más información, póngase en contacto con Dr. Alex Smith.
73. Si desea más información, póngase en contacto con el Dr. Alex Smith.
74. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
75. Si desea obtener más información, póngase en contacto con la Dra. Alex Smith.
76. Si desea obtener más información, póngase en contacto con la Sra. Alex Smith.
77. Si desea más información, póngase en contacto con la Dra. Alex Smith.
78. Para más información, contacte con el Dr. Alex Smith.
79. Para obtener más información, póngase en contacto con la Dra. Alex Smith.
80. Para más información, por favor contacten directamente al Dr. Alex Smith.
81. Si desea obtener más información, póngase en contacto con Dr. Alex Smith.
82. Para obtener mayor información, póngase en contacto con la Dra. (?) Alex Smith.
83. Para obtener más información, póngase en contacto con la Dra. Alex Smith.
84. Para obtener más información, póngase en contacto con el Dr. Alex Smith.
85. Para más información, por favor contacte con el Dr. Alex Smith.

86. Para más información, póngase en contacto con el Dr. Alex Smith.
87. Para más información, pongáse en contacto con el Dr. Alex Smith.
88. Para más información, póngase en contacto con el Dr. Alex Smith.
89. Para más información, póngase en contacto con el Dr. Alex Smith.
90. Para más información, por favor ponte en contacto con el Dr. Alex Smith.

D.0.1.9 Text 3 – Focus point 3

Source segment (*English*)

- Madison, **WI** 53726

Target segment (*Spanish*)

1. Madison, WI 53726
2. Madison, WI 53726
3. Madison, WI 53726
4. Madison, WI 53726
5. Madison, WI 53726
6. Madison, WI 53726
7. Madison, WI 53726
8. Madison, WI 53726
9. Madison, WI 53726
10. 53726 Madison, Wisconsin
11. Madison, WI 53726
12. Madison, WI 53726
13. Madison, WI 53726
14. Madison, WI 53726
15. Madison, WI 53726
16. Madison, WI 53726 (EE.UU.)
17. Madison, Wisconsin 53726
18. Madison, WI 53726
19. Madison, WI 53726 (EE.UU.)
20. Madison, WI 53726
21. Madison, WI 53726
22. Madison, WI 53726
23. Madison, WI 53726
24. Madison, WI 53726
25. Madison, Wisconsin 53726 (EE.UU.)
26. Madison, WI 53726
27. Madison, Wisconsin 53726, EE.UU.
28. Madison, WI 53726
29. Madison, WI 53726
30. Madison, WI 53726
31. Madison (Wisconsin) 53726, USA
32. Madison (WI 53726)
33. Madison, Wisconsin, 53726
34. Madison, WI 53726
35. Madison, WI 53726
36. Madison, Wisconsin 53726
37. Madison, WI 53726
38. Madison, WI 53726
39. Madison, WI 53726
40. Madison, WI 53726
41. Madison, WI 53726
42. Madison, WI 53726 - EE.UU.
43. Madison, WI 53726
44. Madison, WI 53726
45. Madison, WI (EE. UU.) 53726
46. Madison, WI 53726, EEUU.
47. Madison, WI 53726

48. Madison, WI 53726
49. Madison, WI 53726
50. Madison, WI 53726
51. Madison, WI 53726
52. Madison, WI 53726
53. Madison, WI 53726
54. Madison, Wisconsin 53726
55. Madison, WI 53726
56. Madison, Wisconsin 53726
57. Madison, WI 53726
58. Madison, WI 53726 (EE. UU.)
59. Madison, WI 53726
60. Madison, WI 53726
61. Madison, WI 53726
62. Madison (Wisconsin) 53726
63. Madison, WI 53726
64. Madison, WI 53726
65. Madison, WI 53726, EE.UU.
66. Madison, WI 53726
67. Madison, WI 53726
68. Madison, WI 53726
69. Madison, WI 53726
70. Madison, WI 53726
71. Madison, WI 53726
72. Madison, WI 53726
73. Madison, WI 53726
74. Madison, WI 53726
75. Madison, WI 53726
76. Madison, WI 53726 (EUA)
77. Madison, WI 53726
78. Madison, WI 53726
79. Madison, Wisconsin (EE.UU.), 53726
80. Madison, WI 53726
81. Madison, WI 53726
82. Madison, WI 53726
83. Madison, WI 53726 (Estados Unidos)
84. Madison, WI 53726
85. Madison, WI 53726
86. Madison, WI 53726
87. Madison, WI 53726
88. Madison, WI 53726
89. Madison, WI 53726
90. Madison, WI 53726

D.0.2 Phoric to fully lexical phrases

D.0.2.1 Text 1 – Focus point 1

Source segment (*English*)

- **It** is a software application available at no cost to University of Pittsburgh students.

Target segment (*Spanish*)

1. Se trata de una aplicación de software disponible de forma gratuita para los estudiantes de la universidad de Pittsburgh.
2. SpyPredator es una aplicación de software que la Universidad de Pittsburgh pone a disposición de sus estudiantes de manera gratuita.
3. Se trata de una aplicación de software disponible de forma gratuita para los alumnos de la Universidad de Pittsburgh.

4. Se trata de una aplicación de software que se encuentra disponible de forma gratuita para los estudiantes de la universidad de Pittsburgh.
5. Está disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
6. Es un programa informático disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
7. Es una aplicación de software disponible sin ningún tipo de coste para los estudiantes de la Universidad de Pittsburgh.
8. Se trata de una aplicación de software disponible y gratuita para los estudiantes de la Universidad de Pittsburgh.
9. Se trata de una aplicación de software disponible gratuitamente para los alumnos de la University of Pittsburgh.
10. SpyPredator 1.4 es una aplicación de software gratuita para los estudiantes de la Universidad de Pittsburgh,
11. Se trata de una aplicación de software disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
12. Es una aplicación de software disponible de forma gratuita para los alumnos de la universidad de Pittsburgh.
13. Se trata de una aplicación de software gratuita para los alumnos de la Universidad de Pittsburg.
14. Se trata de un programa de software disponible sin coste para los alumnos de la Universidad de Pittsburgh.
15. Se trata de una aplicación de software disponible sin ningún coste para los estudiantes de la Universidad de Pittsburgh.
16. Se trata de un aplicación de software disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
17. Se trata de un programa de aplicación disponible para los estudiantes de la Universidad de Pittsburg sin coste alguno
18. Se trata de una aplicación de software gratuita para los estudiantes de la Universidad de Pittsburg,
19. Se trata de una aplicación de software disponible de forma gratuita para los estudiantes de la Universidad de Pittsburg.
20. SpyPredator es una aplicación gratuita para los estudiantes de la Universidad de Pittsburgh.
21. Se trata de una aplicación informática que se ofrece sin coste alguno a los alumnos de la Universidad de Pittsburg.
22. Se trata un programa gratuito disponible para los estudiantes de la Universidad de Pittsburgh.
23. Esta es una aplicación disponible de manera gratuita para los estudiantes de la Universidad de Pittsburgh.
24. Se trata de una aplicación gratuita disponible para los alumnos de la universidad de Pittsburgh.
25. Se trata de una aplicación de software sin coste disponible para alumnos de la universidad de Pittsburgh.
26. Esta es una aplicación de software gratis disponible para los estudiantes de la Universidad de Pittsburgh.
27. Se trata de una aplicación de software gratuita para los estudiantes de la Universidad de Pittsburg,
28. Se trata de una aplicación de software gratuita que se pone a disposición de los estudiantes de la Universidad de Pittsburgh.
29. Los estudiantes de la University of Pittsburgh pueden disponer de esta aplicación de software de forma gratuita.
30. Se trata de una aplicación de software disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
31. Este software es gratuito para los estudiantes de la Universidad de Pittsburg.
32. Es una aplicación de software disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
33. Se trata de una aplicación informática disponible gratuitamente para los estudiantes de la Universidad de Pittsburgh.
34. Se trata de una aplicación de software gratuita para los estudiantes de la Universidad de Pittsburgh.
35. Se trata de un programa que la University of Pittsburgh pone a disposición de sus estudiantes sin coste alguno.
36. Es una aplicación software disponible sin coste alguno para los estudiantes de la Universidad de Pittsburgh.
37. Todos los estudiantes de la Universidad de Pittsburgh pueden utilizar esta aplicación de software de manera totalmente gratuita.
38. Esta aplicación es totalmente gratuita para los alumnos de la Universidad de Pittsburgh.
39. Es una aplicación informática disponible sin coste alguno para los estudiantes de la Universidad

de Pittsburgh.
40. Se trata de una aplicación de software disponible de forma gratuita para los alumnos de la Universidad de Pittsburgh.
41. Se trata de un software disponible de manera gratuita para los estudiantes de la Universidad de Pittsburgh.
42. Se trata de una aplicación de software disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
43. Se trata de una aplicación de software disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
44. Se trata de una aplicación de software que se ofrece sin coste alguno a los estudiantes de la Universidad de Pittsburgh.
45. Es una aplicación informática disponible, de forma gratuita, para los estudiantes de la Universidad de Pittsburgh.
46. Se trata de una aplicación de software gratuita disponible para los estudiantes de la Universidad de Pittsburgh.
47. Se trata de un programa gratuito para los estudiantes de la University of Pittsburgh.
48. Se trata una aplicación de software de los estudiantes de la Universidad de Pittsburg que está disponible de forma gratuita.
49. Se trata de una aplicación de software disponible sin coste alguno para los estudiantes de la Universidad de Pittsburgh
50. Este software está disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
51. Se trata de una aplicación de software gratuita para los estudiantes de la Universidad de Pittsburg
52. Se trata de una aplicación gratuita para los estudiantes de la Universidad de Pittsburg.
53. Se trata de una aplicación de software disponible de forma gratuita para todos los estudiantes de la Universidad de Pittsburgh.
54. Este software está disponible de manera gratuita para los estudiantes de la Universidad de Pittsburgh.
55. Esta aplicación de software está disponible de forma gratuita para los estudiantes de la Universidad de Pittsburg.
56. Se trata de una aplicación de software disponible sin ningún coste adicional para los estudiantes de la Universidad de Pittsburgh.
57. Es una aplicación de software que se encuentra disponible de manera gratuita para los estudiantes de la Universidad de Pittsburgh.
58. Este programa está a disposición gratuitamente de los alumnos de la University of Pittsburgh (EE.UU).
59. Es una aplicación de software disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
60. Es una aplicación informática gratuita para los estudiantes de la Universidad de Pittsburgh.
61. Se trata de una aplicación de software que la Universidad de Pittsburgh ofrece a los estudiantes de forma gratuita.
62. SpyPredator es una aplicación de software disponible gratuitamente para todos los estudiantes de la Universidad de Pittsburgh.
63. Es una aplicación de software disponible gratuitamente para los estudiantes de la University of Pittsburgh.
64. Se trata de una aplicación de software gratuita para los alumnos de la Universidad de Pittsburg.
65. Esta aplicación de software está disponible para estudiantes de la Universidad de Pittsburgh de manera gratuita.
66. Se trata de una aplicación de software disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
67. Se trata de una aplicación informática de la que los estudiantes de la Universidad de Pittsburgh (EUA) pueden disponer gratuitamente.
68. SpyPredator se trata de una aplicación de software a la que los estudiantes de la Universidad de Pittsburg pueden tener acceso de forma gratuita.
69. Es una aplicación de software disponible gratuitamente para los estudiantes de la Universidad de Pittsburgh.
70. Se trata de una aplicación de software que está disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
71. Se trata de una aplicación de software gratuita para los estudiantes de la Universidad de Pittsburgh
72. Esta aplicación está disponible de forma gratuita para los estudiantes de la Universidad de Pittsburg y
73. Dicha aplicación de software es gratuita para los estudiantes de la Universidad de Pittsburg

74. Se trata de una aplicación de software disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh.
75. Se trata de una aplicación que se encuentra disponible de forma gratuita para los estudiantes de la Universidad de Pittsburg.
76. Es una aplicación de software disponible si ningún tipo de coste para los estudiantes de la Universidad de Pittsburg.
77. Es una aplicación de software disponible sin coste alguno para los estudiantes de la Universidad de Pittsburgh.
78. Se trata de una aplicación informática disponible sin coste alguno para los alumnos de la Universidad de Pittsburgh.
79. Es una aplicación disponible sin coste alguno para los estudiantes de Pittsburgh.
80. Se trata de una aplicación de software que se distribuye de forma gratuita entre los estudiantes de la Universidad de Pittsburg y que puede descargarse desde software.pitt.edu.
81. Se trata de una aplicación gratuita para los alumnos de la Universidad de Pittsburgh que puede descargarse en software.pitt.edu.
82. Se trata de una aplicación de software que se encuentra disponible de forma gratuita para los estudiantes de la Universidad de Pittsburgh, en EE. UU, y que puede descargarse desde la página web software.pitt.edu (en inglés).
83. Se trata de una herramienta de software disponible de forma gratuita para los alumnos de la Universidad de Pittsburgh; puede descargarse desde software.pitt.edu.
84. Se trata de una aplicación de software disponible de forma gratuita para los estudiantes de la universidad de Pittsburg y puede descargarse de software.pitt.edu.
85. Es una aplicación de software disponible sin coste para los estudiantes de la Universidad de Pittsburgh y que puede descargarse desde software.pitt.edu.
86. Esta aplicación es gratuita y está disponible para los estudiantes de la Universidad de Pittsburgh, que pueden descargarla desde software.pitt.edu.
87. Se trata de una aplicación gratuita para los estudiantes de la Universidad de Pittsburgh y se puede descargar desde la dirección software.pitt.edu.
88. Esta aplicación es gratuita para los estudiantes de la Universidad de Pittsburgh y se puede bajar desde la página software.pitt.edu.
89. Se trata de una aplicación de software que se ofrece a los alumnos de la Universidad de Pittsburgh de forma gratuita y que se puede descargar desde el sitio web software.pitt.edu.

D.0.2.2 Text 2 – Focus point 1

Source segment (*English*)

- **It** has revolutionized many doctors' practices.

Target segment (*Spanish*)

1. Ha revolucionado el ejercicio de la medicina de muchos doctores.
2. Ha supuesto una revolución en las prácticas de numerosos médicos.
3. Para muchos ha revolucionado el ejercicio de la medicina.
4. Ha revolucionado la práctica de muchos médicos.
5. Esta aplicación ha revolucionado las consultas de numerosos doctores.
6. Ha revolucionado la forma de trabajar de muchos profesionales de la medicina.
7. Ha revolucionado el ejercicio de muchos doctores.
8. que ha supuesto una auténtica revolución en muchas prácticas médicas.
9. Ha revolucionado la práctica de muchos doctores.
10. Ha revolucionado muchas consultas médicas.
11. que ha revolucionado la práctica de muchos profesionales de la medicina.
12. Este dispositivo ha revolucionado gran parte de las prácticas médicas.
13. que ha revolucionado muchas de las prácticas del sector.
14. Ha revolucionado las consultas de muchos médicos.
15. Ha constituido una revolución de las prácticas médicas.
16. Ha revolucionado las consultas de muchos profesionales de la medicina.
17. Ha revolucionado la práctica médica de muchos profesionales.
18. Ha revolucionado el método de trabajo de muchos doctores.
19. Ha revolucionado muchas prácticas médicas.
20. y que ha revolucionado la práctica de muchos facultativos.

21. Ha revolucionado las consultas de muchos de ellos.
22. Ha revolucionado numerosas prácticas médicas.
23. Ha revolucionado la práctica de muchos doctores.
24. Ha revolucionado el mundo de la medicina.
25. ha supuesto una revolución en muchos consultorios médicos.
26. Ha supuesto una auténtica revolución para las prácticas médicas.
27. y que ha revolucionado las consultas de muchos doctores.
28. y ha revolucionado las prácticas de numerosos doctores.
29. Ha revolucionado muchas prácticas médicas.
30. Este dispositivo ha revolucionado las consultas de muchos facultativos.
31. ha revolucionado el trabajo de muchos doctores.
32. Ha revolucionado las prácticas de numerosos doctores.
33. Ha revolucionado la consulta de muchos doctores.
34. que ha revolucionado el método de trabajo de muchos médicos.
35. Ha revolucionado muchos consultorios.
36. Ha revolucionado la práctica profesional de muchos médicos.
37. Ha revolucionado la práctica médica de muchos doctores.
38. Ha constituido una auténtica revolución en muchas de las prácticas de los médicos.
39. Ha revolucionado la praxis de numerosos doctores.
40. que ha revolucionado la práctica médica.
41. Ha revolucionado muchas prácticas médicas.
42. MedHelpRx ha revolucionado el día a día de numerosos médicos.
43. Ha revolucionado la práctica de la mayoría de médicos.
44. Ha revolucionado la forma de trabajar de muchos doctores.
45. Ha supuesto una revolución en la práctica de muchos doctores.
46. y que ha revolucionado muchas consultas.
47. Ha revolucionado las prácticas de muchos facultativos.
48. y que ha revolucionado la forma de trabajar de un gran número de doctores.
49. Ha revolucionado la consulta de muchos doctores.
50. y que ha revolucionado su modo de proceder.
51. Su utilización ha revolucionado las prácticas de muchos profesionales de la salud.
52. Ha revolucionado la forma de ejercer de muchos doctores.
53. y que ha revolucionado muchas consultas médicas.
54. Ha revolucionado numerosas consultas médicas.
55. Ha revolucionado la práctica de muchos profesionales.
56. Ha revolucionado las consultas médicas de muchos doctores.
57. que ha revolucionado el método de trabajo de muchos médicos.
58. y que ha supuesto un cambio radical en muchas consultas.
59. Ha revolucionado el método de trabajo de muchos de ellos.
60. Ha revolucionado las prácticas habituales de numerosos médicos.
61. Ha revolucionado el método de trabajo de muchos doctores.
62. Ha revolucionado el ejercicio profesional de muchos facultativos.
63. Este dispositivo ha revolucionado muchos consultorios.
64. Ha supuesto una revolución en las consultas de muchos de ellos.
65. Ha revolucionado la práctica de muchos doctores.
66. En realidad, ha revolucionado la práctica de un gran número de doctores, ya que incorpora herramientas que permiten importar historiales desde la mayoría de sistemas de gestión de pacientes.
67. Este aparato ha revolucionado las consultas de muchos médicos, y dispone de herramientas que le permitirán importar los datos de pacientes de la gran mayoría de los sistemas de gestión de pacientes.
68. En realidad, ha revolucionado la práctica de un gran número de doctores, ya que incorpora herramientas que permiten importar historiales desde la mayoría de sistemas de gestión de pacientes.
69. Cuenta con unas herramientas que permiten importar los datos de los pacientes de la mayoría de los sistemas de gestión.
70. Ha revolucionado las consultas de un gran número de médicos y dispone de herramientas que le permiten importar información de la mayor parte de sistemas de gestión de pacientes.
71. MedHelpRx es una aplicación clínica completa que utilizan miles de médicos y que ha revolucionado la práctica de muchos profesionales.
72. MedHelpRx es una completa aplicación clínica usada por miles de médicos, que ha revolucionado la práctica diaria de muchos doctores.
73. MedHelpRx es una aplicación clínica muy completa que utilizan miles de médicos y que ha revolucionado muchas de las prácticas en medicina.

74. MedHelpRx es una completa aplicación clínica utilizada por miles de médicos que ha revolucionado la forma de funcionar de muchos consultorios.
75. MedHelpRx es una aplicación clínica con todas las prestaciones que miles de médicos utilizan ya y que ha revolucionado el ejercicio de la profesión.
76. La aplicación clínica MedHelpRx incorpora numerosas funciones que aplican miles de médicos; ha revolucionado las prácticas de muchos profesionales.
77. MedHelpRx es una aplicación clínica con todas las funciones que utilizan miles de médicos y que ha supuesto un antes y un después en las prácticas de muchos de ellos.
78. MedHelpRx es una aplicación clínica completa que utilizan miles de médicos y que ha revolucionado las prácticas de muchos doctores.
79. MedHelpRx es un equipo médico utilizado por miles de especialistas que ha revolucionado el trabajo de muchos profesionales médicos.
80. MedHelpRx es también una completa aplicación de uso clínico utilizada por miles de profesionales de la salud que ha supuesto toda una revolución en numerosas consultas.
81. MedHelpRx es una completa aplicación clínica utilizada por miles de médicos y que ha revolucionado los consultorios de muchos de ellos.
82. MedHelpRx es una solución completa que utilizan miles de médicos y que ha revolucionado el día a día de muchas consultas.
83. MedHelpRx es una herramienta clínica muy completa que utilizan miles de médicos y que ha revolucionado muchas consultas.
84. MedHelpRx es una completa aplicación clínica usada por miles de médicos y que ha revolucionado la forma de trabajar de muchos doctores.
85. MedHelpRx es una aplicación clínica completa utilizada por miles de médicos que ha supuesto una revolución para su actividad profesional.
86. MedHelpRx es una aplicación clínica con funciones completas que utilizan miles de profesionales de la medicina, y que ha revolucionado el sistema de trabajo de muchos doctores.
87. MedHelpRx es una aplicación clínica completa utilizada por miles de médicos que ha revolucionado la práctica de muchos profesionales.
88. MedHelpRx es una aplicación clínica de grandes prestaciones utilizada por miles de profesionales de la salud en todo el mundo, que ha revolucionado un gran número de prácticas médicas.
89. MedHelpRx es una aplicación clínica completa que utilizan miles de médicos y que ha revolucionado muchas de las prácticas que éstos emplean.
90. MedHelpRx es una aplicación clínica muy completa, utilizada por miles de médicos; ha revolucionado el ejercicio de la profesión de muchos de ellos.

D.0.2.3 Text 3 – Focus point 1

Source segment (*English*)

- When your business runs short of a specific product **It** will beep and display a warning message.

Target segment (*Spanish*)

1. Cuando existen pocas existencias de un determinado producto, el dispositivo emite un pitido y muestra un mensaje de advertencia. Cuando se están agotando las existencias de algún producto de la empresa, el dispositivo emite un pitido y muestra un mensaje de advertencia.
2. Cuando en su negocio empieza a escasear un producto específico, el dispositivo emite un pitido y muestra un mensaje de advertencia.
3. Cuando se le está acabando un producto específico, el dispositivo emitirá un pitido y mostrará un mensaje de advertencia.
4. Cuando su negocio se quede corto de un producto específico, Stock Terminal emitirá un pitido y visualizará un mensage de aviso.
5. Cuando se agote algún producto en su negocio, oirá un pitido y aparecerá un mensaje de advertencia.
6. Cuando en su empresa desciendan las existencias de algún producto concreto, el dispositivo emitirá un pitido y se visualizará un mensaje de alerta.
7. Cuando su negocio se quede sin un producto específico, pitará y mostrará un mensaje de aviso.
8. Cuando su empresa ande escasa de un producto determinado, le avisará con un mensaje de alerta.
9. En caso de que su empresa esté acabando las existencias de un producto concreto, el dispositivo emitirá una señal y mostrará un mensaje de alerta.
10. Cuando se estén agotando las existencias de un producto específico, el dispositivo pitará y aparecerá un mensaje de advertencia.

11. En el momento en que detecta que su negocio necesita stock de un producto específico, el dispositivo emite un pitido y muestra un mensaje de alerta.
12. Cuando las existencias de un producto específico empiecen a escasear en su empresa, emitirá un sonido y mostrará un mensaje de aviso.
13. Cuando algún producto está a punto de agotarse, emite un aviso acústico y la pantalla muestra un mensaje de advertencia.
14. Cuando a su negocio le falta un producto específico, el dispositivo emitirá un sonido y aparecerá un mensaje de aviso.
15. Cuando la empresa se va quedar sin un producto específico, el dispositivo emite un pitido y muestra un mensaje de advertencia.
16. Cuando a su negocio le falte un producto específico, Stock Terminal le avisará con un sonido y le mostrará un mensaje de advertencia.
17. Cuando falte algún producto específico en su negocio, el dispositivo emitirá un pitido y mostrará un mensaje de advertencia.
18. Cuando comienza a agotarse un producto determinado, el dispositivo emite un pitido y muestra un mensaje de advertencia.
19. Cuando su negocio se esté quedando de un producto concreto, emitirá un pitido y mostrará una mensaje de aviso.
20. si en su negocio se agota un producto específico, este dispositivo emite un sonido y muestra un mensaje de advertencia.
21. Cuando hay pocas existencias de un determinado producto en la empresa, el sistema activa un pitido y muestra un mensaje de advertencia.
22. Cuando en su empresa escasee un producto específico, emitirá un pitido y mostrará un mensaje de alerta.
23. Puede estar tranquilo, ya que cuando las existencias de un producto comiencen a escasear, el dispositivo sonará y le mostrará un mensaje de aviso.
24. Cuando se le esté agotando un producto, emitirá un pitido y enviará un mensaje de aviso en pantalla.
25. Cuando su negocio esté a punto de quedarse sin un producto determinado, el dispositivo emitirá un aviso sonoro y en pantalla aparecerá un mensaje de advertencia.
26. Cuando se queda sin existencias de un producto en concreto, el dispositivo le avisa mediante una alarma y un mensaje de advertencia en pantalla.
27. Cuando falta un determinado producto, el dispositivo emite un pitido y muestra un mensaje de aviso.
28. Si un determinado producto se agota, el dispositivo suena y muestra un mensaje de aviso.
29. Cuando en su negocio se esté agotando algún producto, éste emitirá un sonido y mostrará un mensaje de advertencia.
30. Cuando en su negocio queden pocas existencias de un determinado producto, el dispositivo emitirá un pitido y mostrará un mensaje de advertencia.
31. Estudios de casos han demostrado que Stock Terminal ha contribuido a aumentar la productividad en un 150
32. Cuando el negocio se queda sin existencias de un producto específico, el dispositivo emite un pitido y muestra un mensaje de advertencia.
33. Si un producto específico se está agotando, el dispositivo emitirá un pitido y mostrará un mensaje de advertencia.
34. Siempre que en su negocio falte algún producto le avisará con un pitido y le mostrará un mensaje de advertencia en la pantalla.
35. Cuando queden pocas unidades de un producto determinado de su empresa, Stock Terminal emitirá un pitido y mostrará un mensaje de advertencia.
36. Cuando se agoten las existencias de un producto determinado en su empresa, la terminal emitirá un pitido y aparecerá un mensaje de advertencia.
37. Si en su empresa quedan pocas unidades de un producto determinado, el dispositivo emitirá un pitido y mostrará un mensaje de aviso.
38. Cuando en su negocio falte algún producto específico, el dispositivo sonará y desplegará un mensaje de advertencia.
39. Cuando su negocio esté a punto de agotar un producto específico emitirá un pitido y mostrará un mensaje de alerta.
40. Cuando su empresa tenga pocas existencias de un determinado producto, el dispositivo emitirá un pitido y mostrará un mensaje de aviso.
41. Cuando uno de sus artículos esté a punto de agotarse, el dispositivo emitirá un aviso sonoro y mostrará un mensaje de advertencia.
42. Cuando se esté quedando sin existencias de un producto concreto, el dispositivo emitirá un pitido

y aparecerá un mensaje de advertencia.
43. Si un producto específico escasea, el terminal le avisará con un mensaje sonoro de advertencia.
44. Cuando un determinado producto se vaya agotando en su negocio, el Stock Terminal emitirá una señal y mostrará un mensaje de aviso.
45. En el momento en que su empresa se esté quedando sin un producto determinado, el dispositivo emitirá un pitido y le mostrará un mensaje de aviso.
46. Cuando su empresa se quede sin un producto concreto, el dispositivo pitará y mostrará un mensaje de advertencia.
47. Cuando se está agotando algún producto en la empresa, Stock Terminal emite un pitido y muestra un mensaje de advertencia.
48. Cuando empieza a quedar poca cantidad de un determinado producto, Stock Terminal emite un pitido y muestra un mensaje de advertencia.
49. Cuando cuente con pocas existencias de un determinado producto para su negocio, el aparato le avisará con un pitido, al tiempo que aparecerá un mensaje de aviso en la pantalla.
50. Cuando en su negocio se detecte escasez de un producto concreto, el dispositivo emitirá un pitido y mostrará un mensaje de advertencia.
51. Cuando el stock de un producto específico de la empresa empieza a agotarse, el aparato emitirá un bip y visualizará un mensaje de advertencia.
52. Cuando el negocio se vaya a quedar sin un producto en concreto, el sistema emitirá un aviso sonoro y mostrará un mensaje de advertencia.
53. Cuando un empresario se quede sin existencias de un producto específico, emite un sonido y muestra un mensaje de advertencia.
54. Cuando su negocio tenga pocas reservas de un producto determinado, emitirá una señal sonora y mostrará un mensaje de aviso.
55. Cuando su negocio esté agotando las existencias de un producto específico, emitirá un pitido y mostrará un mensaje de advertencia.
56. Cuando en su negocio disminuyen las existencias de un producto determinado, el dispositivo emite un pitido y le muestra un mensaje de aviso.
57. Cuando su empresa se quede sin existencias de un determinado producto, se emitirá un pitido y aparecerá un mensaje de aviso.
58. Cuando un producto está a punto de agotarse, el dispositivo emite una señal sonora y muestra un mensaje de aviso.
59. Stock Terminal le avisa mediante un mensaje sonoro y visual cuando se agotan las existencias de un determinado producto en su empresa.
60. Cuando en su negocio escasee un producto específico, el dispositivo emitirá un pitido y mostrará un mensaje de alerta.
61. Cuando se esté agotando un determinado producto en la empresa, el dispositivo emitirá un sonido y mostrará un mensaje de aviso.
62. Cuando se agota un producto concreto en su empresa, el dispositivo le avisa mediante un pitido y muestra un mensaje de advertencia.
63. Cuando su empresa se esté quedando sin un determinado producto, pitará y aparecerá un mensaje de advertencia en la pantalla.
64. Si su empresa se queda sin existencias de un determinado producto, sonará un pitido y aparecerá un mensaje de aviso.
65. Cuando en su negocio se esté agotando un producto específico, el dispositivo emitirá un pitido y mostrará un mensaje de advertencia.
66. Cuando escasea un producto, el terminal emite una señal acústica y muestra un mensaje de advertencia.
67. Cuando las existencias de un producto empiezan a agotarse, emite un pitido y muestra un mensaje de advertencia.
68. En el momento en que las existencias de un determinado producto en su empresa empiezan a escasear, el dispositivo emite un pitido y muestra un mensaje de advertencia.
69. Cuando su negocio empieza a quedarse sin algún producto en concreto, Stock Terminal pita y muestra un aviso.
70. Cuando un producto empieza a escasear, Stock Terminal emite un aviso sonoro y muestra un mensaje de advertencia.
71. Cuando su empresa se quede sin un producto específico, el dispositivo emitirá una alarma sonora y mostrará un mensaje de advertencia.
72. Si su empresa se está quedando si existencias de un producto determinado, el dispositivo emite una señal y muestra un mensaje de advertencia.
73. Cuando su empresa se quede sin un producto específico, el dispositivo emitirá un pitido y mostrará un mensaje de advertencia.

