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DAINORA MAUMEVIČIENĖ

TRANSLATION STRATEGIES IN SOFTWARE LOCALISATION

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Research supervisor:

Prof. Dr. Tatjana Solomonik-Pankrašova (Vilnius University, Humanities, Philology – 04H)

VILNIAUS UNIVERSITETAS

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prof. dr. Tatjana Solomonik-Pankrašova (Vilniaus universitetas, humanitariniai mokslai, filologija – 04H)

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LIST OF ABBREVIATIONS, ACRONYMS AND NUMERONYMS

ANT – Actor Network Theory

CAT – Computer Aided / Assited Translation

DPT – Desktop Publishing Operator

DTS – Descriptive Translation Studies

EC – European Comission

EMSaS – System for the development of E-learning processes in Lithuania

Eng. – English

ERP – Enterprise Resource Planning

EU – European Union

FIN – Finance System (PeopleSoft)

G11N - Globalisation

GILT – Globalisation, Internationalisation, Localisation, Translation

GUI – Graphical User Interface

HRMS – Human Resource Management System

I18N – Internationalisation

ICT – Information Communication Technologies

ISACA – Information Systems Audit and Control Association

IT – Information Technologies

ITMiS – Information Technologies for Science and Studies

KTU – Kaunas University of Technology

LABT – Lithuanian Academic Library Network

LIEDM – Lithuanian Distance Learning Network

L10N - Localisation

LieMSIS – Lithuanian Science and Study Information system

LINFO – Linux Information Project

LISA – Localisation Industry Standards Association

Lith. – Lithuanian

LRVK – Lietuvos Respublikos Valstybės Kontrolė (National Audit Office of Lithuania)

LSP – Language Service Providers

LVU – Lithuanian Virtual University

MES – Ministry of Education and Science, the Republic of Lithuania

P1 – Perception 1

P2 – Perception 2

PIA – Pure Internet Architecture

PMI – Project Management Institute

PVM – Pridėtinės Vertės Mokestis (Value Added Tax)

QA – Quality Assurance

ROI – Return On Investment

SA – Student Administration

SL – Source Language

ST – Source Text

TL – Target Language

T9N – Translation

TS – Translation Studies

TT – Target Text

TLIG – Translation, Localisation, Internationalisation, Globalisaton

US – United States

WO – Word-Only (Translation Environment)

WYSIWYG – What-You-See-Is-What-You-Get (translation environment)

VAT – Value Added Tax

VMU – Vytautas Magnus University

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1. INTRODUCTION

Localisation has developed as a merger of language and technologies. Globalisation and the development of global markets determine acquisition of new software in all spheres of human activity both in Lithuania and worldwide. In order to address the needs of the developing knowledge and information communication society and business, and achieve a wider usage of a product (hereinafter any type of software is perceived as a type of a product in this thesis), the biggest corporations that provide software solutions, such as *IBM*, *Microsoft*, *Hewlett Packard* and others, attempt to localise as many products for specific target markets and users as they can. Localisation is possible when a product is technically, culturally and linguistically adjusted to the needs of a local market and complies with local laws, norms and regulations, consumer needs, expectations and linguistic / cultural requirements.

Due to its multidisciplinary nature, localisation has been defined in various ways and is still much discussed about. Its definition depends on the field of specialists who describe the conception. Language specialists, linguists and translation scholars emphasise linguistic and cultural aspects of localisation, while computer specialists and project managers indicate technological aspects of the phenomenon. Considering the complexity of the process of localisation, the Localisation Industry Standards Association (LISA)[1] characterises localisation as "the process of modifying products or services to account for differences in distinct markets" (LISA 1998).

Localisation as a phenomenon and process has just been recently observed; therefore it needs to be thoroughly investigated both within global and local contexts. The period between 1979 and 1980 could be considered as

[1] Localisation Industry Standard Association (LISA) was founded as the non-profit organisation for globalisation, internationalisation, localisation and translation business community in 1990 and functioned till 2011; therefore the webpage of the association www.lisa.org is no longer available.

the start of localisation processes when several attempts to localise operation systems for consumers in the United States of America (USA), Japan and Europe were noticed (Esselink 2006:21). In Lithuania, processes of localisation came into being after several decades and were initiated by *IBM* (Dagienė, Grigas and Jevsikova 2010).

The need to explore the phenomenon of localisation and its relationship with translation as well as the impact of the localised software on the target language and culture is obvious. ICT enter all the spheres of human activities, including language; therefore they influence the language and culture in new ways. This doctoral thesis entitled ***Translation Strategies in Software Localisation*** deals with the application of translation strategies in software localisation that enables tracking the impact of software localisation of the target language and culture.

The relevance and novelty of the research. This topic has been selected as **a relevant area of research,** since the process and phenomenon of localisation is quite new, while the conception of localisation through the prism of linguistics and its relationship with translation are relatively unexplored. The polemics in the area of localisation and translation related to the origin of the phenomenon, the variety of definitions and fuzzy boundaries between the fields of localisation and translation indicate the fact that localisation, its relationship with translation, translation strategies employed during the process of localisation, as well as the case study of the entire localisation process in the Lithuanian context have not been thoroughly examined and require scientific attention.

Moreover, it has to be mentioned that up till now localisation has not received the attention of linguists and translation scholars within the Lithuanian context. Localisation is frequently studied as the object of computer science. There are few academic publications on the subject, and no doctoral thesis that would explore and describe the phenomenon and the process of localisation in the scope of translation studies has yet been defended. This

thesis targets the gap and strives to examine the process and the phenomenon of localisation from a linguistic perspective. The current research of localisation would add new value to the study of translation and would extend the scope of translation as studies, science and a profession. The attempt to examine the issue of localisation in the Lithuanian context from a linguistic perspective and explore the phenomenon in the scope of translation studies emphasises the novelty of the research both within the Lithuanian and global contexts. Localisation / translation has never been studied before by means of investigating how the localised product makes impact on the target language and culture and, in turn, how the target language and culture changes the product localised. The applicability of 30 strategies of translation, proposed by Andrew Chesterman (1997, 2005) to examine the linguistic adaptation of software language strings has been never tested before either.

Furthermore, though localisation processes have been accelerating in the Lithuanian market, and big companies that localise either commercial or open source software (*Affecto Lt*, or *Tildė*), have been established, no case studies or thorough investigations on how the localisation of particular software impacts and affects the target, in this case, the Lithuanian language and culture, have been conducted or published. Considering the fact that the Lithuanian language is one of the oldest Indo-European languages, it becomes of crucial importance and relevance to analyse how the old and archaic language affects the modern processes of localisation and is itself influenced by them. The clash of the old language and modern technologies should become an interesting and relevant issue of scholarly research. According to Telksnys, the UNESCO Chair in Informatics for Humanities, it is obvious that big nations and big languages will influence other languages and other cultures, especially the small ones; therefore, it becomes essential to ensure that the software localised for the target language (Lithuanian) would be used to preserve and retain the Lithuanian language; and the possibilities, provided by information

communication technologies would be exhausted on behalf of the language (1998).

The fact that there are no case studies of the entire localisation process in the Lithuanian market also requires scientists' attention. Comprehensive case studies would provide not only scientific attempts to examine the process of localisation in the Lithuanian market and discuss particular outcomes of localisation processes and their impact on the Lithuanian language / culture, but could be further used by researchers, translation or localisation scholars as sources. Thus the findings of this thesis could be of great interest to software developers, who consider possibilities to launch their products in Lithuania, to process owners, to representatives of localisation industry, and to localising companies that could apply the results of this research in other projects of localisation. The topic of the thesis that falls within the scope of multidisciplinary studies is both relevant and novel for translation studies, applied linguistics, computer linguistics, Lithuanian linguistics and computer science.

The relevance and novelty of the thesis determines **the focus of the research work**, i.e. translation strategies that are applied in the process of *PeopleSoft* software translation / localisation in Lithuania. Translation strategies that are used to localise software are explored by means of two perceptions of translation / localisation, i.e. the traditional perception of translation / localisation (P1), and sociological, actor network theory-based conception of translation / localisation, (P2). The software in question is an enterprise resource planning system (ERP) that is used to manage various academic, financial, economic and other organisation-related processes. *PeopleSoft* software has been implemented at a national level in Lithuanian science and study institutions during the development of LieMSIS project (Lithuanian Science and Study Information System) as part of Lithuanian Virtual University (LVU). The project has been selected as **the object of the research** due to its uniqueness (the first national attempt to create an integrated

and standardised information system for science and education in Lithuania), the scope (the number of participants) and the duration (2000 – 2012).

By analysing the unique case of LieMSIS localisation process in Lithuania, the research, by virtue of translation strategies, **aims** at investigating **whether the implemented software (product) changes the target (Lithuanian) language and culture OR the target language and culture change the product implemented.** The central research problem sets the principal **tasks of the research**:

- to overview the existing linguistic material concerning linguistic (translation-based) and technological exploration of localisation and to provide a descriptive review of the treatment of localisation as a phenomenon and a process;
- to define localisation in terms of linguistic approach as a new paradigm and area in Translation Studies that is marked by the digital medium;
- to analyse localisation by means of applying a combined model where the traditional perception of translation / localisation, P1, and sociology-based perception of translation / localisation, P2, merge and provide a framework for examining localisation as a process and a project;
- to test whether the synthetic preliminary, micro- and macro-level structural analysis of translation strategies can be applied to examine the localisation of software language strings;
- to empirically test the proposed theoretical model of traditional translation (P1) and sociology-based approaches to translation / localisation (P2) and analyse the impact of the localised product on the Lithuanian language and culture on the one hand, and the influence of the Lithuanian language and culture on the localised product on the other.

The need to examine localisation phenomenon from a linguistic perspective, to define its relationship with translation, to explore what translation strategies are applied to tailor the software to the target language and culture determines **the hypothesis (H) of the research** that is formulated as follows:

(H): Despite the fact that the software implemented has to be adapted to the target language / culture, it tends to change the target language / culture.

With the aim to either prove or reject the main hypothesis in view, the research examines if, by means of translation strategies, the target culture where the product is localised and the language can change the localised product. Translation strategies applied to texts can be applied to localise software language strings; by means of translation strategies translators make significant impact on the source language and culture, since the translation of the software is the core activity. In addition, the research seeks to either support or reject **the claim (C)** that localisation is a new form of translation, marked by the digital medium, and a new paradigm in Translation Studies.

The thesis ***Translation Strategies in Software Localisation*** falls within the scope of *Descriptive translation studies* (*DTS*) (Toury 1995). Thus in an attempt to carry out the research and test the hypothesis the following **research methods** are applied. The theoretical insights have been provided on the basis of the generally applied descriptive, analytical and contrastive research methods that are exercised by means of qualitative description and synthesising.

Translation strategies that are used to localise software are explored by means of two perceptions of translation and localisation, i.e. the traditional perception of translation / localisation (P1), and sociological, actor network theory-based conception of translation / localisation, (P2). The first conception is based on a classical understanding of the process of translation / localisation as an act of communication that is proposed by Otto Kade (1968), Anton

Popovich (1980), Josè Lambert and Hendrik van Gorp (1985/2006), Lucia Molina and Amparo Hurtado Albir (2002), and Anthony Pym (2004). The approach highlights the interaction of man → text → man during the act of communication. Localisation is treated as a process of communication between the sender and the recipient of the message, where translator-localiser becomes both the recipient and the sender of the message. The descriptive, contrastive and qualitative analysis of *PeopleSoft* (corpus, i.e. language strings) Lithuanisation is grounded on the model of the synthetic preliminary, micro- and macro-level structural analysis that was suggested by Lambert and van Gorp (1985/2006) and allows exploring both translation and localisation phenomena within a wider context (i.e. literary and cultural systems). The synthetic preliminary, micro- and macro-level structural analysis is used to examine the application of translation strategies to Lithuanise software. Translation strategies, defined as a set of actions to deal with translation problems, are studied according to the model of 30 translation strategies that embrace syntactic / grammatical, semantic and pragmatic strategies and were introduced by Chesterman (1997, 2005).

Whereas the second perception, P2, approaches localisation and translation from a sociological perspective and focuses on the interaction of entity → text → man that is grounded by *actor network theory* (*ANT*). The theory has been applied to study translations by Hélène Buzelin (2006, 2007a, 2011). Translation and localisation, with reference to *ANT*, is examined as a process of displacement by means of which identities and the conditions of interaction are established as seen in Bruno Latour (1996), Cassandra Crawford (2004), Michel Callon (2005) and others. *Actor network theory* is employed to analyse the social context of the process of software localisation, i.e. how the network and relations of actors affect the process of software localisation in Lithuania.

The **empirical corpus** of the research, composed of the official documents (i.e. acts, decrees, laws of the *Government of the Republic of*

Lithuania, the *Ministry of Education and Science* and the *National State Audit*), 109 internal documents of the project (i.e. minutes of meetings, deliverables, agreements, e-mail messages, conference presentations), 2660 screenshots of the original American software (i.e. *PeopleSoft* that was Lithuanised to develop the integrated and standardised system for Lithuanian institutions and its localised version in Lithuanian), 84852 translation units / language strings of the original and Lithuanised *PeopleSoft* versions, translation documentation (i.e. wordlists, screenshots of translation tables, tables, Microsoft Excel spread-sheets), 36 press release publications, newspaper articles and academic publications, has been applied to examine the way the product, i.e. the implemented software, changes the target language and culture.

The degree of the examination of the central problem in local and global contexts reveals that localisation as a linguistic, cultural and technical phenomenon has just been identified and counts decades of its existence. Therefore, not much research has been conducted in the area of localisation studies either in the local (i.e. Lithuanian) or global contexts.

The analysis of doctoral theses that were carried out and defended in Lithuania during the period between 2000 and 2008 provides evidence that no research papers that focus on linguistic aspects of localisation as well as the analysis of the overall process of localisation in the Lithuanian context were undertaken. Yet, the solid foundation for the study of localisation in Lithuania has been laid down by scientists at *the Institute of Mathematics and Informatics* of *Vilnius University*. The pioneers in the field of localisation, who publish their research works and findings in the area of localisation, are Valentina Dagienė, Gintautas Grigas, and Tatjana Jevsikova (2010, 2011). Jevsikova in her doctoral thesis under the title *Localisation of Internet Software* (2009) aimed at exploring a formalisation method of textual resources used to localise Internet software that could improve the quality of localisation. The handbook *Programinės įrangos lokalizavimo pagrindai* (*Basics of*

Software Localisation) (2011) is the first attempt to provide theoretical background on localisation for the Lithuanian audience. Other research works that deal with the issue of localisation are presented on the webpages of *Information Society Development Committee* under *the Ministry of Transport and Communication* and the homepage of the *Lithuanian Language for Information Technologies*.

However within the global context, the phenomenon of localisation has already been explored for several decades by scientists. Localisation as a process and phenomenon has been examined by Bert Esselink (2000), Minako O'Hagan and David Ashworth (2002), Anthony Pym (2003, 2004, 2008), Michael Cronin (2003), Minako O'Hagan (2006), Daniel Gouadec (2007), Keiran J. Dunne (2007), Reinhard Schäler (2007), Keiran J. Dunne and Elena S. Dunne (2011) and others. Quite a number of articles and the exchange of the best practices are constantly published on the webpage of *Globalisation and Localisation Association*.

The processes and phenomena of localisation and translation receive much attention at *Universitat Rovira i Virgili* in Spain, where articles, e-publications and books are announced and seminars and conferences are organised to discuss the topic of translation and localisation. The phenomenon of localisation is explored at *Dublin University* and *Localisation Research Centre*, established at *Limerick University* (the Republic of Ireland), *University College London* (the United Kingdom) and *Katholekie universiteit Leuven* (Leuven, Belgium). The studies of translation and localisation have just started at *Kaunas University of Technology* where a new Master's programme on technical translation and localisation has been offered. Moreover, to boost both the process of localisation and the research in the fields of localisation and translation, and to improve the quality of localised products in Lithuania, *Localisation Section* was established by *Lithuanian Computer Society* in March 2012.

Structure of the doctoral thesis. The present thesis is composed of four constituent chapters: introduction, theoretical and analytical parts and conclusions. The introductory part defines and presents the research focus, aim, tasks and the central research question that is followed by the hypothesis. The main research methods and approaches exercised in the thesis as well as the relevance and novelty of the thesis are discussed within the introductory part either. Possible ways of the practical application of the research in local and global contexts are also introduced. Moreover, the same section of the thesis places the phenomenon of localisation within a context, i.e. describes its significance, profiles the perception of localisation through its relationship with globalisation, internationalisation and translation and through the prism of linguistic rather than technological approaches in both local (Lithuanian) and global contexts.

The theoretical framework and the methodology of the research are provided in the second part of the thesis. It describes two theoretical approaches that are applied to disclose traditional (P1) and sociology-based (P2) perceptions of translation / localisation invoked to study the research object. Moreover, the second part embraces the methodology of the research work that is applied to find out if the software implemented within the target language / culture has an impact on the target language / culture or is affected itself by the target language and the culture.

The case analysis of LieMSIS project, which focuses on the localisation of *PeopleSoft* software for Lithuanian science and study institutions, is introduced in the analytical part of the thesis. Micro- and macro-level structural textual analysis of translation strategies, communicative approach to translation and localisation and actor network theories are employed to explicate the Lithuanisation of software and to research how the product localised amends the target language and culture. Qualitative data is used to reject or confirm the hypothesis of the thesis. Conclusions of the empirical research will provide generalised insights and suggest possibilities to apply the

findings of the research work in practice. To ground the validity of the thesis, the list of literature follows the conclusions and records all references.

Practical significance of the thesis. The thesis *Translation Strategies in Software Localisation* offers both theoretical and practical applications of the findings of the research. First of all, the theoretical application of communicative and actor network theories to deal with the phenomenon of localisation contributes to the development of translation and localisation studies within the local and global contexts. Observations of the theoretical part that aim at providing linguistic insights into the phenomena of localisation and translation as well as their relationship render deeper theoretical knowledge of the phenomena of the fields as linguistic issues that could be employed in future research works on localisation and translation.

The case analysis and the survey of the actors involved in the process of LieMSIS Lithuanisation and the investigation of the project could be beneficial both for localisation industries that undertake projects of localisation and practicing translators/localizers, scholars and students enrolled in translation and localisation programmes.

2. SITUATING LOCALISATION IN CONTEXT: THE PROBLEM OF DEFINITION

The perception of localisation is double-sided, i.e. linguistic and technological. Therefore, this section of the thesis aims at revealing linguistic conception of localisation and explores the way localisation is defined and perceived in terms of the relationship between translation, localisation, internationalisation and globalisation. Localisation is approached in terms of localisation principles that pertain to translation and translation theories; these theories highlight and disclose linguistic comprehension of the phenomenon as well as its approximation to translation.

2.1. Significance of localisation

Globalisation and the development of the global market foster the adaptation of new products in all spheres of human activity by means of localisation. In order to achieve global competitive advantage and satisfy the needs of the consumer society, companies have to adapt or localise their products so as to meet local requirements and create an illusion of a locally developed product, which is international on the one hand but looks like a native product on the other (Sprung 2000; Fry 2003). The term *localisation* could be briefly defined as the linguistic and cultural adaptation of a product (*product* is widely understood as any type of product, i.e. a book, a film or a website) to a particular country, region and language.

Due to technological and economic development and industries EU officials have started to consider the significance of localisation processes. Reports and communications approach localisation as a new form of language mediation in the labour market and as a tool to foster multilingualism and intercultural communication (EC 2007:16, 2008:13). The significance of localisation as a profit providing business is exemplified in the report on *Studies on translation and multilingualism: The size of the language industry*

in the EU (2009), indicating the language industry as one of the most successful industries that was not affected by the last economic downturn. In 2008, the activities that were related with translation, interpretation, software and website localisation were estimated as 5.7 billion Euros with a forecast to reach 20 billion Euros in 2015 (EC 2009: iv).

Furthermore, localisation as a new direction within translation studies has been considered and examined in the academic publications of translation and computer science researchers, translators, localisers and software developers (Brooks 2000; Esselink 2000, 2006; Sprung 2000; O'Hagan and Ashworth 2002; Cronin 2003; Dagienė 2004; O'Hagan 2005; Biau Gil and Pym 2006; Dagienė and Grigas 2006; Gouadec 2007; Munday 2008; Pym 2008, 2010a). Much of the discussion has focused on whether localisation should be perceived as a wider process that incorporates translation in liaison with other stages of product development (customisation, testing), or rather as a new form of translation marked by the digital medium. Pym has recently defined localisation as a new translation paradigm; however, the researcher states that "there has been remarkably little debate about localisation among translation theorists" due to the nature of localisation, which has been perceived as technological and industrial (2010a: 136).

The discussions of multiple scholars, researchers and EU officials about the significance of localisation enumerate prerequisites for localisation which are mainly factor / reason-based, whereas the reasons are interrelated and interconnected. Academic publications on localisation usually highlight economic and global reasons as an imperative for localisation (Brooks 2000; Esselink 2000; Thibodeau 2000; Pym 2010c); however, it is possible to single out the correlation of global, economic, technological, educational and socio-cultural reasons as presented in figure 1:

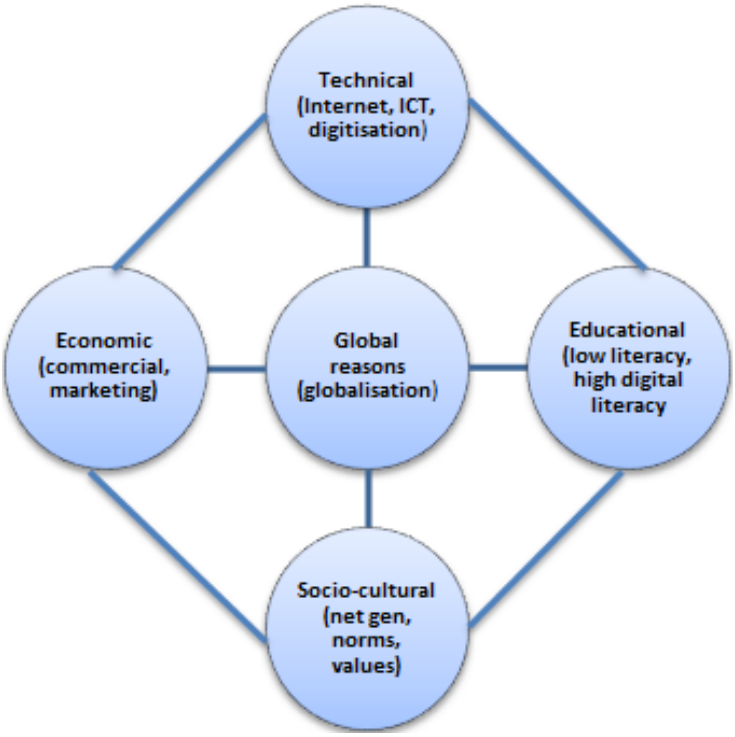


Figure 1. Relationship of factors / reasons that condition localisation. Source: created by the author of the thesis

The figure illustrates that global reasons become a condition for other causes as they determine economic, technical, educational, social and cultural reasons in turn; but on the other hand, globalisation is impossible without economic, technological, educational and socio-cultural advance.

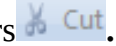
Localisation, as mentioned above, is globalisation driven because many companies willing to sell their products abroad and to generate the higher return on investments have to compel their products to "communicate" in the language of their customers. Moreover, language is seen as the principle obstacle to localisation, because if companies or individuals wish to communicate with the representatives of other cultures and languages or access data in their language, the content has to be translated and localised (O'Hagan and Ashworth 2002: ix). Thus, localisation, as Sprung states, has become "the mainstream obsession" and if ignored, could turn into a greater loss of non-translation and localisation than the total amount spent for the entire process (2000: xiii).

Economic reasons which embrace commercial and marketing factors are mainly determined by globalisation and are characterised as the main reasons for software localising. According to Ricky Thibodeau, localisation of software might increase sales by 25 per cent, which, in turn, might generate more income from the profit gained (2000: 127). Non adaptation of products to particular countries / cultures / customers might be too great a risk for a company, as product users have certain expectations. Software designers state that expectations of software developers and users coincide. Both parties anticipate that the software will satisfy their needs, working requirements and lifestyles, which becomes quite a challenge for software developers (Degler and Battle 2001: 34). Therefore, much money is spent for research and case studies to find out what products to localise, how to satisfy the needs of consumers, increase international sales, penetrate local markets and occupy a niche there.

Localisation is perceived as a technological and industrial process (Pym 2010a: 136); hence, technological reasons that are related with economic ones need to be considered as well. Technological factors highlight the rapid development of ICT, the explosion of the Internet usage and digitisation. Technology is deeply embedded in today's society. Technological progress has boosted the spread of the Internet, which has become extensively used as a means of successful real-time business communication. Forums, video conferences, blogs, social networks (*Facebook*, *Twitter*) and instant messaging programmes (*Skype*) allow communicating and sharing information beyond borders and time restrictions. Digitisation and information communication technologies have laid the foundation for successful intercultural communication among countries where geographical borders have disappeared. Many international companies are successfully exploiting the advantage of real-time communication provided by the Internet in order to reach their target consumers and offer them products / services that "speak"

their language. Hence, localisation has become a prerequisite for successful marketing and inter-cultural communication.

In addition to this, the world has already witnessed the emergence of *Net generation* (*net gen*), which is synonymous to *Millennial generation*, *Generation I* (Internet) and could be characterised as a techno-savvy generation (Oblinger and Oblinger 2005). The term *net generation*, as researchers Diana Oblinger and James Oblinger define, pertains to a cohort of young people who were born between 1982 and 2000 and who have grown up in a digital and technology based environment and believe the world to be a global village[2] (2005). Such a generation is able to use any ICT devices and the Internet, is digitally literate and more responsive to any visual information in comparison to other generations (Oblinger and Oblinger 2005: 12). The authors emphasise that the *Net generation* representatives are exposed to daily ICT usage and read more of information on the Internet that is accessed via *Google* or other search engines and *Wikipedia* rather than printed books (Oblinger and Oblinger 2005). Thus, aiming to tame the target audience of the net gen, companies have to localise their software as well as other products because literacy of this cohort is not so highly developed, despite the fact that their digital literacy is the highest in comparison to other generations.

Educational reasons are closely linked with technological and social (i.e. rapid digitisation, the spread of the Internet and social media, the emergence of the *Net gen*). Since general literacy (reading and writing skills) of the *Net gen* has decreased in comparison to other generations due to highly developed visual perception, i.e. software developers improve the quality of their products by making them easily assessable and managed with low computer literacy skills. This means that the majority of information is presented pictorially by means of icons and other signs. For example, the function of cutting the text in *Microsoft word software* is represented by a pictogram of scissors 

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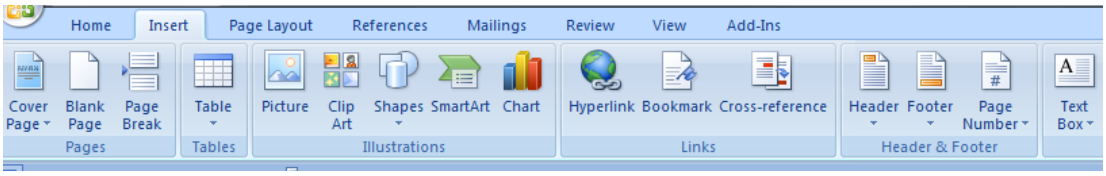
[2] The term *global village* pertains to Internet and the world wide web and was first used by Marshall McLuhan in his publication *The Gutenberg Galaxy: the Making of Typographic Man* (1962).

icon is well understood by both digitally literate and illiterate users. The word *Cut* that follows the icon of the scissors is probably less noticeable since the size of the icon is bigger in comparison to the word itself. Moreover, such a pictorial and visual display of the information is easier perceived by adult users who possess low computer literacy skills. Icons and commands that are presented in the picture below can be easily comprehended by those who probably have not been taught how to use the software since the icons are already eloquent with no need for detailed explanations.



Picture 1. Icons of *Microsoft word* software. Source: *Microsoft word*

Socio-cultural reasons is the last factor to determine the significance of localisation which is culture and society sensitive. No software or any other product will be accepted by a particular target market if it does not correspond to certain cultural norms, values and behavioural patterns. Culture specific information and meaning needs to be carefully considered when choosing specific colours or pictograms / icons in software or website design. For example, black colour is the colour of death and mourning in Lithuanian and many Western cultures, but it is considered to be the colour of femininity in Eastern cultures (Zeller 2006: 90). Furthermore, the display of visual information for techno-savvy society where a product is going to be localised is completely different from that in any culture / society with a lower level of digital skills. For instance, the pictogram  that replaces the word *favourites* in the *Internet explorer* could hardly be associated with favourite pages and should be replaced with a more universal and meaningful symbol.

Picture 2 displays different *Yahoo* homepages and serves as a good illustration of different behavioural patterns conveyed by means of divergent

visual information layout in several countries, i.e. the United Kingdom, Spain, Italy, Germany and China.

Picture 2. Different *Yahoo* homepages. Source: *Yahoo* homepages

For instance, the icon of an envelope that stands for mail is the first icon in many European countries and cultures; however, it cannot be found on the Chinese homepage. The icon of vehicle is the second pictogram on the original webpage of *Yahoo* on the German homepage, because in Germany a means of transport is considered to be an important attribute of welfare and luxury (as demonstrated by *Opel* and *BMW* promoting slogans: *Driving is our birth right* and *Wir leben Autos* (*We love cars*)). Yet, the icon does not exist on the Spanish and Chinese homepages. Italian *Yahoo* homepage locates the icon of dating signified by the symbol of heart in the second position. Due to the fact that Italians are hot tempered and emotional people, relationships and romance are prioritised over the purchase of luxurious cars. The Chinese homepage of

Yahoo might be considered to be rather simple and blank, since many icons that are used on the European homepages of *Yahoo* do not occur. The icons that appear reflect preferences and habits that are Chinese culture-specific, i.e. listening to music, taking pictures or browsing for information on the world wide web. Moreover, the variant design of *Yahoo* homepages demonstrates that culture related habits are addressed and considered during the process of localisation.

The analysis of reasons / factors that regulate the process of localisation leads to a subsequent investigation of localisation as a phenomenon. The following section of the thesis introduces divergent conceptions of localisation that reveal different perception of the field amongst translation scholars, software engineers, localisation industry representatives and ICT researchers.

2.2. Conception of localisation

The reasons that condition processes of localisation serve as the first stage in acquiring the perception of localisation. Meanwhile a detailed analysis of the way localisation is defined and the discussion of different attitudes and approaches of multiple scholars, researchers, translators and localisation professionals reveal a better comprehension of the phenomenon. Localisation was born out of the marriage of language to technologies (Esselink 2000: 1) and could metaphorically be called the offspring of language; thus, the linguistic aspects of localisation should be traced to the linguistic background it has inherited. Hence, it is possible to explore the way localisation is defined and perceived in terms of the relationship of translation and localisation.

Definitions are always provided to examine particular phenomena, as the way certain words / terms / processes are defined might render valuable insights and shed some light on the phenomena themselves. The art to define a word is deeply rooted in language studies; therefore, definitions of localisation pertain to the first linguistic aspect of localisation. Besides, the etymology of the terms of *translation* and *localisation* might unveil the peculiarities and the

non / approximation of the above mentioned processes. The term *localisation* (or the American English version *localization*) appeared in the context of studies of localisation around the 1990s. The British English variant of the term *localisation*, or the American English, i.e. *localization*, is widely used. Since the process of localisation emerged in the United States of America and rippled through other parts of the world later on, the application of the American term could be more reasonable. This thesis follows the standard of British English; therefore, the term *localisation* is applied in the thesis instead of the American term[3].

The term *localisation* was first of all used in marketing and commerce around the 1990s (Pym 2003: 26; Biau Gil 2005: 15; Dunne 2006: 1) and has just entered the domain of translation studies (Munday 2008; Baker and Saldanha 2009; Pym 2010a). However the first known usage of the term can be traced back to 1792. The etymology of the word *localisation* suggests that the term originated from the English adjective *local* (relating to or characteristic to a particular place) and the noun *locale* (a place that is market by certain cultural and linguistic aspects). The English adjective *local* derives from Old Latin *stlocus* (place) which was substituted by the Latin words *localis*, *locus* (place). The first known use of the English adjective *local* is traced to the 15th century (*Oxford English Dictionary* 2012). The dictionary defines *localisation* as the process of making local or assigning and keeping something within a definite locality. Moreover, it must be mentioned that the term *localisation* is also found in medical discourse with the meaning to limit the size of an area that something affects and to prevent it from spreading further or to discover exactly where something is (*Oxford English Dictionary* 2012). Thus, the meaning of some disease localisation embeds the seme of prevention which is opposite to the meaning of *software localisation* that embraces the idea of distribution and spread over a vast area.

[3] Yet the American English version of the term *localization* is retained in the original quatations.

Meanwhile the etymology of the term *translation* suggests that the noun derives from the Latin preposition *trans* which means *beyond* and a verb *latum* which means *to bring.* The first known use of the English noun *translation* dates back to the 14th century (*Oxford English Dictionary* 2012). The etymology of the above mentioned terms, i.e. *translation* and *localisation*, reveals the fact that the noun *place* becomes a point of correlation of the terms, though the meaning component of the noun *place* is not so obvious when talking about *translation*. Since the meaning of *translation* pertains to the meaning of *transfer*, it is possible to infer that this is a transfer of an object from one place to another (here the place does not refer to a physical place but rather a text), whereas the term *localisation* clearly indicates that localisation is adaptation to a particular place.

Exploring the way localisation is defined, a multitude of definitions has been observed due to the fact that localisation has just recently evolved as a profession, industry and the phenomenon (Dunne 2006:1). The way *localisation* is defined depends on those who describe it and their diverse insights into the subject. There were about nineteen different definitions counted while analysing the definition of the term "localisation" (Jiménez 2007: 4). Definitions of localisation are usually contextually bound and reveal the attitude of those who formulate the definitions (Dunne 2006). Some definitions focus on the specific reasons and aspects of localisation and describe it as "the mainstream obsession" (Sprung 2000), an imperative for companies which seek to become global (Thibodeau 2000), a process of adapting something to a particular local market (Deitsch and Czarnecki 2001; Savourel 2001; Schmitz 2005; Palumbo 2009:71), a form of language mediation, a tool for cross-cultural communication, a possibility to overcome linguistic and cultural barriers (O'Hagan and Ashworth 2002; O'Hagan 2005, 2006) and just as a linguistic process (Brooks 2000). Meanwhile other authors providing the definition for localisation focus on the relationship between

translation, internationalisation, localisation, and globalisation (LISA 1998; Esselink 2000; Pym 2004; Jiménez 2007; Dunne 2011).

Since localisation is a mixture of language and technologies (Esselink 2000: 1), both translation theorists and software developers-localisers describe different aspects and define localisation diversely. Therefore there is no solid consensus on the definition of the term due to multiple understandings of the phenomenon (Dunne 2006:1-5). Localisers are proponents of a practical approach, are not interested in theorising and are more concerned with benefit rather than definitions. Therefore, they offer descriptions that "do not come from a linguistics / translation background" (Biau Gil 2005: 19). On the other hand, definitions that are suggested by the theories might be far removed from practice and, thus, might appear too artificial and distant. Still, definitions are necessary for the sake of having a common understanding of what is what. It has been observed that in defining localisation the polemics centres on the perception of the relationship and differences between translation and localisation, which are blurred (Munday 2008: 191). Translation theorists who aim at disclosing the phenomenon of localisation within the scope of translation studies seek to present versatile aspects of localisation; therefore, their works would subscribe to both views (translation as part of localisation and translation encompassing localisation).

Coming back to the polemics in comprehension of localisation, one group of authors (Ebben and Marshall 1999; Esselink 2000, 2006; Austermühl 2001; Brooks 2000; Sprung 2000; Pym 2002, 2008; Dagienė 2004; Dagienė and Grigas 2006; Zeller 2006) claim that translation is just part of localisation. These writers argue that "translation is only one of the many modifications a program has to go through" (Biau Gil and Pym 2006: 14), and treat localisation as a process of software adaptation / preparation / modification (Sprung 2000; Austermühl 2001; Cronin 2003; Pym 2004, 2010b; Zeller 2006). Researchers who argue that translation is part of localisation identify localisation-specific aspects such as internationalisation (the process of preparing a product to be

localised during the process of product development); the model "one-to-many" (Pym 2010a: 126), which means that after internationalisation the product can be translated and adapted to several target languages / cultures (e.g., Lithuanian, or any other); the use of technologies (translation memories, terminology management systems and computer aided / assisted translation); and the scope and complexity of the entire process (Esselink 2000; Pym 2008, 2010a).

The other group of authors (O'Hagan and Ashworth 2002, 2005; Dunne 2006; O'Hagan 2006; Gouadec 2007, Jiménez 2007; Munday 2008; Ryan, Anastasiou and Cleary 2009) define translation as the core of localisation since the idea of localisation can be historically traced back to translation and might be regarded as a new form of translation marked by the digital medium. For example, Gouadec, describing technical and linguistic aspects of localisation, supports the view that localisation is a variety of translation:

> *Localisation is basically "instrumental translation" or translation that literally produces instruments. Failure to adapt contents, format, and form in any way carries the immediate penalty of non-understanding, non-acceptance and/or non-usability. Be that as it may, localisation is technically a variety of translation. Yet, for reasons of marketing <…> and self-appraisal, most translators do claim a different status of localisation* (*Gouadec 2007: 38*).

O'Hagan and Ashworth (2002) claim that localisation is part of globalisation, whereas translation is the core of localisation and globalisation. Being in favour of O'Hagan and Ashworth's idea, and indicating that localisation encompasses cultural awareness, technical expertise and translation, Ryan, Anastasiou and Cleary describe translation as the core activity (2009: 15). Interestingly enough, in order to try to solve the conflict and seek for a compromise between translators-academics and localisers, Austermühl, though differentiates translation from localisation, also adheres to the idea of translation being the core and central activity of localisation (2006: 69). Figure 2 below signifies both the understanding of translation as the centre of localisation and the relationship of translation, localisation and globalisation wherein translation is the heart of both localisation and globalisation. The author of the thesis is the proponent of such an understanding of translation

and localisation as well as the relationship of translation / localisation / globalisation; thereby when exploring the process of *PeopleSoft* Lithuanisation, the terms translation and localisation are used synonymously.

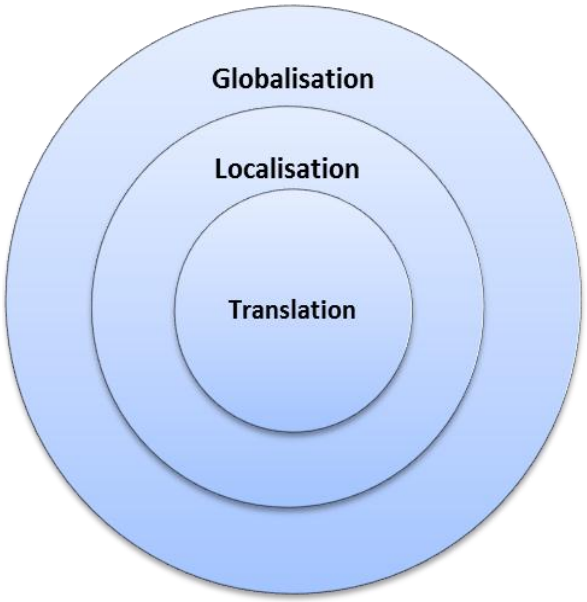


Figure 2. Translation as the core of localisation and globalisation. Source: O'Hagan 2006

Discussing the issue of translation as the core of localisation and globalisation more thoroughly, Ashworth and O'Hagan agree that localisation entails both activities: software engineering and translation (2002: 12). The scholars prove their point of view by stating that when "translation moved from a paper-based [activity] to a digital medium such as computer software, the process came to be called localization, as it required special engineering adjustments in addition to translation of texts" (2002: 71). Moreover, the researchers define it as a "comprehensive adaptation of the Message into the Receiver's environment in terms of both language and cultural context" (ibid.). If the majority of the above definitions on localisation dwell on a product-based approach, O'Hagan and Ashworth (2002), O'Hagan (2005, 2006) apply a communicative approach by emphasising the adaptation of the message sent to the receiver. Such an approach views localisation as an act of communication in which a message has to be modified to meet the particular

cultural and linguistic requirements of its recipient. Jody Byrne also subscribes to a similar point of view, and with reference to his article on localisation, describes localisation as "a complex blend of textual, visual and cultural communication" (2009). This comprehension of localisation as an act of communication is borrowed from translation studies that describe translation as an act of communication (Nida 1964; Kade 1968).

In addition to the perception of localisation that focuses on the relationship between translation and localisation, the third one, characterised as a holistic approach towards localisation, needs to be addressed. This understanding of localisation is suggested by Pym, who defines localisation as a distribution and movement of a text in time and space (2004: 13). The author observes that people are surrounded by localisations because texts (texts are defined as material objects) move from one century to another, one generation to another, one culture to another and one language to another. That is why localisation becomes a permanent movement between different languages (2004: 21).

Moreover, it needs to be added that not only texts (material objects) but many objects (products) move; therefore, the world could be defined as the "world of moving texts and people, objects and subjects" (Pym 2004: 8). The mobility of localisation is conditioned by the aim of localisation to satisfy the needs of both companies that provide products and people who wish to consume products. This could be regarded as a positive aspect of localisation because users get access to the product in their native language after the process of localisation has been completed. Thus, localisation becomes a tool to maintain cultural and linguistic diversity and maintain national identity. As a proponent of this point of view, Deborah Fry states that localisation helps create a better world without outsiders and insiders because "no one is left out" (2003: 11).

Analysing the conception of localisation, it has been observed that although it is diversely determined, both translation theorists and software

developers-localisers usually turn to the definition provided by LISA. The association states that "localisation involves taking a product and making it linguistically and culturally appropriate to the target locale (country/region and language) where it will be used and sold" (LISA 1998: 3). The evidence reveals that such a definition is too broad and has no mention of translation activity at all. Moreover, it emphasises adaptation component within the process of localisation aimed at meeting the needs of the users (Pym 2005; Jiménez-Crespo 2011). One part of the definition, "making it linguistically appropriate" (LISA 1998: 3), hides a hint and reference to translation undertaken to make the product suitable to the target language / culture. The definition seems to reduce the significance of translation as an activity to a small "subset of localisation" (Sprung 2000: xvii) due to the fact that this definition is provided by LISA – the premier organisation for globalisation, internationalisation and localisation industries, abbreviated as *GIL* (LISA 1998). The acronym *GIL* does not embrace the letter *T*, which stands for *translation*, to form the acronym *GILT*, because localisation, as the translation researcher Munday observes, has become a superordinate term for translation (2008: 191). Even though the acronym *GILT* encompasses translation (T), it is the last word, making it also the least important, for the words that come first are the most significant in human perception (Lakoff, Johnson 2003: 132). Since localisation historically evolved from translation, it would be more logical to reverse the acronym *GILT* to the acronym *TLIG* to reflect the development of the phenomenon and its connection to translation, internationalisation and globalisation respectively (Dunne 2006: 5).