74. Si en su empresa empieza a escasear un producto específico, el dispositivo emitirá un pitido y mostrará un mensaje de advertencia.
75. Si un producto concreto se agota en su negocio, el dispositivo pitará y mostrará un mensaje de advertencia.
76. Cuando se están agotando las existencias de un producto específico, el dispositivo emite un pitido y muestra un mensaje de alerta.
77. Cuando su negocio se esté quedando sin un producto concreto emitirá un pitido y mostrará un mensaje de aviso.
78. Cuando su empresa tenga pocas existencias de un determinado producto, sonará un pitido y se mostrará un mensaje de advertencia.
79. Cuando es necesario reponer un producto específico para su negocio emitirá un sonido de alarma y mostrará un mensaje de advertencia.
80. Cuando las existencias de un producto empiezan a agotarse, el dispositivo emite un sonido y muestra un mensaje de advertencia.
81. Cuando las existencias de uno de sus productos sean escasas, el dispositivo sonará y le mostrará un mensaje de alerta.
82. Cuando las existencias de un determinado producto de la empresa se estén terminando, el dispositivo emitirá un sonido y mostrará un mensaje de aviso.
83. Si el negocio se queda con pocas existencias de un producto determinado, la alarma suena y se muestra un mensaje de advertencia.
84. Cuando baja el stock de un producto el dispositivo le avisa con un mensaje.
85. Cuando a su negocio se le esté acabando un determinado producto, emitirá un pitido y mostrará un mensaje de advertencia.
86. Si baja la cantidad en inventario de un producto específico, Stock Terminal le enviará una señal sonora y visualizará un mensaje de advertencia.
87. Si en su empresa comienza a haber una carencia de un producto en concreto, su dispositivo emitirá un sonido y le mostrará un mensaje de aviso.
88. Cuando su empresa se queda sin algún producto concreto, Stock Terminal emite un pitido y muestra un mensaje de advertencia.
89. Cuando tu negocio no tiene reservas suficientes de un producto específico, se emitirá un pitido y se mostrará un mensaje de aviso.

D.0.3 Newly introduced cohesive referents per discourse segment

D.0.3.1 Text 1 – Focus point 1

Source segment (*English*)

- The file is 13.7 MB**:** it may take some minutes to download with a modem connection.

Target segment (*Spanish*)

1. El archivo ocupa 13,7 MB, de modo que la descarga puede tardar algunos minutos con una conexión de módem.
2. El archivo pesa 13,7 MB y puede tardar unos minutos en descargarse si utiliza una conexión de módem.
3. El archivo pesa 13.7 MB, razón por la que su descarga con una conexión de módem puede durar varios minutos.
4. El tamaño del archivo es de 13,7 MB y la descarga puede tardar varios minutos si se utiliza una conexión telefónica con módem.
5. El archivo tiene un tamaño de 13,7 MB, por lo que es posible que tarde unos minutos en descargarse con una conexión vía módem.
6. El tamaño del archivo es de 13,7 MB, por lo que puede tardar unos minutos en descargarse con una conexión por módem.
7. El archivo ocupa 13,7 Mb, por lo que es posible que tarde unos minutos en descargarse.
8. El archivo pesa 13,7 MB; por lo tanto, descargarlo con una conexión por módem puede llevar varios minutos.
9. El archivo pesa 13,7 MB por lo que, si tienes una conexión de módem, es posible que tarde algunos minutos en descargarse.

10. El archivo ocupa 13,7 MB, por lo que podría tardar algunos minutos en descargarse con una conexión de módem.
11. El archivo es de 13.7 Mb, la descarga puede tardar algunos minutos con una conexión con módem.
12. El archivo tiene un tamaño de 13,7 MB, por lo que puede tardar algunos minutos en descargarse si la conexión es vía módem.
13. El archivo tiene un tamaño de 13,7 MB, por lo que la descarga puede tardar unos minutos si utilizas una conexión mediante módem.
14. El archivo ocupa 13,7 MB, puede tardar varios minutos en descargarse con una conexión de módem.
15. Debido al tamaño del archivo (13.7 MB), la descarga puede durar algunos minutos con una conexión por módem.
16. El archivo mide 13,7 MB, por eso puede tardar unos minutos en descargarse si lo hace mediante una conexión de módem.
17. El archivo ocupa 13.7 MB, por lo que puede tardar varios minutos en descargar el producto con una conexión de módem.
18. El archivo tiene un tamaño de 13,7 MB, por lo que puede tardar varios minutos en cargarse si utiliza una conexión de módem.
19. El archivo tiene 13,7 MB, así que puede tardar algunos minutos en descargarse con una conexión módem.
20. es posible que tarde algunos minutos en descargarse con una conexión por módem.
21. es posible que se tarden unos minutos en realizar la descarga con una conexión de módem.
22. La descarga te puede llevar unos minutos con una conexión por módem.
23. La descarga puede durar varios minutos con una conexión por módem.
24. Si se conecta a través de módem, el programa puede tardar algunos minutos en descargarse.
25. Puede tardar varios minutos en descargarse con una conexión de módem.
26. Puede que tarde algunos minutos en cargar con una conexión a Internet moderna.
27. motivo por el cual la descarga podría tardar varios minutos con una conexión por módem.
28. si utiliza una conexión por módem, la descarga puede tardar varios minutos.
29. Con una conexión de módem, puede tardar varios minutos en descargarse.
30. puede tardar unos minutos en descargarse si dispone de una conexión moderna.
31. Puede que tarde algunos minutos en descargarse si dispone de una conexión por módem.
32. Puede que tarde algunos minutos en descargarse con una conexión vía módem.
33. Puede que tarde unos minutos en descargarse con conexión módem.
34. por lo que, con una conexión módem, la descarga puede tardar unos minutos.
35. la descarga puede tardar unos minutos si se realiza con una conexión de módem.
36. puede tardar unos minutos a descargarse con una conexión con módem.
37. Puede que la descarga tarde varios minutos con una conexión mediante módem.
38. Puede que tarde unos minutos en descargarse utilizando una conexión por módem moderna.
39. si está utilizando una conexión por módem, puede que tarde unos minutos en descargarse.
40. Puede tardar unos minutos en descargarse si se utiliza una conexión por módem.
41. Puede que tarde unos minutos en descargarse si se usa una conexión con módem.
42. La descarga con una conexión con módem puede durar unos minutos.
43. la descarga puede tardar varios minutos si se utiliza una conexión de módem.
44. por tanto, con una conexión de módem tardará unos minutos en descargarse.
45. Si la conexión se realiza a través de un módem, puede que tarde varios minutos en descargarse.
46. La descarga durará algunos minutos con una conexión de módem.
47. La descarga puede durar unos minutos si su conexión es mediante módem.
48. es posible que la descarga tarde unos minutos si la conexión se realiza a través de un módem.
49. Si dispone de una conexión mediante módem es posible que tarde algunos minutos en descargarse.
50. Puede tardar algunos minutos en descargarse con una conexión modem.
51. por lo que puede tardar unos minutos en descargarse con una conexión por módem.
52. por lo que si utiliza una conexión con módem, la descarga puede prolongarse unos minutos.
53. Con una conexión de módem, es posible que el archivo tarde varios minutos en descargarse.
54. su descarga puede tardar varios minutos si se utiliza una conexión a través de módem.
55. su descarga puede llevar unos minutos si tiene una conexión por módem.
56. puede que tarde varios minutos en descargarse con una conexión módem.
57. Es posible que tarde varios minutos en descargarse con una conexión de módem.
58. si su conexión es por módem, es posible que tarde algunos minutos en decargarse.
59. Si tienes una conexión vía módem, la descarga tardará unos minutos.
60. por lo que puede tardar varios minutos en descargarse con una conexión por modem.
61. puede que tarde unos minutos en descargarse con una conexión de módem.
62. es posible que tarde algunos minutos en descargarse si utiliza una conexión con módem.
63. Puede que el proceso de descarga con una conexión módem lleve algunos minutos.

64. puede tardar varios minutos en descargarse mediante una conexión por módem.
65. puede que tarde unos minutos en descargarse con una conexión por módem.
66. Es posible que tarde varios minutos en descargarse con una conexión mediante módem.
67. Con una conexión a través de módem, la descarga puede tardar unos minutos.
68. Con una conexión vía módem la descarga puede tardar unos minutos.
69. Con una conexión de módem, la descarga puede tardar unos minutos.
70. Si la conexión es de módem, es posible que deba esperar unos minutos hasta que finalice la descarga.
71. Es posible que tarde algunos minutos en descargarse si dispone de una conexión de módem.
72. Es probable que tarde algunos minutos en descargarse si la conexión es mediante un módem.
73. puede tardar algunos minutos en descargarse con una conexión por módem.
74. Su descarga puede tardar algunos minutos con una conexión a través de módem.
75. por lo que puede tardar varios minutos en descargarlo con una conexión mediante módem.
76. si utiliza una conexión por módem, puede que tarde algunos minutos en descargarse.
77. Puede llevarle unos minutos descargarlo con una conexión módem.
78. la descarga con una conexión de módem puede tardar varios minutos.
79. puede que la descarga dure varios minutos si la conexión se ha establecido vía módem.
80. la descarga desde una conexión a través de módem puede requerir unos minutos.
81. puede tardar unos minutos en descargarse con una conexión por módem.
82. Si dispone de una conexión con módem, la descarga puede tardar unos minutos.
83. La descarga puede durar varios minutos con una conexión de módem.
84. por lo que puede tardar varios minutos en descargarse si se utiliza una conexión por módem.
85. La descarga puede tardar unos minutos con una conexión de móden.
86. es posible que el proceso de descarga tarde unos minutos si utiliza una conexión con módem.
87. Es posible que tarde unos minutos en descargarlo con la conexión de módem.
88. Puede que el proceso de descarga tarde unos minutos con una conexión a modem.
89. El proceso de descarga puede durar unos minutos con una conexión de módem.
90. puede tardar algunos minutos en descargarse si se utiliza una conexión con módem.

D.0.3.2 Text 1 – Focus point 2

Source segment (*English*)

- Be sure to un-check Don't create a Start Menu Folder if it is checked**;** this parameter creates a program group on your start menu.

Target segment (*Spanish*)

1. asegúrese de desmarcar la opción Don't create a Start Menu Folder si esta se encuentra seleccionada; dicha acción permite la creación de un grupo de programas en el menú de inicio.
2. asegúrese de desactivar la opción Don't create a Start Menu Folder en caso de que esté activada. Este parámetro crea un grupo de programas en el menú de inicio.
3. asegúrese de desmarcar la casilla Don't create a Start Menu Folder si está marcarda; este parámetro crea un grupo de programas en el menú de inicio.
4. asegúrese de que desmarca la opción Don't create a Start Menu Folder (No crear una carpeta de menú Inicio) si está seleccionada. Este parámetro crea un grupo de programas en el menú Inicio.
5. Asegúrate de desmarcar la opción Don't create a Start Menu Folder en caso que esté marcada; este parámetro crea un grupo de programas en tu menú de inicio.
6. Asegúrese de desactivar la casilla No crear una carpeta en el menú de inicio si está activada; este parámetro crea un grupo de programas en el menú de inicio.
7. Asegúrese de desmarcar "Don't create a Start Menu Folder" (No crear una carpeta de menú de inicio) si está marcada. Este parámetro crea un grupo de programa en su menú de inicio.
8. Asegúrese de desmarcar la casilla Don't create a Start Menu Folder (No crear una carpeta de menú de Inicio) si está marcada. Este parámetro crea un grupo de programas en su menú de inicio.
9. Asegúrese de deseleccionar la casilla No crear carpeta en el menú de inicio, en caso de que esté seleccionada; este parámetro crea un grupo de programas en su menú de inicio.
10. asegúrese de desmarcar la casilla Don't create a Start Menu Folder (No crear una carpeta de menú de inicio),si es que está marcada; este parámetro crea un grupo de programas en el menú de inicio.
11. Asegúrese de desactivar la opción Don't create a Start Menu Folder (No crear una carpeta en el menú de inicio) en caso de que esté activada; este parámetro crea un grupo de programas en el menú de inicio.
12. Asegúrese de quitar la marca de Don't create a Start Menu Folder si esta frase está marcada. Este parámetro crea un grupo de programas en su menú de inicio.

13. si desea evitar que se cree un grupo de programas en el menú Inicio, compruebe que la opción Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) está desmarcada.
14. Asegúrese de desactivar la opción Don't create a Start Menu Folder [No crear una carpeta en el menú Inicio] si está activada; este parámetro crea un grupo de programas en su menú de Inicio.
15. Asegúrese de desmarcar la opción Don't create a Start Menu Folder (No crear una carpeta en el menú de inicio) si está seleccionada, ya que este parámetro crea un grupo de programas en el menú de inicio.
16. Asegúrese de desactivar la casilla Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) si se encuentra activada, ya que, de lo contrario, este parámetro creará un conjunto de programas en el menú Inicio.
17. Asegúrese de que la casilla No crear una carpeta en el Menú Inicio (Don't create a Start Menu Folder) no está marcada; este parámetro crea un grupo de programas en el Menú Inicio.
18. asegúrese de desactivar la opción Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) en caso de que esté activada; este parámetro crea un grupo de programas en el menú de inicio.
19. desmarque la casilla Don't create a Start Menu Folder en caso de que esté marcada (este parámetro crea un grupo de programas en el menú de inicio).
20. Asegúrese de desmarcar Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) si está marcado; este parámetro crea un grupo de programas en el menú de inicio.
21. Asegúrese de que la opción Don't create a Start Menu Folder (No crear carpeta de menú Inicio) esté desactivada, ya que, de lo contrario, se creará un grupo de programas en el menú Inicio de su equipo.
22. Asegúrese de que no selecciona la opción Don't create a Start Menu Folder (No crear archivo en menú de inicio) si apareciera ya seleccionada, puesto que dicho parámetro crea un grupo de programas en su menú de inicio.
23. debe desmarcar la opción Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) si está marcada; este parámetro crea un grupo de programas en el menú de inicio.
24. Asegúrese de desactivar la casilla ≪Don't create a Start Menu Folder≫ (No crear una carpeta de menú de inicio) en caso de que estuviera seleccionada, puesto que este parámetro crea un grupo de programas en el menú de inicio.
25. Asegúrese de que la opción Don't create a Start Menu Folder no esté marcada; este parámetro crea un grupo de programa en el menú de inicio.
26. Asegúrese de desmarcar Don't create a Start Menu Folder (No crear una carpeta de menú de inicio) si está marcada. Este parámetro crea un grupo de programas en el menú de inicio.
27. Asegúrate de que el botón No crear acceso directo en menú de inicio está desactivado para evitar que este parámetro cree un grupo de programas en tu menú de inicio.
28. Compruebe que no esté seleccionada la opción Don't create a Start Menu Folder (No crear una carpeta en el menú de inicio), si lo está; este parámetro creará un grupo de programas en dicho menú.
29. Asegúrese de quitar la marca de la casilla Don't create a Start Menu Folder (No crear una carpeta de menú Inicio) en caso de estar marcada, ya que este parámetro crea un grupo de programas en su menú de inicio.
30. No olvide desmarcar No crear una carpeta de menú de inicio en el caso de que esté marcada; este parámetro crea un grupo de programa en su menú de inicio.
31. Asegúrate de que la opción Don't create a Start Menu Folder (no crear una carpeta en menú de inicio) no esté seleccionada. Este parámetro crea un grupo de programas en tu menú de inicio.
32. Asegúrate de desmarcar Don't create a Start Menu Folder si está marcado; este parámetro crea un grupo de programa en tu menú de inicio.
33. asegúrese de eliminar la selección de Don't create a Start Menu Folder en el caso de que esta opción aparezca seleccionada. Este parámetro crea un grupo de programas en su menú de inicio.
34. asegúrate de deseleccionar Don't create a Start Menu Folder si está seleccionado; este parámetro crea un grupo de programas en el menú de inicio.
35. Asegúrese de anular la selección de Don't create a Start Menu Folder (No crear una carpeta en el menú de inicio) si está marcada; este parámetro crea un grupo de programas en el menú de inicio.
36. Asegúrese de eliminar la selección de Don't create a Start Menu Folder (No crear una carpeta de menú de inicio), en su caso, ya que este parámetro crea un grupo de programas en el menú de inicio.
37. Asegura que la opción Don't create a Start Menu Folder no esté seleccionada, si lo está, este parámetro creará un grupo de programa en tu menú de inicio.
38. Asegúrese de quitar la marca de la casilla Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) si está seleccionada; este parámetro crea un grupo de programas en el menú "Inicio".

39. Asegúrate de deseleccionar la casilla Don't create a Start Menu Folder (no crear una carpeta en el menú inicio) si está seleccionada; este parámetro crea un grupo de programas en tu menú de inicio.
40. asegúrese de desmarcar la opción Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) en caso de que esté seleccionada: de este modo se creará un grupo de programas en el menú Inicio.
41. Deseleccione la casilla Don't create a Start Menu Folder si está seleccionada. De este modo, se crea un grupo de programas en el menú de inicio.
42. Asegúrese que la casilla No crear una Carpeta de Inicio no está seleccionada; esta opción crea una barra para el programa en su menú de inicio.
43. Asegúrese de deseleccionar Don't create a Start Menu Fólder si aparece seleccionado; este parámetro crea un grupo de programa en su menú de inicio.
44. Asegúrese de cancelar la selección de Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) si esta opción estuviera seleccionada. Este parámetro crea un grupo de programas en el menú Inicio.
45. es importante desmarcar la opción Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) en caso de estar seleccionada; este parámetro crea un grupo de programas en el menú de inicio del equipo.
46. Asegúrese de no marcar la opción Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) si está marcada; este parámetro crea un grupo de programas en el menú Inicio.
47. Asegúrese de desmarcar la opción Don't create a Start Menu Folder (No crear una carpeta de menú de inicio) si está seleccionada; este parámetro crea un grupo de programas en su menú de inicio.
48. asegúrate de desactivar la casilla Don't create a Start Menu Folder en caso de que esté activada. Este parámetro crea un grupo de programas en el menú Inicio.
49. desmarque la casilla Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) si estuviera marcada; este parámetro crea un grupo de programas en su menú Inicio.
50. Si la casilla Don't create a Start Menu Folder está activada, desactívela. Este parámetro crea un grupo de programas en su menú de inicio.
51. Asegurarse de desactivar el parámetro No crear una carpeta del menú Inicio en caso de que esté activado. Este parámetro crea un grupo de programas en el menú Inicio.
52. asegúrese de desmarcar la casilla No crear una carpeta en el menú de Inicio si aparece marcada. Este parámetro crea un grupo de programas en su menú de Inicio.
53. si está seleccionada, anule la selección de Don't create a Start Menu Folder (No crear una carpeta de menú de inicio), puesto que este parámetro crea un grupo de programas en el menú de inicio.
54. Asegúrate de que no está seleccionada la opción Don't create a Start Menu Folder, o de lo contrario se creará un grupo de programa en tu menú de inicio.
55. deseleccione la opción Don't create a Start Menu Folder (No crear una carpeta del menú Inicio) si está seleccionada; este parámetro crea un grupo de programas en el menú Inicio.
56. asegúrese de quitar la marca de verificación No crear carpeta en el menú inicio; este parámetro crea un grupo de programas en el menú inicio.
57. Es importante desmarcar la opción Don't create a Start Menu Folder si aparece marcada; este parámetro crea un grupo de programas en tu menú de inicio.
58. asegúrese de deseñalar Don't create a Start Menu Folder si este elemento aparece señalado; este parámetro crea un grupo de programa en su menú de inicio.
59. Asegúrese de que la opciónDon't create a Start Menu Folder no esté seleccionada; este parámetro crea un grupo de programas en el menú de inicio.
60. Compruebe que desactiva la casilla No crear una carpeta en el menú Inicio si se encuentra marcada. Este parámetro crea un grupo de programas en su menú Inicio.
61. Desmarque la casilla Don't create a Start Menu Folder si está marcada; este parámetro crea un grupo de programas en el menú de inicio.
62. Asegúrate de que la opción create a Start Menu Folder≫ (No crear una carpeta de menú de inicio) no esté seleccionada; este parámetro crea un grupo de programas en tu menú de inicio.
63. Comprueba que la opción Don't create a Start Menu Folder (No crear una carpeta en menú de inicio) no está señalada, si lo está debes quitar la señal, pues este parámetro crea un grupo de programas en tu menú de inicio.
64. Asegúrese de no seleccionar No crear una carpeta de menú de inicio si esta opción estaba marcada; este parámetro crea un grupo de programas en el menú Inicio.
65. Asegúrese de que la casilla Don't create a Start Menu Folder (No crear una carpeta de menú de inicio) no está marcada. Si lo estuviese, este parámetro crea un grupo de programas en el menú de inicio.
66. no se olvide de desmarcar la opción "Don't create a Start Menu Folder" (No crear una carpeta en

el menú Inicio) en caso de estar marcada; este parámetro crea un grupo de programas en el menú Inicio.

67. asegúrese de que desactiva la opción para no crear una carpeta del menú de inicio (Don't create a Start Menu Folder) si ésta está activada. Éste es un parámetro que crea un grupo de programas en el menú de inicio.
68. asegúrate de quitar la marca de la casilla Don't create a Start Menu Folder si está marcada; este parámetro crea un grupo de programas en el menú de inicio.
69. Si está activada, asegúrese de desactivar la opción Don't create a Start Menu Folder (no crear una carpeta del menú de inicio), ya que este parámetro crea un grupo de programas en su menú de inicio.
70. Asegúrese de no marcar No crear una Carpeta del Menú de Inicio (Start Menu Folder) si está marcada; este parámetro crea un grupo de programas en su menú de inicio.
71. Asegúrese de desactivar el elemento Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) si estuviese seleccionado.
72. si la opción Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) está marcada, desmárquela. Este parámetro crea un grupo de programas en el menú Inicio del equipo.
73. asegúrese de desmarcar la casilla 'Don't create a Start Menu Folder' (no crear una carpeta en el menú de Inicio) si es que se encuentra marcada, ya que esta opción crea un grupo de programas en su menú Inicio.
74. Asegúrese de cancelar la selección de Don't create a Start Menu Folder si esta opción se encuentra seleccionada; este parámetro crea un grupo de programas en el menú de inicio del PC.
75. Asegúrese de desmarcar la casilla "No crear una carpeta en el menú de inicio" si ésta apareciese seleccionada: este parámetro crea un grupo de programas en su menú de inicio.
76. Asegúrate de desmarcar la casilla "No crear una carpeta en menú de inicio" si está marcada; este parámetro crea un grupo de programa en tu menú de inicio.
77. asegúrese de desmarcar la opción Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) en caso de que esté marcada; este parámetro crea un grupo de programas en el menú Inicio.
78. asegúrese de desmarcar Don't create a Start Menu Folder si está seleccionado; este parámetro crea un grupo de programas en el menú de inicio.
79. Asegúrate de desmarcar la opción "Don't create a Start Menu Folder" (no crear una carpeta de menú inicio) en caso de estar seleccionada; este parámetro crea un grupo de programa en tu menú inicio.
80. Asegúrate de desactivar la casilla No crear un archivo de Menu Inicio si está selecionada; este parámetro crea un grupo de programa en tu menú de inicio.
81. Asegúrese de quitar la marca en Don't create a Start Menu Folder en caso de que la casilla esté marcada; este parámetro crea un grupo de programa en el menú de inicio.
82. Aségurese de que la opción Don´t create a Start Menu Folder - No seleccionar una carpeta en el menú inicio- no esté marcada. Esta opción crea un grupo de programas en el menú inicio.
83. No olvide desmarcar la casilla "Don't create a Start Menu Folder" (No deseo crear una carpeta en el menú de inicio) si está seleccionada, puesto que este parámetro crea un grupo de programas en el menú de inicio del equipo.
84. asegúrese de desactivar la selección de Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio), en caso de que esta opción se encuentre seleccionada. Este parámetro crea un grupo de programas en el menú de inicio.
85. Asegúrese de desmarcar el archivo Don't create a Start Menu si está marcado; este parámetro crea un grupo de programas en su menú de inicio.
86. Recuerde desmarcar Don't create a Start Menu Folder (No crear ninguna carpeta en el menú Inicio) si está marcado. De este modo se creará un grupo de programas en el menú Inicio.
87. Cerciórese de deseleccionar la casilla "Don't create a Start Menu Folder" (No crear una carpeta en el menú de inicio) si está seleccionada; este parámetro crea un grupo de programas en su menú inicio.
88. Asegúrese de desmarcar Don't create a Start Menu Folder (No crear una carpeta en el menú de inicio) si está marcado. Este parámetro crea un grupo de programas en su menú de inicio.
89. Asegúrese de desactivar la opción Don't create a Start Menu Folder (No crear una carpeta en el menú Inicio) en caso de que esté activada; este parámetro crea un grupo de programas en el menú Inicio.
90. Asegúrese the deseleccionar Don´t create a Start Menu Folder si está seleccionado; este parámetro puede crear un grupo de programas en su menú de inicio.

D.0.3.3 Text 1 – Focus point 3

Source segment (*English*)

- Restoring previously fixed spyware problems will re-install the spyware programs on your computer.

Target segment (*Spanish*)

1. Si se restauran problemas de spyware ya corregidos se instalarán nuevamente los programas de spyware en el equipo.
2. Si restaura un elemento de spyware previamente reparado, se volverán a instalar programas de spyware en su ordenador.
3. Si se restauran problemas de spyware que ya se habían solucionado, se volverán a instalar los programas de spyware en el ordenador.
4. Restaurar problemas de programas espía anteriormente fijos hará reinstalar los programas espía en tu ordenador.
5. Al restaurar problemas de spyware ya solucionados se reinstalarán programas de spyware en el ordenador.
6. Si se restauran programas espías para los que ya se han solucionado problemas, se volverían a instalar en el ordenador.
7. Si restaura programas cuyo problema ya se había solucionado se reinstalarán los programas de spyware en el ordenador.
8. Si restaura un problema de spyware solucionado anteriormente, se volverán a instalar los programas de spyware en su equipo.
9. Restaurar problemas de software espía que hayan sido reparados con anterioridad volverá a instalar dichos programas en su equipo.
10. Si restaura problemas de spyware solucionados anteriormente, se volverán a instalar programas de spyware en su ordenador.
11. Si repara problemas de spyware que ya hayan sido solucionados previamente, los programas de spyware volverán instalarse en su equipo.
12. La restauración de problemas de spyware resueltos previamente reinstalará los programas de spyware en el equipo.
13. Si restaura problemas relacionados con software espía que se hayan solucionado con anterioridad, se volverán a instalar los programas de software espía en su equipo.
14. Restablecer problemas de programas espía solucionados anteriormente provocará que se instalen de nuevo los programas espía en su ordenador.
15. La restauración de problemas de spyware que ya se habían resuelto previamente volverá a instalar los programas de spyware en su ordenador.
16. La restauración de antiguos problemas de software espía reinstalará los programas de software espía en el ordenador.
17. La restauración de problemas de spyware previamente resueltos volverá a instalar los programas de spyware en el equipo.
18. El restaurar problemas de spyware ya solucionados previamente reinstalará los programas de spyware en tu ordenador.
19. Si restaura problemas de spyware que ya ha solucionado anteriormente, los programas de spyware se volverán a instalar en el ordenador
20. Si reanuda problemas de spyware ya solucionados, se volverán a instalar los programas spyware en su ordenador.
21. Al restablecer problemas de spyware fijados anteriormente, los programas de spyware se volverán a instalar en su ordenador.
22. Al restablecer problemas de spyware resueltos anteriormente, volverás a instalar el spyware en tu ordenador.
23. Al restaurar problemas solucionados de spyware previamente se reinstalarán los programas de spyware en tu ordenador.
24. Deshacer reparaciones de problemas de spyware significará la reinstalación de ciertos programas de spyware en su ordenador.
25. si decide restaurar problemas que ya se han corregido, se volverán a instalar los programas espía en el equipo.
26. La recuperación de los problemas provocados por los programas espía que ya habían sido arreglados previamente puede volver a instalar los programas espía en su ordenador.
27. Si restaura problemas de software espía resueltos con anterioridad se volverán a instalar los programas de software espía en el PC.