The comprehension of localisation as a superordinate term for translation is overturned by O'Hagan, who shifts translation from the periphery (being the least important term in *GILT*) and describes it as core and the essential part of localisation and globalisation (2005, 2006). The author of the thesis also adheres to the viewpoint that any type of product adaptation is carried out by means of translation. Book translation, the subtitling and dubbing of a film

could be perceived as a type of localisation. However, the meaning of localisation is usually narrowed down just to software or website localisation. Moreover, within the project of software localisation, users tend to judge the acceptability of a product by means of language, as they notice the language first of all. If a message on the screen is not understandable, the users will immediately get frustrated and will not care about the design of the product or the difficult programming code that allows them to perform various commands. All those difficult programming riddles that are claimed to be more important in product design and testing rather than translation would appear to be of minor significance to the users because the correctness of language is the first thing to be observed, as human beings function and perceive the reality through the language.

2.3. Localisation, internationalisation, globalisation and translation

A better perception of localisation is gained not only by exploring the definition of the phenomenon but also by analysing the relationship between localisation and other closely related processes, i.e. globalisation, internationalisation and translation.

> ***Globalization (G11N)*** *Globalization addresses the business issues associated with taking a product global. In the globalization of high-tech products this involves integrating localization throughout a company, after proper internationalization and product design, as well as marketing, sales, and support in the world market* (*LISA 1998: 3*).

Globalisation as a term is used in various ways and different contexts especially the ones related to economics, financial, marketing, social and political studies. Wolfgang Teubert and Anna Čermáková, examining the variety of definitions of globalisation, indicate that the term is defined differently because the comprehension of the phenomenon prevailing in the worldwide society is not homogeneous due to non-homogenous discourse community (2007: 99). With reference to different approaches taken towards

globalisation, the authors characterise globalisation as an inevitable and worldwide phenomenon / trend / process, with its advantages and disadvantages, which stands for an economic, political, technological and social integration (Teubert and Čermáková 2007: 77-101). This definition is similar to the one provided in the glossary of *LISA Primer* (Lommel 2003: 42). The thesis subscribes to the definition of globalisation mentioned above by conceiving it as a worldwide process of integration; however, when discussing the issue of localisation, it is necessary to emphasise that globalisation is not only the characteristic of the twenty first century but also an important strategic imperative in software development and localisation.

A company needs to consider the issue of whether to develop (non)global software during the stage of software design. If a company aims at producing a local product and does not seek to become global, localisation issues do not need to be addressed. However, if a company attempts to compete in the international market, it needs to consider localisation and plan it in the initial stage of software development. Discussing software localisation, it is obvious that the relationship between localisation and globalisation is direct, where localisation becomes a prerequisite for globalisation on the one hand, and globalisation becomes a process that facilitates localisation and provides a possibility to use a product in countries other than the country of its production (O'Hagan and Ashworth 2002: xviii). Researcher José Ramón Biau Gil when defining the term of globalisation, describes the relationship of globalisation, internationalisation and localisation as a mathematical problem, i.e. globalisation = internationalisation + localisation (2005: 17).

Another key term that is closely related to both localisation and globalisation is internationalisation. According to LISA, internationalisation is defined in the following way:

> ***Internationalization* (*I18N*)** *Internationalization is the process of generalizing a product so that it can handle multiple languages and cultural conventions without the need for re-design. Internationalization takes place at the level of program design and document development* (*LISA 1998: 3*).

Internationalisation as a term brings in some confusion when exploring processes of localisation and globalisation due to the fact that some authors use the terms of *globalisation* and *internationalisation* synonymously (Brooks 2000, Cheng 2000). For example, Shehata defines internationalisation and globalisation as synonyms and determines them as the process of developing the core of a program with a code design that can support other languages (2000: 2). However, LISA's definition discriminates between globalisation and internationalisation, since the definition of globalisation clearly pertains to globalisation as the process of integration of localisation after the product being properly internationalised (LISA 1998: 3). This means that globalisation becomes a superordinate term for both localisation and internationalisation. Meanwhile internationalisation is a process of neutralizing the software, as Pym (2010a) has noted, by eliminating all culture- or language-specific items (date formats, currencies, colours, icons, etc.).

The last constituent part of the acronym *GILT* is assigned to translation. The definition of the term *translation* is not embraced by LISA's report. The term *translation* seems to be undesirable, since LISA and companies that provide localisation services, as Biau Gil and Pym state, differentiate themselves from the activity of translation (Brooks 2000; Sprung; Biau Gil 2005; Pym 2005). Biau Gil, exploring the relationship between the concepts of globalisation, internationalisation and localisation and presenting the mathematical problem mentioned in the section, asks a question of where translation fits the equation, since the term of *translation* is not always mentioned to define the key terms related to localisation (2005: 17). Despite the fact, translation, with reference to Esselink, could be explained as follows:

> *A process of converting written text or spoken words to another language. It requires that the full meaning of the source material be accurately rendered into the target language, with special attention paid to cultural nuance and style (Esselink 2000: 4).*

The definition of the term *translation* characterises translation as a process; however, within the scope of localisation, whereas translation is

reduced just to a small subset, translation is perceived as the replacement of language strings within a de-contextualized environment (Pym 2005, 2010a). Since translators are usually provided with language strings that have been extracted from software, they obtain no visual information (icons, pictures) that follows the text; thereby the translators are forced to render the language units into the target language with no context available. During the early stage of the development of localisation industry the significance of translation in the process of localisation was underestimated. Translation as a term that pertains to localisation was enlisted in Esselink's publication on localisation only in 2000. However translation scholars and theorists, who discuss the nature and historical development of localisation and the significance of translation in the scope of localisation (Dunne 2006), elevate translation by emphasising the fact that translation could be considered as the essence of localisation (O'Hagan 2006). The author of the thesis adheres to this point of view and employs the perception of translation and localisation throughout the entire doctoral thesis. The significance of translation in the process of globalisation is obvious, since translation, which entails and embraces language and culture, has become an integral part of globalisation (O'Hagan and Ashworth 2002: 22).

The relationship between translation, localisation and globalisation could be presented by means of the following equation proposed by Pierre Cadieux and Bert Esselink (2004) that is similar to the equation of Biau Gil (2005):

$$\text{GLOBALISATION} = \text{INTERNATIONALISATION} + \begin{matrix} N\times \text{ LOCALISATION} \\ N\times \text{ LOCALISATION} \end{matrix}$$

The equation is best perceived with reference to O'Hagan's diagram (2006: 39) that could be further extended by incorporating Pym's (2010a) model of the processes of translation, internationalisation, localisation and globalisation as presented in the following figure:

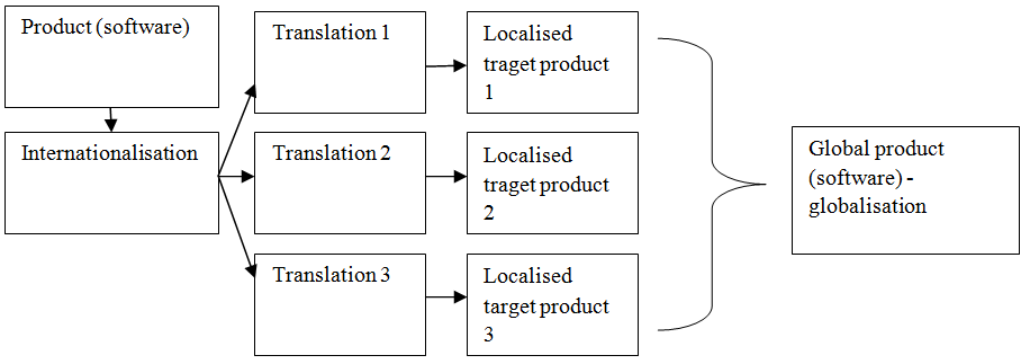


Figure 3. Relationship of internationalisation, translation, localisation and globalisation. Source: created by the author with reference to O'Hagan 2006 and Pym 2010a

Following the framework of Pym (2010a), the figure demonstrates the relationship of the processes of translation, internationalisation and localisation, and indicates the stages of product development. First of all, any product (software) is prepared for the process of translation before the actual translation takes place. This means that the original product gets internationalised or neutralised for translation by means of removing culture-related elements. Afterwards, the translation is carried out by translating the linguistic content of the software into as many target languages and cultures as needed. When the process of translation is complete, the versions translated get localised (Pym 2010a: 124). And the final stage of the entire process terminates with a global product, which proves the fact that the process of globalisation has taken place. The next section of the thesis further discloses and discusses linguistic aspects of localisation in terms of its features, such as the size, scope and complexity of the process, internationalisation and the translation model "one-to-many", reuse of the text and other.

2.4. Linguistic aspects of localisation in terms of localisation features

Authors, who support the view that localisation is a more complicated phenomenon, of which translation is a mere subset or "even a language problem" (Pym 2008: 2), mention the *size*, *scope*, *content* and *complexity* of

the process of localisation. Software is usually composed of many textual and visual elements (content), i.e. windows, help menus, hot keys, commands, interfaces and online help, which all have to be translated, often without knowing any particular context. The aspects of *size*, *scope*, *content* and *complexity* also embrace various tasks that are performed in addition to translation. These would generally include software engineering, testing, project management, user training and product maintenance after the process of localisation has been completed. Such features are characteristic only of software localisation.

Moreover, *size*, *scope*, *content* and *complexity* cannot be attributed to the translation of a book, for example, at least in the traditional sense, as books are usually written by an author and then translated by a translator[4]. During the process of translation, a decision about what to culturalise or localise, for example the names of people and places, has to be made. When the translation is complete, it is edited and corrected by the specialists of the target language[5], then edited by an editor, not to mention the entire process of publishing. Another similar case of *size*, *scope*, *content* (*linguistic and visual*) and *complexity* pertains to subtitling and dubbing of a film where, first of all, the entire creation of a the linguistic and visual content of the product takes place with script writers, directors, a team of actors, camera men and other staff members, not to mention the entire industry of dubbing and subtitling which involves management and testing of the project, similar to software localisation. This proves that in terms of *size*, *scope*, *content* and *complexity*, localisation is not something new, as these features are sometimes attributed to other types of translation (literary and audio-visual).

Internationalisation is another feature of localisation, which is defined as the preparation and generalisation of a product "so that it can handle multiple

[4] However the author of the thesis believes, this could be denied by saying that the translation of a book such as the Bible is also quite big in scope, size, content and complexity.

[5] For example, if a book is translated from English into Lithuanian, the translated text is rewieved by a specialist of the Lithuanian language and then returned to the translator(s) for a review once again.

languages and cultural conventions without the need for re-design" during the process of product engineering (LISA 1998: 4). Internationalisation means "writing for translation" (Esselink 2000: 3), or developing "an intermediary version" of a text to be translated (Pym 2010a: 122). This process ensures the possibility of writing the correct date formats, referencing local currencies, and using the correct linguistic characters within a particular alphabet. The process of *internationalisation*, as a new concept offered for translation studies, is characteristic only of localisation (Pym 2008, 2010a: 123-127). *Internationalisation* is carried out during the time of product design. The product is prepared by neutralising culture- or language-specific items, such as colours or date formats; only then it is translated. Here Pym proposes the "one-to-many" model of translation, since after the internationalisation of the product it can be translated into many target languages at the same time (ibid.: 124-125). Such a model is not characteristic of the previously discussed translation of a book, which does not need to be internationalised, whereas software does. However, several examples that are related to the personal experience of the author of this thesis may be provided here.

A certain type of product preparation was typical of Lithuania and other countries of the Soviet Bloc. Any book that was translated from English into Russian, Lithuanian or any other language of the Soviet Bloc countries had to be prepared in such a way that the translations could be handled in multiple languages and cultural norms, without any manifestations of free will, independence or freedom. Negative remarks about communism were not allowed, and collectivism had to be glorified against dark and wild capitalism. Thus, prior to the translation, subtitling and dubbing, books and films were read and adapted by the deletion of certain places or the provision of some explanations.

For example, the translation of Hemingway's novel *For Whom the Bell Tolls* that was published in Lithuania in 1972 contains an article about the novel that characterises both Hemingway and Robert Jordan (the main

character) as fighters for folk ideas, revolution, communism and a brighter tomorrow (Simonovas 1972: 570). The subtitles from the Lithuanian film *Nut Bread* (1978) also serve as a good illustration of this kind of neutralisation: one of the characters states that he wants to perform a piece of music entitled "*Ir blogi laikai taps gerais, kai vėl tave pamatysiu*" (Eng. *Bad times will become good when I see you again),* while the subtitles indicate that the character wants to play the song "The sun will shine when I see you again." The metaphor of *Bad times* is associated with Soviet times and their change to good times (a symbol of Lithuania regaining its independence) is completely neutralised. It is obvious that this is more related to the rigorous censorship of the Soviet regime and does not directly pertain to internationalisation as defined by LISA. The preparation of this type of product (a poem, song, book or film) took place prior to the translation. However, such preparation is similar to the neutralisation carried out during internationalisation, as culture- or language-specific items were removed. The book was neutralised and after its release one could see comments about the author and the book/novel in the preface that used to manifest certain propaganda.

Subtitling and dubbing also undergo similar processes of internationalisation, as the films to be translated / subtitled or dubbed must often provide certain explanations necessary to adapt the film to a specific country, culture and language. This preparation also takes place during the development of the film. As with localisation, films are also released in many languages at the same time, so the model "one-to-many" is not limited to the industry of localisation.

In addition, product (brand) launching is also quite similar to product arrangement and culturalisation. Brands, though they are the property of a company, must also be adapted to specific cultures and consumers to avoid any kinds of misunderstandings that are often considered in handbooks on marketing. For example, Estée Lauder's moisturizer *Country Mist* was not purchased in Germany, as the noun *Mist* means *manure* in German. Similarly,

advertisements for *Schick* razors are not shown in Lithuania, as the pronunciation of *Schick* sounds like the Lithuanian verb *Šik*, which is the imperative mood of the vulgar verb *to shit*. These examples prove the process of internationalisation to be characteristic not only of localisation, though that is where internationalisation is most evident.

One more aspect that is typical of localisation is the *non-linear, top-down, de-contextualised translation* approach (Pym 2010a: 132). When localising, software texts (if they can be called texts) are not translated like sentences in a book. Software texts are quite rare (with the exception of error messages, which can be rather long), whereas translators-localisers usually deal with individual words and language strings. The words are translated in a linear manner, when an equivalent of the original word in the target language is presented; at the same time, however, the same word might be linked to some other information (hypertext) which can be accessed by clicking the word. The entire picture is displayed within a tree's architecture with the possibility to probe deeper and deeper, so the top-down method of translation pertains to the digital medium. Moreover, the feature of de-contextualisation is also quite obvious in software translation. The context is rather vague because software programmers are free to choose whether to enter context-related information in programming resources during the stage of software development. Since the entry of context-related comments during programming is not formalised (not required), software developers avoid filling in field or menu item related remarks because it is time consuming. For example, translating the field name *search* into Lithuanian is quite tricky, as it could be translated as *paieška* (noun form of the verb *to search*), *ieškoti* (infinitive of the verb *to search*), *ieškok* (informal imperative of the verb *to search*) and *ieškokite* (polite imperative of the verb *to search*). And if the programmer marked that *search* is related to a button, the confusion how to translate could be escaped. The non-linear and top-down approach, as well as de-contextualisation, could be the most

distinctive features ascribed to localisation that are not found in "traditional" translation (e.g., the translation of a book or an article).

The *re-use* of previously localised versions is also attributed to localisation, as software development proceeds rapidly and new updates are released every year (if not more often). So the *re-use* of previously translated versions allows translators/localisers to save some time and money by translating only the new parts within a new release. Technologies (localisation tools) help to identify the missing parts (Pym 2010c). Re-usability is usually applicable only to software and website localisation; however, in this age of technologies, it could also be ascribed to translations of any other type of text. There are many novels and books that are re-translated. For example, new translations of the Bible keep appearing in the market.

Moreover, translators are keen to use translation technologies that allow them to *re-use* any texts or passages that have been translated before. Thus, re-usability could be attributed to any translations at all, as technologies are frequently exploited by a modern translator, whose image has changed from that of a person armed with a pencil, paper and many dictionaries to the one of a person armed with a powerful ICT, Internet access and other high-tech tools. However, the constant *re-use* of already translated texts might lead to the problems of the authorship of translations, as translation tools allow sharing the translated texts among translators. Yet, this would be an interesting research issue for further investigation. The following section of the thesis proceeds with the further analysis of the linguistic aspects of localisation in terms of translation theories.

2.5. Linguistic aspects of localisation in terms of translation theories

The question of whether localisation is something new or just a fancy name for a new and advanced form of translation has been raised in publications concerned with the relationship of translation and localisation (Cadieux and Esselink 2004; O'Hagan 2005, 2006; Sandrini 2005; Austermühl

2006; Gouadec 2007; Pym 2008, Pym 2010b). The answer to this question could be presented by probing into translation theories and revealing the points where localisation merges with translation and unfolds its linguistic aspects.

First of all, it could be stated that localisation is nothing new and deserves to be discussed within the scope of translation studies. Indeed, the first germs of localisation could be observed within the theory of Friedrich Schleiermacher (1813 / 2004), who argues that texts should be translated by bringing the author to the language of the reader or the reader to the author. When talking about localisation, the process of bringing the writer to the reader or, more appropriately, the product to the reader, is rather important, as, otherwise, the product will remain unused. Moreover, there is no single author, but rather a group of authors, as most products are developed by a team. And the author or writer of a text whom Schleiermacher had in mind could be replaced by the product and the reader by the receiver or user thereof. As localisation is the adaptation of a product for a specific culture and language, the method of translation suggested by the scientist would be based on the strategy of moving the writer to the reader, as it is necessary to move the product to the specific culture, language and receiver (the consumer / user of the product). For example, *Microsoft* products were "moved" to the Lithuanian language and culture in 2001 in order to be used in Lithuania.

Jean Vinay and Jean Darbelnet's *Stylistique comparée du français et de l'anglais: method de traduction* (1958) entails a story of the authors and their observations about different road-signs and their translations on the road that they recognised while travelling from New York to Montreal (1995: 1-6). The authors of the book discuss the issue of equivalence and the way it could be achieved when translating from French into English, but the story in the preface fits well to illustrate the situation of road-signs being localised in different cultures and languages. The phrase *Wet paint* could serve as an illustration here. No Lithuanian would understand the phrase were it to be translated into Lithuanian as *Šlapi dažai,* but the Lithuanian past participle

Dažyta (Eng. *painted*), which indicates a completed action instead of a quality, would be quite understandable.

Furthermore, the linguistic aspects of localisation are explicitly stated in Lawrence Venuti's theory on the invisibility of the translator (Venuti 1995). Discussing the role of the translator within the process of translation and the way s/he becomes in/visible, the author introduces two strategies of translation that are borrowed from Schleiermacher, i.e. *domestication* (the reduction of the foreign text's culture and values and their rendering in the culture and values of the target language), and *foreignisation* (the translation of a text without localisation, which allows readers to feel that they read a translated text). As an example, consider a cartoon based on an Eastern tale about a boy who visits the Sun to elicit an answer to the question of how to become a man. The cartoon is dubbed into Lithuanian, but the image of the Sun as a man is quite unusual for Lithuanian children. This is because the Lithuanian noun *saulė* (Eng. *the Sun*) is feminine and is associated with women and mothers, whereas in Eastern cultures, the Sun is associated with a man. If the picture of the sun were to be redrawn, the cartoon would be domesticated for the Lithuanian audience. *Domestication* is thus close to localisation, since the process is similar to text / product adaptation to a specific culture, language and country.

For instance, the Google webpage is a good example of domestication/localisation. When opening the page, one clearly sees *Google Lietuvos, Google Deutschland, Google España*, i.e. the name of the country appears beneath the logo. Although Google appears "to speak" every language, the Lithuanian page is not as correctly domesticated / localised as some of the others; it is not clear if the Lithuanian webpage should indicate the name of the country by saying *Google Lietuva* (this would conform to the other examples above), or state that "Google belongs to Lithuania" (Lith. *Google Lietuvos*) as the webpage claims.

The idea of *domestication / foreignisation* could be further developed by adding the concept of *culturalisation*, developed by O'Hagan and Ashworth

(2002), who describe "translation-mediated communication" and discuss the issues of localisation (2002: 69). According to the scholars, localisation is simply "culturalisation of the Message" sent to the receiver (O'Hagan and Ashworth 2002: 71). These theorists regard translation as an act of communication (translation-mediated communication) where the message, through translation, is sent to a receiver. And if localisation is a new form of translation, a communicative approach to localisation can be applied as well, wherein the message that is sent to the receiver / user of the software must be adapted or culturalised to a particular language and culture with the aim of being understood.

The paradigm shift from a focus on source texts towards a focus on the target text offers new insights into localisation and reveals other linguistic aspects of localisation. *Skopos* theory, proposed by Hans Vermeer in the 1970s, offers a functional approach to translation and highlights the purpose of the target text to be achieved and communicated within a particular target culture (Munday 2008: 79-82). *Skopos* theory suggests that the application of translation strategies is decided by the needs of the target text / language / culture. Such a functional approach works well with localisation as it is demonstrated in articles about website and software localisation (Charalampidou 2007; Fernández Costales 2009) wherein the product produced and its target users become more important than the prototype. Any message that is communicated through an IT product (website or software) has to achieve a particular purpose so that receivers of the message would know what they are supposed to do with it. Therefore, the message or software has to be culturally and linguistically adapted (Pym 2008: 2, 2010: 43-51).

Descriptive translation studies also emphasise the fact that "translating depend[s] very much on the cultural situation involved" (Toury 1995; Pym 2008; Dunne and Dunne 2011). Localisation as a process is highly dependent

on the cultural situation: the country's values, a tradition to (non)localise and socio-economic context.

2.6. Perception of localisation in Lithuanian context

The previous sections of the thesis have provided the theoretical framework for treating localisation as a linguistic phenomenon and process in terms of the features of localisation and translation theories, whereas this part of the dissertation strives to reveal the Lithuanian conception of localisation as a phenomenon that was imported to Lithuania with products (software). However, if the first attempts to localise software worldwide were observed in the 1980s, the first such effort was exercised in Lithuania only in 1996 with the localisation of OS/2 by *IBM*. *Microsoft* introduced its two localised products even later: in 2001. This late appearance of the localisation phenomenon in Lithuania can presumably be explained by demographic data. Lithuania is a small country with a small locale[6], a nation of about three million and a market that does not provide big opportunities for localisation companies. In addition to this, Lithuanian, in comparison with "major languages" such as English, Chinese or Spanish, falls into the category of "minor languages" (Cronin 2010).

Moreover, the Lithuanian language is not particularly easy to localise. Being a representative of the Baltic branch of the Indo-European group of languages, Lithuanian is the most archaic of all the living Indo-European languages and has preserved an archaic grammatical structure and patterns of word building. The French linguist Antoine Meillet (1866–1936) suggested that "anyone wishing to hear how Indo-Europeans spoke should come and listen to a Lithuanian peasant." This quotation has become so deeply rooted and often used when describing the Lithuanian language in documents and

[6] Here the term *locale* is perceived in Esselink's terms as "a specific combination of language, region character encoding" (2000: 1).

websites that references to the original source are impossible to be traced and are never given.

Not only the glorious past of the language, but also the history of the country[7] have long led both average Lithuanians and the professional body of *the State Commission of the Lithuanian Language* to try to preserve the native tongue; the latter institution is obsessed with the idea of cleaning the language from the barbarisms and jargonisms coming from Russian and, currently, English. In addition to this, the need to Lithuanise is rigorously governed by the Law on the State Language (31 January 1995, No. I-779) that regulates "the use of the state language in public life of Lithuania, protection and control of the state language, and the responsibility for violations of the Law on the State Language". This law underlies the language policy and requires all transactions, establishments and organizations, various public events, courts, signs and information to function and comply with the norms of the state language. The law is rather strict and even triggered an international scandal in July 2010, as the Polish minority in Lithuania cannot write their personal names in Polish (due to their use of Polish letters that do not appear in the Lithuanian alphabet) and are forced to Lithuanise them.

Even though the phenomenon of localisation has been recently observed within the Lithuanian market, the tradition to Lithuanise is quite embedded within Lithuanian culture and was characteristic of the entire twentieth century, described as the age of Lithuanisation (Matuzevičius and Valionis 1980). Lithuanisation and the tradition to Lithuanise thrived during the Soviet times. The Soviet government claimed that all art is for the people and aimed to educate society and provide access to the cultural heritage of other nations. Thus, names, songs, books, films and operas were Lithuanised. For example, the well-known song "Do Re Mi" from the musical *The Sound of Music* is a good example of localisation. The only resemblance to the original song is the

[7] The Lithuanian language and its press were banned by the Russian Tsar during the period 1864–1904, when it was also required that the Cyrillic alphabet be used instead of the Latin and that the press be released in Russian; Lithuania underwent a second period of Russification during Soviet times.

melody while the references to "a female deer" or a "drop of golden sun" have been Lithuanised: "*Do – tai saulė danguje* (Eng. *the sun in the sky*) / *Rė – švelnus jos spindulys* (Eng. *its tender ray*). Moreover, the tradition to Lithuanise names is still alive and deeply entrenched within the Lithuanian language. For example, Shakespeare would never recognise his own name, as in Lithuanian William Shakespeare is *Viljamas Šekspyras* or *Shakespeare'as*, Margaret Thatcher is *Margaret / Margarita Tečer,* and Anthony Pym is *Antoni / Antonis / Antanas Pim / Pimas / Pym'as.*

In addition to this, with reference to the process/term *localisation* itself, the verb *to localise* and the noun *localisation* have localised Lithuanian versions that are more commonly used, for international words are frequently Lithuanised. For example, *linguistics* can be translated as *lingvistika* or *kalbotyra* (Eng. *language research*), while *jury* will be either *žiuri* or *komisija* (Eng. *board / committee*). As for the term *localisation*, the noun *lietuvinimas* (Eng. *making Lithuanian* / *Lithuanisation*) is applied instead. The term *Lithuanisation* is perceived as the localisation of software to the particular environment that is named after the term denominating the environment. As a result, the adaptation of products to the Lithuanian language and culture is called Lithuanisation, while adaptation, for example, for the Arabic language and culture would be called Arabisation (Dagienė 2004). Similarly the verb *to localise* is replaced by the Lithuanian verb *su / lietuvinti* (Eng. *to Lithuanise* / *make Lithuanian*). Thus, the definition of localisation could be changed in that Lithuanisation is not restricted only to linguistic modification and is perceived as a process of adapting a particular product to the Lithuanian language and culture.

Despite the fact that the tradition to Lithuanise is quite anchored in the Lithuanian language and culture, the advent of high-tech processes and technologies (new ICT words and the absence of their equivalents in Lithuanian) is conceived of as a potential threat to the Lithuanian language. The impact of English has intensified after the fall of the iron curtain, and

Lithuanian is being strongly anglicised. The majority of ICT products are US-based, which means that most ICT words are English. And if there are no Lithuanian counterparts, and the terminologists do not manage to provide Lithuanian words promptly enough, English words begin to take root in Lithuanian. The nouns *pozicionavimas* (Eng. *positioning*) and *rūteris* (Eng. *router*) could serve as an illustration. Hence, it has been stated that software has to be exploited as a means of preserving and cherishing the Lithuanian language (Telksnys 1998).

Although it is perceived as a challenge, localisation and its impact on Lithuanian have not been studied by translation or language scholars in Lithuania. Research in the area of localisation and its relationship with translation is still in its infancy. In examining localisation, Lithuanian scientists follow Western tradition and rely on the works of Western theorists and practicians. Much has been done by Dagienė, Grigas and Jevsikova (2010; 2012), the leading scholars of Computer Science and Informatics who have been acknowledged as the pioneers in localisation research in Lithuania. They are looked to as authorities by linguists, translation theorists and professionals alike. Localisation has been considered an important turn in translation studies. In 2006 it was included in the Master's programme of technical translation and localisation at *Kaunas University of Technology*.

However, studies of localisation as part of translation studies have just begun, and translation theorists follow the works of the Lithuanian scientists of Mathematics and Computer Science mentioned above. They define *localisation* as adaptation that cannot be regarded as translation (Dagienė 2004; Dagienė and Grigas 2006). Researchers agree that translation is just a subset of localisation. Yet when talking about the process of localisation and providing some statistics on the localisation industry in Lithuania, scientists synonymously use words related to translation such as *to translate*, *translated software*, *a need to translate software* (Dagienė 2004; Dagienė and Grigas 2006). The theoretical implications about localisation, both a phenomenon and

a process in global and local settings, lead to the description of the participants of the process of localisation.

2.7. Sociological aspects of localisation in terms of participant actors

Localisation emerged as a process and profession thirty years ago (Dunne 2006), thereby it is characterised not only by its features but also by participants, or actors, who are directly involved in the process of localisation. If considered through the prism of project management, localisation is marked by an endeavour to provide a product at one end and assume the product at the other. Since localisation is about the exchange of a product, two parties, i.e. the supplier of the product and the consumer / user of the product are present. However, not only actors participate in the process of localisation. Adhering to O'Hagan and Ashworth's point of view that defines localisation as an act of communication, where a message is customised for the culture of the receiver (2002: 31-33), the sender and the receiver of the message encoded in software or website might be specified. Software or website as well as any other product have to be localised for particular cultures and languages due to different origin of the product, hence, two or more cultures have to communicate and interact.

Publications, books and other resourced consulted enumerate agents (who take part in the process of localisation) and roles assigned to the participants of localisation when planning the process of localisation project (Combe 2000; Esselink 2000; Lavallee 2000; Thibodeau 2000; O'Sullivan 2001; Biau Gil 2005; Dunne 2006; Ryan, Anastasiou and Clearly 2009; Shirley 2011). For instance, Dunne describing the historic development of localisation industry and discussing the existence of confusion, related to the conception and definition of localisation, indicates that there is no consensus on the definition of localisation due to the attitude of different stakeholders involved in the process of localisation and specifies them. To name a few, these would be clients, vendors, executives, developers, sales and marketing personnel, project

managers, consultants, translators, and others (Dunne 2006: 2-5). However, Dunne's specification of the participants of the process of localisation is rather general, since it does not particularise responsibilities and the roles performed when implementing the project of localisation.

The most comprehensive list of contributors who participate in the process of localisation is provided by Esselink (2000). The main participants are the publisher, the publisher's subsidiary or distributor, and a localisation service provider (Esselink, 2000: 13-16). Software publishers recruit a vendor manager, who is responsible for business relationship with localisation service providers, a localisation manager, who is in charge of project coordination, quality assurance team, responsible for the final quality check of the project implemented, and in-country language reviewers who proofread the samples of localised files. Meanwhile, localisation service providers employ an account or programme manager, responsible for the direct contact with publishers, project manager, localisation specialist or senior translator and translators, proofreaders and quality assurance (QA) specialists, localisation engineers and testing engineers, a computer aided translation (CAT) tools specialist and a desktop publishing (DPT) operator.

Thibodeau, examining localisation practices in a fast growing US-based company, *MapInfo*, distinguishes similar roles of the actors. However, his description is simpler and is not as detailed as the one provided by Esselink (Thibodeau 2000: 130). Comparing both lists of the roles of actors involved in a project of localisation, it has been observed that the participation of translators or linguists, who are responsible for translating the software and who are called localisers, is indicated only by Esselink (2000: 16). Thibodeau does not single out the role of translators and language specialists as if understating the significance of translation. The role of localisers seems to encompass the role of translators. Such understanding of roles already witnesses the merger of translation and localisation envisaged by Cadieux and Esselink several years later (2004).

Moreover, the perception of the role of translators and localisers is rather confusing as well. Esselink defines that translators who take part in the process of localisation and translate software are called localisers (2000: 13-14), whereas Thibodeau seems to assume that localisers are translators per se since he does not specify the role of translators as such (2000). Meanwhile Karen Combe, describing localisation practises in *Hewlett-Packard's LaserJet Solutions Group*, identifies translators and localisers as two different participants (2000: 103). The author does not provide a clear definition as to who is a localiser; however, it is possible to infer that she refers to localisation managers and engineers as localisers. To avoid the confusion related to the definition of a localiser and summing up the opinion of Esselink (2000) and Thibodeu (2000), a definition of a localiser might be offered by suggesting that any actor, who is assigned a particular role, is responsible for specific tasks, and is involved in the process of localisation can be characterised as a localiser. Thus, a translator might be specified as a localiser, and his / her role in the process of localisation is especially elevated by O'Hagan and Ashworth (2002: 6). The translator is the one who affects the message that is sent to the receiver and at the same time becomes an intermediary receiver, who is responsible for re-shaping and packaging of the content within the message to meet the expectations of the receiver (O'Hagan and Ashworth 2002: 6).

To sum up the section that aims to situate localisation within the linguistic context, it is possible to conclude that localisation could be perceived as a multifaceted phenomenon where language, culture and technologies come together with a goal to present some creative content of a product, i.e. book, film, website or software, to a target audience. The diverse conceptions of localisation as the consequence of the merger of language and technologies allow highlighting linguistic origin and aspects of localisation that become palpable when examining the understanding of the phenomenon, exploring its linguistic grounds by virtue of translation theories, analysing its relationship with translation, and investigating localisation-specific features. Linguistic

aspects of localisation, such as origin, links with translation and the adaptability of translation theories, namely functional ones (communicative, *Skopos*, *DTS*), make grounds for localisation to be treated as a paradigm within Translation Studies. This comprehension of localisation widens the scope of Translation Studies and localisation as a separate and new area of translation with a future perspective to evolve into a separate field of translation. In this way, the term *translation* becomes an umbrella term that entails localisation alongside the mainstream forms of translation, namely literal, technical, audiovisual, and the like.

3. THEORETICAL APPROACHES TO TRANSLATION AND LOCALISATION

The description of the phenomenon of localisation within a context leads to the introduction of the theoretical framework that is used to ground and validate the theoretical approaches applied in the thesis. Thereby, his section of the dissertation profiles two perceptions to translation and localisation. The traditional perception to translation and localisation (P1) embraces the communicative approach (Kade 1968), micro- and macro-level structural analysis (Lambert and van Gorp 1985 / 2006) and the model of translation strategies (Chesterman 1997 / 2005). Whereas the sociology-based approach to translation and localisation (P2) invokes principles of actor network theory (Latour 1996, Law and Hassard 2004, Callon 2005). This section also provides the methodology of the research.

3.1. Traditional perception of translation and localisation (P1)

The previous section of the thesis elaborated on the perception of localisation and provided a conclusion that localisation has evolved from translation and shares similar grounds with translation as an activity in terms of its linguistic aspects. Translation and likewise localisation could be also studied as a product, process and act by means of process-based and functional theories, i.e. communicative approach, translation strategies, *Skopos* and others. This type of approach is applied in the thesis and could be regarded as the traditional one because the communicative interaction of the process of translation is grounded on the traditional opposition between the source text and the target text on the one hand, and the sender and the recipient of the text / message, on the other. The communicative interaction between the participants of the act of communication, i.e. human beings, takes place by means of a dialogue, or communicative situation, where human beings exert the biggest influence on the communicated message, meanwhile other objects and entities

are not taken into consideration. The subsequent sections of the thesis approach translation and localisation as an act of communication and provide new linguistic insights into localisation.

3.1.1. Translation and localisation as an act of communication

Translation as an act of communication has been studied by many Western and Russian translation theorists and scholars, such as Otto Kade (1968), Eugine Nida and Charles Taber (1969/1982), Anton Popovich (1980), José Lambert and Hendrik Van Gorp (1985/2006), Aleksandr Davidovich Shveicer (1988), Olimpija Armalytė and Lionginas Pažūsis (1990), Minako O'Hagan and David Ashworth (2002), Anthony Pym (2003, 2005, 2009), Liucija Černiuvienė (2008). A communicative theory and approach to translation was suggested by a German translation theorist Kade in 1960. The theorist considers translation as an act of communication and a process, whose participants are: the sender of a text (an author), the translator (both the receiver and the sender), and the final receiver of the translated text. During the process of communication, the language becomes a means of communication; meanwhile the objective reality becomes the context.

The act of communication is composed of two stages (Kade 1968: 32). During the first stage the text is sent to the translator, the first and immediate recipient of the message. The translator changes the code of the text by means of translation, as s/he has to decode the message and render it in the target language required. After the translation of the message (the text) is complete, the translator becomes the sender of the translated target text to the final receiver and reader (Kade: 1968: 69-90). The stage when the author of the original text/message transmits it to the translator is characterised as the first act of communication, whereas the stage when the translator forwards the adapted and modified message to the final reader is defined as the second act of communication. The role of the translator becomes of crucial significance, since the translator is the recipient of the information (the original text to be

translated) during the first stage and the sender of the translated text to the final reader/user during the second.

Translation as a process and act of communication can be illustrated by means of the following figure:

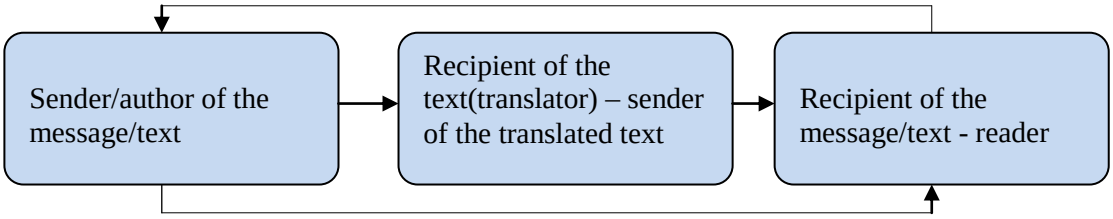


Figure 4. Translation as an act of communication (1). Source: created by the author with reference to Kade 1968

The figure above clearly demonstrates two acts or situations of communication in the process of translation. The diagram shows the participants, the author of the original text/message, the translator and the final reader of the translated text/message, involved in the acts of communication. The interaction among the participants of the act of communication is indicated by arrows. However the figure of translation as an act of communication above does not display any other linguistic or extra-linguistic factors, such as the type of language, culture, values, traditions, age of participants, the time of the process of communication, and other factors that take place during the process of communication. The participants of the act of communication are not the only objects that have impact on the act of communication. It is obvious that the setting—virtual or real environment, channels of communication via telephone, messaging programmes or face-to-face, age of the participants as well as their education, norms and values, and time period—affect the act of communication. The model of translation as an act of communication, suggested by Kade does not examine the factors mentioned above; thus, it seems that translation as an act of communication takes place within the vacuum (Shveicer 1988).

Factors that affect the process of translation as an act of communication were examined and added to the model of translation as an act of communication by a Slovak translation theorist Popovich (1980). The theorist identifies reality and literary traditions in both communicative situations and stages. The scheme of translation as an act of communication depicts two communicative situations where the translator becomes the intermediary who joins both communicative situations and is the one who takes into consideration the expectations of the final receiver of the message during the process of translation (Popovich 1980, Shveicer 1988). The model of translation as an act of communication, proposed by Popovich, is applied to the translation of literary works; however, it could be successfully used to analyse translations of any texts, as the same two communicative situations occur with two texts / messages (the original / source and the target text), two authors of the text (the author of the source text and the author of the translated target text), two recipients (the translator as the recipient of the source text and the recipient of the translated target text, or the final user) and two literary traditions (literary tradition of the source text and the literary tradition of the target text), as Popovich suggests (ibid.)

When Popovich (1980) model of translation as an act of communication is applied to any translation of a text, it becomes purposeful to change the literary tradition to a contextual situation, since the translation of a contract is affected by the economic situation, socio-cultural environment, epoch, traditions, values and similar factors. Moreover, the reality merges with socio-cultural environment. Figure 5 illustrates translation as an act of communication and entails the factors that influence the process of translation. Herein, S1 and S2 signify socio-cultural environment; R1 (the translator as the recipient of the source text) and R2 (the recipient of the translated text) stand for recipients of the source text, while TT1 and TT2 refer to target text. Meanwhile A1 stands for the author of the source text, whereas A2 indicates the author of the translated text, i.e. the translator, who changes the code of the

source text into the code of the translated text and sends it to the final recipient, or reader. Finally Lt1 and Lt2 represent literary tradition of the source text TT1 and the translated text TT2 respectively.

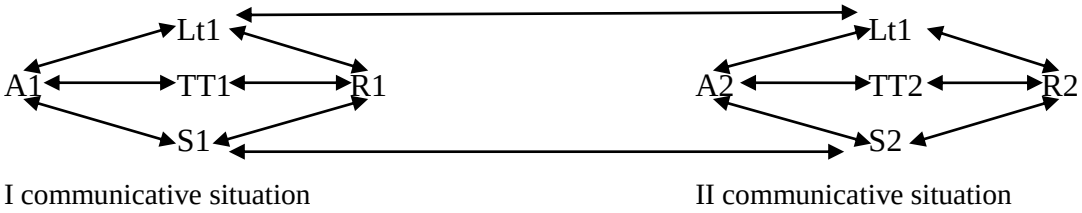


Figure 5. Translation as an act of communication (2). Source: created by the author with reference to Popovich 1980

The analysis of the model of translation as an act of communication demonstrates that the translator takes the most significant role during the process of the transmission of the message. Being the first recipient of the original text, the translator affects it most of all, since the formulation of the translated text that is forwarded to the final recipient depends on his/her experience, knowledge, beliefs and translation strategies, namely foreignisation, domestication, culturalisation, neutralisation and the like.

The significance of communication in the process of localisation has been emphasised by many researchers (O'Hagan and Ashworth 2002; Pym 2004, 2006; Biau Gil 2005, Dunne 2011, Tsvetkov and Tsvetkov 2011). Since localisation has historically developed from translation and pertains to translation in terms of translation theories, a communicative approach (Kade 1960; Nida and Taber 1969/1982; Popovich 1980; Shveicer 1988; O'Hagan and Ashworth 2002) could be similarly used to analyse the process of localisation as an act of communication.

When a communicative approach is applied to localisation, the model of translation as an act of communication could be changed in the following way. The developer of software becomes the author of the source product that replaces the source text, while the receiver of the software is the translator /

localiser who, after having changed the code of the linguistic content, sends the product to the final user of the software. Here it is important to mention that the understanding of a text differs from the traditional perception of the text.

The text is not perceived as a set of coherent formation that has the beginning and the end. Instead, any word combination, phrase, paragraph or passage is perceived as a text or a unit of translation (Armalytė, Pažūsis 1990: 56). The text segments, i.e. language units, are presented by means of graphical user interface and compose the content of the message that is send to the final user. Language units are usually defined as language strings (Pym 2010a) and are subject to change by means of translation strategies, since the translator / localiser is the first recipient of the message.

After the translation / localisation of the software, the translator / localiser becomes the author of the software provided to final users. Bearing in mind the fact that translation is not the only component of localisation (i.e. localisation involves engineering tasks, software development and testing), it is possible to say that the translator, who is the first recipient of the source text of the source product, is not the only receiver and the sender of the translated/localised software.

Since localisation is a complex process with a huge team of technical, functional and language specialists, the entire team of localisation becomes the first recipient of the product localised. In addition to this, one translator has to be replaced by a team of translators. Moreover, localisation engineers and the testing team become the receivers of the source product, thus, a conclusion can be drawn that during the process of localisation the recipient stands for all localisation team that is composed of different employees and localisers of any software till it is acquired by the final user.