28. Si selecciona solucionar problemas de software espía previamente solucionados, dichos programas volverán a instalarse en su ordenador.
29. La opción de restablecer problemas de spyware anteriormente reparados hará que se vuelvan a instalar estos programas de spyware en tu ordenador.
30. Si se recuperan los problemas de software espía corregidos con anterioridad, los programas de software espía se volverán a instalar en el ordenador.
31. Si decide restablecer problemas de spyware ya reparados, volverá a instalar los programas de spyware en el ordenador.
32. Al restaurar los problemas de software espía, anteriormente instalados, se volverán a instalar los programas de software espía en tu ordenador.
33. Al reparar problemas de spyware previamente solucionados se reinstalarán los programas de spyware en tu ordenador.
34. Restaurar problemas de programas espía reparados previamente, reinstalará los programas espía en el ordenador.
35. Si restaura problemas de spyware previamente solucionados volverá a instalar los programas espía en el ordenador.
36. Si soluciona problemas de software espía ya solucionados, los programas de software espía se volverán a instalar en su ordenador.
37. La restauración de problemas de software espía resueltos con anterioridad volverá a instalar los programas de software espía en el ordenador.
38. La restauración de problemas causados por los programas espías fijados previamente provocará la reinstalación de programas espía en tu PC.
39. Al restaurar problemas de programas espía que se hayan corregido con anterioridad, se volverán a instalar dichos programas en el equipo.
40. Si restaura problemas de spyware que ya se han eliminado del sistema, se volverán a instalar en el ordenador.
41. Restaurar problemas de programas espía que ya hayan sido solventados con anterioridad resulta en la reinstalación de dichos programas espía en su equipo.
42. Si restaura problemas de spyware previamente fijados, reinstalará los programas spyware en su ordenador.
43. La restauración de problemas de software espía anteriormente corregidos reinstalará el software espía en el ordenador.
44. Tenga en cuenta que la restauración de problemas de spyware solucionados previamente implica una reinstalación de los programas de spyware en el equipo.
45. Si restaura los problemas de software espía que se han solucionado anteriormente, se volverán a instalar los programas de software espía en su equipo.
46. Al restaurar los problemas de programa espía previamente solucionados, los programas espía se volverán a instalar en su ordenador.
47. Al restaurar problemas de software espía anteriormente solucionados se volverán a instalar los programas espía en el equipo.
48. Recuperar archivos que se hayan reparado anteriormente con problemas causados con software malicioso, volverá a instalar este software en su ordenador.
49. Si restaura problemas de software espía que ya se han resuelto, dichos programas volverán a instalarse en el equipo.
50. La restauración de problemas de spyware resueltos anteriormente provocará la reinstalación de programas de spyware en su equipo.
51. Restaurar spyware previamente fijado reinstalaría estos programas en su ordenador.
52. La restauración de problemas de spyware solucionados anteriormente provocará la nueva instalación de los programas de spyware en su ordenador.
53. Si restaura problemas de spyware previamente fijados, el spyware correspondiente se volverá a instalar en el ordenador.
54. En caso de restaurar problemas de spyware anteriormente arreglados, los programas de spyware se instalarán de nuevo en el ordenador.
55. Si restablece problemas de spyware solucionados anteriormente, los programas de spyware se volverán a instalar en su equipo.
56. Si arregla problemas que ya habían sido solucionados anteriormente, los programas espía que había eliminado se instalarán de nuevo.
57. Recuperar problemas de spyware ya solucionados volverá a instalar los programas de spyware en su ordenador.
58. si se restauran problemas de software espía que se han solucionado previamente, se volverán a instalar los programas de software espía en su equipo.
59. Restaurar problemas previamente solventados con spyware volverá a instalar los programas spy-

ware en su ordenador.
60. Si restaura problemas de software espía ya solucionados, se volverá a instalar el software espía en el ordenador
61. Si restauras problemas de spyware que ya se habían solventado, reinstalarás los programas de spyware en tu ordenador.
62. Si restaura problemas de spyware resueltos con anterioridad, los programas de spyware se instalarán de nuevo en el sistema.
63. Si restaura problemas de software espía anteriores, se volverán a instalar programas de software espía en el equipo.
64. Restaurar problemas que han sido previamente fijados como spyware re-instalaran los programas de spyware en tu ordenador.
65. Restaurar elementos afectados por spyware hará que se reinstalen los programas de spyware en su ordenador.
66. Si restablece problemas de software espía fijados anteriormente, podría reinstalar los programas de software espía en su ordenador.
67. Si repara problemas de spyware que ya han sido resueltos, los programas de spyware se instalarán de nuevo en su ordenador.
68. Al restaurar problemas causados por programas espía que se hayan reparado previamente se volverán a instalar los programas espía en el ordenador.
69. Restaurar programas espía previamente reparados provocará la reinstalación de dichos programas espía en tu ordenador.
70. seleccione con cuidado los problemas que desea restaurar, puesto que si restaura problemas de spyware que ya han sido resueltos, se reinstalarán los programas de spyware en su equipo.
71. presta atención a la hora de seleccionar qué problemas de spyware deseas solucionar, ya que si restauras uno previamente solucionado, el programa de spyware correspondiente se volverá a instalar.
72. vaya con cautela a la hora de seleccionar qué problemas desea solucionar, puesto que la resolución de problemas relacionados con software espía que hubieran sido solucionados previamente provocará que los programas espía vuelvan a instalarse en su ordenador.
73. Sé prudente al seleccionar los problemas que deseas solucionar, ya que al solucionar los ya creados por programas espía, se reinstalarán los programas espía en tu ordenador.
74. ten cuidado al seleccionar qué problemas deseas restaurar, ya que si eliges restaurar problemas de spyware que ya se hayan solucionado anteriormente, los programas de spyware volverán a instalarse en tu equipo.
75. seleccione con cuidado qué problemas desea restaurar, ya que restaurar problemas de software espía que ya había solucionado anteriormente hará que los programas de software espía se vuelvan a instalar en su ordenador.

D.0.3.4 Text 2 – Focus point 1

Source segment (*English*)

- Be careful with the Trashcan feature**.** Tapping the trashcan will permanently delete the patients record.

Target segment (*Spanish*)

1. Recuerde que si selecciona la aplicación Papelera de reciclaje (Trashcan) se borrará definitivamente el registro de pacientes.
2. Tenga especial cuidado con la función Eliminar (Trashcan), ya que al tocar este icono, el registro de pacientes se eliminará de forma permanente.
3. Tenga cuidado con la opción Trashcan (Eliminar), ya que, si pulsa este botón se borrarán los informes del paciente de forma permanente.
4. Tenga cuidado con la opción de papelera, ya que si presiona este icono borrará permanentemente el historial del paciente.
5. Tenga especial cuidado con la opción Trashcan (Papelera), ya que al pulsarla se elimina el historial del paciente.
6. Tenga cuidado con la opción Trashcan (papelera), ya que si la utiliza se borrará de forma permanente el registro del paciente.
7. Tenga precaución con el icono de la papelera; si lo selecciona, puede borrar los datos de los pacientes de forma definitiva.

8. Al puntear la función Trashcan borrará permanentemente la historia del paciente, por lo que se recomienda precaución al utilizar esta característica.
9. Utilice con prudencia la función "Trashcan" (Papelera), puesto que si la selecciona se eliminará de forma permanente la historia del paciente.
10. Si selecciona la papelera, el registro de pacientes se eliminará de forma permanente.
11. Al puntear en el icono de la papelera, la historia clínica del paciente se borrará definitivamente.
12. Si toca la papelera se borrará definitivamente el historial del paciente.
13. Si toca esta función, se eliminará de forma permanente el historial del paciente.
14. Si clicas sobre Trashcan se borrará permanentemente el historial de los pacientes.
15. Si la pulsa, el registro de los pacientes se eliminará de forma permanente.
16. Si se pulsa el botón de la papelera, se borrará de manera permanente el historial médico del paciente.
17. Si la selecciona, se eliminarán definitivamente los pacientes.
18. Si pulsa esta opción, los historiales médicos de sus pacientes se borrarán de forma permanente.
19. Si pulsa en este icono, el registro de pacientes se eliminará permanentemente.
20. Al pulsar sobre la Papelera, se eliminará el historial del paciente de forma permanente.
21. Si puntéa en Trashcan, se suprimirá permanentemente el registro de paciente.
22. Si pulsa esta opción, se borrarán los historiales de los pacientes de forma permanente.
23. Si pulsa Trashcan se borrará el registro del paciente de manera permanente.
24. Si se pulsa Trashcan, se borra de modo permanente la historia del paciente.
25. Si puntea el cubo de basura eliminará para siempre la historia clínica del paciente.
26. Si puntea en la papelera, se eliminará el historial del paciente de forma permanente.
27. Si pulsa en el icono correspondiente, el historial del paciente se eliminará de forma irreversible.
28. Si da un toque en la Papelera de Reciclaje, se eliminarán los historiales de los pacientes de forma permanente.
29. Si pulsa Trashcan, el registro de pacientes se eliminará constantemente.
30. si pulsa en la Trashcan, el registro del paciente se eliminará permanentemente.
31. Al pinchar sobre Trashcan, eliminará de manera permanenteel historial del paciente.
32. Si selecciona la opción Trashcan (Papelera), el informe del paciente se borrará de forma definitiva.
33. ya que, al tocar esta opción, se eliminará permanentemente la historia del paciente.
34. Si la pulsa, eliminará de forma permanente el registro del paciente.
35. Pulsando en la Papelera de Reciclaje eliminará permanentemente el historial de los pacientes.
36. si puntea en la papelera, los historiales de los pacientes se eliminarán para siempre.
37. ya que si la selecciona, el historial del paciente en cuestión se borrará permanentemente.
38. Si hace clic sobre ella, borrará para siempre los historiales de los pacientes.
39. Si pulsa el cubo de basura, se eliminará el historial del paciente de forma permanente.
40. Al hacer clic sobre ella eliminará de forma permanente el historial de los pacientes.
41. Al pulsar esta función se eliminará permanentemente el historial médico del paciente.
42. Si pulsa Trashcan, borrará para siempre los registros de los pacientes.
43. Si pulsa sobre dicha función, se borrará el informe del paciente de forma definitiva.
44. Al hacer clic en ese icono, borrará definitivamente el registro de pacientes.
45. Si pulsa la Papelera borrará permanentemente el historial de los pacientes.
46. pulsar este icono eliminará de forma definitiva el registro del paciente seleccionado.
47. Si toca en Trashcan se eliminará de forma permanente el historial del paciente.
48. Si le diese a la Papelera, se eliminará permanentemente el informe del paciente.
49. Si toca la Papelera se borrarán de forma permanente los historiales de los pacientes.
50. Si pulsa el icono de la papelera, el registro del paciente quedará eliminado de forma permanente.
51. Si pulsa esta característica, eliminará el historial del paciente de forma definitiva.
52. Si pincha en ella se borrará para siempre el historial del paciente.
53. Si pulsa Papelera, borrará definitivamente el historial de los pacientes.
54. Si pulsa la opción Trashcan, los historiales de los pacientes se eliminarán de forma permanente.
55. Si clica en Trashcan, eliminará definitivamente la historia clínica de los pacientes.
56. Si pulsa dicha papelera suprimirá permanentemente el registro de pacientes.
57. Si selecciona Trashcan (Papelera) borrará el historial del paciente de forma permanente.
58. si lo toca con el puntero se borrará de forma permanente el registro de pacientes.
59. Al pulsar en el icono con forma de cubo de basura el registro del paciente se borrará permanentemente.
60. Si puntea en ella, se eliminarán definitivamente los historiales de los pacientes.
61. Al pulsar en el icono de papelera se eliminará el historial del paciente de manera permanente.
62. Al seleccionar esta función se elimina el historial del paciente de forma permanente.
63. Si pulsa Trashcan desaparecerá de manera permanente el informe del paciente.
64. Si pulsa esta opción, se suprimirá de forma permanente el registro del paciente.

65. Si la pulsa, el registro de los pacientes se eliminará de forma permanente.
66. Si toca el icono de la papelera, el historial del paciente se eliminará para siempre.
67. Al pulsar en Trashcan se eliminará definitivamente la información relativa a los pacientes.
68. Si pulsa Trashcan, el registro de los pacientes se eliminará de forma permanente.
69. porque si pulsa esta opción, se eliminará definitivamente el historial del paciente.
70. Tocando el icono Trashcan se borrará el registro del paciente.
71. Al pulsar en ella se eliminará definitivamente el historial del paciente.
72. Teclear el icono Papelera borrará de forma permanente el historial del paciente.
73. Si toca la papelera, borrará permanentemente el registro del paciente.
74. Si pulsa Trashcan, el registro del paciente se suprimirá permanentemente.
75. Si puntea el Cubo de basura eliminará de manera permanente el historial del paciente.
76. Si toca la Papelera de reciclaje, suprimirá de forma permanente el historial de pacientes.
77. Si la pulsa, borrará los registros de los pacientes de forma irreversible.
78. Pulsar en Trashcan (Papelera) eliminará de forma permanente el historial del paciente.
79. Si selecciona esta opción, se eliminará de forma permanente el registro del paciente.
80. Seleccionar Trashcan borra los historiales de los pacientes de forma permanente.
81. Si pulsa el icono de la papelera, el historial del paciente se borrará de forma permanente.
82. Si pulsa Papelera borrará permanentemente el historial del paciente.
83. Si pulsa Trashcan (Papelera), suprimirá de forma definitiva el registro del paciente.
84. Al tocar Papelera, el registro de pacientes se eliminará permanentemente.
85. Clicando en Trashcan se elimina el historial del paciente.
86. Pulsar el elemento Trashcan eliminará de forma permanente el registro de pacientes.
87. Si pincha en ella, eliminará el registro del paciente de forma permanente.
88. Si pulsa sobre la Papelera borrará definitivamente el historial del paciente.
89. Si pulsa la papelera, se borrará de forma permanente el historial del paciente.
90. Tocando ≪Trashcan≫eliminarás permanentemente el registro del paciente.

D.0.3.5 Text 2 – Focus point 2

Source segment (*English*)

- You can generate multiple prescriptions for the same patient**.** Tap the Multi button in the top of the Rx window.

Target segment (*Spanish*)

1. Si desea generar varias recetas para el mismo paciente, escoja el botón Multi situado en la parte superior de la ventana Rx.
2. Para generar varias recetas para un mismo paciente, pulse el botón Multi (Múltiples), situado en la parte superior de la ventana de Rx.
3. Puede generar varias prescripciones para el mismo paciente pulsando el botón Multi que se encuentra en la parte superior de la ventana Rx.
4. Puede crear varias recetas para un mismo paciente, para ello, pulse el botón "Multi" situado en la parte superior de la ventana "Rx".
5. Seleccione el botón Multi que se encuentra en la parte superior de la ventana Rx.
6. Para ello, puntee en el botón Multi situado en la parte superior de la ventana Rx.
7. Pulse el botón Multi situado en la parte superior de la ventana Rx.
8. Toque el botón Multi (Varios) en la parte superior de la ventana Rx (Receta).
9. Haz clic sobre el botón Multi en la parte superior de la ventana Rx.
10. Pulse el botón Multi en la parte superior de la ventana Receta.
11. Seleccione el botón Varias en la parte superior de la ventana Rx.
12. Pulse el botón "Multi" (Varias recetas) en la parte superior de la ventana "Rx" (Receta).
13. Pulse el botón Multi en la parte superior de la ventana de Rx.
14. Pulse el botón Multi en la parte superior de la ventana Rx.
15. Puntée el botón Multi (Varios) situado en la parte superior de la ventana Rx.
16. Pulse el botón Multi (Varias) situado en la parte superior de la ventana Rx (Receta).
17. Pulse sobre el botón Multi, situado en la parte superior de la ventana Rx.
18. Pulse el botón Multi (Varios) en la parte superior de la ventana Rx.
19. Puntee el botón Multi en la parte superior de la ventana de Rx.
20. Puntee en el botón Multi situado en la parte superior de la ventana Rx.
21. Para ello, pulse el botón Multi de la parte superior de la ventana Rx.

22. Toque el botón Multi en la parte superior de la ventana Rx.
23. Pulse el botón Multi situado en la parte superior de la ventana Rx.
24. Pulse en el botón Multi de la parte superior de la ventana Rx.
25. Pulse el botón Multi (Varias) situado en la parte superior de la ventana Rx (Receta).
26. Pinche sobre el icono Multi en la parte superior de la ventana de Rx.
27. Seleccione el botón Multi (Varias) situado en la parte superior de la ventana de Rx.
28. Toque en el botón de multiopción (Multi) de la ventana Rx.
29. Presione en el botón Multi, situado en la parte superior de la ventana Rx.
30. Pulse sobre el botón Multi en la parte superior de la ventana Rx.
31. Pulse el botón Multi en la parte superior de la ventana Rx.
32. Puntee en el botón Multi (Varias) situado en la parte superior de la ventana de recetas.
33. Para ello, seleccione el botón ≪Multi≫ en la parte superior de la ventana Rx.
34. Haga clic en Multi, en la parte superior del apartado Rx.
35. Pulse el botón Multi en la parte superior de la ventana Rx (Receta).
36. Haga clic en el botón Multi en la parte superior de la ventana Rx.
37. Pulse el botón Multi que se encuentra en la parte superior de la ventana Rx.
38. Pulse el botón Multi en la parte superior de la ventana Rx.
39. Pulse sobre el botón Multi en la parte superior de la ventana Rx.
40. Haga clic en la opción Multi situada en la parte superior de la ventana Rx.
41. Pulse el botón Multi en la parte superior de la ventana Rx.
42. Para ello, pulse el botón Multi (Varios) situado en la parte superior de la ventana Rx.
43. para ello pulse el botón 'Multi' en la parte superior de la ventana de 'Rx' (prescripciones).
44. Toque en el botón Multi situado en la parte superior de la ventana Rx.
45. Seleccione el botón Multi en la parte superior de la ventana Rx.
46. Toque el botón Multi en la parte superior de la ventana Rx.
47. Pulse el botón Multi situado en la parte superior de la ventana Rx (Recetas).
48. Pulse el botón Multi que verá en la parte superior de la ventana Rx.
49. Pinche en el botón "Multi" que aparece en la parte superior de la ventana Rx.
50. Pulse el boton Multi en la parte superior de la ventana Rx.
51. Pulse el botón Multi situado en la parte superior de la ventana Rx.
52. Clique el botón Multi en la parte superior de la ventana Rx.
53. Pulse el botón Multi (Varias) que se encuentra en la parte superior de la ventana Rx.
54. Toque el botón Multi situado en la parte superior de la ventana Rx.
55. Selecciona con el puntero el botón Multi en la parte superior de la ventana Rx.
56. *missing translation*
57. Puntee en el botón Multi situado en la parte superior de la ventana Rx (Receta).
58. Seleccione el botón Multi en la parte superior de la ventana Rx.
59. Pulse el botón Multi que aparece en la parte superior de la ventana Rx.
60. Pulse el botón Multi (Múltiple) de la parte superior de la ventana Rx (Medicamento con receta).
61. Toque el botón Multi (Múltiples) de la parte superior de la ventana Rx (Receta).
62. Pulse en el botón Multi (Varias) situado en la parte superior de la ventana Rx.
63. Pulse el botón Multi en la parte superior de la ventana Rx.
64. Pulse el botón "Multi" situado en la parte superior de la ventana "Rx".
65. Toque el boton Multi en la parte superior de la ventan Rx.
66. Pulse en el botón Multi, en la parte superior de la ventana Rx.
67. Vaya al boton Multi en la parte superior de la ventana RX.
68. Para ello, puntee el botón Multi que se halla en la parte superior de la ventana Rx.
69. Toque el botón Multi de la parte superior de la ventana Rx.
70. Pulse el botón Multi situado en la parte superior de la ventana Rx.
71. Puntee el botón Multi en la parte superior de la ventana Rm.
72. Toque el botón Multi que hay en la parte superior de la ventana Rx.
73. Pulse el botón Multi (Múltiple) en la parte superior de la ventana Rx (Prescripción).
74. Pulse el botón Multi de la parte superior de la ventana Rx (Medicación).
75. Toque el botón Multi (Varias) que se encuentra en la parte superior de la ventana Rx (Receta médica).
76. Teclee el botón Multi arriba de todo de la pantalla Rx.
77. Pulse el botón Multi (Varios), en la parte superior de la ventana Rx (Receta).
78. Pulse el botón Múltiple en la parte superior de la ventana Rx.
79. Pulse el botón Multi (Varias) situado en la parte superior de la ventana Rx.
80. Toque el botón Multi ubicado en la parte superior de la ventana Rx.
81. Clique en la opción Multi situada en la parte superior de la ventana de la receta.
82. Pulse el botón Multi que aparece en la parte superior de la venta Rx.

83. Pulse en el botón "Multi" en la parte superior de la ventana de la receta.
84. Pulse el botón Multi situado en la parte superior de la ventana Rec.
85. Pulse el botón Multi que se halla en la parte superior de la ventana Rx.
86. Toca el botón ≪Multi≫ (múltiple) en la parte superior de la ventana ≪Rx≫.
87. Para ello, pulse el botón "Multi" en la parte superior de la ventana "Rx" o bien seleccione varias casillas a la izquierda de los nombres de medicamentos almacenados en la pantalla "Favourites".
88. toque el botón Varias (Multi) de la parte superior de la ventana Rx, o bien, active varios cuadros de los que se muestran a la izquierda del nombre de los fármacos almacenados en la pantalla Favoritos (Favourites).
89. Para ello, seleccione el botón "Multi" en la parte superior de la ventana "Rx", o bien seleccione varios cuadros múltiples, situados en el lado izquierdo de los nombres de los fármacos guardados en la pantalla de favoritos.
90. Para ello, pulse el botón "Multi" en la parte superior de la ventana "Rx" o bien seleccione varias casillas a la izquierda de los nombres de medicamentos almacenados en la pantalla "Favourites".

D.0.3.6 Text 2 – Focus point 3

Source segment (*English*)

- For more information on your device and on the License Agreement, send us an e-mail. No cost. No obligation. No hassle.

Target segment (*Spanish*)

1. Si desea obtener más información sobre el dispositivo y sobre el contrato de licencia, puede solicitárnosla por correo electrónico sin ningún compromiso ni coste adicional.
2. Para obtener más información sobre el dispositivo y el Acuerdo de licencia, envíenos un mensaje de correo electrónico gratis, sin compromiso y de forma sencilla.
3. Para obtener más información sobre el dispositivo y sobre el acuerdo de licencia, póngase en contacto con nosotros mediante correo electrónico de forma totalmente gratuita.
4. Si desea obtener más información sobre el dispositivo y el acuerdo de licencia, envíenos un correo electrónico sin compromiso.
5. Si desea obtener más información sobre su aparato y sobre el ≪Contrato de licencia≫, envíe un correo electrónico a nuestra dirección sin coste alguno, sin obligación alguna y sin ningún problema.
6. Para obtener más información sobre el dispositivo y el contrato de licencia, envíenos un correo electrónico; no implica ningún coste, obligación ni problema para usted.
7. Sin preocupaciones.
8. Sin problemas.
9. Sin molestias.
10. Sin problemas.
11. Sin problemas.
12. Sin problemas.
13. Sin compromisos.
14. Sin problemas.
15. Sin problemas.
16. Sin problemas.
17. ninguna molestia.
18. Sin esfuerzos.
19. Sin problemas.
20. Sin ningún problema.
21. y no le causará molestia alguna.
22. Sin molestias.
23. Sin complicaciones.
24. Sin embrollos.
25. y sin inconvenientes.
26. Sin agobios.
27. Sin problemas.
28. Sin Problemas.
29. sin problemas.
30. Sin problemas.
31. Sin problemas.

32. ni molestia.
33. ni problemas.
34. No es ninguna molestia.
35. Sin problema.
36. Sin problemas.
37. Sin dificultades.
38. Sin problemas.
39. Sin problemas.
40. sin complicaciones.
41. Sin problemas.
42. Sin complicaciones.
43. Sin dificultades.
44. Sin molestias.
45. Sin complicaciones.
46. Sin preocupaciones.
47. Sin problemas.
48. Sin problemas.
49. missing translation
50. Sin complicaciones.
51. Sin problemas
52. Sin problemas.
53. Sin complicaciones.
54. Sin molestias.
55. ni problema alguno.
56. Sin ningún coste ni compromiso.
57. Sin problemas.
58. Sin problemas.
59. Sin problemas
60. Sin prisas.
61. Sin problemas.
62. Sin problemas.
63. Sin complicaciones.
64. Sin complicaciones.
65. Sin molestias.
66. Sin problemas.
67. Sin complicaciones.
68. Sin complicaciones.
69. No nos supone ningún problema.
70. Sin dificultad.
71. ni dificultades.
72. Sin molestias.
73. Sin complicaciones.
74. Sin molestias.
75. No nos supone ninguna molestia.
76. No hay ningún coste adicional, no es obligatorio y no es ninguna molestia.
77. Es la forma más fácil, económica y que menos obligaciones le puede acarrear.
78. sin costes, obligaciones ni problemas.
79. Sin gastos, obligaciones ni molestias.
80. Gratuito Sin obligaciones Sin problemas
81. Totalmente gratis, sin compromiso y sin problemas: así de sencillo.
82. Sin costes, obligaciones ni preocupaciones.
83. Sin gastos, obligaciones ni problemas.
84. no tienen nada que perder ni asume ninguna obligación.
85. Es gratuito y sencillo.
86. No hay ningún coste adicional, no es obligatorio y no es ninguna molestia.
87. Sin coste alguno, sin compromiso y sin complicaciones.
88. Realice sus consultas de forma gratuita y sin compromiso.
89. sin ningún coste, sin ninguna obligación y sin problemas.
90. No es obligatorio, y no es complicado.

D.0.3.7 Text 3 – Focus point 1

Source segment (*English*)

- Stock Terminal will save you expensive training courses and tedious data-entering hours.

Target segment (*Spanish*)

1. Stock Terminal le ahorrará caros cursos de formación, así como interminables horas de introducción de datos.
2. Stock Terminal le supondrá un ahorro de dinero y tiempo: no necesitará invertir en cursos de formación caros ni tendrá que pasar horas de aburrimiento introduciendo datos.
3. Stock Terminal le evitará costos cursos de formación y tediosas horas de introducción de datos.
4. Stock Terminal le ahorrará horas tediosas de introducción de datos y caros cursos de formación.
5. Stock terminal le ahorrará costosos cursos de aprendizaje y tediosas horas de entrada de datos.
6. Stock Terminal te ahorrará costosos cursos de formación y pesadas horas de introducción de datos.
7. Ya no será necesario asistir a costosos cursos de formación ni pasar largas horas introduciendo datos, con lo que ahorrará tiempo y dinero.
8. Stock Terminal le evitará tener que realizar costosos cursos de formación y aburridas horas de introducción de datos.
9. Stock Terminal le permitirá ahorrarse cursos de aprendizaje poco económicos y horas muertas de introducción de datos.
10. El dispositivo le permitirá ahorrar en costosos cursos de formación y largas horas de introducción de datos.
11. Gracias a Stock Terminal no tendrá que pasar largas horas introduciendo datos ni asistir a costosos cursos de formación.
12. Stock Terminal le permitirá ahorrarse costes en cursos de formación y horas de trabajo incómodo introduciendo datos.
13. Stock Terminal permite guardar los cursos de formación de alto coste y los datos introducidos durante largas horas.
14. Stock Terminal le permitirá ahorrarse costosos cursos de formación y una gran cantidad de tiempo en la introducción de datos.
15. Gracias a Stock Terminal evitará tener que realizar cursos de formación costosos y emplear largas horas en introducir datos.
16. Stock Terminal le ahorrará los caros cursos de formación y las pesadas horas de introducción de datos.
17. se ahorrará cursos de formación caros y largas horas para registrar datos.
18. Stock Terminal le ahorrará los costosos cursos de formación y las tediosas horas de introducción de datos.
19. Gracias a este dispositivo ya no tendrá que asistir a costosos cursos de formación ni pasar horas en la ardua tarea de introducción de datos.
20. Stock Terminal te ahorrará dinero en caros cursos de formación y tiempo en aburridas horas de almacenaje de información.
21. Para utilizar Stock Terminal no es necesario que realice costosos cursos de formación ni que pase interminables horas introduciendo datos.
22. Gracias a Stock Terminal, se ahorrará caros cursos formativos y largas horas introduciendo datos.
23. Stock Terminal le ahorrará costosos cursos de formación y tediosas horas de introducción de datos.
24. Este dispositivo le evitará asistir a costosos cursos de formación, además de las largas horas de inventario.
25. Stock Terminal le ahorrará muchos cursos de formación costosos y tediosas horas de introducción de datos.
26. Stock Terminal le evitará tener que asistir a costosos cursos de formación y pasarse tediosas horas introduciendo datos.
27. Gracias a Stock Terminal ahorrará en costosos cursos de formación y largas horas dedicadas a la introducción de datos.
28. Stock Terminal le evitará perder tiempo en esos caros cursos de formación y le permitirá invertir en otra cosa las horas y horas dedicadas a la tediosa tarea la introducción de datos.
29. Stock Terminal le ahorrará costosos cursos de formación y tediosas horas de introducción de datos.
30. Gracias a Stock Terminal, se ahorrará cursos de formación muy caros y largas horas destinadas a la inserción de datos.
31. Además, se ahorrará los cursos de formación, tan poco asequibles, y las interminables horas de introducción de datos.