In terms of localisation as an act of communication, it has been also observed that several communicative situations and more participants, in comparison to translation as an act of communication, are involved. First of all, the communicative situation of two or more cultures has to be mentioned. The

product implemented (i.e. software) is usually developed by one culture and is later adapted and localised to satisfy the needs of another culture. Software and similar types of production are usually US-based; therefore, it represents the American culture and has to be localised to meet the needs of the receiving culture[8]. This means that all norms, traditions, values that are initially embedded in the original product (software), have to be localised, e.g. colours, salutations, vocative constructions, dates and other. Hence, translators and localisers become intermediaries who are able not only to grasp the meaning but also transfer it appropriately as it is required by the target culture.

3.1.2. Translation strategies

During the process of translation / localisation the action of transferring the message of the original text is performed by means of applying a set of actions, defined by the name of *strategies.* The term *strategy* comes from a military context (Gambier 2010) and has become popular in economic, political and scientific contexts. *Oxford English Dictionary* defines the term *strategy* as a plan or method for achieving something (2012) and emphasises the lemma of *a plan* or *a method* to attain something.

The term *translation strategies* is defined as a set of actions and tactics used to complete any translation of texts: literary, scientific, software, language strings and others. According to Pym, a strategy is an action aimed at achieving some purpose (2011: 92). Strategies are also known as actions, shifts, methods, techniques or procedures[9]. The literature on translation provides different classifications of actions, procedures, methods, shifts,

[8] The term culture is defined as the collective programming of mind that distinguishes a group of people from other groups of people (Hofstede 2010:180).

[9] The synonymous usage of the terms (strategies, actions, methods, procedures, techniques, shifts and other) in the literature on translation studies demonstrates a lack of concensus between translation scholars and reveals the "terminological mess" (Pym 2011: 92) of translation studies since different terms denote the same concepts.

strategies, techniques, and other. For instance, to describe the process of transfer, Jean Vinay and Jean Darbelnet (1958) introduce five procedures, Eugine Nida (1964) indicates seven techniques, John Catford (1965/2002) proposes five shifts, Peter Newmark (1988/1995) suggests both eight methods and fifteen procedures, Mona Baker (1992) proposes eight strategies used by translators and Andrew Chesterman (1997) provides thirty such strategies. Other types of classification are summarised by Lucia Molina and Amparo Hurtado Albir (2002), Luc van Doorslaer (2007), Mahmoud Ordudari (2007), Yves Gambier (2010), Shadia Banjar (2011) and other authors.

At the same time *translation strategies* as a term is used to denote a way of dealing and solving certain translation problems that arise when translating (Krings 1986; Hurtado Albir 1996; Molina and Hurtado Albir 2002; Chesterman 1997, Chesterman 2005). During the process of translation, translators often make decisions to find solutions for the questions of what and how to translate. The question *what* is usually answered by examining the source text for translation, whereas a response to *how* question is suggested by translation strategies, since they offer solutions that are necessary to deal with particular problems. Translation strategies are usually applied as a part of translation and localisation process when translators and localisers have to transfer the meaning of the source text units to the target text.

Since the terms—strategies, methods, procedures, shifts, techniques and the like are applied synonymously—, Chesterman (2005) suggests using the term *method* to denote a general way of translating. The notion of method is close to the perception of a translation type: free, literal, or other. Meanwhile, the term *strategy* is described as a cognitive way to solve problems that occur at different stages of translation. The application of strategies is procedural and is based on cognitive efforts. The notion of *technique* refers to linguistic, micro-level and textual procedures. And the term *shift* denotes the result of a procedure (Chesterman 2005).

The differentiation of the above-mentioned terms is based on three semantic distinctions of procedures, methods, shifts, strategies, and techniques, i.e. result versus process, global versus local, and problem-solving versus routine (Chesterman 2005; Gambier 2010). If translation is examined in terms of a result and process, thirty strategies proposed by Chesterman could be employed (Chesterman 2005, Gambier 2010), since the author provides a detailed, extensive, flexible and "heuristic" classification of translation strategies. Besides, the classification of Chesterman attempts to summarise translation strategy-related proposals of other translation scholars (Vinay and Darbelnet 1958; Nida 1964; Catford 1965/2002; Newmark 1988/1995; Baker 1992, 1993; Molina and Hurtado Albir 2002; Klaudy 2003).

In terms of the definition of translation strategies, this thesis adheres to the view point of Chesterman and follows his definition of translation strategy as a way to solve a problem that occurs during the process of translation and his definition of *strategy* as a plan and tactics to attain something. Translation strategies allow examining translation as an action and a multi-level hierarchical process (Chesterman 1997). Since the thesis aims at examining *PeopleSoft* localisation / translation as a process, it is purposeful to apply the set of syntactic, semantic and pragmatic strategies suggested and developed by Chesterman (1997).

The list of thirty strategies of translation, proposed by Chesterman, is subdivided into three groups, i.e. syntactic / grammatical, semantic, and pragmatic (1997). All types of translation strategies are indicated in the table below.

The first column is occupied by syntactic strategies that mainly involve manipulations of form, whereas semantic strategies deal with lexical semantics and change meaning of the target text units in comparison to the source texts. Pragmatic strategies manipulate the information selected in the message sent. Each and every strategy reveals the way the message of the original text is

modified to communicate the message to the target audience and reflects the impact of the target language and culture on the message.

10 Syntactic/grammatical strategies	**10 Semantic strategies**	**10 Pragmatic strategies**
(G1): Literal translation	(S1): Synonymy	(P1): Cultural filtering
(G2): Loan, calque	(S2): Antonymy	(P2): Explicitness change (explicitation / implicitation)
(G3): Transposition	(S3): Hyponymy / hyperonymy	(P3): Information change (addition / omission)
(G4): Unit shift	(S4): Converses	(P4): Interpersonal change
(G5): Phrase structure change	(S5): Abstraction change	(P5): Illocutionary change (speech act change)
(G6): Clause structure change	(S6): Distribution change (expansion / compression)	(P6): Coherence change
(G7): Sentence structure change	(S7): Emphasis change	(P7): Partial translation
(G8): Cohesion change	(S8): Paraphrase	(P8): Visibility changes (notes, glosses, etc.)
(G9): Level shift	(S9): Trope change	(P9): Transediting
(G10): Rhetorical scheme change	(S10): Other semantic changes (modulation)	(P10): Other pragmatic changes (layout, choice of dialect).

Table 1. Translation strategies by Chesterman 1997. Source: created by the author of the thesis.

Thereby a description of every strategy and the analysis of examples are presented in the analytical part of the thesis which focuses on the case of *PeopleSoft* localisation in Lithuania. Moreover, the analysis of translation strategies closely pertains to micro- and macro level structural analysis that demonstrates the way the message is transformed to accommodate the requirements of the target language and culture. The description of the model of micro- and macro-level structural analysis is presented in the following section of the thesis.

3.3.3. Micro- and macro-level structural analysis

The application of micro- and macro-level structural analysis to examine the process of localisation is rather new in the studies of localisation; no such previous attempts have been observed. Initially micro- and macro-structural analysis was proposed by Lambert and van Gorp (1985/2006) as a way and a tool to explore literary translations, translation phenomena, translation

strategies, models and norms, specifically "one-directional way of studies and a straightforward confrontation between T1[Text 1] and T2 [Text 2]" (Lambert and van Gorp 2006: 41). The structural analysis is rather flexible because it does not focus on the equivalence between the source text and the target text and does not aim at finding the answer to the question if the translation of the text is good or bad, since such a normative approach is source oriented. Instead it seeks to explore the translation within a wider context: literary, religious or cultural.

The approach of applying micro- and macro-level structural analysis to translation stems from polysystems and norms theory, proposed by Itamar Even-Zohar (1978) and Gideon Toury (1995). The theories suggest that the target and the source texts, being the representatives of the target and the source systems respectively, do not belong just to the literary target / source systems and are part of translational, cultural or religious target and source systems. The systems are not isolated, since they are open and interact, overlap and belong to other systems, for example the literary system of the world.

Lambert and van Gorp (1985/2006) emphasise the idea that texts cannot be studied by simply comparing or juxtaposing the texts and applying the binary opposition of the source and the target texts. Instead, the texts and the relations between the texts have to be examined from the points of view of both texts. This type of analysis is defined as the frame of reference and cannot be identified with the study of the source/target text; it allows to examine translational phenomena as well as "translational and textual strategies, i.e. norms and models" (Lambert and van Gorp 2006: 42) as a result of translational and selection strategies applied. Since such an approach focuses on the description of translation as a process and a product and falls into the scope of *Descriptive translation studies*, the authors provide a scheme that could be used to describe any translation.

The proposed synthetic scheme for the description of translation encompasses four levels of primarily structural analysis of: (1) the preliminary

data, (2) the macro-level, (3) the micro-level, and (4) the systemic context (Lambert and van Gorp 2006). The analysis of the preliminary data is related to the investigation of general information about the translation (the title page), the presentation of meta-texts (footnotes and comments), and the description of the general strategy of the translation (complete or partial).

The macro-level structural analysis focuses on the layout of the text (subdivision into chapters / acts), titles of chapters, the relation between types of narrative, internal narrative structure, and authorial comments. The micro-level structural analysis shifts the focus on the study of phonic, graphic, micro-syntactic, lexico-semantic, stylistic and elocutionary levels of the text (word selection, forms of speech reproduction, modality). And finally, the analysis of the systemic context shifts the focus on the exploration of oppositions between micro- and macro-levels, intertextual relations (i.e. other translations and creative works) and intersystemic relations (genre structures, stylistic code) and other (Lambert and van Gorp 2006:45-47). The thesis applies the synthetic scheme for the analysis of translation strategies that employed during the process of localisation. The synthetic scheme and the list of elements used to describe translation / localisation are presented in Annex 1.

The synthetic scheme proposed by Lambert and van Gorp (1985/2006) might be successfully applied to the study of localisation process. Yet, the synthetic scheme of micro- and macro-level structural analysis could be used to analyse the process of localisation only after its modification, since not all the elements of the scheme are found during the process of localisation. The adaptation of the scheme is suggested by the author of the thesis and the new scheme is composed with reference to certain aspects of the software localised: presentation of the information by means of language strings, the presence of hypertext and other visual elements.

The model of translation strategies by Chesterman (1997) is also integrated into the micro- and macro-level structural analysis, since it focuses on the same items, i.e. dominant patterns, selection of words, division of the

text and the like, that are highlighted by the micro- and macro-level structural analysis. Moreover, the synthesis of both models of analysis reveals the traditional approach to translation and localisation (as a new form of translation) of *PeopleSoft*. Here the traditional approach denotes a model *original → translation* and *author* / *sender → translator* / *receiver* / *sender → reader* / *receiver*.

The synthetic and integrated scheme of micro- and macro-level structural analysis and translation strategies composed by the author of the thesis with reference to Lambert and van Gorp (1985/2006) and Chesterman (1997) might be presented as follows:

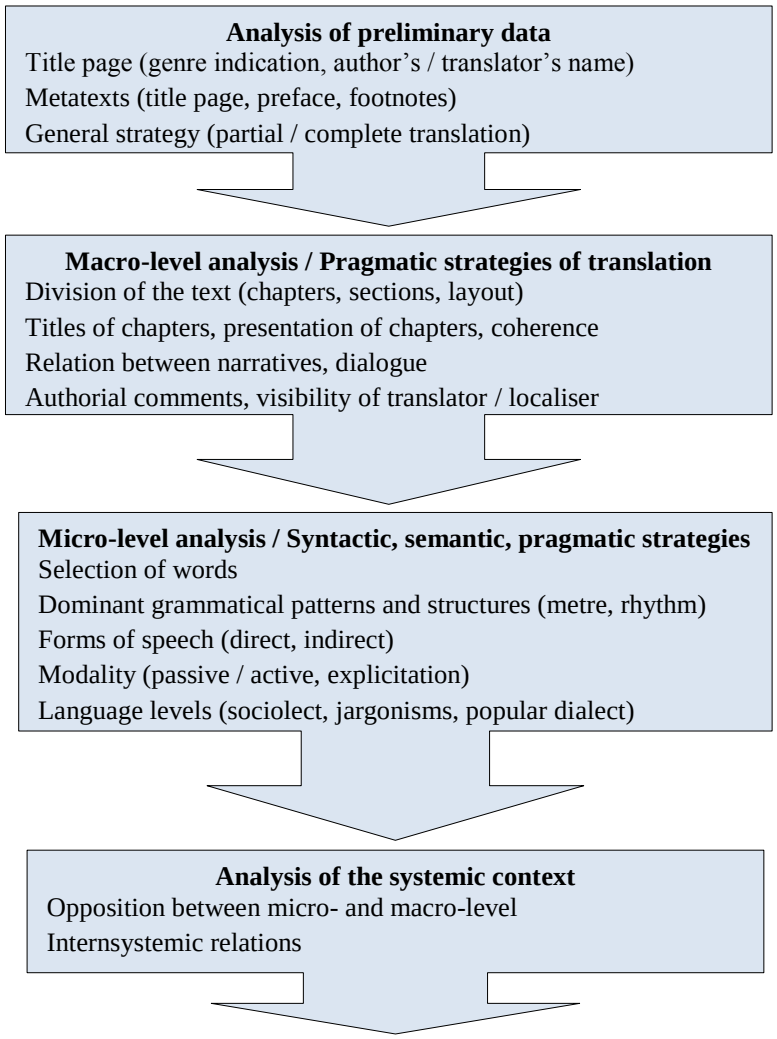


Figure 6. Synthetic / integrated micro- and macro-level structural analysis. Source: composed by the author with reference to Lambert and van Gorp (1985/2006) and Chesterman (1997).

The first constituent of the scheme entails the preliminary data, or all the elements (the title, the title page of the software, the meta-texts and the generally strategy) that help to reveal general information and describe the software localised by means of examining the title and the webpage of the software, the presence of the developer of the software, the presence / absence of any information about the target language / culture. The preliminary analysis will answer the questions if any meta-text is present and if the localisation of the software is complete. During the first stage of the analysis, the following questions could be considered: who carried out localisation, who made the decision to translate / localise the software, and who were the translators. The answers would provide general context about the localised software and could lead to the second stage of the macro-level structural analysis of the software localised.

During the second stage, the division of language strings of the software (menu items, components, fields, and length of the field) could be examined. The names of the components of the software would also provide some valuable insights about the relation of the elements of the software. Moreover, the types of narratives used in the localised version as well as the relationship between the types of narrative could be described. The macro-level structural analysis is closely related to pragmatic strategies of translation, namely information change, coherence change, visibility change and layout, that have a considerable impact on the division of the language strings and components of the software and authorial comments. The analysis of macro-structural level would help to discover if and how the target language and culture change the macro-level (external level) of the software localised.

The third stage of the analysis, referencing the scheme of Lambert and van Gorp (1985/2006), would dwell on the investigation of the micro-level of the software localised. The analysis of the micro-level could, therefore, be centred on the assumption that is formulated as follows: the analysis of the

micro-level reveals the way the target language / culture changes the software localised. Hence, the following elements could be examined:

- selection of words (the selection of words for translation within a restricted space, since the length of long and short fields are strictly defined, and the usage of numerals instead of full words),
- dominant grammatical structures (presence / absence of abbreviations, acronyms, contractions and full sentences),
- the presence / absence of perspective and the point of view (pragmatics and register selected),
- modality (passive, active constructions or neutral forms),
- language levels (socio, popular, jargonisms, neologisms).

Moreover, during the micro- and macro-level structural textual analysis translation strategies employed to Lithuanise *PeopleSoft*, namely syntactic, semantic and pragmatic, might be explored. For instance, syntactic / grammatical strategies, i.e. literal translation, loan, transposition, unit shift, phrase, clause and sentence structure change, cohesion change, level shift, and semantic strategies, i.e. synonymy, antonymy, hyponymy / hyperonymy, converses, abstraction change, distribution change, emphasis change, paraphrase and trope change, pertain to micro-level changes such as the selection of words, expression of uncertainty, the use of dominant grammatical patterns and rhythm and the selection of language levels.

Pragmatic strategies of translation, namely interpersonal change and illocutionary change, are directly linked with forms of speech reproduction (i.e. direct and indirect) and the use of neologisms, jargonisms as a type of language level. During this phase of the analysis the answers to the questions of whether the same translation patterns are followed to localise software and if translation strategies could be successfully applied to analyse the process of localisation might be answered.

The analysis of the micro-level of the software would lead to the final stage of the description of the software and provide some insights about the systemic context. The focus would be shifted to the study of intersystemic relations (the relations with other localised versions of the same software) and the opposition between the micro- and macro- levels. The acceptance or refusal of the software localised in the target language / culture might be investigated within this stage of the analysis as well.

3.2. Sociological perception of translation and localisation (P2)

If the traditional perception of translation / localisation as an act of communication operates on the conception of the interaction of human beings and the text, the sociology-based perception of translation / localisation focuses on the interaction of human and non-human objects with the text. Localisation as a process involves many participants who / that have already been defined together with the roles assigned to each participant / actor; hence, it is purposeful to introduce actor network theory (converted into the acronym *ANT*) that can be applied to the study of localisation. The software localised, according to actor network theory, is a participant or an actor because it becomes a medium of communication and affects other actors that/who engage in the process of localisation. This chapter of the thesis intends to disclose the main theoretical implications of actor network theory that is used to reveal translation / localisation as a process and phenomenon through the prism of the sociology-based perception of translation / localisation respectively.

3.2.1. Actor network theory and its principles

Actor network theory (*ANT*) emerged in the mid-1980 (at the same time when localisation both as a phenomenon and industry appeared) in Paris school and the works of French science and technologies studies scholars Michel Callon (1980) and Bruno Latour (1996), and British sociologist John Law

(2004). The theory stems from the Sociology of Science, Mathematics, and Technologies Studies and shares some common grounds with semiotics, structuralism and post-structuralism. *ANT* is defined as the semiotics of things or entities since it explores the relations between things (material) and concepts (semiotics) (Crawford 2004: 1).

The difference between semiotics and *ANT* is such that semiotics is concerned with meaning and its production and ignores the fact that the meaning should serve as means of communication between actors and the nature. Meanwhile *ANT* claims that the meaning cannot be explored separately from the nature of what entities are, and, instead of the meaning, things should be studied (Latour 1996: 6-8; Crawford 2004: 1-3; Law and Hassard 2004).

Though being criticised for the controversies of the theory, the tensions and misunderstandings caused by unclear labelling and perception of the key notions, i.e. actor, network, theory and translation (Latour 1996; Latour 2004; Law and Hassard 2004; Folaron and Buzelin 2007), *ANT* provides a conceptual framework for understanding and examining collective socio-technical processes. *ANT* is considered to be a set of methods and techniques rather than a theory (Latour 1996) and focuses on the question of how ideas are turned into "hard facts" that are converted into technological innovations used by the society (Latour 1996; Folaron and Buzelin 2007). The facts are modified and changed by the society through relations that the society establishes. Therefore, *ANT* centres on "relational materiality" (Crawford 2004) and does not discriminate between nature and science, fact and fiction, content and context, human and non-human, since everything is intermingled and (non)connected.

The theory seeks to answer the questions of how actors are related and connected, how they convert within the network, how networks bestow certain qualities to actors, how actors establish certain roles, who they become useful to, and how actors participate in particular programmes and get motivated (ibid. 2004). The notion of non-human embraces any things or entities that

might be natural, artificial, material or conceptual, i.e. animals, machines, technologies or texts (Crawford 2004; Latour 2004; Law and Hassard 2004).

The main principles that *ANT* subscribes to are the following ones:

- agnosticism that rejects the existence of any *a priori* knowledge and assumptions of the nature of networks;
- generalised symmetry according to which all actors / actants are given the same footing and are equal;
- free associations that allow abandoning distinctions between natural and social phenomena since these distinctions are not causal and are the outcome of networked activity (Crawford 2004: 2).

According to *ANT*, all the world is made up of actors/actants who/that are characterised as "volitional actors" (Crawford 2004: 1). An actor, as Latour defines it, is a semiotic definition of an actant, i.e. "something that acts or to which activity is granted by others" (Latour 1996: 5). Such a comprehension of an "actor" or an "actant" is different from the social definition of the term *actor*, according which only a human individual can be defined as an actor. *ANT* extends the perception of the term *actor*, since, according to the theory, anything, i.e. humans and non-humans, individuals and non-individuals, natural or artificial things, can be actants provided they are granted the source of action and have some effect on other actants, i.e. things and entities (Latour 1996: 5; Harman 2009: 17). Actors might be textual, conceptual, social and technical. All of them are equal and can be explored without imposing on them any a priori definitions and knowledge.

Actors define the world in their own world-building capacities; they are linked in one way or another way and, by means of connections/relations, they form networks. Actants always act with the world, and the more they are connected, the more real and stronger they become, whereas the less they are connected, the less real they are, since actants gain strength by means of their

relations and associations (Latour 1996, Latour 2004, Harman 2009). One of the central claims of *ANT* is that the actor is its relations (Harman 2009: 18).

The term *actor network* is a translation of the French term *acteur reseau* and is replaced by other terms: *enrolment*, *traduction* and *translation*. According to Law and Hassard, the term *network* does not mean society, whereas *actor* does not mean *agency* (2004). The perception of *network* , as Latour claims, deviates from the common technical meaning of a network, for example, a computer network that is distant, connected, strategically organised, compulsory, final and stabilised (1996). In *ANT* a *network* may have no technical characteristics of the network as the one used to describe a computer network above (Latour 1996). Moreover, *ANT* clearly differentiates itself from the study of social networks due to the fact that social networks aim to explore the social relations of human actors, whereas *ANT* widens the scope of its exploration by focusing on all heterogeneous relations of agents/actors and entities (Latour 1996, Latour 2004; Law and Hassard 2004). Actor networks are omnipresent, dynamic, and flexible and exist everywhere; thereby they connect with other networks and by means of those connections they provide explanations to themselves (Latour 1996).