32. Stock Terminal le ayudará a ahorrarse el dinero que cuestan los caros cursos de formación, y le evitará pasar horas y horas introduciendo datos.
33. Stock Terminal le ahorrará costosos cursos de formación y horas tediosas de introducción de datos.
34. Stock Terminal le ahorrará no sólo los costosos cursos de formación sino también tediosas horas de grabación de datos.
35. Gracias a este programa, no tendrá que realizar costosos cursos de formación y se evitará la tediosa tarea de introducir datos durante horas.
36. Con Stock Terminal, se ahorrará los costosos cursos de formación y la tediosa tarea de tener que introducir datos en el ordenador.
37. Stock Terminal le ahorrará dinero en cursos de formación y tiempo, pues no tendrá que ir introduciendo datos.
38. Stock Terminal le ahorrará caros cursos de formación y el tedioso trabajo de introducir datos durante horas.
39. Stock Terminal le evitará caros cursos de aprendizaje y horas tediosas introduciendo datos.
40. Stock Terminal le permitirá ahorrarse los costosos cursos de formación y las tediosas horas empleadas en introducir datos.
41. Esta solución le permitirá ahorrar en cursos de formación caros y podrá olvidarse de horas de trabajo intentando introducir datos al ordenador.
42. Con Stock Terminal se ahorrará los caros cursos de formación y horas y horas de aburrimiento a la hora de guardar sus datos.
43. Con Stock Terminal se podrá olvidar de los costosos cursos de formación y las tediosas horas de introducción de datos.
44. Con el Stock Terminal podrá ahorrarse caros cursos de formación y aburridas horas de entrada de datos.
45. Stock Terminal le ahorrará los costosos cursos de formación y las largas horas de introducción de datos.
46. Stock Terminal le ahorrará tener que acudir a largos cursos de formación y pasar tediosas horas introduciendo datos.
47. Stock Terminal le ahorrará tener que realizar costosos cursos de formación y dedicar interminables horas a entrar datos.
48. Además, con Stock Terminal ahorrará tiempo y dinero porque no tendrá que invertir en cursos de formación caros y no tendrá que pasar horas introduciendo datos.
49. Stock Terminal le ahorrará caros cursos de formación y largas y aburridas horas introduciendo datos.
50. Stock Terminal le ahorrará costosos cursos de formación, y evitará que tenga que dedicar horas y horas a la tediosa tarea de introducir datos.
51. Stock Terminal le ahorrará cursos de formación costosos y largas horas tediosas de introducción de datos.
52. Este dispositivo le ayudará a ahorrarse caros cursos de formación y a evitar prolongadas horas de introducción de datos.
53. Stock Terminal le ahorrará costosos cursos de formación y largas horas de introducción de datos.
54. Stock Terminal le ahorrará cursos de formación costosos y horas tediosas de introducción de datos.
55. ahorrándole costosos cursos de formación y tediosas horas de introducción de datos.
56. Con el Stock Terminal se ahorrará los cursos de capacitación costos y las pesadas tareas de introducción de datos.
57. Ya no necesitará invertir en costosos cursos de formación ni emplear horas y horas en la fatigosa tarea de introducir datos.
58. Gracias a este dispositivo, podrá prescindir de cursos de formación costosos y minimizar el tiempo empleado en la administración de datos.
59. Stock Terminal le ahorrará caros cursos de formación y largas horas dedicadas a la introducción de datos.
60. Stock Terminal le evitará tener que realizar costosos cursos de formación y una gran cantidad de horas introduciendo datos.
61. Con Stock Terminal se ahorrará costosos cursos de formación y largas horas de introducción de datos.
62. Asimismo, se ahorrará tanto la asistencia a cursos de formación como las tediosas horas de introducción de datos.
63. Gracias a Stock Terminal, ya no serán necesarios cursos de formación caros ni se pasará largas horas introduciendo datos.
64. Stock Terminal le ahorrará los caros cursos de formación y las largas horas introduciendo datos.
65. Stock Terminal ahorra caros cursos de formación y horas tediosas de introducción de datos.
66. No tendrá que invertir en cursos de formación ni dedicar horas a la fastidiosa introducción de

datos.
67. Esta herramienta le ahorrará los elevados gastos asociados a los cursos de formación, al tiempo que le evitará tener que dedicar numerosas horas a la tediosa tarea de introducir datos.
68. Stock Terminal le ahorrará costosos cursos de formación y tediosas horas dedicadas a la introducción de los datos.
69. Stock Terminal le ahorrará en cursillos de formación y en horas de tediosa introducción de datos.
70. Gracias a este innovador dispositivo ya no necesitará recurrir a cursos de alto coste y ahorrará gran cantidad de tiempo en la introducción de datos.
71. Con Stock Terminal se ahorrará los caros cursos de formación y las monótomas horas de introducción de datos.
72. Stock Terminal le supondrá un gran ahorro en cursos de formación y en tiempos de introducción de datos.
73. Stock Terminal le ahorrará cursos de formación costosos y largas horas de introducción de datos.
74. Stock Terminal le ayudará a ahorrar en cursos de formación costosos y largas horas de introducción de datos.
75. Stock Terminal le ahorrará costosos cursos de formación y tediosas horas dedicadas a introducir datos.
76. Gracias a esta herramienta se ahorrará los costosos cursos de formación y el tedio de horas de introducción de datos.
77. Stock Terminal le ahorrará caros cursos de formación y tedioso tiempo de introducción de datos.
78. Stock Terminal le evitará tener que realizar costosos cursos de formación y tener que emplear muchas horas introduciendo datos.
79. Stock Terminal le ahorrará tener que pagar caros cursos de formación y horas de tedioso trabajo introduciendo datos.
80. Con Stock Terminal, podrá olvidarse de los caros cursos de formación y las largas horas invertidas en la introducción de datos.
81. Stock Terminal le evitará costosos cursos de formación y penosas horas introduciendo datos.
82. Con Stock Terminal no será necesario que asista a cursos de formación de elevado coste ni que dedique horas a la tediosa tarea de introducir datos.
83. Con Stock Terminal, ahorrará en costosos cursos de formación y no tendrá que pasar horas y horas introduciendo datos.
84. Con Stock Terminal se ahorrará caros cursos de formación y aburridas horas de introducción de datos.
85. Stock Terminal le permitirá ahorrarse costosos cursos de formación y tediosas horas dedicadas a la introducción de datos.
86. Stock Terminal le ahorarrá tener que realizar cursos de formación que cuestan una fortuna y le evitirá dedicar horas enteras a la introducción de datos.
87. Con este dispositivo no tendrá que abonar costosos cursos de formación ni pasará horas interminables introduciendo datos.
88. Stock Terminal evitará que tenga que realizar caros cursos de formación y que tenga que pasar largas horas introduciendo datos.
89. Además, te ahorrarás caros cursos de formación y horas de aburrida introducción de datos.
90. Con Stock Terminal no tendrá que asistir a costosos cursos de formación ni dedicar horas y horas a introducir datos y su negocio ganará en rapidez y eficacia.

D.0.3.8 Text 3 – Focus point 2

Source segment (*English*)

- Businessmen all have different opinions about productivity.

Target segment (*Spanish*)

1. Todos los empresarios tienen distintas teorías sobre la productividad.
2. Cada empresario tiene su propia opinión acerca de la productividad.
3. Cada empresario tiene una opinión distinta sobre la productividad.
4. Los hombres de negocios tienen distintas opiniones sobre la productividad.
5. Todos los empresarios tienen opciones acerca de su productividad.
6. Cada uno tiene una opinión diferente sobre la productividad.
7. Las personas dedicadas al mundo de la empresa tienen opiniones distintas sobre la productividad,
8. Todos los hombres de negocios tienen una opinión diferente sobre la productividad.

9. Los empresarios tienen distintas opiniones acerca de la productividad.
10. Cada empresario tiene su propia opinión acerca de la productividad.
11. Los hombres de negocios tienen diferentes puntos de vista en lo que concierne a la productividad.
12. Cada profesional tiene una opinión diferente sobre la productividad.
13. Los hombres de negocios tienen distintas opiniones sobre la productividad.
14. Cada empresario tiene su propio concepto de la productividad.
15. Cada empresario tiene una opinión diferente sobre la productividad.
16. Cada empresario tiene una opinión diferente sobre la productividad,
17. Los hombres de negocios tienen diferentes opiniones sobre la productividad,
18. Todos los empresarios tienen una opinión distinta sobre la productividad.
19. Cada empresario tiene su propio concepto de productividad.
20. Todos los ejecutivos tienen diferentes opiniones respecto a la productividad.
21. Aunque cada empresario tiene una concepción diferente de lo que significa la productividad,
22. Los empresarios pueden tener distintas opiniones sobre la productividad.
23. Cada empresario tiene una opinión diferente acerca de la productividad.
24. Aunque la mayoría de los empresarios tienen diferentes opiniones sobre la productividad en general,
25. Todos los empresarios tienen una concepción diferente sobre la productividad.
26. Todos los hombres de negocios tienen opiniones diferentes en lo referente a la productividad.
27. Cada empresario tiene su propia opinión acerca de la productividad.
28. Todos los empresarios tienen varias opciones de productividad.
29. Los hombres de negocios entienden la productividad de diferentes maneras.
30. Todos los empresarios tienen opiniones distintas acerca de la productividad.
31. Cada empresario tiene diferentes opiniones sobre la productividad.
32. Los hombres de negocios tienes opiniones distintas sobre el concepto de productividad.
33. En materia de productividad, los empresarios no logran ponerse de acuerdo.
34. Los hombres de negocios tienen opiniones muy variadas sobre la productividad.
35. Todos los hombres de negocios tienen su propia opinión sobre la productividad.
36. Los empresarios tienen diferentes opiniones sobre productividad.
37. Todos los empresarios tienen opiniones distintas sobre la productividad.
38. Cada empresario tiene su punto de vista con respecto a la productividad.
39. Cada empresario tiene una opinión diferente sobre la productividad.
40. Todos los empresarios tienen sus propias opiniones acerca de la productividad.
41. Cada empresario tiene su propia opinión acerca de la productividad.
42. Los empresarios tienen diferentes opiniones sobre la productividad.
43. Cada empresario tiene una opinión distinta sobre la productividad.
44. Todos los empresarios tienen opiniones distintas en lo relativo a la productividad.
45. Todos los empresarios tienen nociones distintas sobre el concepto de productividad.
46. Todos los empresarios tienen su propia opinión cuando se trata de hablar de productividad.
47. Todos los empresarios tienen diferentes opiniones acerca de la productividad, aunque
48. Cada empresario tiene su opinión particular sobre la productividad.
49. Los hombres de negocios tienen distintas opiniones acerca de la productividad.
50. Cada hombre de negocio tiene su propia opinión sobre la productividad.
51. Todos los hombres de negocios tienen diferentes opiniones acerca de la productividad.
52. Cada hombre y mujer de negocios entiende la productividad de manera distinta.
53. Las personas de negocios tienen diferentes opiniones acerca de la productividad.
54. Cada profesional del mundo de los negocios tiene su propia idea de lo que es la productividad.
55. Los expertos en negocios tienen diferentes opiniones sobre la productividad.
56. Cada ejecutivo tiene su propia concepción de lo que es la productividad.
57. Todos los hombres de negocios tienen opiniones distintas sobre la productividad.
58. Todos los empresarios tienen opiniones diferentes acerca de la productividad.
59. Cada empresario tiene su propia opinión sobre la productividad.
60. Cada empresario tiene una opinión diferente sobre la productividad.
61. Los hombres de negocios discrepan acerca de la productividad.
62. Cada empresario tiene una opinión diferente acerca de la productividad.
63. Los empresarios tienen diferentes opciones para mejorar la productividad.
64. Cada ejecutivo tiene una opinión distinta en lo que respecta a la productividad.
65. Los empresarios tienen opiniones dispares acerca de la productividad.
66. En el ámbito de los negocios, no todo el mundo opina lo mismo en lo que refiere a la productividad.
67. Los empresarios suelen tener opiniones muy distintas sobre el modo de mejorar la productividad.
68. Cada empresario tiene su propio concepto de productividad.
69. Los hombres de negocios tienen diferentes opiniones sobre la productividad.
70. Cada empresario tiene una visión sobre la productividad distinta.

71. Los hombres y mujeres de negocios discrepan siempre en cuanto a la productividad.
72. Cada empresario tiene su propia visión acerca de la productividad.
73. Todos los hombres de negocios tienen opiniones distintas sobre la productividad.
74. Los empresarios tienen diferentes opiniones acerca de la productividad.
75. Todos los empresarios tienen diferentes puntos de vista sobre la productividad.
76. Los empresarios suelen tener opiniones diferentes acerca de la productividad.
77. Los empresarios tienen, cada uno de ellos, opiniones diferentes sobre lo que es la productividad.
78. Cada empresario tiene una idea diferente de lo que es la productividad.
79. Cada empresario tiene una opinión diferente acerca de la productividad.
80. Todos los empresarios tienen opniones diferentes acerca de la productividad.
81. Los hombres de negocios tienen opiniones diversas acerca de la productividad.
82. Los empresarios suelen tener distintas concepciones sobre la productividad, pero todos coincidirían en que Stock Terminal dispone de algunas funciones realmente interesantes que lo distinguen de otros equipos de la competencia.
83. Los empresarios tienen distintas opiniones sobre la productividad, aunque todos coinciden en que Stock Terminal tiene funciones atractivas con las que otros dispositivos portátiles no cuentan.
84. Aunque los empresarios tienen opiniones distintas sobre el concepto de productividad, todos estarán de acuerdo en que Stock Terminal cuenta con una serie de funciones atractivas que lo distinguen de cualquier otro dispositivo portátil.
85. Cada empresario tiene un punto de vista distinto sobre la productividad, pero todos estarían de acuerdo en que Stock Terminal dispone de funciones interesantes y prácticas que le hacen diferenciarse de otros dispositivos portátiles.
86. Todos los empresarios tienen distintas opiniones sobre la productividad, pero todos coinciden en que Stock Terminal tiene atractivas características que le hacen distinto a otros dispositivos manuales.
87. Cada empresario tiene una opinión diferente sobre la productividad, pero todos estarían de acuerdo en que Stock Terminal ofrece una serie de características que no se encuentran en otros dispositivos de mano.
88. Cada empresario tiene una idea diferente de la productividad, pero todos estarían de acuerdo en que Stock Terminal cuenta con llamativas funciones inexistentes en otros dispositivos de bolsillo.
89. Cada hombre de negocios tiene una opinión distinta acerca de la productividad, pero todos ellos estarían de acuerdo en que Stock Terminal ofrece funciones muy atractivas no disponibles en otros dispositivos portátiles.
90. Todos los hombres de negocio tienen distintas opiniones sobre la productividad, pero todos ellos estarían de acuerdo en que Stock Terminal dispone de interesantes funciones que no presentan otros dispositivos de mano.

D.0.3.9 Text 3 – Focus point 3

Source segment (*English*)

- If your device is lost or stolen, please refer to our contact below; she will deal with the deactivation of the serial number **(we will not take charge of lost devices without a signed license agreement)**.

Target segment (*Spanish*)

1. Si pierde su dispositivo o se lo roban, póngase en contacto con nosotros a través de la responsable cuyo nombre se indica a continuación; ella se encargará de desactivar el número de serie (no nos hacemos responsables de dispositivos perdidos que no dispongan de un acuerdo de licencia firmado).
2. En caso de pérdida o sustracción del dispositivo, póngase en contacto con la persona que se indica a continuación para que se ocupe de desactivar el número de serie (sólo se atenderán las solicitudes relativas a dispositivos perdidos en los casos en los que exista un contrato de licencia firmado).
3. Si pierde o le roban el dispositivo, póngase en contacto con la persona indicada más abajo; ella se encargará de la desactivación del número de serie (no nos responsabilizamos de dispositivos perdidos sin un contrato de licencia firmado).
4. Si pierde o le roban el dispositivo, póngase en contacto con la persona que le indicamos abajo, que se encargará de la desactivación del número de serie (no nos ocuparemos de los dispositivos que se pierdan sin un contrato de licencia firmado).

5. Si pierde o le roban su dispositivo, por favor remítase a la dirección de abajo; ella se ocupará de la desactivación del número de serie (no nos hacemos responsables de los dispositivos perdidos sin un contrato de licencia firmado).
6. Si se pierde o se lo roban, póngase en contacto con la persona que indicamos a continuación para que desactive el número de serie. (No nos responsabilizamos de los aparatos perdidos que no posean un acuerdo de licencia firmado.)
7. En caso de pérdida o sustracción del dispositivo, póngase en contacto con la persona que se indica más abajo. Ella se encargará de desactivar el número de serie. (La empresa declina toda responsabilidad respecto a los dispositivos perdidos en el caso de que no se haya firmado un contrato de licencia.)
8. Si pierde su dispositivo o se lo roban , póngase en contacto con la persona indicada más abajo, quien gestionará la desactivación del número de serie (no efectuaremos ningún cargo por dispositivos perdidos sin haber firmado un acuerdo de licencia).
9. Si se le pierde o le roban el dispositivo, póngase en contacto con nosotros en la dirección de contacto que aparece posteriormente. No nos haremos cargo de los dispositivos que se pierdan que no cuenten con un acuerdo de licencia firmado.
10. En caso de pérdida o robo del dispositivo, diríjase al contacto que se indica a continuación. Dicho contacto se encargará de la desactivación del número de serie. Tenga en cuenta que no nos haremos responsables de la pérdida de los dispositivos que no estén en posesión de un contrato de licencia debidamente firmado.
11. En caso de pérdida o robo del dispositivo, póngase en contacto con la persona de contacto especificada más adelante, quien se encargará de desactivar el número de serie. Recuerde que no nos haremos cargo de los dispositivos perdidos que no dispongan de un acuerdo de licencia debidamente firmado.
12. En caso de pérdida o robo del dispositivo, puede informar a nuestro representante, cuyos datos de contacto figuran más abajo; éste procederá a desactivar el número de serie (la empresa no se hace cargo de los dispositivos extraviados que no cuenten con un contrato de licencia debidamente firmado).
13. Si pierde o le roban el dispositivo, póngase en contacto con la persona que se indica a continuación; ella se encargará de desactivar el número de serie (no nos haremos cargo de los dispositivos perdidos a menos que exista un acuerdo de licencia firmado).
14. En caso de pérdida o robo del dispositivo, póngase en contacto con la persona que se indica más abajo; ella se encargará de desactivar el número de serie (no nos haremos cargo de los dispositivos perdidos que no dispongan de un contrato de licencia firmado).
15. Si su dispositivo se extravía o se lo roban, diríjase a la persona indicada más abajo. Esta persona desactivará el número de serie (no nos responsabilizaremos de los dispositivos extraviados si no disponemos de un permiso de licencia firmado).
16. Si le roban o pierde el dispositivo, póngase en contacto con la persona que se indica a continuación, que se encargará de desactivar el número de serie (no nos hacemos cargo de los dispositivos perdidos si no se ha firmado antes un acuerdo de licencia).
17. Si pierde o le roban el dispositivo, póngase en contacto con la persona responsable que aparece más abajo. Esta persona se encargará de desactivar el número de serie (no se aceptará la pérdida de dispositivos sin la firma previa del acuerdo de licencia).
18. Si pierde o le roban el dispositivo, póngase en contacto con nuestra persona de referencia. Ésta procederá a desactivar el número de serie (no nos encargaremos de los dispositivos perdidos si no se ha firmado el acuerdo de licencia).
19. Si el dispositivo se pierde o se lo roban, diríjase a nuestra persona de contacto; ella se encargará de desactivar el número de serie -siempre que exista un acuerdo de licencia firmado para el dispositivo robado.
20. Si pierde su dispositivo o se lo roban, acuda al contrato que le ofrecemos a continuación; se encargará de la desactivación del número de serie (no nos haremos cargo de los dispositivos sin su contrato de licencia debidamente firmado).
21. Si pierde o le roban el dispositivo, consulte con la persona de contacto que aparece a continuación, que se encargará de desactivar el número de serie (excepto cuando se trata de dispositivos perdidos que no cuentan con un contrato de licencia firmado).
22. Si ha perdido el dispositivo o se lo han robado, diríjase a la persona de contacto que le indicamos a continuación y que se encargará de la desactivación del número de serie (no nos hacemos cargo de dispositivos perdidos sin el correspondiente acuerdo de licencia firmado).
23. Si el dispositivo se pierde o lo roban, consulte con nuestra persona de contacto que encontrará más abajo; ella se encargará de la desactivación del número de serie (no nos encargaremos de ningún dispositivo perdido sin un acuerdo de licencia firmado).

24. En caso de pérdida o robo del dispositivo, póngase en contacto con la persona que se indica a continuación para que se proceda a la desactivación del número de serie del equipo (esta operación no se efectuará para dispositivos perdidos no sujetos a acuerdos de licencia).
25. Si le robaran o perdiera el dispositivo, rogamos se ponga en contacto con la persona abajo indicada; ésta se encargará de desactivar su número de serie (no nos encargaremos de aquellos equipos perdidos que no cuenten con contrato de concesión de licencia firmado).
26. En caso de pérdida o sustracción del dispositivo, póngase en contacto con la persona que se indica a continuación; esta se encargará de desactivar el número de serie (en caso de no haber recibido un acuerdo de licencia firmado, no nos haremos cargo de los dispositivos perdidos).
27. En caso de pérdida o robo del dispositivo, póngase con contacto con la persona abajo indicada; ésta tramitará la desactivación del número de serie (no nos hacemos cargo de dispositivos perdidos sin el correspondiente acuerdo de licencia firmado).
28. En caso de pérdida o robo, póngase en contacto con la persona que se indica más abajo, que se ocupará de desactivar el número de serie (no nos hacemos cargo de los dispositivos extraviados si no se ha suscrito previamente un contrato de licencia).
29. En caso de pérdida o robo, diríjase al contacto proporcionado a continuación, y esta persona desactivará el número de serie. La empresa no se hará cargo de dispositivos perdidos de los cuales el propietario no disponga de un acuerdo de licencia firmado.
30. Si pierde o le roban su dispositivo, consulte nuestra forma de contacto detallada más abajo; le ayudaremos con la desactivación del número de serie (el servicio de pérdida de dispositivos no le será cargado sin un contrato de licencia de uso firmado).
31. Si pierde el dispositivo o se lo roban, póngase en contacto con la persona indicada más abajo; ella se encargará de la desactivación del número de serie (no nos ocuparemos de los dispositivos perdidos que no dispongan de un contrato de licencia firmado).
32. Si pierde el dispositivo o se lo roban, diríjase a la persona de contacto mencionada a continuación, que se encargará de desactivar el número de serie. (No nos hacemos cargo de los dispositivos perdidos cuyo acuerdo de licencia no se haya firmado debidamente.)
33. Si pierde o le roban el dispositivo, póngase en contacto con la persona que le indicamos más abajo; él se encargará de la desactivación del número de serie (no nos haremos responsables de ningún dispositivo perdido sin un contrato de licencia firmado).
34. Si su dispositivo se pierde o lo roban, comuníquese con el contacto que indicamos más abajo. Ella se encargará de la desactivación del número de serie. (No nos responsabilizaremos de dispositivos perdidos en ausencia de un contrato de licencia firmado.)
35. Si su dispositivo se pierde o se lo roban, por favor informe a nuestro contacto, cuyo nombre se indica más abajo: ella le tramitará la desactivación de su número de serie (no nos haremos cargo de los dispositivos perdidos sin un contrato de licencia de uso).
36. Si pierde o le roban el dispositivo, póngase en contacto con la persona que se indica a continuación; quien se encargara de la desactivación del número de serie (no nos hacemos responsables de los dispositivos que se hayan perdido y no tengan un contrato de licencia firmado).
37. Si se pierde o le roban el dispositivo, pongase en contacto con el representante que figura abajo y le ayudará a desactivar el número de serie (no nos ocuparemos de la tramitación de aquellos dispositivos perdidos que no tengan un acuerdo de licencia firmado).
38. En el caso de que pierda o le roben el dispositivo, póngase en contacto con la persona que indicamos más adelante. Ella se encargará de desactivar el número de serie (no nos haremos cargo de los dispositivos perdidos sin un contrato de licencia firmado).
39. En caso de pérdida o robo, diríjase a la persona de contacto que figura a continuación. Ella gestionará la desactivación del número de serie (no nos encargaremos de los dispositivos extraviados que carezcan de un contrato de licencia firmado).
40. Si pierde o le sustraen el dispositivo, por favor indíquelo a nuestro contacto indicado más abajo; se encargará de la desactivación del número de serie (no nos haremos cargo de los dispositivos perdidos sin un acuerdo de licencia firmado).
41. Si pierde o le roban el dispositivo, póngase en contacto con nosotros (encontrará los datos de contacto más adelante) y nos encargaremos de desactivar el número de serie. Recuerde que no nos haremos responsables de dispositivos perdidos o robados que no dispongan de un contrato de licencia firmado.
42. Si lo pierde o se lo roban, póngase en contacto con la persona que le indicamos a continuación, quien se encargará de desactivar el número de serie. Tenga en cuenta que solo podremos ayudarle en caso de que haya firmado el acuerdo de licencia.
43. Si su dispositivo ha sido robado o lo ha perdido, comuníquese con el contacto que se indica más adelante, ella se encargará de desactivar el número de serie (no nos haremos cargo de los dispositivos perdidos que no dispongan de un contrato de licencia firmado).
44. Si extravía o le sustraen el dispositivo, puede recurrir a la persona de contacto que se indica más

abajo. Ella procederá a la desactivación del número de serie (deberá contar con un acuerdo de licencia).

45. Si perdiera o le robaran su aparato, consulte a nuestra persona de contacto indicada más abajo: su número de serie será desactivado (no somos responsables de dispositivos perdidos sin un acuerdo de licencia firmado).
46. Si su dispositivo es objeto de robo o pérdida, nuestra persona de contacto (ver más abajo) se encargará de desactivar el número de serie de su dispositivo (no nos hacemos cargo de dispositivos extraviados que no estén vinculados a un acuerdo de licencia válido).
47. Si pierde el dispositivo o se lo roban, informe de ello al contacto que verá más adelante, quien se ocupará de la desactivación del número de serie (no nos hacemos responsables de los dispositivos perdidos sin un acuerdo de licencia firmado).
48. En caso pérdida o robo del dispositivo, puede dirigirse a la persona de contacto que se indica más abajo, que procederá a desactivar el número de serie (no nos responsabilizaremos de dispositivos para los que no se haya firmado un contrato de licencia).
49. En caso de pérdida o robo de su aparato, póngase en contacto con Alex Smith; le ayudará a desactivar el número de serie (no nos hacemos responsables de los dispositivos perdidos si no hay un acuerdo de licencia firmado).
50. En caso de pérdida o robo, por favor, diríjase a nuestro contacto que figura abajo; ella se ocupará de la desactivación del número de serie. (No nos hacemos responsables de dispositivos extraviados cuando no se ha firmado un acuerdo de licencia.)
51. En el caso de que pierda el dispositivo o de que éste sea robado, consulte a la persona de contacto que figura bajo estas líneas; ella se encargará de la desactivación del número de serie (no nos haremos cargo de los dispositivos perdidos que no cuenten con un contrato firmado de cesión de licencia).
52. Si pierde el dispositivo o se lo roban, remítase a la persona de contacto que se indica más adelante y se encargará de la desactivación del número de serie (no nos haremos cargo de los dispositivos perdidos que no dispongan de un acuerdo de licencia firmado).
53. Si pierde el dispositivo o se lo roban, póngase en contacto con la persona que le indicamos más abajo. Ella se encargará de la desactivación del número de serie (no nos responsabilizaremos de aquellos dispositivos perdidos sin un contrato de licencia firmado).
54. Si pierde o le roban el dispositivo, póngase en contacto con la persona indicada a continuación y ella desactivará el número de serie (no nos haremos cargo de los dispositivos perdidos si no existe un acuerdo de licencia firmado).
55. Si su dispositivo se pierde o es sustraído, diríjase a nuestro contacto (véase más abajo), ella se encargará de la desactivación del número de serie (no cargamos los dispositivos perdidos sin un contrato de licencia firmado).
56. Si pierde o le roban su dispositivo, póngase en contacto con nuestra persona de contacto, indicada más abajo, quien se encargará de llevar a cabo la desactivación del número de serie (no nos hacemos cargo de los dispositivos perdidos sin un acuerdo de licencia firmado).
57. Si pierde su dispositivo móvil o se lo roban, póngase en contacto con la persona indicada abajo; ésta se encargará de desactivar el número de serie (no nos haremos cargo de los dispositivos móviles perdidos sin una licencia firmada).
58. En caso de pérdida o robo, póngase en contacto con la persona indicada a continuación, quien se encargará de desactivar dicho número de serie. No obstante, no responderemos frente a la pérdida de ningún dispositivo sin que exista un acuerdo de licencia debidamente firmado.
59. Si pierde el dispositivo, o se lo roban, póngase en contacto con la persona que se indica más adelante para desactivar el número de serie (la empresa no se hace cargo de dispositivos perdidos si no dispone de un contrato de licencia firmado).
60. En caso de pérdida o robo, contáctenos y nos ocuparemos de desactivar el número de serie de su dispositivo (bajo presentación del contrato de licencia).
61. Si pierde o le roban su dispositivo, por favor contacte con la persona que le indicamos más abajo; dicha persona gestionará la desactivación del número de serie (no nos hacemos cargo de los dispositivos perdidos sin un contrato de licencia firmado).
62. Si pierde o le roban el dispositivo, consulte con nuestro contacto cuyos datos se indican a continuación. Ella se encargará de desactivar el número de serie (No nos responsabilizaremos de los dispositivos perdidos que no dispongan de contrato de licencia firmado).
63. Si pierde o le roban el terminal, diríjase al contacto que le proporcionamos a continuación, quien se encargará de desactivar el número de serie. Tenga en cuenta que no respondemos de los dispositivos perdidos que no tienen un acuerdo de licencia firmado.
64. Si su dispositivo se pierde o se lo roban, póngase en contacto con la persona que se indica a continuación; ella se encargará de desactivar el número de serie (no nos haremos responsables de los dispositivos perdidos sin un acuerdo de licencia firmado).

65. Si pierde o le roban su dispositivo, póngase en contacto con nuestra representante indicada más abajo; de este modo ella se encargará de desactivar el número de serie (no nos haremos responsables de los dispositivos extraviados si el acuerdo de licencia no está firmado).
66. Si su dispositivo se pierde o es robado, debe acudir a la persona de contacto citada más abajo, que se encargará de desactivar el número de serie (no nos hacemos cargo de dispositivos perdidos sin un acuerdo de licencia firmado).
67. Si su dispositivo se pierde o es robado, diríjase a nuestra persona de contacto. Sus datos están más abajo y ella le indicará como desactivar el número de serie (no nos haremos responsables de dispositivos extraviados de los que nos se haya firmado un contrato de licencia).
68. Si pierde el dispositivo, o si se lo roban, diríjase a la persona de contacto que le indicamos a continuación, quien procederá a la desactivación del número de serie correspondiente. Tenga en cuenta que no nos haremos cargo de los dispositivos perdidos que no dispongan de un contrato de licencia.
69. En caso de pérdida o robo del dispositivo, consulte con la persona de contacto indicada a continuación; ella se encargará de desactivar el número de serie del dispositivo (los dispositivos perdidos que no dispongan del correspondiente acuerdo de licencia firmado quedan excluidos de este tratamiento).
70. Si su dispositivo se pierde o es robado, por favor repórtenoslo al contacto abajo indicado que se encargará de desactivar el numero de serie (no nos hacemos cargo de los dispositivos perdidos que no tengan firmados los términos y condiciones legales).
71. En caso de pérdida o robo, deberá comunicarlo a la persona de contacto que se indica más adelante para proceder a la desactivación del número de serie (tenga en cuenta que no se atenderán solicitudes por pérdida o robo si no se dispone de un contrato de licencia firmado).
72. Su pierde o le roban el dispositivo, póngase en contacto con la persona indicada más abajo y ella se ocupará de desactivar el número de serie (no nos ocuparemos de ningún dispositivo extraviado sin un contrato de licencia firmado).
73. En caso de pérdida o robo de su Stock Terminal, póngase en contacto con la persona indicada abajo. Ella se encargará de desactivar el número de serie (no nos hacemos responsables de los dispositivos perdidos que no tengan un acuerdo de licencia firmado).
74. En caso de que pierda o le roben el dispositivo, comuníquelo a nuestro contacto que encontrará más abajo; ella se encargará de desactivar el número de serie (no nos ocuparemos de dispositivos perdidos en caso de no haber un contrato de licencia firmado).
75. Si pierde o le roban el dispositivo, póngase en contacto con la persona que le indicamos a continuación, quien le ayudará en la desactivación del número de serie (no gestionaremos la pérdida de dispositivos que no dispongan de un contrato de licencia firmado).
76. Si pierde el dispositivo o se lo roban, comuníqueselo a la persona de contacto que le indicamos más adelante; se encargará de desactivar el número de serie (no nos ocuparemos de los dispositivos perdidos para los que no se haya firmado un acuerdo de licencia).
77. Si pierde o le roban el dispositivo, contacte con la persona que indicamos más abajo y ella se encargará de desactivar el número de serie (no nos responsabilizaremos de dispositivos perdidos que no dispongan de un contrato de licencia firmado).
78. Si su dispositivo se pierde o se roba, contacte con nosotros en los datos que se muestran más abajo, nos encargaremos de desactivar el número de serie (no aceptamos responsabilidad por dispositivos perdidos sin un acuerdo de licencia firmado).
79. Si pierde o le roban el dispositivo, consulte nuestros datos de contacto que aparecen abajo y procederemos a la desactivación del número de serie (no nos haremos cargo de los dispositivos perdidos que no tengan el contrato de licencia firmado).
80. Si pierde o le roban su dispositivo, por favor diríjase a nuestra persona de contacto referenciada abajo; ella se encargará de la desactivación de su número de serie (no nos haremos cargo de aquellos dispositivos perdidos sin acuerdo de licencia previamente firmada).
81. Si pierde o le roban el dispositivo, póngase en contacto con la persona que se indica más abajo. Esta persona desactivará el número de serie (no nos hacemos responsables de los dispositivos perdidos para los que no se ha firmado un acuerdo de licencia).
82. En caso de pérdida o robo del dispositivo, diríjase al contacto que le proporcionamos más abajo. Ella procederá a la desactivación del número de serie (no nos haremos cargo de dispositivos extraviados cuyo acuerdo de licencia no se haya firmado).
83. Si pierde o le roban su dispositivo, póngase en contacto con la persona que se indica a continuación; ésta se ocupará de desactivar el número de serie (no podemos hacernos cargo de dispositivos que se hayan perdido y no cuenten con un acuerdo de licencia firmado).
84. Si pierde o le roban el dispositivo, póngase en contacto con la persona que se indica a continuación, que le ayudará a desactivar el número de serie (no nos haremos cargo de los dispositivos perdidos si no existe un acuerdo de licencia firmado).