ANT also rejects the perception of the society by means of binomial oppositions, dichotomies and hierarchies and provides new insights into the perception of the world. Thinking in terms of networks, it is possible to get rid of some spatial dimensions such as far / close, big / small and inside / outside (Latour 1996; Law and Hassard 2004). All spatial dimensions are perceived and explored by means of connections, and the effect of remoteness, closeness, proximity, connectedness, hierarchies and outsiderness is achieved through the work carried out by actants.

According to Latour, things might be close when they are disconnected and distant when they are close (Latour 1996: 3-5). For example, a person might be close to his/her friend sitting in another room, but appear more connected to his/her sister who is one hundred kilometres away. In terms of the

partition of the world and the scale of big and small, *ANT* states that one network is never bigger than another (Latour 1996). A network might be just longer and more extended via connections. The spatial dimension of inside/outside is also rejected by *ANT* since, being boundless, networks have no inside and outside (ibid. 1996). The conception of the world, proposed by *ANT*, provides a new perception of the society which is comprehended as some kind of filament and has "fibrous, thread-like, wiry, stringy, ropy, capillary character that is never captured by the notions of levels, layers, territories, spheres, categories, structure, systems"(Latour 1996: 56).

One more important key term for *ANT* is the notion of *translation* the perception of which is rather complex. The understanding of the term *translation* in *ANT* is not related with the transfer of meaning as translation is perceived in Translation Studies. According to the theory, *translation* is a dynamic and collective process of displacement and the means of linking one actor with another (Crawford 2004, Law and Hassard 2004; Buzelin 2007a, 2007b; Harman 2009). *Translation* is not only a process but also an effect (outcome). During the process of *translation*, entities change, become either similar or simplified, but retain their differences and acquire certain qualities that define their identity. Therefore, the term *translation* might be perceived as "betrayal" of origins (Crawford 2004).

Moreover, societies, nature or machines are structured the way they are because of translation; thus the whole world is defined as "translation of forces" (Harman 2009: 26). Translations take place in the world that is composed of various media (here layers of the world are defined as media) or mediators (Crawford 2004, Harman 2009). Communication also occurs by means of translation, since communication does not happen spontaneously. If there are two actors, they do not start communicating immediately because they need some medium / entity by means of which the communication might start. This means that every actor becomes a mediator or a translator "that leaves no message untransformed" (Harman 2009: 77).

Software localised also becomes a mediator for the communication to happen not only between the giving party and the receiving, but also between two or more cultures. Applying actor network theory to localisation and aiming to prove/reject the central question of the thesis, i.e. if software implemented changes the target language and culture and conversely, it is possible to get some valuable insights subscribing to the viewpoint that actors, for example software, cultures, vendor and client, are affected by each other. They are such as they are because of the relations and connections they form in the network of localisation.

3.2.2. Localisation / translation in terms of Actor Network Theory

Because of its innovative nature, *Actor Network Theory* is frequently applied to analyse case studies, since it provides valuable analytical insights, offers new conceptual tools to carry out empirical research and helps to "articulate translation phenomena through another vocabulary" (Folaron and Buzelin 2007: 23-25). Subscribing to Deborah Folaron and Hélène Buzelin's ideas, this thesis adheres to the point of view that *ANT* becomes "an essential phase of *DTS* and <...> unveils a further inventory of translation related phenomena" (2007: 23).

Despite the fact that Latour is largely unknown in translation studies (Buzelin 2007a), it has been observed that *ANT* has already been employed in the context of Translation Studies by Pym (2007) Buzelin (2006, 2007a, 2007b), Buzelin and Folaron (2007), and other scholars. The academic publications of Lambert and Van Gorp (1985/2006) entail some principles of ANT as well. The researchers do not mention the term *actor network theory* specifically; however, such dimensions as *relations* and *selection strategies* that are discussed in the publication are defined as one of the most important aspects of *ANT*. Besides, the authors emphasise the fact that translation usually takes place within a wider system (e.g., literary, political, national and

international) and, therefore, is perceived as a result of relations among different parameters (Lambert and Van Gorp 1985/2006: 39).

Localisation, similarly to translation, connects many actors / entities / elements (human and non-human, individual and teams, natural and artificial) who/that participate and assume certain functions in the process. Actors who are engaged in the project / process of both translation and localisation are defined by localisation industry representatives and have been explored in the previous chapters of the thesis (cf. 2.7.). *Actor network theory* could be applied to investigate localisation as an outcome of the relations of actants. This type of research might add some value towards the study of localisation in the context of Translation Studies, since no application of *ANT* to explore localisation has been detected.

Localisation as well as translation does not take place in the vacuum. "Various hands" are actively involved in the processes (Buzelin 2007b: 53) and create at their own time / space and pace by means of various connections / relations. The application of ANT might help analyse what actors are involved in the process of localisation, how localisation / translation is carried out, as well as explore how actors step into connections, how these connections influence their functioning and activity, and how the connections affect the production of the final product. Moreover, *ANT* might provide the answers to the questions how the (non)existence of relations among actors influence localisation by means of either changing the software localised through the target language / culture or changing the target culture / language through the software localised.

Localisation, similarly to translation, is a collective, dynamic, and complex process by means of which a certain product is developed (for example, a localised version of *Microsoft* software or *Nokia* webpage in the Lithuanian language). The result as well as the success of localisation depends on actors (localisation team managers, translators, software developers, technicians, end users and others), who act as intermediaries / mediators within

the network established. Thereby, as Buzelin suggests, during the process of localisation and translation "the expression of the relations between various intermediaries that have participated in its process" could be detected (2007 b: 39).

The result achieved during the process of localisation is the direct effect of collective team-working and depends on negotiations, communication and relations of the actors involved since all are responsible for the development of the final product. However, this factor, though being observed, is not substantially emphasised and focused upon. During the process of localisation the implementing (publishers of the software) and the receiving (the client purchasing the software) parties meet and negotiate together, yet both sides forget that together they constitute one team and a network. Good and positive functioning of the network ensures the achievement of good results, i.e. the production of the final product. Therefore, examining localisation as a process and project, it is interesting to explore negotiations of actors of the network. Negotiations, according to Buzelin, are perceived as "strategies of persuasion (or changes in strategies) which make it possible to deal with these changes and ensure and guide the participation (or departure)" of the actors involved (Buzelin 2007b: 51). Moreover, negotiations within the network are not only local (among the representatives of the same culture / language) but international (among representatives of different culture / language, for example Lithuanians and Americans).

When applied to the study of the process of localisation, *ANT* could also provide some analytical insights about the role, the authority and the status of the translator within the process of localisation. This might elevate the significance of the role of the translator as a profession that is usually devaluated by localisation industry representatives. Translation and translators are usually overlooked claiming that translation is just a minor activity within the overall process of localisation. Translators, inasmuch as interpreters, seem

to be invisible during the process of translation / interpretation and localisation and are usually frowned upon (Buzelin 2006).

If the translation of the software localised is accurate, nobody appreciates the work of the translators. Meanwhile, if the translation of the software is unacceptable due to any problems, for example, technical (i.e. the truncation of words and sentences) or linguistic (i.e. introduction of a new and approved term instead of a jargon or a loan word used in the target language), all, i.e. software end-users, technicians (IT specialists) and localisation team managers, become language professionals. They comment the quality of the translation and express their dissatisfaction and anger, ignoring factors and any other force majeur that might affect the process of translation / localisation. *Actor network theory*, in this case, allows avoiding certain subjectivity due to its focus on the principle of connectivity and the rejection of any *a priori* knowledge because it aims to explore the relations that are established by means of conflicts, negotiations and communication instead of emphasising who / what is better / worse, or who / what is more / less significant. Instead, the focus is shifted to the relations of the actors / agents (for example, translators), where all the actors are equally treated, notwithstanding if they are winners or losers (Latour 1996; Crawford 2004; Folaron and Buzelin 2007, Harman 2009).

The authority and status of translators in the process of localisation might also be demonstrated by means of decision making. This unfolds the role of a translator as a political agent. The decision what to translate or not is usually made by the process owners (the client buying the software) and localisation team managers, while translators become only executives of what has been decided. They might be invited to participate in the process of decision making, yet not allowed to make the decisions of the highest level. Thereby, translators have to prove and fight for their point of view, since, being volitional agents, translators have their preconceptions and understanding about the subject which might differ from the one of other actors (localisation managers, editors, software developers, and end users). Therefore, it might be

difficult for a translator to prove personal righteousness and convince other actors to follow the same point of view and the same direction.

The ability to convince is related with the selection of particular strategies that not only ensure the participation of other intermediaries but also highlight "the continuation of the project" (Buzelin 2007b: 48- 51). The skill to persuade other actors of the network reveals social and political influence of translators in the process of localisation, since translators who assume the function of intermediaries (Folaron and Buzelin 2007; Pym 2007) between two or more cultures / languages are able to introduce new norms, values, and conceptions.

Bearing this in mind, it is interesting to study what difficulties, problems, confrontations and obstacles the translators face, how these difficulties are handled by translation and localisation teams in general and how these difficulties affect both the process and attitude towards translations in the project of localisation. Localisation is a dynamic and collective process; thus problem solving becomes a collective effort the outcome of which depends on the knowledge and skills of each actor (translator / localiser) involved (Folaron and Buzelin 2007).

The principle of networking and connectivity, suggested by *ANT*, could be employed to analyse the software localised as one of the actors involved. Since *ANT* places all entities, i.e. natural and artificial on the same footing, the software localised becomes one of the actors the alliances are made up with. Hence, it is possible to study the software localised (actant) from the viewpoint of those who produce it and treat natural and artificial entities in similar terms (Folaron and Buzelin 2007:8). During the analysis of the process of software localisation, it is interesting to study how the actors and their relations affect the production of the localised version of the software and how and by whom the software is changed. Being one of the artificial actors of the network of localisation, the software localised is a network in itself. Fields, menu items, components, information and all types of verbal and non-verbal data, different

forms of reports are all interconnected and interrelated and form a network, where every element is connected through nodes and ties.

Finally, the software also changes and affects other actors that are involved, i.e. culture and language. Two or sometimes even more cultures are connected by means of software. Adhering to the viewpoint of Pym about the movement of texts (2004, 2007), it is obvious that the localised software migrates from one culture to another similarly to the way the texts do. When doing so, it seems to exert some influence on the target language and culture, since the software localised might introduce new norms, values and patterns of behaviour that have never observed before.

Moreover, two cultures might be perceived as "two zones" (Pym 2007) where by means of the mediation of all localisers the communication takes place (Pym 2007). The interaction of two zones or entities (if thinking in terms of *ANT*) never goes one-way in the network. Not only the US-based software affects the Lithuanian language and culture, but also the Lithuanian language and culture are likely to modify the software localised. The Lithuanian language and culture affect the software through the connections that are established by translators, clients and IT specialists. All the actors involved in the process of localisation become "intercultural subjects", since they function and act within "intercultural networks" and follow "intercultural rules" (Pym 2007).

To sum up, the principles of *Actor network theory* widen the perception of translation and localisation from the transfer of meaning to a dynamic process of displacement by means of boundless networks. Thereby, *ANT* provides the theoretical framework to explore both translation and localisation in terms of a communicative network where the interplay of agents allows testing the hypothesis of the research. Since the theoretical insights have been presented in the previous parts of the thesis, namely 3.1. and 3.2., the subsequent part of the dissertation surveys the applied research methodology.

3.3. Research methodology

The model of the research that was applied to approach translation (the numeronym t9n) / localisation (the numeronym l10n) as a process in terms of traditional and sociological perception of translation / localisation could be illustrated by figure 7. The top level of the block diagram illustrates the linguistic perception of localisation as a phenomenon and process through the prism of the relationship of translation and localisation, i.e. the historic development of the phenomenon of localisation, features, and translation theories that could be applied to study the process of localisation. Since the research focuses on the case analysis of *PeopleSoft* localisation in the Lithuanian market, the product, i.e. *PeopleSoft*, and the context of project implementation is described.

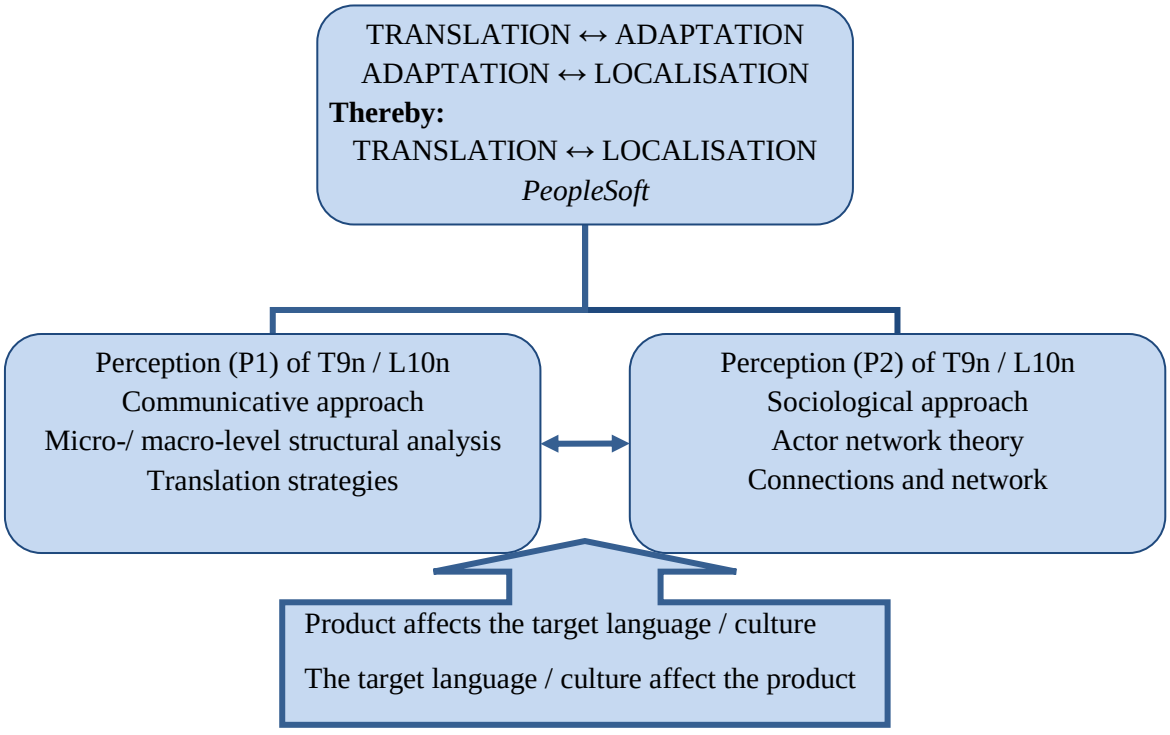


Figure 7. The model of the research. Source: created by the author of the thesis

Furthermore, the process of localisation, i.e. *PeopleSoft* Lithuanisation is explored by means of two perceptions applied, i.e. the traditional perception of

translation / localisation (P1), which focuses on the interaction of two or more human beings by means of a message sent, and the sociological perception of translation / localisation (P2), when objects / entities intervene into the interaction of human beings and affect the process of communication.

Therefore, according to P1, the process of translation / localisation is analysed by means of a communicative approach and the synthetic micro- and macro-level structural analysis of translation strategies. Meanwhile, in terms of P2, the process of translation / localisation of *PeopleSoft* is investigated through actor network theory, the network and connections the actors of *PeopleSoft* network step in. The analytical insights acquired provide results that either reject or confirm the hypothesis of the thesis, i.e. the product localised tends to change the target language and culture. The analysis of *PeopleSoft* Lithuanisation by means of the two perceptions of localisation / translation might also reveal if the target language and culture affect the product.

The corpus of the research is composed of official documentation, i.e. orders, decrees and laws that set grounds for the development of the standardised and integrated system for Lithuanian science and study institutions and that have been used as the empirical data of the research. The total number of the documents passed, mostly by *the Minister of Education and Science*, is 14, among them 11 decrees and acts, the Law on the State Language and others.

Press release documents and newspaper articles that were printed and e-published in Lithuanian, hardcopy and online dailies, such as *the Atgimimas, the Lietuvos Rytas, the Respublika, the Vakaro Žinios*, and the news-portal *Delfi* have been applied to describe the environment and context of LieMSIS implementation. The total number of such articles and press release documents is 10. The documents have been used to explore the lifecycle of the project.

The object of the research, i.e. *PeopleSoft* product and the localised version, have been examined to describe translation strategies that were

employed to tailor the original *PeopleSoft* to the Lithuanian language and culture. Since the language of the product is changed by means of translation, 84852 translation units / language strings of the original and the corresponding Lithuanian counterparts of graphical user interface[10] (GUI) have been investigated. All the language strings and the screenshots that capture the translator's working environment were manually recorded and collected in Microsoft Excel spread-sheets. The total number of the analytical makeup is approximately 2660 pictures.

Since all *PeopleSoft* screenshots were manually calculated, the error of calculation was impossible to avoid. Though the screenshots for analysis have been selected randomly, they reflect all constituent subsystems (FIN, HRMS, CS) and modules of *PeopleSoft*. The analysis of translation strategies is qualitative. Due to a large scope of materials (English and Lithuanised screenshots of *PeopleSoft*), the idea to provide quantitative data was rejected; thus, the analysis of translation strategies, applied to localise *PeopleSoft* to the Lithuanian language and culture, does not present the prevalence of one type of translation strategy over another.

Translation strategies, with reference to Chesterman (1997), that were used to localise *PeopleSoft* GUI texts to the Lithuanian language and culture, were examined according to the groups, i.e. each translation strategy that falls under the group of syntactic, semantic and pragmatic strategies was explored separately. During the analysis of translation strategies the fact that the subdivision of strategies has fuzzy boundaries was taken into consideration, since a strategy that is included into one group may be assigned to the other. For example, sometimes sentence structure change, as a type of syntactic strategies overlaps with a paraphrase (a type of semantic strategies). Moreover, the same language string that is selected for analysis may contain several

[10] Graphical user interface, abbreviated as GUI, is defined as "a human-computer interface (i.e. a way for humans to interact with computers) that uses windows, icons and menus and which can be manipulated by a mouse (and often to a limited extent by a keyboard as well)" (Linux Information Project LINFO 2004).

translation strategies. Bearing this in mind, it has been decided to focus on the strategy that is in the selected language string in question in the first place and to mention other overlapping strategies if they are of significant importance to research findings.

All language strings that were chosen for the analysis of translation strategies include both the original English *PeopleSoft* and the Lithuanised versions. To differentiate between the original and the Lithuanised language strings the acronyms SL (source language) and TL (target language) were used. All the examples that were applied to illustrate the usage of translation strategies are enumerated in square brackets next to the acronyms SL and TL respectively. The total number of language units, selected as illustrations to describe translation strategies and demonstrate the influence of the product on the target language / culture and vice versa in the analytical part of the thesis, amounts to 148 and includes 74 original and Lithuanised language strings in total. The frequency and definitions of lexemes of particular language strings have been verified in the online *Longman Dictionary of Contemporary English*, the online *Merriam-Webster Dictionary*, *Oxford English Dictionary, Corpus of the Contemporary Lithuanian Language*, *Parallel Corpus*, the online *Dabartinės Lietuvių Kalbos Žodynas* and *Lietuvių kalbos žodynas*, and the online multilingual thesaurus *EUROVOC*.

When conducting the research, the following **restrictions** have been taken into consideration. The implementation of the integrated information system for Lithuanian science and study institutions has not been completed yet, and the final results are expected to be achieved by the end of 2012. Bearing this in mind, it has been decided to investigate only the first stage of LieMSIS implementation, i.e. the localisation of *PeopleSoft* that was carried out during an eight-year period, from 1999 till 2007.

4. LOCALISATION OF *PEOPLESOFT* SOFTWARE AS RESEARCH CORPUS

The focus of the thesis is placed on the implementation of the project (here the term "project" denotes a temporary effort to develop a unique product (Project Management Institute 2008: 434)) of Lithuanian Science and Study Information System (herein after referred to as LieMSIS) during which *PeopleSoft* software was localised for science and study institutions in Lithuanian. The aim of LieMSIS project is (since the project is still in the process of development and has not been completed yet) to reform and integrate information systems in Lithuanian institutions of education, to standardise the processes of higher education in Lithuania, and to develop a an integrated information system for / of institutions (i.e. the *Ministry of Education and Science*, the Republic of Lithuania, the *Department of Statistics*) that regulate and coordinate the processes of education in Lithuanian universities and colleges. This chapter reconstructs chronological events that have taken place during the development of the integrated system for science and study institutions in Lithuania and introduces *PeopleSoft* software that was Lithuanised.

4.1. LieMSIS project

The start and end of the project, according a process-oriented approach to localisation, are regarded as one of the most significant characteristic features since the start and the end of the project establish the limits of its temporariness. LieMSIS implementation project started in 1999 with the exploration of available resources and legal requirements for the implementation of the information system in Lithuania. The idea to develop an integrated and standardised system of Lithuanian science and study institutions was triggered by the successful implementation of several PHARE projects: 79-PHARE-LI-PAO "Multi-country cooperation in distance education" and

"Higher Education Reform in Lithuania" (Sasnauskaitė 2003; Targamadzė and Viliūnas 2008). The *Ministry of Education and Science* (MES) of the Republic of Lithuania, initiated the development of LieMSIS with an aim not only to reform the system of higher education but to reorganise the institutions of higher education in Lithuania by means of computerisation and digitisation of educational processes to enable the institutions to successfully integrate into the EU system of education and compete with other educational establishments both in Europe and worldwide (LRVK 2010).

In 2001 the Minister of Education and Science issued the decree No 115 that approved the validation of the programme "Information Technologies for Science and Studies 2001 - 2006" (ITMiS) under which the first LieMSIS specification was prepared, and LieMSIS as a common, standardised and integrated system of all public and private institutions of higher education in Lithuania had to be implemented (Radzevičienė and Valiulis 2005; VMU 2006; Donauskaitė 2007; LRVK 2010). *The Ministry of Education and Science* together with the leading Lithuanian universities (*Vilnius University*, *Kaunas University of Technology* and *Vilnius Gediminas Technical University*) and colleges (*Vilnius College* and *Kaunas College*) were the initiators, coordinators, developers, and promoters of the project.

The subsequent works to be implemented within the scope of ITMiS programme had to be further developed under the national programme "Lithuanian Virtual University" (hereinafter LVU) during the period of 5 years from 2007 till 2012. The LVU programme is composed of four interrelated sub-programmes: the development of E-learning processes (EMSaS), the development of e-learning infrastructure (LieDM), the development of integrated Lithuanian Science and Study information space (LABT), and the development of management and self-service infrastructure (LieMSIS task). LieMSIS system has been developed by means of adapting *PeopleSoft* software and *Oracle Business Suite* composed of module-based subsystems. The structure of the LVU programme is revealed in the chart below that

indicates the interrelationship of the programme and four interconnected sub-programmes (tasks).

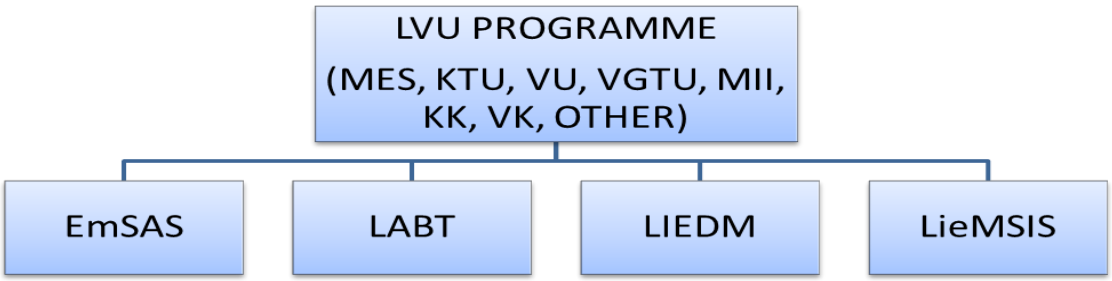


Figure 8. LVU programme and interrelated tasks. Source: Targamadzė and Viliūnas 2008

The survey of 2001 identified needs and gaps that allowed improving the specification of the programme. The initiators of the project met with the leading ERP software providers, i.e. *SAP AP*, *NobleStar Systems Corporation*, *Siemens* and *Oracle*, that became interested in the idea to develop the standardised and integrated information system in Lithuania (Donauskaitė 2007). On December 2, 2003 the company from the United States, *NobleStar Systems Corporation*, committed to standardise the process of higher education in Lithuanian by offering to localise *PeopleSoft* software and adapt Financial (FIN), Human Resource Management (HR) and Student Administration (SA) subsystems (Dubovijienė 2003, Donauskaitė 2007).

In 2010 *the National Audit Office of Lithuania* conducted the national audit. The final report of the national audit stated that Lithuanian Science and Study Information System had been developed for 10 years and about 51 million Litas was allocated; however the aim of the project was not completely achieved, since the system did not function at its full capacity and the advantageous parts of the system were not implemented (LRVK 2010). After the recommendations of the *National Audit Office*, the *Ministry of Education and Science* issued a decree (ISAK No V-2424) to continue the development of the information system under LieMSIS / IMSiS programme; thus, the

development of the project is still in progress and should be completed by the end of 2012.

PeopleSoft localisation project has been an in-house project, i.e. the entire process of the development of the integrated system in Lithuania has been carried out in the target country. The highest decision-making body, namely LieMSIS Steering Committee has been composed of business owners of the leading institutions of higher education. The executive body in charge of *PeopleSoft* localisation consisted of the staff members from both parties: the United States of America (*NobleStar Systems Corporation*) and Lithuania (*Kaunas University of Technology*). The localisation team involved administrative, functional, technical, and translation staff members that represented both parties. The administrative department was responsible for process management, decision making issues, organisation of the work-flow, and delegation of tasks. The functional team was subdivided into three groups, Human Resources, Finances and Student Administration, since these were the main sub-systems and products of *PeopleSoft* that were Lithuanised for the development of the integrated information system in Lithuania. Technical staff, IT specialists and engineers, had to build in all the solutions suggested by the functional staff members, solve technical problems related to malfunctioning of software as well as assist functional and translation staff members.

Meanwhile the department of translation was in charge of community and conference interpreting, translating, specifically Lithuanisation of *PeopleSoft* modules, project related documentation (contracts, minutes, official letters, etc.), editing, terminology management, and software testing. All the team of LieMSIS localisation had a chance to directly communicate, collaborate and participate when making certain decisions since all the groups were accommodated in the same location and facilities in Kaunas. The next section of the thesis describes the software that was localised in Lithuania during the development of the standardised information system.

4.2. *PeopleSoft* software

The development of the integrated and standardised system for institutions of higher education in Lithuania (universities, colleges, institutions of vocational training and other) has been based on the adaptation of *PeopleSoft* software, i.e. an integrated software package that provides applications to perform and execute business processes in organisations, institutions and enterprises. The software as a US-based product was developed by *PeopleSoft* enterprise that was established in 1987 and existed as an independent company till 2005, when it was hostilely taken over by *Oracle Corporation* (Miller 1999). Though the enterprise does not exist anymore, its products are widely used by many companies and, currently, the brand name and the product line of *PeopleSoft* are managed by *Oracle*.

PeopleSoft software is advantageous since it is a fully integrated business software system that allows handling various organisation management related processes, automate and integrate core business processes by computerising manual tasks, as well as access and share common data across the entire organisation in a real time environment (ISACA 2006). *Oracle* states that *PeopleSoft* applications are designed to meet the most complex requirements of enterprises and "provide comprehensive business and industry solutions, enabling organizations to increase productivity, accelerate business performance, and lower the cost of ownership" (www.oracle.com). Due to its characteristic features *PeopleSoft* has been a worldwide leader: more than 12, 200 global companies use *PeopleSoft* software to increase the efficiency of their performance.

When discussing the design of *PeopleSoft* application suites it is important to mention that *PeopleSoft* moved from a client-server based design to web-centric design defined as Pure Internet Architecture (PIA). The advantage of an Internet-based design is such that all information can be accessed and run on a web without additional downloads. The architecture of

PeopleSoft application suites are based on database technology and web architecture. Since *PeopleSoft* is PIA environment, it launches itself and can be viewed over the Internet. Currently the software complies with all web standards and is deployed using Internet browsers (Doolittle 2008: 11 - 12). The main advantage of the software is its focus on business processes instead of departments or functions as well as the fact that the system is driven and owned by its process owners and end users, rather than being driven and owned by the information and communication technology alone (ISACA 2006).

PeopleSoft software package is composed of the following systems and may cater to specific business needs:

- Human Resource Management System (HRMS) that is currently known as Human Capital Management (HCM)
- Financial Systems (FIN)
- Distribution Systems
- Manufacturing Systems.

PeopleSoft package has been frequently chosen for its "easy customization", adaptability to changing business processes and ability to fit specific and complex needs of different organisations and at the same time being generic "to meet corporate and governmental requirements" (www.learn*PeopleSoft*.info).

PeopleSoft localisation and translation process might be graphically represented in the following way:

Figure 9. *PeopleSoft* implementation process. Source: composed by the author with reference to Targamadzė, Viliūnas 2008

The flowchart indicates both *PeopleSoft* implementation phases and localisation processes. The start of the project in 2001 was immediately followed by the phase of specification which focused on the analysis of

specific requirements and needs, essential for the development of solutions to provide the foundation for the Lithuanisation of *PeopleSoft* software. The design phase embraced programming tasks; therefore, the collaboration and communication of technical and functional staff was essential. During the development stage the software was arranged according the suggested solutions. The Lithuanisation of software language strings started at that phase and continued during the implementation. Besides, *PeopleSoft* prototypes of human resources, financial and student administration modules were created. The end of the implementation phase was related to the testing of the functioning of the system and end-user training. After the implementation of the software in one of the piloting institutions, the roll-outs to other institutions of higher education were planned. Following the successful roll-out of the software in all the pilot institutions, the deployment of the software in around 95 remaining institutions was scheduled.

4.3. Translation in LieMSIS project

The process of translation during the project of localisation is usually perceived as a project of translation because it also has clearly marked beginning and end. Translation is regarded as one of the core activities that determine the overall success of a project. Tailoring of the linguistic content of the software to the target market, language and culture takes up the biggest share of the total localisation costs and becomes one of the essential activities during the project of localisation. Thus, the section aims at describing the process of translation during *PeopleSoft* localisation as well as translation-related decisions that could influence the process of *PeopleSoft* translation / localisation.

The contract of *PeopleSoft* localisation envisaged translation as one of the core activities of LieMSIS project. The contract and other internal documents indicate that the translation of *PeopleSoft* software has been an “in-house” and

"in-context"[11] project, since it has been carried out in the target country, Lithuania. Taking into consideration the total costs of the project implementation, the idea to outsource translation by hiring subcontractors, i.e. language service providers (LSP), was rejected because of the additional costs, security issues and data protection. Moreover, outsourcing translation would have meant providing LSP translators with a limited amount of information that is usually presented as extracted data on excel spread-sheets with no access to the real product when translators work, as Biau Gil describes, in "word-only (WO) translation environment" (2005: 39). This type of translation is error-prone, since part of information is presented by non-verbal elements, such as visual elements, symbols or icons that are not retained in word-only environments, i.e. word lists. If translators do not access non-verbal elements, they can make errors in the target texts due to a lack of information. Then translation as activity becomes stripped of the context, or decontextualised.

To provide a high-quality product, it was decided to exhaust the potential of human resources at *Kaunas University of Technology* instead of hiring LSP. Thus, the Department of Translation, composed of KTU lecturers, who are practising translators-experts from the *Centre of Foreign Languages*, was established. The group of translators involved five translators who were in charge of software localisation and other translation / interpreting related activities. The *Department of Translation* was located in the same facilities with Functional, Technical and Administrative Departments of LieMSIS implementation team; therefore translators could meet, communicate, consult and make certain translation-related decisions with the other members of the localisation team on a daily basis.

The Department of Translation could communicate with other localisation experts and were granted the access to any type of information, such as internal documents and PeopleBooks, i.e. a resource that supplements

[11] Susan Cheng uses the terms "in-house and in-context" translation to describe the globalisation of an e-Commerce Web site (2000: 31 – 42).

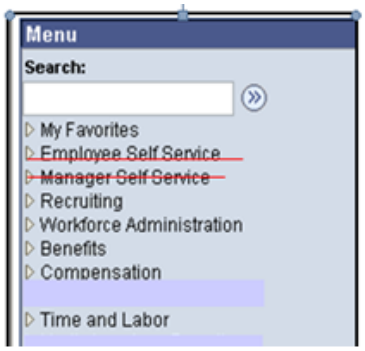
PeopleSoft software, about the product, necessary during the process of Lithuanisation. Besides, the translators could access the production and development environments of the localised software, which allowed the translators/localisers to use "WYSIWYG, i.e. What-You-See-Is-What-You-Get" (Biau Gil, 2005:40) translation environment that embraces both verbal and non-verbal elements, adds contextual information and reveals the structure of content elements of the software (hierarchical relationship of portal objects, menu items, components, pages, long and short field labels and messages) and ensures higher quality of translation. Thereby WYSIWYG translation environment provides the translators with the insights about the contexts of translation items and affects the selection of translation strategies.

The translation / localisation of GUI content in process was arranged in the environment of the software, as *PeopleSoft* contains a tool for *PeopleSoft* translation (electronic tool used to speed up the process of translation) that assists translators in the process of translation / localisation. Prior to the process of translation it was believed that the *PeopleSoft* delivered language utilities, i.e. an inbuilt automated translator *PeopleSoft* Translation could accommodate for the translation / localisation of the Lithuanian version of *PeopleSoft*. However, taking into consideration differences of the English and the Lithuanian languages, i.e. gender specific endings, the system of declensions, it was decided to employ practising Lithuanian translators who would be responsible for Lithuanisation of software's GUI that is defined in the thesis as the linguistic content, composed of language strings or units.

A suggestion to integrate *SDL Trados translation memory* tool was refused because of the costs of the tool. Therefore, it was decided to provide translators with the translation units (language strings) displayed in excel spread sheets, word lists and word documents in word-only environment. The pictures below demonstrate the translator's word-only working environment. The translators were given screenshots of the original version of the software and had to write an aligned Lithuanian version next to the English language

unit, e.g. *My favorites – Mano puslapis*. Another way of translating was to suggest the Lithuanian version for the original English version in a table or a word list, e.g. *payroll – darbo užmokestis* (*DU*), *Business Unit – Verslo Vienetas*.

At first sight, this way of translating might look as an easy task, yet it is difficult and error-prone. For instance, if the language unit *My favorites* is submitted for translation as an entry on a plain word list with no contextual information, the translation becomes ambiguous. Rendering the language unit into the Lithuanian language, the explicitation is likely to be used due to the fact that the direct translation of the original phrase *My favorites*, i.e. *Mano mėgstamiausi*, is too vague as it is not obvious what the original noun *favorites* implies. Therefore, the translator might add additional information and translate the message as *mano favoritas* (*my favourite*), *mano mėgstami daiktai* (*my favourite things*), *mano mėgstamiausi* (*my favourite* where *favourite* is the superlative of the adjective *favourite*). Without the context, the suggested translation might be wrong, since the menu item *My favourite* implies information about favourite pages of the user.



Meniu

Mano puslapis
Darbuotojo savitarna
Vadovo savitarna
Naujo darbuotojo paieška
Darbuotojų administravimas
Naudos
Kompensacijos

Laikas ir Darbas

1	**Payroll/ Darbo užmokestis (DU)**
1.1	**Integration/Integracija**
1.1.1	Integration of Payroll and Human Resources Management processes / Personalo valdymo ir DU procesų integracija.
1.1.2	Integration between Creditor and Payroll modules (i.e. set up employee as a Vendor). / Integracija tarp „Kreditoriaus“ ir „DU“ modulių (t.y. apskaityti darbuotoją kaip tiekėją).

Picture 3. Translator's WO working environment and documents

Moreover, translating / localising the components of the software as presented in the examples above proved to be time and effort consuming since seeking to provide the correct translation the translators had to browse for the contextual information about the translated item in the environment of the software. The analysis required more time and slowed down the process of translation. Therefore it was decided to customise the translation tool provided by the software and provide a tool for Lithuanian translations "the *PeopleSoft* delivered language utilities are not sufficient for the implementation of a Lithuanian version of *PeopleSoft* for this project. This has resulted in the writing of a custom translation utility. The tool for translation allowed the translation experts to work in "WYSIWYG" translation environment that had direct access to PeopleBooks (guide and help books) and provided the link and navigation to a particular page where the translation item appeared.

In addition, the customised *PeopleSoft* translation utility automatically supplied translations of the items that were previously translated and appeared in new modules of the software. For example, if the language unit *Search Criteria* that appears in the module of workforce administration has been rendered into the Lithuanian language as *Paieškos kriterijai* the same translation would automatically be offered for all language units *Search Criteria* in other modules of *PeopleSoft* software.

The content of the software was composed of 84852 units that had to be translated, reviewed and approved both by translators and KTU process owners. One translation unit could be composed of just one word, a sentence, or a passage of the length of one or more pages. Therefore the translation of a unit could sometimes be completed during a second or a day.

In addition to actual translation / localisation of software language strings, i.e. menu items, short and long field labels, messages, editing and testing of the localised software LieMSIS translators were in charge of translation of other project related documents such as internal documentation, correspondence, project minutes, decision-related materials and other.

Moreover, the translators usually became mediators in conference, community interpreting, or interpreting in meetings, negotiations and other events. The extract from the internal document below illustrates this:

> *According to the contract, project deliverables were to be based on the English language and <…> Experts were to have required the English language skills. There have been many occasions that documents have had to be translated to the Lithuanian language to ensure a clear understanding of proposals and points of clarification. This has been required for understanding and acceptance of the often complicated information. The extra step of translating often large documents has caused delays in deliverable approvals, other project deadlines and has disrupted the flow of project implementation. In addition, all the meetings with <…> Experts have been translated into Lithuanian which greatly slowed the normal progress of meeting* (*Internal document* 2006a).

The quotation above illustrates both the scope and area of translational activities and also demonstrates the negative impact of the increased amount of translation tasks on the overall implementation of the project. Due to the translation of other project-related documentation the scope of translation activities increased significantly. Rather than focusing on translation of the content of GUI, the translators had to focus on other tasks, which was both time- and effort-consuming, taking into consideration the fact that the time allocated for the adaptation of *PeopleSoft* remained the same. Yet, the positive impact of additional translation was related to the fact that the participation of translators in various events provided additional contextual information and knowledge to be applied in the process of software translation.

The process of Lithuanisation was also slowed down by the absence of terminologists and the Lithuanian language specialists in the team of translators. The contract did not plan the participation of terminologists and the Lithuanian language specialists. Therefore the translators had to carry out desk research on *PeopleSoft* specific terms, search for new terms and consult the Lithuanian language specialists and terminologists who were outside of the localisation team. For instance, the Lithuanisation of such *PeopleSoft* specific terms as *business unit* (*verslo vienetas*), *voucher* (*Mokėtinų sumų sąskaita*), *benefit ID* (*muito lengvatos ID*), *mask* (*šablonas*), *cancel* (*atšaukti / atsisakyti*)

and other required the analysis of the original terms and the search for word-context related information in PeopleBooks. The process of the analysis was time consuming due to several reasons, i.e. at the time of *PeopleSoft* localisation ICT related terminology was not well-established and approved by the Lithuanian terminologists, thus some of ICT related words were non-present in the Lithuanian language. Instead loan English words and jargon were used (for example, *folderis / folder*, *ruteris / router*, *skaneris / scanner*, *printeris / printer*, and *domain / domenas*).

The approved *Enciklopedinis kompiuterijos žodynas* (*Encyclopaedic Dictionary of Computer Science*) that has an addition of *Anglų – lietuvių kalbų kompiuterijos žodynėlis* (*English-Lithuanian Dictionary of Computer Terms*) and contains about four thousand term records was published by the *Institute of Mathematics and Informatics* only in 2008. When searching for or developing a new term translators had to consult with IT, finance, accounting, Lithuanian language and other specialists, contact *the State Commission of the Lithuanian Language*, browse for the relevant information in translation and computer forums, databases and other sources of information. This distracted the translators from the main activity, i.e. the translation of language strings, since the search of terminology is not the main activity of a translator and is considered to be a waste of resources (Joscelyne 2000: 91). The participation of one terminologist and the Lithuanian language specialist and their daily presence in the localisation team could speed up the process of translation and localisation.

Despite the amount and scope of translational tasks delegated to the translators, it could be stated that the translators of the localisation team played an important role during the process of project implementation and software localisation. First of all, they served as functional members of the team who were in charge of specific translation and interpreting tasks. The adaptation of the software's content according to the norms and rules of the Lithuanian language was dependent on them, since the translators had a direct impact on

the software localised by means of translation strategies applied. Secondly, the translators / interpreters were important agents and intermediaries in the act of intercultural communication. For the most part, the ability to communicate and understand each party in the act of intercultural communication, i.e. negotiations, meetings, proposals, and deliverables, were dependent on translators.

To sum up the description of the translation activities, tasks and the entire process during the implementation of the integrated and standardised system for Lithuanian science and study institutions, it is possible to claim that the scope of translation- and interpreting-related tasks was not clearly defined during the process of decision making. This resulted in delay and slowdown of the entire translation process, since sufficient human resources (i.e. more translators, a terminologist and Lithuanian language specialists) were not planned in the contract. Moreover, though process owners and experts understood the significance of translation, the status of translation, its role and impact on the project and project related activities was not clearly defined and considered. There were no translators-experts among process owners and project managers in charge of decision making. The lack of know-how and experience in similar project localisation was the cause of delays of the overall project implementation and insufficient management of human resources.

5. TRANSLATION STRATEGIES IN *PEOPLESOFT* LOCALISATION

In any project and process of localisation, the corpus of translation, i.e. software content that is composed of language units to a larger extent and is presented by means of graphical user interface, has to be linguistically adapted. The localised product is tailored to the target culture and language by virtue of translation strategies that become a tool to influence both the original product and the giving culture. This section of the thesis has several aims. It is intended to test for the first time if translation strategies can be applied to examine the Lithuanisation of software language strings (GUI language strings)[12]. If the results of testing are positive, an assumption that localisation is a new form of translation marked by the digital medium might be confirmed, since translation strategies can be equally applied to translate software language strings and to other types of translation: literary, audiovisual and other. Secondly, this section profiles what and how translation strategies have been used to localise GUI of *PeopleSoft* software. Thirdly, the in-depth linguistic micro-level analysis will unfold how the product localised (*PeopleSoft* software) changes the target language and culture, and how the target language and culture, Lithuanian in this case, change the product localised.

The list of translation strategies, i.e. ten syntactic (literal translation, loan, transposition, unit shift, phrase, clause, sentence structure changes, cohesion change, level shift and rhetorical scheme change), ten semantic (synonymy, antonymy, hyponymy, converses, abstraction change, distribution change, emphasis change, paraphrase, trope change and other semantic changes) and ten pragmatic (cultural filtering, explicitness change, information change, interpersonal change, illocutionary change, coherence change, partial translation, visibility change, transediting and other pragmatic changes) strategies adapted from Chesterman (1997) have been applied to examine the

[12] Throughout the entire thesis the term *software language strings / units / texts* are used synonymously and denote language strings, units and texts of graphical user interface (GUI).

localisation of *PeopleSoft* language strings to the Lithuanian language and culture, since the culture and language are interrelated: the culture is revealed by means of language and the language manifests through the culture. Prior to the in-depth micro- and macro-level structural textual analysis of translation strategies and *PeopleSoft* Lithuanisation, the preliminary analysis needs to be carried out.