85. Si pierde o le roban el dispositivo, le rogamos que lo notifique cuanto antes a la persona de contacto que le facilitamos más abajo; esta persona procederá a la desactivación del número de serie indicado (no nos haremos responsables de los dispositivos perdidos sin el documento de Términos y Condiciones Legales debidamente firmado).
86. Si el dispositivo se pierde o es sustraído, remítase a nuestra persona de contacto, quien se ocupará de la desactivación del número de serie (no nos hacemos cargo de dispositivos perdidos sin un acuerdo de licencia firmado).
87. Si le roban o pierde su dispositivo, puede dirigirse a nuestra persona de contacto, detallada debajo. Ella se encargará de desactivar el número de serie (este servicio sólo será válido para los dispositivos pérdidos que dispongan de un acuerdo de licencia firmado).
88. Si pierde su dispositivo o si se lo roban, consulte a la persona de contacto que le indicamos a continuación. Ella se encargará de desactivar el número de serie (no nos responsabilizamos de dispositivos perdidos que no cuenten con un acuerdo de licencia firmado).
89. Si pierde su dispositivo o se lo roban, diríjase a la persona de contacto que aparece abajo; ella se encargará de desactivar el número de serie (no nos haremos cargo de los dispositivos que se hayan perdido si no se ha firmado un contrato de licencia).
90. Si pierdes o te roban tu dispositivo, por favor dirígete a nuestro contacto (abajo); ella se encargará de la desactivación del número de serie (no nos hacemos cargo de los dispositivos perdidos sin un acuerdo de licencia válido).

D.0.4 Lexical specification

D.0.4.1 Text 1 – Focus point 1

Source segment (*English*)

- **Spyware** refers to software installed on your computer -often without your knowledge or consent- that is used to collect and distribute users' personal details.

Target segment (*Spanish*)

1. El spyware es un software que se instala en su equipo, a menudo sin su conocimiento ni consentimiento, y que se utiliza para obtener y distribuir detalles personales de los usuarios.
2. El término spyware hace referencia al software instalado en el equipo (a menudo sin que el usuario lo sepa o haya dado su permiso para ello) que se utiliza para recopilar y distribuir datos personales de los usuarios.
3. Con el término spyware nos referimos al software instalado en su ordenador, generalmente sin su conocimiento o consentimiento, diseñado para recopilar y distribuir datos personales de los usuarios.
4. Spyware se refiere al software instalado en el ordenador (a menudo sin su conocimiento o consentimiento) que se utiliza para recopilar y distribuir información personal de los usuarios.
5. Los programas espía son programas instalados en tu ordenador -a menudo sin que tú lo sepas o sin tu consentimiento- que recogen y distribuyen datos personales del usuario.
6. Los programas espía son programas que se instalan en un ordenador -a menudo sin que el usuario lo sepa ni lo autorice- y captan y distribuyen los datos personales del usuario.
7. El término "software espía" hace referencia al software instalado en su equipo (a menudo sin su conocimiento o autorización) que se utiliza para recoger y distribuir datos personales de los usuarios.
8. Spyware es un término que hace referencia al software que se instala en su ordenador (a menudo sin que usted lo sepa ni haya dado su consentimiento), y que se utiliza para recopilar y difundir los datos personales de los usuarios.
9. El término Spyware hace referencia al software que se encuentra instalado en su equipo (normalmente sin su conocimiento ni consentimiento) y que se utiliza para recoger y distribuir información personal del usuario.
10. El spyware hace referencia a software instalado en el equipo -con frecuencia sin el conocimiento o consentimiento del usuario -que se utiliza para recopilar y distribuir los detalles personales de los usuarios.
11. Se conoce como software espía cualquier programa informático instalado en su equipo (habitualmente sin su conocimiento ni consentimiento) que se utiliza para recopilar y distribuir detalles personales del usuario.

12. Los programas espía son programas instalados en su ordenador (normalmente sin conocimiento de ello o sin su consentimiento) que son empleados para recoger y distribuir información personal sobre los usuarios.
13. El término spyware denomina un tipo de software que se instala en el ordenador -a menudo sin que el usuario haya dado su consentimiento o lo sepa- y que se utiliza para recopilar y distribuir datos personales de los usuarios.
14. Los programas espía son programas de software que se instalan en su ordenador (muchas veces sin que usted lo sepa y sin su consentimiento) y se utilizan para recoger y distribuir información personal de los usuarios.
15. Los programas espía son programas que se instalan en el ordenador, a menudo sin su conocimiento ni consentimiento, cuya función consiste en recopilar y distribuir datos personales del usuario.
16. El spyware es un tipo de software que se instala en los ordenadores, a menudo sin el conocimiento ni el consentimiento de los usuarios, con el objetivo de recopilar y distribuir su información personal.
17. Spyware es un término que se refiere al software instalado en su ordenador (generalmente sin que lo sepa y sin su consentimiento) que se usa para recoger y distribuir detalles personales del usuario.
18. Spyware hace referencia los programas instalados en el ordenador (sin su conocimiento ni consentimiento) que se utilizan para recopilar y distribuir los datos personales de los usuarios.
19. Las aplicaciones de spyware son programas que se instalan en el equipo, normalmente sin conocimiento ni consentimiento, y se utilizan para recopilar y distribuir la información personal de los usuarios.
20. Spyware se refiere a software instalado en su ordenador (a menudo sin conocimiento o consentimiento) que se utiliza para recopilar y distribuir información personal del usuario.
21. Software espía se utiliza para desigar a todas aquellas aplicaciones instaladas en equipos informáticos (a menudo, sin que los usuarios sean conscientes de ello y sin su consentimiento) cuya función consiste en recopilar y distribuir información personal de los usuarios.
22. El Spyware es un programa maligno que se instala en su ordenador (a menudo sin que usted lo sepa o lo consienta) y se utiliza para recabar y distribuir los datos personales del usuario.
23. El spyware es el software que se instala en el ordenador -a menudo, sin conocimiento ni consentimiento por parte del usuario- que se utiliza para recopilar y distribuir información personal de los usuarios.
24. Spyware es el software que se instala en el ordenador -a menudo sin el conocimiento ni consentimiento del usuario- y tiene el objetivo de recopilar y distribuir los datos personales de los usuarios.
25. El software espía es el software que se instala en el ordenador a menudo sin que uno lo sepa ni haya dado su consentimiento y se utiliza para recopilar y distribuir los datos personales de los usuarios.
26. El spyware es software que se instala en el equipo (a menudo sin el conocimiento ni el consentimiento del usuario) y que se utiliza para recopilar y distribuir información personal del usuario.
27. Spyware hace referencia a todo aquel software instalado en tu ordenador, a menudo sin tu conocimiento o consentimiento, que se utiliza para distribuir los datos personales del usuario.
28. El spyware es una serie de programas que se instalan en su ordenador, normalmente sin que usted lo sepa o sin que haya autorizado su instalación, que se utiliza para recoger y distribuir información personal del usuario.
29. Por spyware se hace referencia al software instalado en su ordenador ?a menudo, sin conocimiento ni consentimiento del usuario? que sirve para recabar y distribuir los datos personales del usuario.
30. El spyware es un software instalado en su ordenador que recopila y distribuye los datos personales de su usuario sin que a menudo éste lo sepa ni haya dado su consentimiento.
31. El Spyware hace referencia a un programa que se instala en tu ordenador -normalmente sin que lo sepas o sin tu consentimiento- y que sirve para recabar y distribuir información personal sobre los usuarios.
32. El spyware es el software instalado en tu ordenador a menudo sin saberlo o sin consentimiento- que se usa para coleccionar y distribuir detalles personales de los usuarios.
33. El término Spyware hace referencia a programas de software instalados en su ordenador (a menudo sin su conocimiento ni aprobación) que se utilizan para recopilar y distribuir datos personales del usuario.
34. Los programas espía son aquellos programas instalados en el ordenador -a veces sin que el usuario lo sepa ni haya dado su consentimiento- que se utilizan para recopilar y distribuir detalles personales del usuario.
35. Spyware (programas espía) hace referencia al software instalado en el ordenador que, a menudo, sin su permiso o consentimiento, se utiliza para recopilar y distribuir datos personales del usuario.
36. El término software espía (spyware) hace referencia al software instalado en su ordenador (a menudo sin su conocimiento ni consentimiento) que se utiliza para recopilar y distribuir detalles personales del usuario.

37. Un programa espía es un software que se instala en tu ordenador (a menudo sin tu conocimiento o consentimiento), y que se utiliza para recoger y distribuir los datos personales de los usuarios.
38. El término “software espía” denomina al software instalado en su ordenador, a menudo sin su conocimiento o consentimiento, que se usa para recopilar y distribuir datos personales de los usuarios.
39. El programa espía es un software instalado en tu PC -a menudo sin tu conocimiento ni consentimiento- que se utiliza para recompilar y distribuir los datos personales de los usuarios.
40. El término inglés spyware (programa espía) hace referencia al software que se instala en el ordenador de un usuariosin el conocimiento ni el consentimiento de éste- y que se utiliza para recopilar y distribuir los datos personales del usuario.
41. El término “spyware” hace referencia a software instalado en un ordenador (normalmente sin el conocimiento o consentimiento del usuario) que se utiliza para recolectar y distribuir información personal del usuario.
42. Por ”programa espía” se designan los programas de software instalados en su equipo - a menudo sin su conocimiento o consentimiento expreso- que se emplean para recabar y distribuir información personal de su usuario.
43. Spyware hace referencia al software que se ha instalado en su ordenador, a menudo sin su consentimiento, que se utiliza para recopilar y distribuir los datos personales de los usuarios.
44. El término spyware, o software espía, hace referencia al software que se instala en su ordenador, a menudo sin su conocimiento o consentimiento, y que se utiliza para recoger y distribuir los datos personales del usuario.
45. El spyware es un tipo de software que se instala en el equipo, a menudo sin el conocimiento ni consentimiento del usuario, que se utiliza para recopilar y distribuir información personal.
46. El término software espía se refiere al software instalado en su equipo (a menudo sin que lo sepa ni lo haya consentido) que se utiliza para recopilar y distribuir los detalles personales del usuario.
47. Spyware hace referencia a un programa que se instala en su ordenador, a menudo sin su conocimiento o consentimiento, que sirve para recabar y distribuir los datos personales de los usuarios.
48. El término spyware hace referencia a un tipo de software que se instala en un equipo informático -a menudo sin que el usuario lo sepa ni lo consienta- con la finalidad de recopilar y distribuir los datos personales del usuario.
49. El término spyware se refiere a programas instalados en su ordenador, normalmente sin su consentimiento, que se utilizan para recopilar y distribuir los detalles personales de los usuarios.
50. El spyware es un programa que se instala en el ordenador (a menudo sin saberlo ni permitirlo el usuario) y que recopila y distribuye al exterior determinada información personal.
51. Spyware hace referencia al software instalado en el ordenador (normalmente sin conocimiento o consentimiento del usuario) que se utiliza para recopilar y distribuir información personal del usuario.
52. El software espía es un tipo de software que se instala en su ordenador, a menudo sin su conocimiento o consentimiento, y que se utiliza para reunir y distribuir información personal del usuario.
53. El software espía (o spyware) es software instalado en el ordenador (por lo general, sin el conocimiento y consentimiento del usuario) que se utiliza para recopilar y distribuir datos personales del usuario.
54. El término Spyware se refiere al software instalado en tu ordenador (a menudo sin tu conocimiento o consentimiento) que se utiliza para recopilar y distribuir datos personales del usuario.
55. Spyware hace referencia a software instalado en el sistema -generalmente sin su conocimiento ni consentimiento- que se utiliza para recopilar y distribuir detalles personales del usuario.
56. El software espía se refiere a los programas instalados en su equipo (normalmente sin su consentimiento ni aprobación) que se utilizan para recopilar y distribuir los detalles personales de los usuarios.
57. Spyware se refiere al software instalado en su ordenador a menudo sin su conocimiento ni consentimiento que se emplea para recoger y distribuir datos personales del usuario.
58. Con el concepto de Spyware se hace referencia a software instalado en el ordenador del usuario, muchas veces sin su conocimiento o consentimiento, que es utilizado para recopilar y distribuir datos personales de éste.
59. El software espía es un software que se ha instalado en su ordenador- a menudo sin su conocimiento ni su consentimiento- que se utiliza para recopilar y distribuir detalles personales del usuario.
60. El Spyware es un software que se instala en su ordenador, normalmente sin su conocimiento ni su consentimiento, y que se utiliza para recopilar y distribuir datos personales de los usuarios.
61. Los programas espía (spyware) hacen referencia a los programas instalados en el ordenador -a menudo sin que lo sepa o haya dado su consentimiento- que se utilizan para recoger y distribuir los datos personales de los usuarios.
62. Un programa espía es una aplicación instalada en tu ordenador -a menudo sin tu conocimiento ni

aprobación- que se utiliza para almacenar y distribuir datos personales de los usuarios.
63. El spyware es software instalado en tu ordenador sin tu conocimiento ni consentimiento- que sirve para recoger y distribuir los datos personales de los usuarios.
64. El spyware son programas instalados en su ordenador, a menudo sin su conocimiento ni consentimiento, que se usan para recoger y distribuir los datos personales de los usuarios.
65. El término spyware hace referencia al software instalado en su equipo, normalmente sin que lo sepa o sin su consentimiento, que se utiliza para agrupar y distribuir los detalles personales del usuario.
66. El término inglés spyware, o programa espía, hace referencia a programas que se instalan en su ordenador, a menudo sin su consentimiento y sin que usted lo sepa, y que se utilizan para recopilar y distribuir la información personal de los usuarios.
67. El software espía (también conocido como spyware) es software instalado en el equipo (a menudo sin el conocimiento ni consentimiento del usuario) que se utiliza para recopilar y distribuir datos personales del usuario.
68. Se entiende por spyware cualquier programa que se instala en el ordenador, muchas veces sin el conocimiento o el consentimiento del usuario, con el fin de recopilar y distribuir información personal.
69. El spyware es un software que se instala en su equipo (normalmente sin su conocimiento o consentimiento) y se usa para recopilar y distribuir detalles personales de los usuarios.
70. El spyware es un software instalado en su ordenador, a menudo sin su conocimiento o consentimiento, que se utiliza para recopilar y distribuir los detalles personales del usuario.
71. El spyware o software espía es un tipo de aplicación instalada en el ordenador menudo sin el conocimiento o el consentimiento del usuarioque se utiliza para recoger y distribuir la información personal de los usuarios.
72. Por "programa espía" (también denominado "spyware", del inglés) se entiende aquellos programas que se instalan en un equipo, a menudo sin el conocimiento o consentimiento del usuario, con el fin de recabar información personal y distribuirla.
73. Un programa espía es una aplicación informática que se instala en su ordenador, normalmente sin que usted lo sepa y sin su consentimiento, cuyo objetivo es recoger y distribuir los datos personales de los usuarios.
74. Este término se refiere a programas que se instalan en el PC -a menudo sin el conocimiento ni el consentimiento del propietario- y que se utilizan para recopilar y distribuir los datos personales de los usuarios.
75. El software espía se instala en su ordenador (a menudo sin su conocimiento ni consentimiento), y recoge y distribuye información personal de los usuarios.
76. Cómo spyware se entiende el software instalado en tu ordenador, a menudo sin tu consentimiento o conocimiento, y que se utiliza para recopilar y distribuir datos personales de los usuarios.
77. El software espía es aquel que se instala en el ordenador (a menudo sin el conocimiento o el consentimiento del usuario) y que se utiliza para reunir y distribuir detalles personales de los usuarios.
78. El término spyware hace referencia a software instalado en su ordenador -a menudo sin su conocimiento ni autorización- que recopila y distribuye información personal de los usuarios del equipo.
79. "Software espía" es el software que se instala en tu ordenador, a menudo, sin tu conocimiento o consentimiento, y que se utiliza para recopilar y distribuir los datos personales de los usuarios.
80. "Spywares" (o programas espía) son un software instalado en tu ordenador -frecuentemente sin tu conocimiento o consentimiento- que se utiliza para recoger y distribuir información personal de los usuarios.
81. El software espía es una aplicación instalada en su equipo, a menudo sin su conocimiento o consentimiento, que se utiliza para recoger y distribuir los datos personales de los usuarios.
82. Por software malicioso se entiende alguna aplicación informática que se ha instalado en su ordenador sin que se haya dado cuenta o sin que haya dado el consentimiento para que se instale. Su función es recoger y distribuir información personal del usuario.
83. El software espía es aquél que se instala en el equipo para recopilar y distribuir datos personales del usuario, a menudo sin el conocimiento ni el consentimiento de éste.
84. Spyware es el término utilizado para describir un tipo de software instalado en su equipo, a menudo sin su conocimiento ni consentimiento, cuya finalidad consiste en recopilar información personal de los usuarios para su posterior distribución.
85. Spyware se refiere al software instalado en su ordenador, amenudo sin su conocimiento ni consentimiento, que se usa para tomar y distribuir los datos personales del usuario.
86. El spyware o software espía es software instalado en un equipo (a menudo sin que el usuario lo sepa ni haya dado su consentimiento para ello) y que se utiliza para obtener datos personales de los usuarios y distribuirlos.

87. Se denominan programas espía aquellas aplicaciones instaladas en su PC, a menudo sin que usted lo sepa o lo haya autorizado, y que se emplean para recoger y distribuir su información personal.
88. La palabra spyware se refiere a programas instalados en el ordenador - a menudo sin permiso y de forma oculta - que se usan para recopilar y distribuir detalles personales de los usuarios.
89. El término "software espía" se refiere al software instalado en su equipo (a menudo sin que usted lo sepa y sin que haya dado su consentimiento) que se utiliza para recopilar y distribuir los datos personales de los usuarios.
90. Spyware se refiere a cualquier programa instalado en su ordenador –a menudo sin su conocimiento o consentimiento– destinado a recopilar y distribuir datos personales de usuarios.

D.0.4.2 Text 1 – Focus point 2

Source segment (*English*)

- **P2P** file sharing applications, which can be used to illegally share copyrighted music and movies, are one of the most common sources of spyware.

Target segment (*Spanish*)

1. Las aplicaciones P2P para compartir archivos, las cuales pueden ser utilizadas para intercambiar música o películas protegidas por derechos de autor de forma ilegal, son una de las principales fuentes de origen del software espía.
2. Las aplicaciones de compartición de archivos P2P, que pueden utilizarse para compartir ilegalmente música y películas sujetas a copyright, son una de las fuentes más habituales de spyware.
3. Entre las fuentes de spyware más habituales están las aplicaciones para compartir archivos en una red punto a punto (P2P) que se usan para compartir de manera ilegal música y películas protegidas por derechos de propiedad intelectual.
4. Las aplicaciones de intercambio de archivos de igual a igual (P2P), las cuales pueden usarse para compartir de forma ilegal música y películas con copyright, son unos de los orígenes de spyware más comunes.
5. Una de las fuentes más comunes de spyware son las aplicaciones de uso compartido de archivos P2P, que se pueden utilizar para compartir de forma ilegal música y películas con copyright.
6. Las aplicaciones P2P de intercambio de archivos, con las que puedes compartir música y películas con copyright de manera ilegal, son una de las fuentes más comunes de programas espía.
7. Las aplicaciones P2P para compartir archivos, que pueden utilizarse para compartir películas o música con copyright de forma ilegal, son una de las fuentes más frecuentes de spyware.
8. Las aplicaciones de intercambio de archivos P2P, que pueden utilizarse de forma ilegal para intercambiar música y películas con derechos de autor, son una de las fuentes más habituales de los programas espías.
9. Las aplicaciones P2P para compartir archivos, que pueden usarse para compartir de manera ilegal música o películas protegidas por los derechos de autor, son una de las fuentes más comunes de spyware.
10. Las aplicaciones de uso compartido de archivos P2P, que pueden utilizarse para compartir de forma ilegal canciones y películas, son algunos de los focos más comunes de spyware.
11. Las aplicaciones de compartición de archivos P2P, que pueden utilizarse para compartir de forma ilegal música y películas con derechos de autor, son una de las fuentes más frecuentes del software espía.
12. Las aplicaciones P2P para compartir archivos, que se utilizan para compartir de manera ilegal música y películas con derechos de autor, son una de las fuentes más habituales de spyware.
13. Los programas para compartir archivos P2P, que se utilizan ilegalmente para compartir música y películas protegidas por derechos de autor son una de las causas más comunes de spyware.
14. Las aplicaciones de compartimiento de archivos P2P, que se pueden utilizar para compartir ilegalmente música y películas con derechos de autor, son una de las fuentes más comunes de spyware.
15. Las aplicaciones de uso compartido de archivos P2P, que pueden utilizarse para compartir películas y música con derechos de autor, constituyen una de las fuentes más comunes de software espía.
16. Los programas que comparten archivos P2P, que pueden emplearse para compartir de manera ilegal música y películas con derechos de reproducción, suelen ser una de las fuentes más comunes de programas espía.
17. Las aplicaciones P2P para compartir archivos entre usuarios, que se pueden utilizar de modo ilegal para compartir música y películas protegidas por derechos de autor, son una de las fuentes más habituales de spyware.

18. Las aplicaciones de uso compartido de archivos P2P, que se pueden utilizar para compartir ilegalmente música y películas con derechos de reproducción, son uno de los tipos más comunes de programas espía.
19. Las aplicaciones de intercambio de archivos P2P, que se pueden utilizar para intercambiar música y películas con derechos de autor de forma ilegal, constituyen una de las fuentes más habituales de descarga de programas espía.
20. Una de las fuentes de spyware más comunes son las aplicaciones P2P de uso compartido de archivos, que se utilizan para compartir de forma ilegal archivos de música y películas protegidos por las leyes de derechos de autor.
21. Una de las fuentes más comunes de spyware son las aplicaciones P2P para compartir archivos, que pueden usarse de forma ilícita compartir música y películas que disponen de derechos de protección.
22. Las aplicaciones de intercambio de archivos P2P, que se pueden utilizar para compartir música y películas con derechos de autor de forma ilegal, son una de las fuentes de spyware más comunes.
23. Las aplicaciones de compartimiento de archivos P2P, que pueden utilizarse para compartir ilegalmente música y películas con derechos de autor, constituyen uno de los orígenes más comunes del spyware.
24. Las aplicaciones para compartir archivos P2P, que se pueden utilizar para compartir de forma ilegal música y películas con copyright, son una de las fuentes más comunes de spyware.
25. Las aplicaciones de uso compartido de archivos P2P, que pueden utilizarse para compartir música y películas protegidas por derechos de autor de forma ilegal, suelen los principales focos de software espía.
26. Al compartir aplicaciones entre particulares, por ejemplo cuando se comparten de manera ilegal los archivos de música y películas protegidos por derechos de autor, dichos programas de spyware encuentran una fuente de distribución.
27. Las aplicaciones P2P para compartir archivos, que pueden utilizarse para compartir música y películas con derechos de propiedad de forma ilegal, son una de las fuentes más comunes de spyware.
28. Las aplicaciones de uso compartido de archivos (P2P), que pueden utilizarse de manera ilegal para compartir música y películas sujetos a derechos de autor, son una de las fuentes más comunes de software espía.
29. Las aplicaciones P2P, por ejemplo, utilizadas para compartir de forma ilegal películas o música sujetas a derechos de autor, son una de las principales vías de entrada.
30. Entre las fuentes más comunes de spyware se encuentran las aplicaciones de uso compartido de archivos P2P, que pueden usarse para compartir de forma ilegal música y películas protegidas contra copia.
31. Las aplicaciones para compartir archivos P2P, que pueden utilizarse para compartir ilegalmente música y películas con copyright, son una de las fuentes de spyware más comunes.
32. Una de las fuentes de spyware más habituales son las aplicaciones de compartición de archivos P2P, que se pueden utilizar para compartir ilegalmente música o películas protegidas por derechos de autor.
33. Las aplicaciones de intercambio de archivos P2P que se pueden utilizar para compartir de forma ilegal música y películas protegidas por derechos de autor son las fuentes más comunes de spyware.
34. Las aplicaciones de uso compartido de archivos (P2P), que pueden utilizarse para intercambiar ilegalmente música y películas protegidas por los derechos de autor, son una de las fuentes más comunes de software espía.
35. Las aplicaciones de compartición de archivos P2P, que se pueden utilizar para compartir de forma ilegal música o películas con derechos de autor, son una de las fuentes más comunes de spyware.
36. Aquellas aplicaciones que comparten archivos P2P, que pueden a la vez utilizarse para compartir ilegalmente derechos de autor tanto de música como de películas, son una de las fuentes más comunes de spyware.
37. Las aplicaciones de intercambio de archivos P2P, mediante las que se puede compartir de forma ilegal música y películas protegidas por derechos de autor, son uno de los medios de acceso más comunes que utilizan los programas de spyware.
38. Las aplicaciones para compartir archivos P2P, que sirven para compartir de forma ilegal música y películas protegidos por derechos de autor, son una de las fuentes más comunes de spyware.
39. Las aplicaciones compartidas de archivos P2P, que se pueden utilizar para compartir ilegalmente música y películas con copyright, son unas de las fuentes más comunes de spyware.
40. Las aplicaciones P2P para compartir archivos, que pueden utilizarse para compartir música y películas con derechos de reproducción de forma ilícita, son una de las fuentes más comunes de spyware.
41. Las aplicaciones para compartir archivos P2P, que pueden usarse para compartir ilegalmente

música y películas con copyright, son una de las fuentes más comunes del spyware.
42. Las aplicaciones de intercambio de archivos P2P, que se pueden utilizar para compartir, de manera ilegal, música y películas protegidas por derechos de autor, son una de las fuentes más comunes de spyware.
43. Una de las fuentes más habituales de programas espía son las aplicaciones de uso compartido de archivos denominadas P2P, a través de las cuales se comparten de forma ilegal archivos de música y de películas protegidos por derechos de autor.
44. Una de las fuentes de procedencia de los programas espía más frecuentes son las aplicaciones P2P de compartición de archivos, que pueden ser empleadas de forma ilegal para compartir música y películas con derechos de autor.
45. Las aplicaciones de uso compartido de archivos P2P, que se utilizan para compartir de manera ilegal música y películas protegidas por derechos de autor, son una de las fuentes de software espía más habituales.
46. Las aplicaciones P2P para compartir archivos, empleadas para compartir de manera ilegal música y películas con derechos de autor, son una de las fuentes más habituales de software espía.
47. Las aplicaciones P2P para compartir archivos, que pueden ser utilizadas para compartir de forma ilegal música y películas con copyright, son una de las fuentes más comunes de spyware.
48. Las aplicaciones P2P de intercambio de archivos, que se pueden utilizar para compartir de forma ilegal música y películas protegidas por derechos de autor, son una de las fuentes más habituales de software espía.
49. Las aplicaciones para compartir archivos entre iguales (P2P), que pueden utilizarse para compartir música y películas con copyright de forma ilegal, son una de las fuentes más comunes de spyware.
50. Las aplicaciones de compartición de ficheros P2P, que se pueden utilizar para compartir, de forma ilegal, música y películas, constituyen la fuente más común de programas espía.
51. Las aplicaciones P2P (en inglés, "peer-to-peer", concepto con el que se denomina una red entre nodos iguales)para el intercambio de ficheros, que pueden utilizarse para compartir de forma ilegal música y películas con derechos de autor, son una de las fuentes de spyware más comunes.
52. Las aplicaciones compartidas de ficheros P2P, que pueden utilizarse para compartir ilegalmente música y películas, son una de las fuentes más comunes de programas espía.
53. Las aplicaciones compartidas de archivos P2P, que se pueden utilizar para compartir música y películas protegidas por los derechos de autor de forma ilegal, constituyen una de las fuentes más habituales de spyware.
54. Las aplicaciones para compartir archivos P2P, que se pueden utilizar para compartir música y películas con derechos de autor de forma ilegal, son una de las fuentes más habituales de software espía.
55. Las aplicaciones de archivos compartidos P2P, que pueden ser utilizadas para compartir ilegalmente música y películas con derechos de autor, son el origen más común de los programas espía.
56. Las aplicaciones P2P (del inglés "peer-to-peer", "de un usuario a otro" en español), que pueden usarse para compartir de forma ilegal música y películas protegidas por derechos de autor, constituyen una de las fuentes más habituales de software espía.
57. Las aplicaciones que comparten archivos P2P, que pueden emplearse para compartir de forma ilegal música y películas con derechos de autor, son una de las fuentes más comunes de programas espía+.
58. El origen habitual de los programas espía suele estar en las aplicaciones para compartir archivos entre equipos (P2P), que se utilizan para compartir de forma ilegal música y películas protegidas por derechos de autor.
59. Las aplicaciones P2P, que pueden usarse para compartir de manera ilegal música y películas protegidas por copyright, son una de las fuentes más comunes de spyware.
60. Las aplicaciones diseñadas para compartir archivos de particular a particular, empleadas para compartir música y películas con copyright de forma ilegal, representan una de las fuentes más comunes de programas espía.
61. Las aplicaciones de transmisión de archivos mediante redes P2P, que pueden utilizarse para compartir música y películas de manera ilegal, son una de las fuentes más comunes de spyware.
62. Las aplicaciones de compartición de archivos P2P, que se utilizan para compartir de forma ilegal música y películas con copyright, son una de las fuentes más habituales de software espía.
63. Una de las fuentes más habituales de descarga de sypware son las aplicaciones de uso compartido de archivos P2P, que se utilizan de forma ilegal para compartir archivos de películas y música protegidos con derechos de autor.
64. Las aplicaciones entre pares (peer-to-peer), que pueden utilizarse para compartir música y películas con derechos de autor de manera ilegal, son una de las fuentes más comunes de software espía.
65. Las aplicaciones P2P usadas para compartir archivos que se pueden emplear para compartir ilegalmente música o películas sujetas a derechos de autor son algunas de las principales causas de

los programas espía.

66. Las aplicaciones de intercambio de archivos P2P, que pueden usarse para intercambiar de forma ilegal música y películas registradas, son una de las fuentes más comunes de software espía.
67. Las aplicaciones para compartir archivos P2P, que pueden ser utilizadas ilegalmente para compartir música o películas protegidas por los derechos de autor, son el origen más común de este software malicioso.
68. Las aplicaciones de uso compartido de archivos P2P, que pueden utilizarse para compartir de forma ilegal música y películas cuyos derechos de autor están protegidos, constituyen una de las fuentes de software espía más comunes.
69. Las aplicaciones de uso compartido de archivos P2P, que pueden utilizarse para compartir archivos de vídeo y música de forma ilegal, son una de las fuentes más habituales de spyware.
70. Las aplicaciones para compartir archivos P2P que pueden usarse para compartir de forma ilegal música y películas sujetas a derechos de autor, son una de las fuentes más comunes de spyware.
71. Las aplicaciones P2P para compartir archivos, que pueden utilizarse de forma ilegal para compartir música y películas con copyright, son una de las fuentes de spyware más habituales.
72. Las aplicaciones P2P que pueden utilizarse para compartir de forma ilegal música y películas protegidas por derechos de autor son una de las fuentes más habituales de spyware.
73. Unas de las vías de entrada de spyware más frecuentes son las aplicaciones de intercambio de archivos P2P utilizadas para descargar ilegalmente música y películas.
74. Las aplicaciones para compartir archivos P2P, las cuales se pueden utilizar para compartir de manera ilegal música y películas con derechos de autor, representan una de las fuentes más comunes de spyware.
75. Una de las fuentes más habituales de software espía son las aplicaciones que comparten archivos P2P, que se pueden utilizar para compartir de forma ilegal música y películas con derechos de autor.
76. Las aplicaciones para compartir archivos P2P que se pueden utilizar para compartir de forma ilegal música y películas protegidas por derechos de autor son una de las fuentes de spyware más habituales.
77. Uno de los mecanismos más frecuentes a través de los que se introducen las aplicaciones espía son los programas P2P de descarga de archivos compartidos, que pueden emplearse para compartir de forma ilegal música y películas.
78. Las aplicaciones para compartir archivos P2P, que pueden usarse para compartir ilegalmente música y películas con copyright, son una de las fuentes más habituales de spyware.
79. Las fuentes más comunes de software espía son las aplicaciones P2P para compartir archivos, que se pueden utilizar de forma ilegal para compartir archivos de música y películas con derechos de autor.
80. Las aplicaciones P2P para compartir archivos, utilizadas de manera ilegal para compartir música y películas con copyright, son una de las fuentes más comunes de spyware.
81. Las aplicaciones P2P para compartir archivos, que se pueden utilizar para compartir música y películas con copyright de forma ilegal, son una de las fuentes de software espía más habituales.
82. Las aplicaciones P2P o peer to peer, las cuales se pueden utilizar para piratear música y películas sujetas a derechos de autor, suelen ser una de las fuentes más corrientes de spyware.
83. Las aplicaciones para compartir archivos P2P, que permiten compartir de forma ilegal música y películas con derechos de autor, son una de las fuentes más comunes de spyware.
84. Las aplicaciones que comparten archivos P2P, que se pueden utilizar para compartir de forma ilegal películas y música protegidas por copyright, son una de las fuentes de software espía más habituales.
85. La carpeta P2P de archivos compartidos, que se pueden usar de forma ilegal para copiar música o películas, es una de las fuentes más comunes de spyware.
86. Las aplicaciones P2P de intercambio de archivos, que pueden utilizarse para compartir ilegalmente música y películas protegidas por copyright, son uno de los orígenes más comunes del spyware.
87. Las aplicaciones que comparten archivos P2P, que normalmente se utilizan para compartir música y películas protegidas por derechos de autor de forma ilegal, son una de las fuentes más comunes de software espía.
88. En muchos casos, su origen está en las aplicaciones de uso compartido de archivos (P2P), que pueden utilizarse para compartir de forma ilegal música y películas protegidas por derechos de autor.
89. Las aplicaciones para compartir archivos P2P, que pueden usarse para compartir de forma ilegal música y películas con derechos de autor, son una de las fuentes de programas espía más comunes.
90. Los programas para compartir archivos P2P, que se pueden utilizar para compartir de forma ilegal música y películas con derechos de autor, son una de las fuentes más comunes de programas espía.

D.0.4.3 Text 1 – Focus point 3

Source segment (*English*)

- **CSSD** recommends using SpyPredator in tandem with Ad-Watch provided by Lavasoft's Ad-Aware®SE Professional.

Target segment (*Spanish*)

1. CSSD recomienda el uso de SpyPredator en combinación con el programa Ad-Watch que se incluye en el paquete Ad-Aware®SE Professional de Lavasoft.
2. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, disponible en la aplicación Ad-Aware®SE Professional de Lavasoft.
3. CSSD recomienda usar SpyPredator junto con la aplicación antiadware Ad-Aware®SE Professional de Lavasoft.
4. CSSD recomienda el uso de SpyPredator junto con Ad-Watch, que se incluye con la aplicación Ad-Aware®SE Professional de Lavasoft.
5. CSSD te recomienda utilizar SpyPredator junto con Ad-Watch, de Lavasoft's Ad-Aware®SE Professional.
6. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, que se suministra con Lavasoft's Ad-Aware®SE Professional.
7. El departamento de Servicios informáticos y desarrollo de sistemas recomienda el uso de SpyPredator junto con Ad-Watch, proporcionado por Lavasoft's Ad-Aware®SE Professional.
8. CSSD recomienda el uso de SpyPredator conjuntamente con Ad-Watch, programas de Lavasoft's Ad-Aware®SE Professional.
9. CSSD le recomienda utilizar SpyPredator conjuntamente con Ad-Watch, proporcionado por Lavasoft's Ad-Aware®SE Professional.
10. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, que se proporciona con Ad-Aware®SE Professional de Lavasoft.
11. El departamento de Servicios informáticos y desarrollo de sistemas recomienda el uso de SpyPredator junto con Ad-Watch, ofrecido por Ad-Aware®SE Professional de Lavasoft.
12. CSSD (Servicios Informáticos y Desarrollo de Sistemas) recomienda utilizar SpyPredator en combinación con Ad-Watch proporcionado por Lavasoft's Ad-Aware®SE Professional.
13. La entidad CSSD recomienda utilizar SpyPredator junto con Ad-Watch, un programa de Ad-Aware®SE Professional de Lavasoft.
14. CSSD recomienda utilizar SpyPredator juntamente con Ad-Watch, distribuido por Lavasoft's Ad-Aware®SE Professional.
15. CSSD recomienda utilizar SpyPredator junto con el programa Ad-Watch, suministrado por Lavasoft's Ad-Aware®SE Professional.
16. Computing Services and Systems Development (CSSD) recomienda utilizarla de forma conjunta con Ad-Watch, una aplicación incluida en Ad-Aware®SE Professional de Lavasoft.
17. CSSD recomienda la utilización de SpyPredator en combinación con Ad-Watch, de Lavasoft's Ad-Aware®SE Professional.
18. CSSD recomienda utilizar SpyPredator en combinación con Ad-Watch de Lavasoft, función incluida en Ad-Aware®SE Professional.
19. CSSD recomienda usar SpyPredator conjuntamente con la solución Ad-Watch suministrada por Lavasoft Ad-Aware®SE Professional.
20. CSSD recomienda que SpyPredator se utilice junto a Ad-Watch, distribuido por Ad-Aware®SE Professional de Lavasoft.
21. CSSD recomienda la utilización en tándem de SpyPredator con Ad-Watch, disponible en Ad-Aware®SE Professional de Lavasoft.
22. CSSD le recomienda utilizar SpyPredator en conjunción con Ad-Watch, ambos sistemas ofertados por Lavasoft's Ad-Aware®SE Professional.
23. El departamento de desarrollo de sistemas y servicios informáticos (CSSD, Computing Services and Systems Development) recomienda el uso de SpyPredator junto con Ad-Watch suministrado con Ad-Aware®SE Professional de Lavasoft.
24. CSSD recomienda el uso de SpyPredator en conjunción con Ad-Watch, suministrado por Lavasoft's Ad-Aware®SE Professional.
25. CSSD recomienda utilizar el SpyPredator junto con el Ad-Watch de Lavasoft's Ad-Aware®SE Professional.
26. CSSD recomienda el uso de SpyPredator en combinación con Ad-Watch de Lavasoft's Ad-Aware®SE Professional.

27. El departamento de Servicios Informáticos y Desarrollo de Sistemas recomienda utilizar SpyPredator junto con Ad-Watch proporcionado por Lavasoft's Ad-Aware®SE Professional.
28. CSSD recomienda utilizar SpyPredator junto con Ad-Watch proporcionado por Ad-Aware®SE Professional de Lavasoft.
29. El Departamento de Sistemas y Servicios Informáticos (CSSD, por sus siglas en inglés) recomienda que se use SpyPredator junto con Ad-Watch, suministrado por Ad-Aware®SE Professional de Lavasoft.
30. CSSD recomienda utilizar SpyPredator junto con Ad-Watch de Lavasoft Ad-Aware®SE Professional.
31. CSSD recomienda utilizar SpyPredator junto con Ad-Watch de Lavasoft's Ad-Aware®SE Professional.
32. CSSD recomienda usar SpyPredator junto con Ad-Watch proporcionado por Lavasoft's Ad-Aware®SE Professional.
33. El CSSD recomienda la utilización de SpyPredator junto con Ad-Watch suministrado por Lavasoft's Ad-Aware®SE Professional.
34. CSSD recomienda utilizar SpyPredator junto con Ad-Watch suministrado por Lavasoft's Ad-Aware®SE Professional.
35. CSSD recomienda el uso de SpyPredator junto con el programa Ad-Watch que se proporciona con Ad-Aware®SE Professional de Lavasoft.
36. CSSD recomienda el uso de SpyPredator combinado con Ad-Watch producido por Lavasoft's Ad-Aware®SE Professional.
37. CSSD (siglas de Computing Services and Systems Development) recomienda el uso de SpyPredator combinado con la aplicación Ad-Watch que incorpora el software Ad-Aware®SE Professional de Lavasoft.
38. El CSSD recomienda el uso de SpyPredator en combinación con la aplicación Ad-Watch de Lavasoft Ad-Aware®SE Professional.
39. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, un producto de Lavasoft's Ad-Aware®SE Professional.
40. El CSSD recomienda el uso de SpyPredator junto con la aplicación Ad-Watch de Lavasoft's Ad-Aware®SE Professional.
41. CSSD recomienda el uso de SpyPredator junto con el programa Ad-Watch de Lavasoft's Ad-Aware ®SE Professional.
42. CSSD recomienda utilizar SpyPredator junto con Ad-Watch de Lavasoft's Ad-Aware®SE Professional.
43. CSSD recomienda el uso de SpyPredator en combinación con Ad-Watch de Lavasoft Ad-Aware®SE Professional.
44. El CSSD recomienda el uso de SpyPredator junto con Ad-Watch de Ad-Aware®SE Professional de Lavasoft.
45. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, que se suministra con Ad-Aware®SE Professional de Lavasoft.
46. CSSD recomienda utilizar SpyPredator en combinación con el programa Ad-Watch suministrado por Lavasoft's Ad-Aware®SE Professional.
47. CSSD recomienda utilizar SpyPredator juntamente con la aplicación Ad-Watch, incluida en el paquete Ad-Aware®SE Professional de Lavasoft.
48. CSSD recomienda el uso de SpyPredator junto con Ad-Watch de Lavasoft's Ad-Aware®SE Professional.
49. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, suministrado por Lavasoft's Ad-Aware®SE Professional.
50. El CSSD recomienda el uso de SpyPredator junto a Ad-Watch proporcionado por Ad-Aware®SE Professional de Lavasoft.
51. Desde CSSD le recomendamos utilizar SpyPredator junto a Ad-Watch, software que proporciona Lavasoft's Ad-Aware®SE Professional.
52. CSSD le recomienda que utilice SpyPredator junto con Ad-Watch, de Lavasoft's Ad-Aware®SE Professional.
53. El CSSD recomienda el uso SpyPredator junto con Ad-Watch, proporcionado por el Ad-Aware®SE Professional de Lavasoft.
54. CSSD recomienda utilizar SpyPredator junto con el programa Ad-Watch proporcionado por Ad-Aware®SE Professional de Lavasoft.
55. La división CSSD recomienda utilizar SpyPredator junto con Ad-Watch, suministrado por Ad-Aware®SE Professional de Lavasoft.
56. CSSD recomienda el uso de SpyPredator junto Ad-Watch, facilitado por Lavasoft's Ad-Aware®SE Professional.

57. CSSD recomienda utilizarlo en conjunción con Ad-Watch, un producto de Lavasoft's Ad-Aware®SE Professional.
58. CSSD recomienda el uso de SpyPredator junto a Ad-Watch suministrado por Lavasoft's Ad-Aware®SE Professional.
59. El Servicio de Informática y Desarrollo de Sistemas de la Universidad (CSSD) recomienda el uso combinado de Spypredator y Ad-Watch, suministrado por Ad-Aware®SE Professional de Lavasoft.
60. CSSD le recomienda que utilice SpyPredator junto con Ad-Watch, proporcionado por Ad-Aware®SE Professional de Lavasoft.
61. CSSD recomienda la utilización de SpyPredator junto con Ad-Watch, proporcionado por Ad-Aware®SE Professional, de Lavasoft.
62. CSSD recomienda utilizar SpyPredator junto con Ad-Watch de Ad-Aware®SE Professional, de Lavasoft.
63. CSSD recomienda el uso de SpyPredator junto con Ad-Watch ofrecido por Ad-Aware®SE Professional de Lavasoft.
64. CSSD recomienda utilizar SpyPredator junto con la aplicación Ad-Watch de Ad-Aware®SE Professional de Lavasoft.
65. CSSD recomienda utilizar de forma simultánea SpyPredator y Ad-Watch, incluido en el Ad-Aware®SE Professional de Lavasoft.
66. CSSD recomienda utilizar SpyPredator junto al módulo Ad-Watch del programa Ad-Aware®SE Professional de Lavasoft.
67. CSSD recomienda utilizar SpyPredator en combinación con Ad-Watch, una aplicación de Ad-Aware®SE Professional de Lavasoft.
68. CSSD recomienda el uso de SpyPredator junto con Ad-Watch, que se proporciona con Ad-Aware®SE Professional de Lavasoft.
69. La CSSD (Computer Services and Systems Division) recomienda utilizar SpyPredator y Ad-Watch conjuntamente, proporcionados por Lavasoft's Ad-Aware®SE Professional.
70. El CSSD recomienda utilizar SpyPredator en combinación con la herramienta Ad-Watch, incluida con el software Ad-Aware®SE Professional de Lavasoft.
71. Computing Services and Systems Development recomienda utilizar SpyPredator junto con Ad-Watch (integrado en Ad-Aware®SE Professional de Lavasoft).
72. CSSD recomienda utilizar el SpyPredator en asociación con el Ad-Watch, que es una aplicación del programa Ad-Aware®SE Professional de Lavasoft.
73. CSSD recomienda el uso de SpyPredator junto con Ad-Watch de Ad-Aware®SE Professional de Lavasoft.
74. CSSD le recomienda utilizar el SpyPredator junto con Ad-Watch, suministrado por Lavasoft's Ad-Aware®SE Professional.
75. CSSD recomienda usar SpyPredator en combinación con Ad-Watch, suministrado por Lavasoft's Ad-Aware®SE Professional.
76. CSSD recomienda utilizar SpyPredator junto con Ad-Watch, proporcionado por Lavasoft's Ad-Aware®SE Professional.
77. Computing Services and Systems Development (CSSD) recomienda la utilización de SpyPredator junto con Ad-Watch, proporcionado por Ad-Aware®SE Professional de Lavasoft.
78. El departamento de SIDS recomienda utilizar el programa SpyPredator en tándem con el Ad-Watch, facilitado por el Ad-Aware®SE Professional de Lavasoft.
79. Servicios Informáticos y Desarrollo de Sistemas recomienda utilizar SpyPredator en combinación con Ad-Watch, distribuido por Lavasoft's Ad-Aware®SE Professional.
80. CSSD recomienda utilizar SpyPredator en combinación con Ad-Watch, proporcionado por Ad-Aware®SE Professional de Lavasoft.
81. CSSD recomienda utilizar SpyPredator junto con Ad-Watch proporcionado por Lavasoft's Ad-Aware®SE Professional.
82. CSSD recomienda el uso de SpyPredator junto con la solución Ad-Watch de Ad-Aware®SE Professional de Lavasoft.
83. CSSD recomienda usar SpyPredator en conjunción con Ad-Watch, suministrado con Ad-Aware®SE Professional de Lavasoft.
84. CSSD recomienda el uso de SpyPredator junto con el uso de Ad-Watch suministrado por Lavasoft's Ad-Aware®SE Professional.
85. La organización CSSD (Computer Supported Spiritual Development) recomienda utilizar SpyPredator en combinación con Ad-Watch, un producto de Lavasoft's Ad-Aware®SE Professional.
86. CSSD recomienda el uso conjunto de SpyPredator y Ad-Watch, distribuido por Ad-Aware®SE Professional de Lavasoft.
87. El Departamento de Servicios de Informática y Desarrollo de Sistemas recomienda usar SpyPredator junto con Ad-Watch, ofrecido por Ad-Aware ®SE Professional de Lavasoft.

88. CSSD recomienda utilizar SpyPredator en combinación con Ad-Watch suministrado por Lavasoft's Ad-Aware®SE Professional.
89. CSSD recomienda el uso de SpyPredator conjuntamente con un Ad-Watch de Lavasoft's Ad-Aware®SE Professional.

D.0.4.4 Text 2 – Focus point 1

Source segment (*English*)

- It has revolutionized many doctors' **practices**.

Target segment (*Spanish*)

1. Ha revolucionado el ejercicio de la medicina de muchos doctores.
2. Ha supuesto una revolución en las prácticas de numerosos médicos.
3. Para muchos ha revolucionado el ejercicio de la medicina.
4. Ha revolucionado la práctica de muchos médicos.
5. Esta aplicación ha revolucionado las consultas de numerosos doctores.
6. Ha revolucionado la forma de trabajar de muchos profesionales de la medicina.
7. Ha revolucionado el ejercicio de muchos doctores.
8. que ha supuesto una auténtica revolución en muchas prácticas médicas.
9. Ha revolucionado la práctica de muchos doctores.
10. que ha revolucionado la práctica de muchos profesionales de la medicina.
11. Ha revolucionado muchas consultas médicas.
12. Este dispositivo ha revolucionado gran parte de las prácticas médicas.
13. que ha revolucionado muchas de las prácticas del sector.
14. Ha revolucionado las consultas de muchos médicos.
15. Ha constituido una revolución de las prácticas médicas.
16. Ha revolucionado las consultas de muchos profesionales de la medicina.
17. Ha revolucionado la práctica médica de muchos profesionales.
18. Ha revolucionado el método de trabajo de muchos doctores.
19. Ha revolucionado muchas prácticas médicas.
20. y que ha revolucionado la práctica de muchos facultativos.
21. Ha revolucionado las consultas de muchos de ellos.
22. Ha revolucionado numerosas prácticas médicas.
23. Ha revolucionado la práctica de muchos doctores.
24. Ha revolucionado el mundo de la medicina.
25. ha supuesto una revolución en muchos consultorios médicos.
26. Ha supuesto una auténtica revolución para las prácticas médicas.
27. y que ha revolucionado las consultas de muchos doctores.
28. y ha revolucionado las prácticas de numerosos doctores.
29. Ha revolucionado muchas prácticas médicas.
30. Este dispositivo ha revolucionado las consultas de muchos facultativos.
31. ha revolucionado el trabajo de muchos doctores.
32. Ha revolucionado las prácticas de numerosos doctores.
33. Ha revolucionado la consulta de muchos doctores.
34. que ha revolucionado el método de trabajo de muchos médicos.
35. Ha revolucionado muchos consultorios.
36. Ha revolucionado la práctica profesional de muchos médicos.
37. Ha revolucionado la práctica médica de muchos doctores.
38. Ha constituido una auténtica revolución en muchas de las prácticas de los médicos.
39. Ha revolucionado la praxis de numerosos doctores.
40. que ha revolucionado la práctica médica.
41. Ha revolucionado muchas prácticas médicas.
42. MedHelpRx ha revolucionado el día a día de numerosos médicos.
43. Ha revolucionado la práctica de la mayoría de médicos.
44. Ha revolucionado la forma de trabajar de muchos doctores.
45. Ha supuesto una revolución en la práctica de muchos doctores.
46. y que ha revolucionado muchas consultas.
47. Ha revolucionado las prácticas de muchos facultativos.
48. y que ha revolucionado la forma de trabajar de un gran número de doctores.

49. Ha revolucionado la consulta de muchos doctores.
50. y que ha revolucionado su modo de proceder.
51. Su utilización ha revolucionado las prácticas de muchos profesionales de la salud.
52. Ha revolucionado la forma de ejercer de muchos doctores.
53. y que ha revolucionado muchas consultas médicas.
54. Ha revolucionado numerosas consultas médicas.
55. Ha revolucionado la práctica de muchos profesionales.
56. Ha revolucionado las consultas médicas de muchos doctores.
57. que ha revolucionado el método de trabajo de muchos médicos.
58. y que ha supuesto un cambio radical en muchas consultas.
59. Ha revolucionado el método de trabajo de muchos de ellos.
60. Ha revolucionado las prácticas habituales de numerosos médicos.
61. Ha revolucionado el método de trabajo de muchos doctores.
62. Ha revolucionado el ejercicio profesional de muchos facultativos.
63. Este dispositivo ha revolucionado muchos consultorios.
64. Ha supuesto una revolución en las consultas de muchos de ellos.
65. Ha revolucionado la práctica de muchos doctores.
66. En realidad, ha revolucionado la práctica de un gran número de doctores, ya que incorpora herramientas que permiten importar historiales desde la mayoría de sistemas de gestión de pacientes.
67. Este aparato ha revolucionado las consultas de muchos médicos, y dispone de herramientas que le permitirán importar los datos de pacientes de la gran mayoría de los sistemas de gestión de pacientes.
68. En realidad, ha revolucionado la práctica de un gran número de doctores, ya que incorpora herramientas que permiten importar historiales desde la mayoría de sistemas de gestión de pacientes.
69. Cuenta con unas herramientas que permiten importar los datos de los pacientes de la mayoría de los sistemas de gestión.
70. Ha revolucionado las consultas de un gran número de médicos y dispone de herramientas que le permiten importar información de la mayor parte de sistemas de gestión de pacientes.
71. MedHelpRx es una aplicación clínica completa que utilizan miles de médicos y que ha revolucionado la práctica de muchos profesionales.
72. MedHelpRx es una completa aplicación clínica usada por miles de médicos, que ha revolucionado la práctica diaria de muchos doctores.
73. MedHelpRx es una aplicación clínica muy completa que utilizan miles de médicos y que ha revolucionado muchas de las prácticas en medicina.
74. MedHelpRx es una completa aplicación clínica utilizada por miles de médicos que ha revolucionado la forma de funcionar de muchos consultorios.
75. MedHelpRx es una aplicación clínica con todas las prestaciones que miles de médicos utilizan ya y que ha revolucionado el ejercicio de la profesión.
76. La aplicación clínica MedHelpRx incorpora numerosas funciones que aplican miles de médicos; ha revolucionado las prácticas de muchos profesionales.
77. MedHelpRx es una aplicación clínica con todas las funciones que utilizan miles de médicos y que ha supuesto un antes y un después en las prácticas de muchos de ellos.
78. MedHelpRx es una aplicación clínica completa que utilizan miles de médicos y que ha revolucionado las prácticas de muchos doctores.
79. MedHelpRx es un equipo médico utilizado por miles de especialistas que ha revolucionado el trabajo de muchos profesionales médicos.
80. MedHelpRx es también una completa aplicación de uso clínico utilizada por miles de profesionales de la salud que ha supuesto toda una revolución en numerosas consultas.
81. MedHelpRx es una completa aplicación clínica utilizada por miles de médicos y que ha revolucionado los consultorios de muchos de ellos.
82. MedHelpRx es una solución completa que utilizan miles de médicos y que ha revolucionado el día a día de muchas consultas.
83. MedHelpRx es una herramienta clínica muy completa que utilizan miles de médicos y que ha revolucionado muchas consultas.
84. MedHelpRx es una completa aplicación clínica usada por miles de médicos y que ha revolucionado la forma de trabajar de muchos doctores.
85. MedHelpRx es una aplicación clínica completa utilizada por miles de médicos que ha supuesto una revolución para su actividad profesional.
86. MedHelpRx es una aplicación clínica con funciones completas que utilizan miles de profesionales de la medicina, y que ha revolucionado el sistema de trabajo de muchos doctores.
87. MedHelpRx es una aplicación clínica completa utilizada por miles de médicos que ha revolucionado la práctica de muchos profesionales.

88. MedHelpRx es una aplicación clínica de grandes prestaciones utilizada por miles de profesionales de la salud en todo el mundo, que ha revolucionado un gran número de prácticas médicas.
89. MedHelpRx es una aplicación clínica completa que utilizan miles de médicos y que ha revolucionado muchas de las prácticas que éstos emplean.
90. MedHelpRx es una aplicación clínica muy completa, utilizada por miles de médicos; ha revolucionado el ejercicio de la profesión de muchos de ellos.

D.0.4.5 Text 2 – Focus point 2

Source segment (*English*)

- Adjust the dose, route and any other **Rx** information as required.

Target segment (*Spanish*)

1. Ajuste la dosis, indique la vía de administración y cualquier otra información de Rx que considere necesaria.
2. Ajuste la dosis, la vía de administración y cualquier otra información necesaria de la receta.
3. Determine la dosis, la vía de administración y otra información sobre el fármaco que considere necesaria.
4. Ajuste la dosis, la vía y cualquier otra información de la receta, según sea necesario.
5. Ajusta la dosis, la vía y otra información de Rx necesaria.
6. Fije la dosis, la vía de administración y cualquier otra información necesaria relativa a la prescripción.
7. Ajuste la dosis, la vía de administración y cualquier otra información relativa a Rx.
8. Ajuste la dosis, frecuencia de administración y cualquier otra información sobre la receta que considere necesaria.
9. Ajuste la dosis, la vía de administración del fármaco o cualquier otra información de la receta según sea necesario.
10. Ajuste la dosis, la forma de ingestión y cualquier otra información relacionada con la toma del medicamento.
11. Ajuste la dosis, tratamiento y cualquier otra información de Rx como corresponda.
12. Regule la dosis, la vía y cualquier otra información Rx necesaria.
13. Ajuste la dosis, ruta y otros datos relativos a Rx como considere necesario.
14. Ajuste la dosis, la vía y cualquier otro dato que considere oportuno.
15. Ajuste la dosis, la vía y otra información Rx, tal y como se le indica.
16. Ajuste la dosis, la vía de administración y cualquier información adicional de tratamiento que sea necesaria.
17. Ajuste la dosis, la ruta y otra información de Rx necesaria.
18. Ajuste la dosis, la administración y cualquier otra información de la receta médica que sea necesaria.
19. Indique la dosis, la vía y cualquier otro dato que sea necesario.
20. Ajuste la dosis, la forma de administración y cualquier otra información de Rx que necesite.
21. Ajuste la dosis, la posología y cualquier otra indicación Rx que sea necesaria.
22. Ajuste la dosis, vía y cualquier otra información de las recetas médicas en caso necesario.
23. Ajuste la dosis, la vía y cualquier otra información de Rx según convenga.
24. Especifique la dosis, la vía de administración, así como cualquier otro tipo de información relacionada con la prescripción.
25. Adapte la dosis e indique la vía o cualquier otra información referente a los Rx que necesite.
26. Ajuste la dosis, la vía de administración y cualquier otra información sobre Rx necesaria.
27. Ajuste la dosis, vía de administración y cualquier otra información relativa a Rx según corresponda.
28. Ajuste la dosis, el itinerario y cualquier otra información de prescripción necesaria.
29. Ajuste la dosis, la vía y toda la información necesaria de la receta médica según corresponda.
30. Modifique la dosis, la vía y cualquier otra información Rx según se precise.
31. Modifique la dosis, la vía y cualquier otra información de la receta que proceda.
32. Ajuste la dosis, la vía o cualquier información Rx según sea necesario.
33. Elija la dosis, la ruta y cualquier otra información médica necesaria.
34. Ajuste la dosis, la vía y cualquier otra información necesaria para la receta.
35. Ajuste la dosis, vía y cualquier otra información Rx necesaria.
36. Ajuste la dosis, la vía de administración y cualquier información Rx según sea necesario.
37. Ajuste la dosis, la ruta y cualquier dato acerca de Rx que sea preciso.

38. Ajuste la dosis, la rutina y toda la información sobre Rx necesaria.
39. Determine la dosis, la posología y cualquier otro dato necesario para la receta.
40. Ajuste la dosis, vía y cualquier otra Rx información que se requiera.
41. Indique la dosis, la vía de administración y cualquier otra información necesaria para la receta.
42. Modifique la posología, la forma de administración o la información que considere oportuna.
43. Determine la dosis, la vía de administración y cualquier otra información de 'Rx' (prescripción) según proceda.
44. Ajuste la dosis, la vía y cualquier otra información necesaria.
45. Ajuste la dosis, vía y cualquier otra información de Rx según necesite.
46. Ajuste la dosis, vía y cualquier otra información Rx que sea necesaria.
47. Ajuste la dosis, la vía de administración y cualquier otra información que necesite sobre recetas las médicas.
48. Especifique la dosis, la vía y cualquier otra información que sea necesaria para la receta, según corresponda.
49. Ajuste dosis, ruta y cualquier otro tipo de información requerida sobre RX.
50. Regule la dosis, la vía y cualquier otra información solicitada en Rx.
51. Establezca la dosis, la vía por la que debe administrarse y cualquier otra información Rx según se requiera.
52. Ajuste la dosis, vía de administración y cualquier información Rx que precise.
53. Ajuste la dosis, la forma de administración y otra información Rx como crea conveniente.
54. Ajuste la dosis, la vía y otra información de prescripción, según sea necesario.
55. Ajusta la dosificación, administración y demás información Rx que se requiera.
56. Ajuste la dosis, la vía y cualquier otra información sobre Rx que sea necesaria.
57. Ajuste la dosis, la vía de administración y cualquier otra información necesaria.
58. Ajuste la dosis, la vía de administración y cualquier otro dato necesario relativo a la receta.
59. Defina la dosis, vía y cualquier otra información Rx necesaria.
60. Ajuste la dosis, vía y cualquier otra información necesaria en Rx.
61. Ajuste la dosis, vía y cualquier otra información de la receta según se requiera.
62. Ajuste la dosis, la vía de administración y cualquier otra información necesaria para la receta.
63. Fije la dosis, la vía de administración y cualquier otra información necesaria relativa a la prescripción.
64. Ajuste la dosis, la ruta y cualquier otra información de las recetas.
65. Ajuste la dosis del medicamento, cómo se debe administrar y cualquier información de Rx según convenga.
66. Ajuste la dosis, la vía de administración y cualquier otro dato requerido en Rx.
67. Ajuste la dosis, el modo de administración del medicamento y cualquier otra información sobre la prescripción, según convenga.
68. Ajuste la dosis, es necesario un seguimiento y cualquier otra información Rx.
69. Ajuste la dosis, la vía y cualquier otra información de Rx según sea necesario.
70. Ajuste la dosis, pauta y cualquier otra información Rx según requiera.
71. Ajuste la dosis, la vía de administración y cualquier otra información de Rx necesaria.
72. Ajuste la dosis, ruta y otra información de Rx necesaria.
73. Defina la dosis, vía de administración y otros datos de Rx necesarios.
74. Ajuste la dosis, la vía y cualquier otra información de Rm necesaria.
75. Indique la dosis, ruta y cualquier otra información Rx necesaria.
76. Ajuste la dosis, la vía de administración y cualquier otra información relativa al medicamento si es necesario.
77. Ajuste la dosis, vía de administración y cualquier otra información relativa a la receta que sea necesaria.
78. Ajuste la dosis, vía y cualquier otra información de medicación que sea necesaria.
79. Ajuste la dosis, el modo de administración y otro tipo de información de recetas médicas, cuando sea necesario.
80. Ajuste la dosis, la vía de administración, y cualquier otra información Rx requerida.
81. Ajuste la dosis, la vía y otra información relevante de la receta.
82. Ajuste la dosis, ruta o cualquier otra información Rx que necesite.
83. Ajuste la dosis, la posología y cualquier otro tipo de información de Rx, según sea necesario.
84. Ajuste la dosis, el modo de administración, así como cualquier otra información sobre la receta que considere necesaria.
85. Ajuste la dosis, la vía y cualquier otra información requerida en la receta.
86. Ajuste la dosis, la vía y cualquier otra información de Rx según sea necesario.
87. Ajuste la dosis y añada la información necesaria para la receta.
88. Especifique la dosis, la vía y cualquier otra información sobre la receta que considere necesaria.

89. Ajuste la dosis, tratamiento y cualquier otra información necesaria.
90. Ajusta como sea preciso la dosis, itinerario o cualquier otra información referida a la receta.

D.0.4.6 Text 2 – Focus point 3

Source segment (*English*)

- Tap Print to print the prescription via **IR**. Most devices can print via Bluetooth if your handheld device and printer support it.

Target segment (*Spanish*)

1. Seleccione Print para imprimir la receta a través de infrarrojos. La mayoría de dispositivos pueden imprimir a través de Bluetooth si tanto el dispositivo de mano como la impresora son compatibles con dicho estándar.
2. Puntee en Print para imprimir la receta por infrarrojos. La mayoría de los dispositivos imprimen por Bluetooth si el dispositivo de bolsillo y la impresora lo admiten.
3. Pulse Print para imprimir la receta mediante infrarrojos. La mayoría de los dispositivos pueden imprimir a través de Bluetooth si su dispositivo portátil y la impresora admiten esta característica.
4. Toque Print (Imprimir) para imprimir la receta a través de IR. La mayoría de los dispositivos pueden imprimir a través de Bluetooth si el dispositivo portátil y la impresora son compatibles.
5. Haz clic sobre Print para imprimir la receta a través de IR. La mayoría de dispositivos pueden imprimir vía Bluetooth si tu dispositivo de mano e impresora lo admiten.
6. Pulse "Print" para imprimir la receta mediante infrarrojos. La mayoría de dispositivos tienen capacidad para la impresión por Bluetooth si tanto impresora como dispositivo lo admiten.
7. Para imprimir una receta por infrarrojos, escoja Print. La mayoría de los dispositivos permiten la impresión por Bluetooth, si el dispositivo portátil y la impresora que utiliza la admiten.
8. Pulse Imprimir para imprimir la receta por infrarrojos. La mayoría de dispositivos pueden imprimir por Bluetooth si el dispositivo manual y la impresora lo admiten.
9. Seleccione Imprimir para imprimir la receta a través de infrarrojos. La mayor parte de dispositivos pueden imprimir a través de Bluetooth si el dispositivo portátil e impresora son compatibles.
10. Pulse "Print" (Imprimir) para imprimir la receta vía infrarrojos. La mayoría de los dispositivos son compatibles con la impresión a través de Bluetooth si su dispositivo de mano e impresora lo admiten.
11. Pulse Print (Imprimir) para imprimir la receta mediante IR. La mayoría de dispositivos pueden imprimir con Bluetooth si son compatibles con el dispositivo de mano y la impresora.
12. Pulse Imprimir para imprimir la receta por infrarrojos. La mayoría de dispositivos pueden imprimir por Bluetooth si su dispositivo portátil e impresora lo soportan.
13. Puntée en Print (Imprimir) para imprimir la receta mediante IR. La mayoría de dispositivos puede imprimir mediante Bluetooth si es compatible con su dispositivo de mano e impresora.
14. Pulse en Print (Imprimir) para imprimir la receta mediante una conexión de infrarrojos. La mayoría de los dispositivos pueden imprimir mediante una conexión Bluetooth si el dispositivo portátil y la impresora lo admiten.
15. Pulse Print para imprimir la prescripción a través de IR. La mayoría de los dispositivos pueden imprimir a través de Bluetooth siempre que su dispositivo de mano y su impresora sean compatibles.
16. Pulse Print (Imprimir) para imprimir la receta por infrarrojos. La mayoría de los dispositivos pueden imprimir mediante Bluetooth si tanto el dispositivo portátil como la impresora admiten este protocolo.
17. Puntee Print [Imprimir] para imprimir la receta por infrarojos. La mayoría de dispositivos pueden imprimir con tecnología Bluetooth si su dispositivo portátil e impresora la admiten.
18. Puntee en Print (Imprimir) para imprimir la receta a través de una impresora IR. La mayoría de dispositivos pueden imprimir a través de Bluetooth si el dispositivo portátil y la impresora lo permiten.
19. Pulse Print (Imprimir) para imprimir la receta a través de infrarrojos. La mayoría de los dispositivos pueden imprimir a través de Bluetooth si el dispositivo portátil y la impresora admiten esta tecnología.
20. Toque Imprimir (Print) para imprimir la receta mediante IR. La mayoría de dispositivos puede imprimir mediante Bluetooth si su dispositivo de mano e impresora tienen esta función.
21. Toque Print (Imprimir) para imprimir la receta por infrarrojos. La mayor parte de los dispositivos se pueden imprimir mediante Bluetooth, en caso de que el dispositivo portátil y la impresora admitan esta función.

22. Pulse Print para imprimir la receta médica por IR. La mayoría de los dispositivos pueden imprimir por Bluetooth si el dispositivo portátil y la impresora ofrecen compatibilidad para ello.
23. Pulse en Print (Imprimir) para imprimir la receta mediante IR. La mayoría de dispositivos pueden imprimir mediante Bluetooth si su dispositivo portátil y su impresora lo admiten.
24. Pulse Print (Imprimir) para imprimir la prescripción por infrarrojos. La mayoría de dispositivos admite la impresión mediante Bluetooth, siempre que el dispositivo y la impresora sean compatibles.
25. Pinche sobre la opción Imprimir para imprimir la receta mediante infrarrojos. La mayoría de equipos le permitirán imprimir por Bluetooth, caso de que su equipo portátil o impresora lo soporten.
26. Seleccione Print (Imprimir) para imprimir la receta por infrarrojos. La mayoría de dispositivos pueden imprimir por Bluetooth si el dispositivo portátil y la impresora son compatibles con esta tecnología.
27. Toque en Print para imprimir las recetas a través de IR. La mayoría de los dispositivos pueden imprimir a través de Bluetooth si su dispositivo e impresora son compatibles con esta opción.
28. Presione Print (imprimir) para imprimir la receta por infrarrojos. La mayoría de dispositivos pueden imprimir a través de Bluetooth si el dispositivo portátil y la impresora son compatibles.
29. Pulse sobre Print para imprimir la prescripción mediante infrarrojos. La mayoría de los dispositivos puede imprimir por Bluetooth si el dispositivo portátil y la impresora son compatibles con esta función.
30. Pulse Imprimir (Print) para imprimir las prescripciones por vía infrarrojos. La mayoría de los dispositivos pueden imprimir por vía Bluetooth si su dispositivo manual y su impresora lo permiten.
31. Puntee en Print (Imprimir) para imprimir la receta por infrarrojos. La mayoría de los dispositivos pueden imprimir mediante Bluetooth si el dispositivo portátil y la impresora admiten esta función.
32. Seleccione ≪Print≫para imprimir la receta por infrarrojos. La mayoría de dispositivos permiten la impresión a través de Bluetooth si el dispositivo portátil y la impresora son compatibles con este sistema.
33. Haga clic en Print para imprimir la receta vía IR. La mayoría de dispositivos pueden imprimir vía Bluetooth si el dispositivo de mano y la impresora lo admiten.
34. Pulse Print (Imprimir) para imprimir la receta mediante infrarrojos. La mayoría de dispositivos pueden imprimir mediante Bluetooth, si su dispositivo manual y su impresora lo admiten.
35. Haga clic en Print para imprimir la receta utilizando una impresora por infrarrojos. La mayoría de los dispositivos pueden imprimir por Bluetooth si su dispositivo manual y su impresora lo admiten.
36. Pulse Print (Imprimir) para imprimir la receta mediante IR. La mayoría de dispositivos pueden imprimir a través de Bluetooth si el dispositivo portátil y la impresora son compatibles con este sistema.
37. Pulse Print (Imprimir) para imprimir la receta por IR (infrarrojos). La mayoría de los dispositivos pueden imprimir por Bluetooth, siempre y cuando su dispositivo manual y su impresora sean compatibles con este sistema.
38. Pulse sobre Imprimir para imprimir la receta mediante IR. La mayoría de dispositivos puede imprimir mediante Bluetooth, por lo que no será un problema si su dispositivo portátil y su impresora estén configurados para ello.
39. Haga clic en Print (imprimir) para imprimir la receta a través de IR. La mayoría de los dispositivos pueden imprimir mediante Bluetooth si su dispositivo portátil y su impresora cuentan con esa opción.
40. Pulse Imprimir para imprimir la prescripción vía IR. La mayoría de los dispositivos pueden imprimir vía Bluetooth si su dispositivo de mano y la impresora están preparados.
41. Pulse Print (Imprimir) para imprimir la receta mediante una conexión por infrarrojos. Si su dispositivo de mano y su impresora son compatibles con la tecnología Bluetooth la mayoría de aparatos modernos lo son, los datos se transmiten por este medio.
42. Pulse Print (Imprimir) para imprimir la receta por infrarrojos. Si su impresora es compatible con la tecnología Bluetooth, podrá imprimir por esta vía con la mayoría de los dispositivos.
43. Pulse 'Print' (imprimir) para imprimir la receta por IR (infrarrojos). La mayoría de los aparatos pueden imprimir por medio del Bluetooth siempre que su aparato portátil y la impresora lo permitan.
44. Toque en Print para imprimir la receta mediante infrarrojos. La mayoría de los dispositivos pueden imprimir a través de Bluetooth si tanto el dispositivo portátil como la impresora son compatibles con este modo.
45. Seleccione Imprimir para imprimir la receta por IR. La mayoría de los dispositivos pueden imprimir a través de Bluetooth si su dispositivo portátil e impresora tienen soporte para ello.
46. Toque Imprimir para imprimir la receta por IR. La mayoría de dispositivos imprimen por Bluetooth si su dispositivo de mano y su impresora están preparados para ello.

47. Pulse Print (Imprimir) para imprimir la receta por infrarrojos. La mayoría de los dispositivos pueden imprimir por Bluetooth si el dispositivo portátil y la impresora lo admiten.
48. Pulse Print para imprimir la receta a través de infrarrojos (IR). La mayoría de dispositivos pueden imprimir a través de Bluetooth si el dispositivo y la impresora soportan esta opción.
49. Pinche en "Print" para imprimir la receta por infrarrojos. La mayor parte de los dispositivos pueden imprimir por Bluetooth, si su impresora y dispositivo portátil lo soportan.
50. Pulse Imprimir para imprimir la receta por infrarrojos. La mayoría de los aparatos pueden imprimir vía Bluetooth siempre que su dispositivo manual y su impresora le permita hacerlo.
51. Pulse Print para imprimir la receta mediante infrarrojos; la mayor parte de los dispositivos pueden imprimir a través de Bluetooth, siempre y cuando tanto su dispositivo como su impresora admitan esta modalidad de protocolo.
52. Clique Print para imprimir la prescripción vía IR. La mayoría de dispositivos pueden imprimir vía Bluetooth si el dispositivo manual y la impresora lo permiten.
53. Pulse Print (Imprimir) para imprimir la receta mediante IR. La mayoría de dispositivos puede imprimir a través de Bluetooth si el dispositivo portátil y la impresora lo admiten.
54. Toque Print (Imprimir) para imprimir la receta a través de infrarojos. La mayoría de los dispositivos imprimen mediante Bluetooth si el dispositivo portátil y la impresora son compatibles con esta tecnología.
55. Selecciona con el puntero Print para imprimir la receta vía IR. La mayoría de dispositivos pueden imprimir vía Bluetooth si tu dispositivo manual e impresora disponen de esta tecnología.
56. *missing translation*
57. Seleccione "Print" para imprimir la receta vía IR. La mayoría de dispositivos pueden imprimir vía Bluetooth, si su dispositivo móvil e impresora son compatibles con esta tecnología.
58. Puntee en Print (Imprimir) para imprimir la receta por infrarrojos. La mayoría de los dispositivos pueden imprimir por Bluetooth si tanto el dispositivo portátil como la impresora son compatibles con dicha tecnología.
59. Pulse Print para imprimir la prescripción mediante infrarrojos. La mayoría de dispositivos imprimen por Bluetooth si el dispositivo portátil y la impresora lo admiten.
60. Seleccione Imprimir para imprimir la prescripción por infrarrojos. La mayoría de dispositivos pueden imprimir por Bluetooth si su dispositivo portátil e impresora lo permiten.
61. Pulse Print para imprimir la receta a través del puerto IR. La mayoría de dispositivos pueden imprimir vía Bluetooth si su dispositivo portátil y la impresora son compatibles.
62. Pulse Print (Imprimir) para imprimir la receta mediante infrarrojos. La mayoría de dispositivos pueden imprimir mediante Bluetooth si el dispositivo portátil y la impresora son compatibles con esta función.
63. Pulse "Print" para imprimir la receta mediante infrarrojos. La mayoría de dispositivos tienen capacidad para la impresión por Bluetooth si tanto impresora como dispositivo lo admiten.
64. Toque Print (Imprimir) para imprimir la receta mediante radiación infrarroja. La mayoría de dispositivos pueden imprimir mediante Bluetooth si el dispositivo de mano y la impresora lo admiten.
65. Pulse en Print (Imprimir) para imprimir cualquier receta mediante IR. Con la mayoría de dispositivos se puede imprimir mediante Bluetooth siempre que su dispositivo portátil y su impresora sean compatibles.
66. Pulse Print para imprimir las recetas a través de infrarrojos. La mayoría de los dispositivos pueden imprimir a través de Bluetooth en caso de que el dispositivo portátil y la impresora sean compatibles con esta tecnología.
67. Pulse "Print" para imprimir la prescripción a través de infrarojos. La mayoría de los dispositivos pueden imprimir a través de Bluetooth si el dispositivo portátil y la impresora admiten esta tecnología.
68. Toque Print para imprimir la prescripción mediante dispositivos inalámbricos. La mayoría de los equipos pueden imprimir a través de Bluetooth, si su dispositivo portátil y su impresora son compatibles.
69. Pulse en Print para imprimir la receta mediante infrarrojos. La mayoría de dispositivos permiten la impresión mediante Bluetooth, siempre que su dispositivo portátil y su impresora sean compatibles con este sistema.
70. Vaya Imprimir para imprimir la receta por infrarrojos. La mayoría de dispositivos pueden imprimir via Bluetooth si su dispositivo manual y su impresora lo permiten.
71. Puntee Print para imprimir la prescripción por IR. La mayoría de dispositivos pueden imprimir por Bluetooth si su dispositivo de mano y su impresora admiten esta funcionalidad.
72. Toque Print para imprimir la receta por infrarrojos. La mayoría de dispositivos pueden imprimir vía Bluetooth si el dispositivo portátil y la impresora disponen de esta función.
73. Pulse Print para imprimir la receta por infrarrojos. La mayoría de dispositivos puede imprimir

por Bluetooth si el dispositivo portátil y la impresora lo permiten.
74. Puntee Imprimir para imprimir la receta a través de infrarrojos. La mayoría de dispositivos pueden imprimir a través de Bluetooth si el dispositivo portátil y la impresora son compatibles.
75. Toque en Imprimir para imprimir la receta mediante IR. La mayoría de dispositivos pueden imprimir también por Bluetooth si su dispositivo de mano y su impresora cuentan con esta característica.
76. Pulse Print (Imprimir) para imprimir la prescripción por infrarrojos. La mayoría de los dispositivos pueden imprimir vía Bluetooth si el dispositivo portátil y la impresora son compatibles con esta tecnología.
77. Pulse "Print" (Imprimir) para imprimir la receta mediante infrarrojos. La mayoría de los dispositivos pueden imprimir vía Bluetooth si el dispositivo de mano y la impresora están configurados para ello.
78. Pulse Print (Imprimir) para imprimir la receta por IR. La mayoría de dispositivos pueden imprimir mediante Bluetooth si su dispositivo manual e impresora lo tienen soportado.
79. Toque Print (Imprimir) para imprimir la receta mediante una conexión por infrarrojos. La mayoría de los dispositivos pueden imprimir mediante Bluetooth si el dispositivo de mano y la impresora lo admiten.
80. Seleccione Print para imprimir la prescripción via IR. La mayoría de dispositivos pueden imprimir vía Bluetooth si su aparato portátil e impresora están preparados técnicamente.
81. Pulse en Print (Imprimir) para imprimir la receta por infrarrojos. La mayoría de los dispositivos pueden enviar los datos mediante Bluetooth, si el dispositivo y la impresora admiten esta tecnología.
82. Pulse Imprimir para imprimir la receta vía IR. La mayoría de los dispositivos pueden imprimir via Bluetooth si su dispositivo de bolsillo y su impresora lo soportan.
83. Pulse Print (Imprimir) para imprimir la receta a través de infrarrojos (IR). La mayor parte de dispositivos pueden imprimir a través de Bluetooth si el dispositivo portátil y la impresora son compatibles con esta tecnología.
84. Toque Imprimir para imprimir la receta a través de infrarrojos. Por otro lado, la mayoría de los dispositivos pueden realizar la impresión mediante Bluetooth si el dispositivo de mano y la impresora cuentan con Bluetooth.
85. Escriba Print para imprimir la receta por IR. Algunos sistemas permiten imprimir a través de Bluetooth si dispone de un medio portátil y la impresora es compatible.
86. Pulse Print para imprimir la receta mediante IR. La mayor parte de los dispositivos pueden imprimir a través de Bluetooth si su dispositivo de mano y la impresora soportan ese estándar.
87. Pulse "Print" para imprimir la receta via IR. Si su dispositivo portátil y su impresora soportan Bluetooth, también podrá imprimir la receta mediante esta herramienta.
88. Pulse Imprimir para imprimir la receta por conexión de infrarrojos. La mayoría de los dispositivos pueden dar la orden de impresión por Bluetooth si el dispositivo móvil y la impresora están configurados para ello.
89. Pulse Print para imprimir la receta mediante infrarrojos. La mayoría de dispositivos pueden imprimir vía Bluetooth si su dispositivo portátil e impresora lo admiten.
90. Toca ≪Print≫(imprimir) para imprimir la receta vía IR. La mayoría de los dispositivos pueden imprimir vía Bluetooth si el dispositivo portátil es compatible.

D.0.4.7 Text 3 – Focus point 1

Source segment (*English*)

- **OS** (language)

Target segment (*Spanish*)

1. Idioma del sistema operativo
2. Sistema operativo (idioma)
3. Sistema operativo (idioma)
4. Sistema operativo (idioma)
5. FO (idioma)
6. Sistema operativo (idioma)
7. OS (idioma)
8. SO (idioma)
9. SO (idioma)

10. SO (idioma)
11. SO (idioma)
12. OS (idioma)
13. SO (idioma)
14. Sistema operativo (idioma)
15. SO (idioma)
16. Sistema operativo (idioma)
17. SO (idioma)
18. Idioma del SO
19. SO (idioma)
20. SO (idioma)
21. SO (idioma)
22. SO (idioma)
23. SO (idioma)
24. SO (idioma)
25. OS (idioma)
26. SO (idioma)
27. SO (idioma)
28. SO (idioma)
29. SO (idioma)
30. Sistema Operativo (idioma)
31. SO (idioma)
32. Sistema operativo (lengua)
33. OS (idioma)
34. SO (idioma)
35. Idioma
36. SO (idioma)
37. OS (idioma)
38. OS (idioma)
39. Sistema operativo (idioma)
40. OS (idioma)
41. Sistema operativo (idioma)
42. Sistema operativo (idioma)
43. SO (idioma)
44. Sistema operativo (idioma)
45. Sistema operativo (idioma)
46. OS (idioma)
47. SO (idioma)
48. SO (idioma)
49. OS (idioma)
50. SO (idioma)
51. SO (idioma)
52. Sistema operativo (idioma)
53. SO (lenguaje)
54. SO (idioma)
55. OS (lenguaje)
56. SO (idioma)
57. SO (idioma)
58. Sistema operativo (idioma)
59. Sistema operativo (idioma)
60. OS (idioma)
61. OS (idioma)
62. SO (idioma)
63. SO (idioma)
64. Sistema operativo (idioma)
65. OS (idioma)
66. SO (idioma)
67. SISTEMA OPERATIVO (idioma)
68. SO (idioma)
69. SO (idioma)
70. OS (lenguaje)
71. SO (idioma)

72. Idioma del sistema operativo
73. Sistema operativo (idioma)
74. Sistema operativo (idioma)
75. SO (idioma)
76. SO (idioma)
77. Sistema operativo (idioma)
78. SO (idioma)
79. Sistema operativo (lenguaje)
80. OS (idioma)
81. Sistema operativo (idioma)
82. SO (idioma)
83. SO (idioma)
84. Sistema operativo (idioma)
85. Idioma
86. SO (idioma)
87. OS (idioma)
88. Idioma del sistema operativo
89. SO (idioma)
90. SO (idioma)

D.0.4.8 Text 3 – Focus point 2

Source segment (*English*)

- 2.0 + **EDR**

Target segment (*Spanish*)

1. 2.0 + EDR
2. 2.0 + EDR
3. 2.0 + EDR
4. 2.0 con EDR
5. 2.0 + EDR
6. Versión 2.0 + EDR
7. 2.0 + EDR
8. 2.0 + EDR
9. 2.0 + EDR
10. 2.0 + EDR
11. 2.0 + EDR
12. 2.0 + EDR
13. 2.0 + EDR
14. 2.0 + EDR
15. 2.0 + EDR
16. 2.0 + EDR
17. 2.0 + EDR
18. 2.0 + EDR
19. 2.0 + EDR
20. 2.0 + EDR
21. 2.0 + EDR
22. 2.0 + EDR
23. 2.0 + EDR
24. 2.0 + EDR
25. 2.0 + EDR
26. 2.0 + EDR
27. 2.0 + EDR
28. 2.0 + EDR
29. 2.0 + EDR
30. 2.0 + EDR
31. 2.0 + EDR
32. 2.0 + EDR
33. 2.0 + EDR

34. 2.0 + EDR
35. 2.0 + EDR
36. 2.0 + EDR
37. 2.0 + EDR
38. 2.0 + EDR
39. 2.0 + EDR
40. 2.0 + EDR
41. 2.0 + EDR
42. 2.0 + EDR
43. 2.0 + EDR
44. 2.0 + EDR
45. 2.0 + EDR
46. 2.0 + EDR
47. + EDR de Bluetooth
48. 2.0 + EDR
49. 2.0 + EDR
50. 2.0 + EDR
51. 2.0 + EDR
52. 2.0 + EDR
53. 2.0 + EDR
54. 2.0 + EDR
55. 2.0 + EDR
56. 2.0 + EDR
57. 2.0 + EDR
58. 2.0 + EDR
59. 2.0 + EDR
60. Bluetooth estándar v. 2.0 + EDR
61. Bluetooth estándar versión 2.0 + EDR
62. Bluetooth, versión estándar 2.0 + EDR
63. Bluetooth versión estándar 2.0 + EDR
64. Bluetooth estándar versión 2.0 + EDR
65. Bluetooth versión estándar 2.0 + EDR
66. Norma Bluetooth 2.0 + EDR
67. Bluetooth versión standard 2.0 + EDR
68. Estándar Bluetooth V. 2.0 + EDR
69. Ver. Bluetooth estándar 2.0 + EDR
70. Estándar Bluetooth versión 2.0 + EDR
71. Estándar Bluetooth versión 2.0 + EDR
72. Estándar Bluetooth versión 2.0 + EDR
73. Estándar Bluetooth V. 2.0 + EDR
74. Estándar Bluetooth, versión 2.0 + EDR
75. Bluetooth estándar, versión 2.0 + EDR
76. Bluetooth estándar, versión 2.0 + EDR
77. Bluetooth estándar, versión 2.0 + EDR
78. Missing translation
79. Missing translation
80. Bluetooth versión estándar 2.0 + EDR
81. Bluetooth estándar versión 2.0 + EDR
82. 2.0 + EDR
83. 2.0 + EDR
84. 2.0 + EDR
85. 2.0 + EDR
86. 2.0 + EDR
87. 2.0 + EDR
88. 2.0 + EDR
89. 2.0 con EDR
90. 2.0 + EDR

D.0.4.9 Text 3 – Focus point 3

Source segment (*English*)

- Size (**w** x **d** x **h** mm)

Target segment (*Spanish*)

1. Tamaño (an x prf x al mm)
2. Tamaño (anchura x profundidad x altura en mm)
3. Tamaño (largo x ancho x alto mm)
4. Tamaño (ancho x largo x alto mm)
5. Dimensiones (an x pr x alt mm)
6. Dimensiones (ancho x alto x prof. en mm)
7. Tamaño (anchura x longitud x altura en mm)
8. Tamaño (a x f x h mm)
9. Tamaño (largo x ancho x alto mm)
10. Dimensiones (w x d x h mm)
11. Tamaño en milímetros (ancho x profundidad x altura)
12. Tamaño (w x d x h mm)
13. Tamaño (w x d x h mm)
14. Dimensiones (ancho x profundidad x altura en mm)
15. Tamaño (anchura x profundidad x altura en mm)
16. Dimensiones (An x Pr x Al mm)
17. Tamaño (ancho x largo x altura, en mm)
18. Tamaño (a x p x a mm)
19. Tamaño (anchura x profundidad x altura en mm)
20. Dimensiones (ancho x profundo x alto)
21. Tamaño (alto x ancho x longitud en mm)
22. Tamaño (anch. x prof. x alt. mm)
23. Tamaño (an x p x al, en mm)
24. Dimensiones (ancho x alto x prof. en mm)
25. Dimensiones (p x a x a mm)
26. Medidas (largo x ancho x alto en mm)
27. dimensiones (anch. x prof. x alt. en mm)
28. Tamaño (an x pr x al, en mm)
29. Tamaño Dimensiones (alto por ancho por largo, mm)
30. Tamaño (ancho x alto x grueso mm)
31. Tamaño (An x P x Al mm)
32. Tamaño (a x p x h mm)
33. Tamaño (an x f x al mm)
34. Tamaño (an. x prof. x al. mm)
35. Dimensiones
36. Tamaño (anch. x prof. x alt. en mm)
37. Tamaño (a x p x a mm)
38. Tamaño (a x p x al mm)
39. Tamaño (ancho x largo x alto en mm)
40. Tamaño (ancho x profundo x alto mm)
41. Dimensiones (anchura x profundidad x altura en mm)
42. Tamaño (ancho x alto x grosor mm)
43. Tamaño (anchura x profundidad x altura)
44. Tamaño (an x al x p mm)
45. Tamaño (ancho x profundidad x altura, mm)
46. Tamaño (ancho x fondo x altura mm)
47. Tamaño (ancho x profundidad x altura mm)
48. Dimensiones (ancho x fondo x alto, en mm)
49. Tamaño (a x f x a mm)
50. Tamaño (ancho x largo x alto mm)
51. Dimensiones (an x pr x al en mm)
52. Medidas (ancho x largo x fondo mm)
53. Tamaño (ancho x profundidad x altura mm)
54. Tamaño (anchura x profundidad x altura)
55. Dimensiones (ancho x grosor x altura mm.)
56. Dimensiones (An x P x Al mm)
57. Tamaño (an. x pr. x alt. mm)
58. Tamaño (anch. x prof. x altura)

59. Dimensiones (anchura x profundidad x altura mm)
60. Tamaño (longitud x ancho x altura mm)
61. Tamaño (ancho x profundo x alto mm)
62. Tamaño (a x l x a mm)
63. Tamaño (ancho x alto x fondo mm)
64. Tamaño (ancho x alto x profundo en mm)
65. Tamaño (anch. x gros. x alt. en mm)
66. Tamaño (anchura x altura x grosor mm)
67. Tamaño (ancho x largo x alto mm)
68. Tamaño (an. x pr. x al. mm)
69. Dimensiones (A x P x A mm)
70. Medidas (ancho x profundidad x altura mm)
71. Tamaño (AxPxA, mm)
72. Tamaño (anch. x prof. x alt. en mm)
73. Ancho x altura x fondo
74. Tamaño (ancho x largo x alto mm)
75. Medidas (a x p x a mm)
76. Dimensiones (ancho x fondo x alto en mm)
77. Tamaño (an x pr x al mm)
78. Tamaño (l x p x a mm)
79. Tamaño (mm de ancho x largo x alto)
80. Tamaño (w x d x h mm)
81. Tamaño (ancho x fondo x alto mm)
82. Dimensiones (ancho x profundidad x altura en mm)
83. Tamaño (anchura x profundidad x altura mm)
84. Tamaño (ancho × profundidad × altura, en mm)
85. Medidas (ancho x alto x grueso)
86. Dimensiones (w x d x h)
87. Tamaño (a x f x a x mm)
88. Dimensiones (an x pr x al mm)
89. Tamaño (anchura x altura x grosor mm)
90. Tamaño (an x l x al)

Appendix E

Selection questionnaire

E.1 Recruitment of translators

This appendix presents the selection questionnaire of experimental subjects. The call was made via a form in SurveyMonkey.com.

The sections of the questionnaire were:

- Introduction
- Personal information
- Previous experience in the field of translation
- Fields of expertise as a professional translator
- Tools
- Acknowledgements

SurveyMonkey.com
because knowledge is everything

Logged in as "tradumatica" Log Off

Home | Create Survey | My Surveys | Address Book | My Account | Need Help?

You have a **basic account**. To remove the limits of a basic account and get unlimited questions, upgrade now!

survey title:
FORMULARIO DE SELECCIÓN DE TRADUCTORES Edit Title

design survey | collect responses | analyze results

- Edit Survey
- Survey Options
- Print Survey
- Restore Questions

Edit Survey

Preview Survey

To change the **look** of your survey, select a theme below.

Print Theme | New Theme

Add Page Here

Page #1 Edit Page | Move | Copy | Delete | Add Logic | Show this Page Only

1. INTRODUCCIÓN

Apreciado traductor:

A continuación encontrarás un cuestionario a través del cual podremos conocer mejor tus campos de especialidad. A partir de las respuestas a este formulario, realizaremos la selección de los traductores que mejor se ajusten al perfil que estamos buscando para realizar de manera remunerada unas traducciones.

Te pedimos que respondas a todas las preguntas. No tardarás más de tres minutos en rellenar este cuestionario.

Add Question Here

Add Page Here

Page #2 Edit Page | Move | Copy | Delete | Add Logic | Show this Page Only

2. DATOS PERSONALES

Add Question Here

Edit Question | Move | Copy | Delete

***1. Nombre y apellidos:**

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete

***2. Dirección de e-mail:**

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete

3. Teléfono fijo:

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete

***4. Teléfono móvil:**

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete

***5. Fecha de nacimiento:(dd/mm/aaaa)**

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

***6. Sexo:**

Hombre

Mujer

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete

***7. Nacionalidad:**

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

***8. Combinación lingüística principal como traductor profesional:**

EN > ES

FR > ES

DE > ES

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete

9. Otras combinaciones lingüísticas como traductor:

Add Question Here

Add Page Here

Page #3 Edit Page | Move | Copy | Delete | Add Logic | Show this Page Only

3. EXPERIENCIA PROFESIONAL DENTRO DEL CAMPO DE LA TRADUCCIÓN

Add Question Here

Edit Question | Move | Copy | Delete | Add Logic

***1. ¿Desde cuándo te dedicas a la traducción?**

Desde hace 0-2 años

Desde hace 3-5 años

Desde hace más de 5 años

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

***2. ¿La traducción supone más del 50% de tu actividad profesional?**

Sí

No

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

3. En caso afirmativo (pregunta 2), ¿desde cuándo la traducción supone más del 50% de tus ingresos?

Desde hace 0-2 años

Desde hace 3-5 años

Desde hace más de 5 años

Add Question Here

Add Page Here

Page #4 Edit Page | Move | Copy | Delete | Add Logic | Show this Page Only

4. CAMPOS DE ESPECIALIZACIÓN COMO TRADUCTOR PROFESIONAL

¿Qué tipo de textos traduces habitualmente y qué porcentaje (aproximadamente) suponen en tu actividad como traductor?

Add Question Here

Edit Question | Move | Copy | Delete | Add Logic

***1. TEXTOS TÉCNICOS**

No traduzco textos técnicos.

Suponen menos de 25% de los textos que traduzco.

Suponen entre el 25% y el 50% de los textos que traduzco.

Suponen más del 50% de los textos que traduzco.

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

***2. TEXTOS JURÍDICOS**

No traduzco textos jurídicos.

Suponen menos de 25% de los textos que traduzco.

Suponen entre el 25% y el 50% de los textos que traduzco.

Suponen más del 50% de los textos que traduzco.

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

***3. TEXTOS CIENTÍFICOS / MÉDICOS / FARMACÉUTICOS**

No traduzco textos científicos / médicos / farmacéuticos.

Suponen menos de 25% de los textos que traduzco.

Suponen entre el 25% y el 50% de los textos que traduzco.

Suponen más del 50% de los textos que traduzco.

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

***4. TEXTOS ADMINISTRATIVOS**

No traduzco textos administrativos.

Suponen menos de 25% de los textos que traduzco.

Suponen entre el 25% y el 50% de los textos que traduzco.

Suponen más del 50% de los textos que traduzco.

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

***5. TEXTOS DE MÁRQUETING**

No traduzco textos de márqueting.

Suponen menos de 25% de los textos que traduzco.

Suponen entre el 25% y el 50% de los textos que traduzco.

Suponen más del 50% de los textos que traduzco.

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

***6. OTROS TIPOS DE TEXTOS**

No traduzco otros tipos de textos.

Suponen menos de 25% de los textos que traduzco.

Suponen entre el 25% y el 50% de los textos que traduzco.

Suponen más del 50% de los textos que traduzco.

Add Question Here

Add Page Here

Page #5 Edit Page | Move | Copy | Delete | Add Logic | Show this Page Only

5. PERFIL INSTRUMENTAL

Las siguientes preguntas hacen referencia al uso de herramientas de traducción asistida por ordenador en tu trabajo.

Add Question Here

Edit Question | Move | Copy | Delete | Add Logic

***1. ¿Utilizas el programa de traducción asistida por ordenador TRADOS para traducir?**

No.

En muy pocas ocasiones.

A menudo.

En la mayoría de las ocasiones.

Siempre.

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

*****

2. ¿Realizas traducciones con otros sistemas de traducción asistida por ordenador que no sean TRADOS?

No, nunca.

En ocasiones.

Sí, siempre.

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete

3. En caso afirmativo, ¿qué otros sistemas de traducción asistida por ordenador utilizas?

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

***4. ¿Realizas también traducciones sin sistemas de traducción asistida por ordenador?**

No.

En muy pocas ocasiones.

A menudo.

En la mayoría de las ocasiones.

Siempre.

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

5. ¿Qué herramientas del paquete TRADOS utilizas habitualmente?

Workbench + Microsoft Word

Workbench + Microsoft Word + Multiterm

Workbench + TagEditor

Workbench + TagEditor + Multiterm

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete | Add Logic

6. ¿Desde cuándo trabajas con TRADOS?

Desde hace un año o menos.

Desde hace 3 años.

Desde hace 5 años.

Desde hace más de 5 años.

Add Question Here | Split Page Here

Edit Question | Move | Copy | Delete

7. ¿Con qué versión de TRADOS y de MS Word trabajas?

Add Question Here

Add Page Here

Page #6 Edit Page | Move | Copy | Delete | Add Logic | Show this Page Only

6. ¡GRACIAS!

Muchas gracias por tu colaboración. Gestionaremos de manera confidencial los datos que nos has facilitado para realizar la selección final de traductores que realizarán de forma remunerada las traducciones.

De cara a poder fijar un día para realizar las pruebas de traducción, te pedimos que nos informes sobre tu diponibilidad para desplazarte a la Facultad de Traducción e Interpretación de la UAB (Campus de Bellaterra).

Add Question Here

Edit Question | Move | Copy | Delete | Add Logic

***1. ¿Durante los viernes del mes de enero y febrero (2009), en qué horario preferirías desplazarte a la UAB para realizar las traducciones (1.300 palabras aprox.)?**

Viernes en horario de mañana (de 10:30 a 15:30, aprox.)

Viernes en horario de tarde (de 15:30 a 20:30, aprox.)

Add Question Here

Add Page Here

Page #7 Edit Page | Move | Copy | Delete | Show this Page Only

7. CIERRE

Apreciado traductor, en el plazo máximo de un mes, nos volveremos a poner en contacto con los traductores seleccionados. Esperamos poder contigo.

¡Hasta pronto!

Dudas y comentarios: barto.mesa@uab.cat

Add Question Here

Appendix F

Experiment protocol

F.1 Task distribution in the computer lab

Aula multimèdia D de la Facultat de Traducció i d'Interpretació de la UAB

ORDINADOR 25	ORDINADOR 26 **SUBJECTE 16** E3+E1+E2 T1+T2+T3	ORDINADOR 27	ORDINADOR 28 **SUBJECTE 17** E3+E1+E2 T2+T3+T1	ORDINADOR 29	ORDINADOR 30 **SUBJECTE 18** E3+E1+E2 T3+T1+T2
ORDINADOR 19	ORDINADOR 20 **SUBJECTE 13** E2+E1+E3 T1+T2+T2	ORDINADOR 21	ORDINADOR 22 **SUBJECTE 14** E2+E1+E3 T2+T3+T1	ORDINADOR 23	ORDINADOR 24 **SUBJECTE 15** E2+E1+E3 T3+T1+T2
ORDINADOR 13	ORDINADOR 14 **SUBJECTE 10** E3+E2+E1 T1+T2+T3	ORDINADOR 15	ORDINADOR 16 **SUBJECTE 11** E3+E2+E1 T2+T3+T1	ORDINADOR 17	ORDINADOR 18 **SUBJECTE 12** E3+E2+E1 T3+T1+T2
ORDINADOR 7	ORDINADOR 8 **SUBJECTE 7** E2+E3+E1 T1 +T2+T3	ORDINADOR 9	ORDINADOR 10 **SUBJECTE 8** E2+E3+E1 T2+T3+T1	ORDINADOR 11	ORDINADOR 12 **SUBJECTE 9** E2+E3+E1 T3+T1+T2
ORDINADOR 1 **SUBJECTE 1** E1+E2+E3 T1 +T2+T3	ORDINADOR 2 **SUBJECTE 2** E1+E2+E3 T2+T3+T1	ORDINADOR 3 **SUBJECTE 3** E1+E2+E3 T3+T1+T2	ORDINADOR 4 **SUBJECTE 4** E1+E3+E2 T1+T2+T3	ORDINADOR 5 **SUBJECTE 5** E1+E3+E2 T2+T3+T1	ORDINADOR 6 **SUBJECTE 6** E1+E3+E2 T3+T1+T2

Llegenda:

E1: Entorn processador de textos Word
E2: Entorn processador de textos Word + Memòria de traducció
E3: Entorn editor de textos TagEditor + Memòria de traducció

T1: Text Spypredator
T2: Text MedHelp
T3: Text Stock Terminal

Software instal·lat a l'aula:

- Trados SDL 2007 Professional
- Microsoft Office Word 2003 (versió 11.8169.8172 – SP3)
- InPutLog (versió 2.0)
- FlashBack Recorder (versió 2.0)

Appendix G

Translation briefs

UAB
Universitat Autònoma de Barcelona

PROYECTO 1

Objetivo

Traducir un texto con Microsoft Word (500 palabras aproximadamente).

Instrucciones

Traduce el texto que encontrarás en la unidad D del ordenador, dentro de la carpeta D:\PROYECTO_01\SOURCE. En la traducción de este texto no utilizarás ninguna herramienta de traducción asistida por ordenador, simplemente el procesador de textos Microsoft Word.

El producto al que hace referencia el texto no ha sido localizado al español (tenlo en cuenta a la hora de citar los menús, botones, etc., en tu traducción).

Cuentas aproximadamente con una hora para traducir y revisar el texto antes de guardarlo en la carpeta D:\PROYECTO_01\TARGET que encontrarás en la unidad D del ordenador.

La calidad de la traducción es importante, ya que el texto que nos facilites no será sometido a un proceso de revisión por parte de un segundo traductor.

Archivos de entrega

- nombredelarchivo_*númeroordenador*.doc (en D:\PROYECTO_01\TARGET)

  Por ejemplo: SpyPredator_12.doc

IMPORTANTE:

- PARA NOMBRAR CORRECTAMENTE EL ARCHIVO DE TU TRADUCCIÓN, ENCONTRARÁS EL NÚMERO DEL ORDENADOR EN LA CPU. ES MUY IMPORTANTE QUE ANOTES BIEN ESTE NÚMERO EN EL NOMBRE DEL ARCHIVO, YA QUE LO UTILIZAREMOS PARA IDENTIFICAR TUS TRADUCCIONES.
- **NO APAGUES EL ORDENADOR CUANDO HAYAS ACABADO.**

UAB
Universitat Autònoma de Barcelona

PROYECTO 2

Objetivo

Traducir un texto con Microsoft Word y SDL Trados Workbench (500 palabras aproximadamente).

Instrucciones

Traduce el texto que encontrarás en la unidad D del ordenador, dentro de la carpeta D:\PROYECTO_02\SOURCE. El cliente ha especificado que la traducción debe realizarse desde el procesador de textos Word (no importes el documento a TagEditor).

Dentro de la carpeta D:\PROYECTO_02\TM encontrarás ya una memoria vacía para que la alimentes con tu traducción.

El producto al que hace referencia el texto no ha sido localizado al español (tenlo en cuenta a la hora de citar los menús, botones, etc., en tu traducción).

Cuentas aproximadamente con una hora para traducir y revisar el texto antes de guardarlo en la carpeta D:\PROYECTO_02\TARGET del ordenador.

La calidad de la traducción es importante, ya que el texto que nos facilites no será sometido a un proceso de revisión por parte de un segundo traductor.

Archivos de entrega

- nombredelarchivo *_númeroordenador*.doc (en D:\PROYECTO_02\TARGET)
- nombredelarchivo *_númeroordenador*_CLEAN.doc (en D:\PROYECTO_02\TARGET)

  Por ejemplo: MedHelp_15.doc y MedHelp_15_CLEAN.doc

El texto con la extensión _CLEAN.doc deberás entregarlo sin segmentos bilingües y el texto sin esta extensión conservará los segmentos bilingües que hayas generado con la memoria.

Conserva la memoria de traducción que has alimentado en la carpeta correspondiente (PROYECTO_02\TM)

IMPORTANTE:

- **NO APAGUES EL ORDENADOR CUANDO HAYAS ACABADO.**

UAB
Universitat Autònoma de Barcelona

PROYECTO 3

Objetivo

Traducir un texto con TagEditor y SDL Trados Workbench (500 palabras aproximadamente).

Instrucciones

Traduce el texto (*.ttx) que encontrarás en la unidad D del ordenador, dentro de la carpeta D:\PROYECTO_03\SOURCE con la ayuda de TagEditor y SDL Trados Workbench. Dentro de la carpeta D:\PROYECTO_03\TM encontrarás ya una memoria vacía para que la alimentes con tu traducción.

Además de los archivos de trabajo (texto y memoria) el cliente te facilita también un PDF para que puedas ver el texto original con formato D:\PROYECTO_03\SOURCE.

El producto al que hace referencia el texto no ha sido localizado al español (tenlo en cuenta a la hora de citar los menús, botones, etc., en tu traducción).

Cuentas aproximadamente con una hora para traducir y revisar el texto antes de guardarlo en la carpeta D:\PROYECTO_03\TARGET del ordenador.

La calidad de la traducción es importante, ya que el texto que nos facilites no será sometido a un proceso de revisión por parte de un segundo traductor.

Archivos de entrega

- nombredelarchivo_*númeroordenador*.ttx (en D:\PROYECTO_03\TARGET)

  Por ejemplo: StockTerminal_15.ttx

Conserva la memoria de traducción que has alimentado en la carpeta correspondiente (PROYECTO_03\TM)

IMPORTANTE:

- **NO APAGUES EL ORDENADOR CUANDO HAYAS ACABADO.**

Appendix H

Data donation

H.1 Informed consent form

El grup de recerca Tradumàtica té un projecte de recerca en marxa amb el suport del Ministeri de Ciència i Innovació per al qual poden ser molt útils les dades resultants d'aquesta activitat de traducció (tractades de forma totalment anònima).

Per tal de poder-les fer servir ens cal primer el vostre consentiment.

Jo,_____, amb DNI/passaport_____, accepto que els materials que he elaborat durant les activitats de traducció dutes a terme a la Facultat de Traducció i Interpretació (UAB) el dia xx de xxx del 2009 es puguin fer servir **amb finalitats de recerca i de manera anònima.**

Signatura

Bellaterra, _____de _____del 2009.

Appendix I

Ethical clearance

I.1 Research Ethics Committee approval

UAB
Universitat Autònoma de Barcelona
Vicerectorat d'Investigació

Comisión de Ética en la Experimentación Animal y Humana (CEEAH)
Universitat Autònoma de Barcelona
08193 Bellaterra (Cerdanyola del Vallès)

La Comisión de Ética en la Experimentación Animal y Humana (CEEAH) de la Universitat Autònoma de Barcelona, reunida el día **26-11-2010**, acuerda informar favorablemente el proyecto titulado **"The impact of CAT tools on translated texts: the TRACE project"** presentado por **Bartolomé Mesa Lao**

Elaborado:	**Aprovado:**
Nombre: Nuria Perez Pastor Cargo: Secretària de la CEEA de la UAB Fecha: 03 DES. 2010	Nombre: Josep Santaló Pedro Cargo: President de la CEEAH de la UAB Fecha: 03 DES. 2010

Edifici A - Campus de la UAB - 08193 Bellaterra (Cerdanyola del Vallès) - Barcelona Spain
Tel.: 34 - 93 581 35 78 - Fax: 34 - 93 581 20 23
www.uab.cat / ceeah@uab.cat

Appendix J

Post-translation questionnaire

J.1 Survey on user satisfaction & text difficulty evaluation

CUESTIONARIO

Número de ordenador: ☐ Mañana
Fecha: ☐ Tarde

Información sobre entornos de traducción

¿Tienes titulación universitaria? ☐ Sí ☐ No

Si tienes una titulación, ¿qué estudiaste?

☐ Traducción ☐ Otros (indica) _____

¿Qué versión de SDL Trados utilizas actualmente?

¿Qué combinación de herramientas utilizas con más frecuencia?
☐ Trados Workbench + MS Word ☐ Trados Workbench + TagEditor

¿Con cuál de las siguientes afirmaciones te identificas más? (marca sólo una opción)
☐ Siempre utilizo Trados Workbench, aunque el cliente no lo exija.
☐ Decido utilizar Trados Workbench según las características del proyecto, aunque el cliente no lo exija.
☐ Únicamente utilizo Trados Workbench cuando el cliente lo exige.

Las versiones más recientes de SDL Trados permiten traducir documentos de Word con TagEditor. ¿Qué opción prefieres para traducir documentos Word o RTF con memoria de traducción?
☐ Trados Workbench + MS Word ☐ Trados Workbench + TagEditor

En la siguiente tabla, valora los siguientes aspectos de cada entorno de traducción: (1 es muy inadecuado, 4 es muy adecuado)

	Word	Trados Workbench + Word	Trados Workbench + TagEditor
Estabilidad (no se cuelga)	1 – 2 – 3 – 4	1 – 2 – 3 – 4	1 – 2 – 3 – 4
Edición de texto	1 – 2 – 3 – 4	1 – 2 – 3 – 4	1 – 2 – 3 – 4
Edición de formato	1 – 2 – 3 – 4	1 – 2 – 3 – 4	1 – 2 – 3 – 4
Visualización del texto	1 – 2 – 3 – 4	1 – 2 – 3 – 4	1 – 2 – 3 – 4
Interfaz	1 – 2 – 3 – 4	1 – 2 – 3 – 4	1 – 2 – 3 – 4
Herramientas de revisión	1 – 2 – 3 – 4	1 – 2 – 3 – 4	1 – 2 – 3 – 4

Información sobre los proyectos traducidos

Indica el nivel de dificultad que te ha supuesto cada aspecto de la tabla en los proyectos de traducción: (1 es muy sencillo, 4 es muy difícil)

	SpyPredator	MedHelp	StockTerminal
Terminología	1 – 2 – 3 - 4	1 – 2 – 3 – 4	1 – 2 – 3 – 4
Comprensión texto de partida	1 – 2 – 3 - 4	1 – 2 – 3 - 4	1 – 2 – 3 – 4
Redacción del texto meta	1 – 2 – 3 – 4	1 – 2 – 3 – 4	1 – 2 – 3 – 4
Ortotipografía y relación texto - imágenes	1 – 2 – 3 – 4	1 – 2 – 3 – 4	1 – 2 – 3 – 4
Herramienta exigida (Word, TagEditor…)	1 – 2 – 3 – 4	1 – 2 – 3 – 4	1 – 2 – 3 – 4

Valora del 1 al 4 la dificultad de cada proyecto
(1 es muy sencillo, 4 es muy complicado)

SpyPredator 1 – 2 – 3 - 4
MedHelp 1 – 2 – 3 - 4
StockTerminal 1 – 2 – 3 - 4

Valora del 1 al 4 tu nivel de satisfacción con las traducciones
(1 es muy insatisfecho, 4 es muy satisfecho)

SpyPredator 1 – 2 – 3 - 4
MedHelp 1 – 2 – 3 - 4
StockTerminal 1 – 2 – 3 - 4

Si los archivos originales de todos los proyectos estuviesen en formato RTF, ¿qué herramienta usarías para cada proyecto? (marca con una cruz)

	SpyPredator	MedHelp	StockTerminal
Word			
Trados WB + Word			
Trados WB + TagEditor			

¿Has tenido tiempo suficiente para realizar los proyectos? (marca con una cruz)

	SpyPredator	MedHelp	StockTerminal
Sí, de sobras			
Sí, suficiente			
Habría preferido 5 minutos más			
Me ha faltado tiempo			

Comentarios (opcional):

Muchas gracias por tu colaboración

Appendix K

Data validation report

K.1 Descriptive statistics of collected data

K.1.1 Translators

Translator Profile	Frequency	Percent
Freelancer	54	60.00
Novice	18	20.00

Table K.1: Translators' profile in the TRACE experiment

Gender	Frequency	Percent
Female	71	78.89
Male	19	21.11

Table K.2: Translators' genderin the TRACE experiment

Shift	Frequency	Percent
Afternoon	44	48.89
Morning	46	51.11

Table K.3: Translators' shift in the TRACE experiment

K.1.2 Texts

K.1.2.1 Text 1

Satisfaction rate		
Scale	Frequency	Percent
1	5	5.62
2	14	15.73
3	44	49.44
4	26	29.21

Table K.4: Translators' satisfaction rate for Text 1

Difficulty rate		
Scale	Frequency	Percent
1	37	42.05
2	43	48.86
3	8	9.09
4	0	0

Table K.5: Translators' difficulty rate for Text 1

Analysis Variable : Time					
N	N Miss	Mean	Median	Minimum	Maximum
90	0	63.2	64.5	33.1	87.9

Table K.6: Translators' performance (time) for Text 1

Environment	Position			
Frequency	1st	2nd	3rd	Total
E1	10	10	10	30
E2	10	10	10	30
E3	10	10	10	30
Total	30	30	30	90

Table K.7: Translation editing environments used for Text 1

Category: Proportion of implicit to explicit cultural/contextual referents

Cu1			Cu2			Cu3		
Cu1	Frequency	Percent	Cu2	Frequency	Percent	Cu3	Frequency	Percent
No	67	74.44	No	63	70.00	No	60	66.67
Yes	23	25.56	Yes	27	30.00	Yes	30	33.33

Table K.8: Proportion implicit to explicit cultural/contextual references in Text 1

Category: Proportion of phoric to fully lexical phrases

Pr		
Pr	Frequency	Percent
No	84	93.33
Yes	6	6.67

Table K.9: Proportion of phoric to fully lexical phrases in Text 1

Category: Newly introduced cohesive referents per discourse segment

Co1			Co2			Co3		
Co1	Frequency	Percent	Co2	Frequency	Percent	Co3	Frequency	Percent
No	66	73.33	No	69	80.23	No	82	91.11
Yes	24	26.67	Yes	17	19.77	Yes	8	8.89

Table K.10: Newly introduced cohesive referents per discourse segment in Text 1

Category: Use of lexical specification

Le1			Le2			Le3		
Le1	Frequency	Percent	Le2	Frequency	Percent	Le3	Frequency	Percent
No	56	62.22	No	81	90.00	No	72	80.00
Yes	34	37.78	Yes	9	10.00	Yes	18	20.00

Table K.11: Use of lexical specification in Text 1

K.1.2.2 Text 2

Satisfaction rate		
Scale	Frequency	Percent
1	3	3.41
2	27	30.68
3	44	50.00
4	14	15.91

Table K.12: Translators' satisfaction rate for Text 2

Difficulty rate		
Scale	Frequency	Percent
1	17	19.54
2	46	52.87
3	23	26.44
4	1	1.15

Table K.13: Translators' difficulty rate for Text 2

Analysis Variable : Time					
N	N Miss	Mean	Median	Minimum	Maximum
89	1	63.5	65.5	24.1	82.4

Table K.14: Translators' performance (time) for Text 2

Environment	Position			
Frequency	1st	2nd	3rd	Total
E1	10	10	10	30
E2	10	10	10	30
E3	10	10	10	30
Total	30	30	30	90

Table K.15: Translation editing environments used for Text 2

Category: Proportion of implicit to explicit cultural/contextual referents

Cu1			Cu2			Cu3		
Cu1	Frequency	Percent	Cu2	Frequency	Percent	Cu3	Frequency	Percent
No	42	47.73	No	61	67.78	No	75	83.33
Yes	46	52.27	Yes	29	32.22	Yes	15	16.67

Table K.16: Proportion implicit to explicit cultural/contextual references in Text 2

Category: Proportion of phoric to fully lexical phrases

Pr		
Pr	Frequency	Percent
No	51	56.67
Yes	39	43.33

Table K.17: Proportion of phoric to fully lexical phrases in Text 2

Category: Newly introduced cohesive referents per discourse segment

Co1			Co2			Co3		
Co1	Frequency	Percent	Co2	Frequency	Percent	Co3	Frequency	Percent
No	77	86.52	No	75	83.33	No	59	67.82
Yes	12	13.48	Yes	15	16.67	Yes	28	32.18

Table K.18: Newly introduced cohesive referents per discourse segment in Text 2

Category: Use of lexical specification

Le1			Le2			Le3		
Le1	Frequency	Percent	Le2	Frequency	Percent	Le3	Frequency	Percent
No	38	42.22	No	54	60.67	No	31	34.83
Yes	52	57.78	Yes	35	39.33	Yes	58	65.17

Table K.19: Use of lexical specification in Text 2

K.1.2.3 Text 3

Satisfaction rate		
Scale	Frequency	Percent
1	6	6.74
2	20	22.47
3	48	53.93
4	15	16.85

Table K.20: Translators' satisfaction rate for Text 3

Difficulty rate		
Scale	Frequency	Percent
1	28	31.46
2	40	44.94
3	20	22.47
4	1	1.12

Table K.21: Translators' difficulty rate for Text 3

Analysis Variable : Time					
N	N Miss	Mean	Median	Minimum	Maximum
89	1	64.1	64.9	19.6	87.0

Table K.22: Translators' performance (time) for Text 3

Environment	Position			
Frequency	1st	2nd	3rd	Total
E1	10	10	10	30
E2	10	10	10	30
E3	10	10	10	30
Total	30	30	30	90

Table K.23: Translation editing environments used for Text 3

Category: Proportion of implicit to explicit cultural/contextual referents

Cu1			Cu2			Cu3		
Cu1	Frequency	Percent	Cu2	Frequency	Percent	Cu3	Frequency	Percent
No	69	77.53	No	44	48.89	No	71	78.89
Yes	20	22.47	Yes	46	51.11	Yes	19	21.11

Table K.24: Proportion implicit to explicit cultural/contextual references in Text 3

Category: Proportion of phoric to fully lexical phrases.

Pr		
Pr	Frequency	Percent
No	24	26.97
Yes	65	73.03

Table K.25: Proportion of phoric to fully lexical phrases in Text 3

Category: Newly introduced cohesive referents per discourse segment

Co1			Co2			Co3		
Co1	Frequency	Percent	Co2	Frequency	Percent	Co3	Frequency	Percent
No	85	94.22	No	23	25.56	No	79	87.78
Yes	5	5.56	Yes	67	74.44	Yes	11	12.22

Table K.26: Newly introduced cohesive referents per discourse segment in Text 3

Category: Use of lexical specification

Le1			Le2			Le3		
Le1	Frequency	Percent	Le2	Frequency	Percent	Le3	Frequency	Percent
No	63	70.00	No	38	42.22	No	58	64.44
Yes	27	30.00	Yes	52	57.78	Yes	32	35.56

Table K.27: Use of lexical specification in Text 3