5.1. Preliminary analysis

The analysis of preliminary data (i.e. the analysis of the first pages and meta-texts if they are available) provides general insights about *PeopleSoft* Lithuanisation as a process and raises generic awareness about the localisation of *PeopleSoft* language strings and application of translation strategies. The analysis is carried out as a two-level process. First of all, verbal and non-verbal information in "WYSIWYG" (Biau Gil 2005) translation / localisation environment is visually examined by means of focusing on the visual display of homepage information of the English and Lithuanised *PeopleSoft* versions. The visual analysis leads to an in-depth linguistic analysis.

Pictures 4 and 5 demonstrate the screenshots of the original and the Lithuanised homepages of *PeopleSoft*. Analysing the original *PeopleSoft* homepages on the left and the Lithuanised homepage on the right visually, the simplicity and plainness of the pages in terms of the design are observed.

White colour that symbolises cleanness and sterility in the Lithuanian culture and clarity in the Western world[13] dominates the pages with some small entries in black. No other icons, symbols or images, except the brand-name and company name *Oracle* in red and *PeopleSoft Enterprise* in black, are presented. The owner of the product, *Oracle/PeopleSoft Enterprise*, is introduced in both the English and the Lithuanised homepages.

[13] Based on Zeller's interpretation of colours (2006).

Picture 4. The genuine English homepage of *PeopleSoft*

Both homepages are identical; no graphical changes are introduced in the Lithuanised page, as the product has to be the same for users from any parts of the world. When opening the Lithuanised homepage, Lithuanian users should feel that they are provided with the same product as American, German, Chinese or any other consumers. Moreover, the homepage usually presents general log-in and product-related information; therefore the Lithuanised version follows the graphical display of the original English version.

Picture 5. The Lithuanised homepage of *PeopleSoft*

The name *Oracle* at the top of the page and *PeopleSoft Enterprise* underneath symbolically signify the merger of the companies, i.e. *Oracle* overtook *PeopleSoft Enterprise.* The hostile takeover is symbolically inferred from the graphical arrangement of the two names of companies and the symbolism of colours. Red colour is usually associated with passion, fire and anger in the West and danger and blood in Lithuania, whereas black colour is related to death and mourning in both Western and Lithuanian cultures. Therefore, the red colour of the name *Oracle* implicitly reveals the company to be aggressive and strong; meanwhile, the name of *PeopleSoft* in a smaller black font under the line symbolically signifies the non-existence and death of *PeopleSoft Enterprise.*

Moreover, the mythological reference to the ability to communicate the wisdom of deities that is embedded in the name *Oracle* strengthens the image of *Oracle Company* as a strong, powerful and predominant IT company. Whereas the implication of being too soft, weak and not strict that the name *PeopleSoft* embraces, in spite of the fact that the blend *PeopleSoft* is composed of the words *people* and *soft* from the word *software*, suggests *PeopleSoft Company* being unable to withstand the pressure and threats posed by *Oracle.*

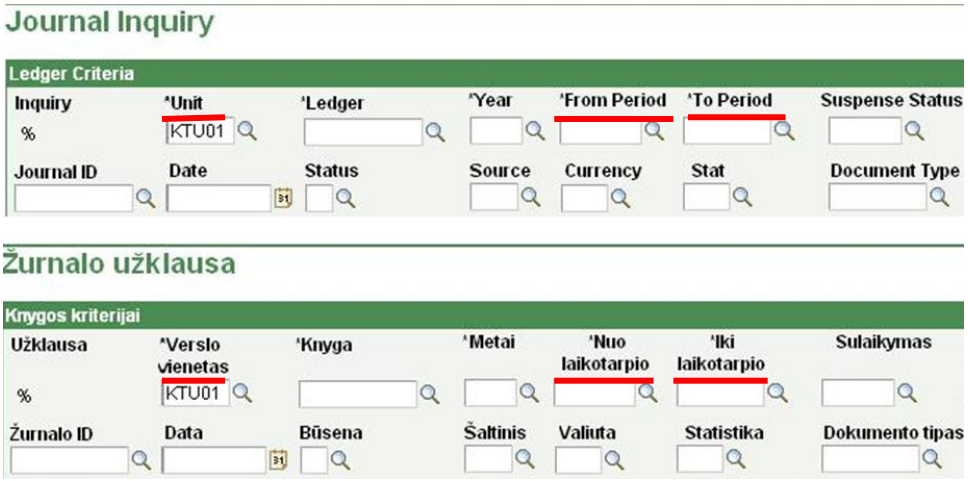
Next to the names of the companies, in a light-greyish table, an authorised user can access *PeopleSoft* software by entering a valid user's ID and a password. Further on, a possibility to select either the English or the Lithuanian language of *PeopleSoft* GUI is offered. The names of the languages and the link *here / čia* are hyperactive and allow choosing the language of the software's interface and indicate links to hypertext. This suggests that the user can get additional information and is also authorised to make some alterations, for example change and set trace flags.

Information in both the original and the Lithuanised versions of the screenshots is obviously identical. For example, both pages present the names of the companies, and then the log-in table, followed by the selection of languages and the permission to set trace flags. The very bottom of the page

entails a footnote about the copyright. The only visible difference that is observed at a glance is slightly different layout of the Lithuanised page. Almost all fieldnames, buttons and language strings are longer in comparison to the English language units, i.e. *vartotojo ID* (*User ID*), *slaptažodis* (*password*), the button name *prisijungti* (*sign in*). The change of the length of the Lithuanised language units is determined by the fact that the Lithuanian language is inflexional. Lengthening when translations become longer that their source text units is considered to be one of translation universals[14].The increase of the length of the Lithuanised text leads to an assumption that longer Lithuanised language strings can affect the product by changing the graphical layout of elements, namely menu items, portal roots, field-labels, names of buttons and the like. Longer language strings require more space and, instead of one line, might be represented in two lines. Yet at the same time, longer language strings render more information to the user, and might be considered as an advantage rather than disadvantage.

The screenshots of picture 6 demonstrate the modification of the layout in the Lithuanised version of *PeopleSoft*. The Lithuanised language units, such as *verslo vienetas* (*business unit*), *nuo laikotarpio* (*from period*), *iki laikotarpio* (*to period*) are displayed in two lines in comparison with the original language strings. Thus, the preliminary analysis reveals that, on the one hand, the Lithuanian language changes the product, specifically its design. On the other hand, the presentation of a Lithuanised language unit in two lines instead of one might be regarded as a technical error of localisation. In other words, if the original language string fits one line, the Lithuanised language unit should be arranged as one line as well.

[14] Translation universals refer to features that typically occur in translated texts and fall into two categories, i.e. source text universals that are based on a difference between the source text and their translations, and target text universals that indicates differences between translations and non-translations in the target language (Baker 1993, Chesterman 2004, Chesterman 2011).



Picture 6. Changes of the graphical layout on the Lithuanised page

The explanation of such an error goes beyond the competence of a translator. Still an assumption can be made that the mistake has probably occurred due to internationalisation errors, i.e. the change of display in the Lithuanised *PeopleSoft* version has not been properly thought of and accommodated when creating the product due to the fact that product developers did not take into consideration the lengthening of lines and left no space in localisation resources when programming the lines.

The analysis of the language unit *user ID* and its counterpart in the Lithuanian language *vartotojo ID* on the homepages of the original and the Lithuanised *PeopleSoft* versions reveals the impact of the product and the English language on the Lithuanian language and culture. The abbreviation *ID* that the Lithuanian language string *vartotojo ID* entails is not characteristic of the Lithuanian language and breaches the rules of word abbreviation. The capitalised and acronymous English abbreviation *ID* stands for the lexemes *identification* and *identification document* that are translated into the Lithuanian language as *tapatybė*, *identifikavimas, tapatybės atpažinimas* (*recognition of identity*), *tapatybės dokumentas* (*identity document*) and *kodas* (*code*). Since localisation is space-restricted (i.e. a limited number of characters with spaces per menu item or field-label is allowed), shorter language units are selected. During *PeopleSoft* localisation, 4 characters per

short value, 7 per long value, 14 per short field-label and 21 characters per long field-label have been determined. Such space constraints influence the choice of words in the Lithuanised language strings and force the usage of abbreviations.

Lithuanian word combinations, *vartotojo identifikavimas*, *vartotojo tapatybė* and *vartotojo tapatybės atpažinimas*, *vartotojo kodas*, are proper equivalents of the English word combination *user ID*. However all the suggested translations exceed the maximum number of characters permitted. The word combinations *vartotojo tapatybė* and *vartotojo kodas* are the shortest Lithuanian translations, yet the version *vartotojo identifikavimas* is more suitable, since it informs *PeopleSoft* users about secure access to the system and his/her identification. Besides, the translation *vartotojo identifikavimas* is a complete equivalent of the English word combination *user identification.* Nevertheless, the Lithuanian counterpart is too long, and one of the words needs to be abbreviated, i.e. the noun *identifikavimas* is abbreviated as *ID.*

According to the Lithuanian language grammar rules, words can be shortened to the first letter followed by a full-stop (*diena* (*day*) – *d.*), to the first or the second syllable (*paveikslas* (*picture*) – *pav.*; *vyresnysis* (*senior*) – *vyresn.*), and by contracting the word when the first letter of the word is followed by a hyphen and the ending of the word (*mokykla* (*school*) – *m-kla*). Thus, the noun *identifikavimas* can be abbreviated as *id.*, or *ident.*; however *ID* is used instead. Such an abbreviation is incorrect due to the fact that acronyms replace full words, whereas the abbreviation of a Lithuanian word to the first letter or the first syllable must be followed by a full-stop. The selection of such an abbreviation is influenced by the English language acronym *ID* (*identification, identification document*) and product. The limited number of characters makes the translators pick the shortest Lithuanian equivalent possible, i.e. *vartotojo ID*, since abbreviation saves from word truncating and the change of graphical layout. Besides, various word combinations that contain the acronym ID are *PeopleSoft*-specific. For instance, *vendor ID*

(*tiekėjo ID*), *event ID* (*įvykio ID*), *item ID* (*prekės ID*), *cycle ID* (*ciklo ID*) and other are frequently used in the software. Moreover, the English language has influenced the Lithuanian culture. Some Lithuanian telecommunication companies provide consumers loyalty cards, such as *Pildyk ID* and *Omni ID* that allow cell phone users to accumulate additional money and minutes in their phone cards and receive particular discounts. Both loyalty programs, *Pildyk ID* and *Omni ID*, embrace incorrect abbreviation ID, probably assimilated from various English-based e-mail and messenger programs, like *Windows Live ID*.

Furthermore, by means of the usage of the noun *vartotojas* (*user*) in the Lithuanised homepage of the software, the development of IT terminology in the Lithuanian language can be tracked. At the time when the localisation of *PeopleSoft* commenced, many English-based IT terms had no counterparts in the Lithuanian language. Possible translations of IT-related terminology were much discussed by Lithuanian IT professionals and linguists. *Enciklopedinis kompiuterijos terminų žodynas* (*the Encyclopaedic Dictionary of Computer Terms*) was published in 2008. One of the terms that caused and still causes many disputes is the rendering of the English word *user*. When the localisation of *PeopleSoft* started, the Lithuanian translation of the word *user* was not approved. In many cases the word was transferred into the Lithuanian language as the Lithuanian noun *vartotojas* (*consumer*) with reference to the fact that consumers are people who buy and use something (as referred in *Dabartinės lietuvių kalbos žodynas* 2000: 914). However, the word combination *kompiuterio vartotojas* (*computer consumer*) sounds strange in the Lithuanian language, and another translation, i.e. *naudotojas*, was suggested by IT professionals. *The Encyclopaedic Dictionary of Computer Terms* introduces the Lithuanian noun *naudotojas* (2008) as the counterpart of the English noun *user*, since computers and computer programs are used (*naudojami*) as tools to gain some benefit rather than consumed (*vartojami*). Yet, the *State Commission of the Lithuanian Language* proposes employing the generic verb

vartoti with reference to the fact that the boundary between the verbs *naudoti* (*use*) and *vartoti* (*consume*) is fuzzy and the word combination *programinės įrangos vartotojas* (*software consumer*) is well-established. Taking all the arguments into consideration, the noun *vartotojas* has been selected while Lithuanising *PeopleSoft*. However after the release of *the Encyclopaedic Dictionary of Computer Terms*, the translation of the English noun *user* could be updated by replacing the Lithuanian noun *vartotojas* with the noun *naudotojas.*

Both homepages entail a meta-text, i.e. a footnote at the bottom of the page, which informs users about the copyright of *Oracle*. A message about *PeopleSoft* as a registered trademark of *Oracle Corporation* implies the merger of the two companies, *Oracle* and *PeopleSoft*. No other information about the localisation of *PeopleSoft* to the Lithuanian market is available on the Lithuanian page. It is obvious that such information should not appear on the Lithuanised homepage for the reason that localisation aims at creating an illusion of a product being developed locally. Therefore, at first sight *Oracle* succeeds at creating the illusion for Lithuanian users that *PeopleSoft* has been locally developed. Yet, the Lithuanian sentence in the footnote at the bottom of the page (*Autorinės teisės / Copyright © 2000, 2006, Oracle. Visos teisės saugomos / All rights reserved. PeopleSoft yra registruotas Oracle kompanijos ženklas*.), where the Lithuanian sentences are followed by English statements, implies that a product is localised, since products that are produced for the local market and users contain information in the local language.

The preliminary linguistic analysis of the original and Lithuanised homepages provides further analytical insights. The comparison of the genuine and the Lithuanised homepages reveals a change of formality in the dialogue between the software and the user. The modification is culturally determined. If in the original version the communication of the software and the user is friendly, direct and informal, the Lithuanian dialogue becomes neutral and more formal due to the fact that such form of communication is acceptable and

proper in the Lithuanian culture when information about the age, gender of an interlocutor is missing. The change of formality in the Lithuanian homepage is expressed by means of the second plural person, i.e. *pasirinkite kalbą* (*please, select a language*), *spauskite čia* (*please, click here*). And the button name *sign in*, which expresses advice through the second singular person, is replaced by a neutral statement composed of the infinitive in the Lithuanian language, i.e. *prisijungti* (*to sign in*). The imperative mood of the English language string, *sign in* is altered by the indicative mood, *prisijugti*, because the command *sign in* (*prisijunk*) might be regarded as an insult and a lack of deference for the user of the Lithuanian culture and language. Since culture manifests itself through language, the examples above demonstrate how the target culture influences *PeopleSoft* software as the product.

Findings of the preliminary analysis, such as the change of layout (longer language units of the Lithuanised software), the alteration of formality degree in the dialogue of the software and the user (from informal in the English version to formal in the Lithuanian version) and the illocutionary change (from advice to a simple statement in the Lithuanian version) allow making a conclusion about the impact of the Lithuanian language on the product, i.e. how the target language and culture change the product that is localised. However, the impact is not unidirectional, as the product affects the target language and culture (introduction of abbreviations and acronyms) in a negative way due to internationalisation errors. At the same time the preliminary analysis has demonstrated that the source and the target languages and cultures alongside the localised software become one of the most active agents that interact and affect the selection of translation strategies. The influence of the product on the target language and culture becomes more palpable during the micro- and macro- analysis of translation strategies applied.

5.2. Syntactic strategies

The analytical insights acquired during the preliminary analysis of the original and the Lithuanised homepages of *PeopleSoft* lay foundations for subsequent micro- and macro-level structural analysis of the Lithuanised version, namely translation strategies that reveal how the product changes the target language and culture and vice versa. The conceptual framework for the analysis is grounded on the model of micro- and macro-level analysis proposed by Lambert and van Gorp (1985/2006) and the aray of translation strategies suggested by Chesterman (1997). The micro-analysis also reveals the actants, i.e. the English and the Lithuanian languages, the American and the Lithuanian culture, the software (content) and the translator / localiser who / that socialise and are under the influence of each other.

The first group of syntactic / grammatical strategies that is presented by Chesterman (1997) is applied by translators to accommodate syntactic or grammatical changes of one kind or another. When examining the language strings of *PeopleSoft* software, almost all of the ten syntactic strategies have been used, since their application allows the manipulation of the form of the target text. Moreover, by means of syntactic / grammatical strategies, macro- and micro-level changes of the software can be approached.

To begin with, the syntactic strategy of *literal translation* indicates the closeness of the target language to the source language, i.e. how maximally close the target language form to the source language form is (Chesterman 1997). Consider the examples below:

SL[1]: Create new customer.
TL[1]: Sukurti naują pirkėją.
SL[2]: Approve, recycle, or deny requisition amounts.
TL[2]: Patvirtinti, apdoroti ar atmesti pirkimo paraiškos sumas.
SL[3]: Initiate requisition amount and ChartField approval workflow.
TL[3]: Pradėti pirkimo paraiškos sumos ir dimensijų patvirtimo veiksmų seką.
SL[4]: Enter search criteria and click on *Search*. Leave blank for all values.
TL[4]: Įveskite paieškos kriterijus ir spustelėkite *„Ieškoti“*. Palikite visas reikšmes tuščias.

The examples above illustrate that TL strings are close in terms of meaning to the original English language strings because the translator follows the original text and attempts not to deviate from it. This happens because the translator the original text affects the translation and believes the source text to be the point of departure for the act of translating. Thus, the source text is likely to influence the decisions made by the translator, i.e. to provide a translation that is close to the original. The slight abstraction change and addition between *requisition* and *pirkimo paraiška* (*purchase requisition*) in examples 2 and 3, the level shift between the compound noun *workflow* and a word combination *veiksmų seka* and the absence of the capital letter *D* in *dimensijos* (*chartfield*) in example 3 as well as a slight transposition of the noun *Search* to the infinitive *Ieškoti* in the last example might be disregarded. In addition to that, the examples above demonstrate that the strategy of literal translation applied overlaps with the semantic strategy of translation. For instance, language strings 2 and 3 contain a case of using a semantic strategy, i.e. the change of abstraction between *requisition* and *pirkimo paraiška* (*purchase requisition*), whereas another syntactic strategy of transposition when the noun is changed into the infinitive is obvious in the last example, since the English noun *search* can be translated into the Lithuanian language as *ieška/paieška* (*search*), yet the infinitive *ieškoti* (*to search*) is selected instead. And the Lithuanised language string of example 4 illustrates a translator's visibility change that is reflected by means of the infinitive *ieškoti* in quotation marks. Such punctuation marks are absent in the original English language string. The translator decides to use the quotation marks because of the punctuation rules of the Lithuanian language. On the other hand, by means of the quotation marks, a type of a button is indicated and, finally, the translator, who has the power to change language, makes himself apparent.

Approaching *literal translation* and the rest of syntactic translation strategies with reference to Lambert and van Gorp (1985/2006) at a micro-level, the choice of simple Lithuanian words that are counterparts of the

English words unfolds because the translator decides to remain faithful to the original language units. Even the metre and rhythm that dominate in the English language string, for example *create new customer*, are retained in the Lithuanian version: *sukurti naują pirkėją. Literal translation* also reveals that the localised product exerts the influence on the language of the Lithuanised product because the translator decides to apply similar and simple grammatical patterns and structures. For example, the Lithuanian language string in example 1 is composed of a verb form (simple present tense) and a noun. Simple and concrete language is typical of IT specialists who express meaning in a condensed way. On the other hand, the language of the Lithuanised product tends to become simple, since users of the product have to understand the dialogue with the software at first glance and with no considerable efforts.

Furthermore, the micro-analysis of the strategy of *literal translation* reveals the usage of language levels (here the term is adopted from Lambert and van Gorp (1985/2006) and is used to describe the variety of speech, i.e. sociolect, archaic, popular, dialect, jargon and the like). All the language strings in the examples above are composed of simple grammatical structures and words that correspond to the standard Lithuanian language. No cases of jargonisms, dialectisms and archaisms have been detected during the analysis of Lithuanian language strings. The selection of words in the Lithuanised version of *PeopleSoft* is strictly determined by the Law on the State Language that regulates the use of the state language in public life of Lithuania and makes sure that all programmes (audiovisual, IT) are translated into the state language. At the same time the law outlines the usage of the standard Lithuanian as the language of products in public.

Another type of syntactic strategy, listed by Chesterman (1997), is a *loan/calque* and entails borrowing separate language units, words and syntagmas, by virtue of which a loan-based neologism might be introduced in the target language. The examples of loans and calques adopted in the Lithuanised version of *PeopleSoft* are the following:

SL[5]: Administer *value added tax* and *Intrastat*.
TL[5]: Tvarkyti *PVM* ir *Intrastato* duomenis.
SL[6]: Print *Crystal* invoices by selected process number.
TL[6]: Spausdinti *Crystal* sąskaitas faktūras pagal pasirinktą proceso numerį.

Loans or calques are inherent in the Lithuanised software language strings, since there are many specific names for programs, queries, reports, hardware and software items. In addition, there are specific loan/calque terms used to define international and European business accounting standards that have to be incorporated in financial documents. Example 5 demonstrates the case of using a calque word that denotes the system of collecting statistical data about the trade of goods in the European Union, *Intrastat.* During the Lithuanisation of *PeopleSoft*, the translator is left with no choice but to assimilate the word. The only modification that occurs in the word is the addition of the Lithuanian ending *–as* (*Intrastatas*) to allow the inflection of the noun *Intrastatas* according to the rules of the Lithuanian language grammar. Although this is a slight change of the original word, *Intrastat – Intrastatas*, it shows how the Lithuanian language affects the product by means of morphology.

The same example entails the assimilation of another calque – term: *pridėtinės vertės mokestis* (*value added tax*). The term has become quite common since 1994 when the value added tax was introduced in Lithuania, and Lithuanian consumers are familiar with it. The usage of the calques *Intrastat* and *VAT* demonstrates the influence of the European accounting standards that have entered the Lithuanian accounting system. Since no other Lithuanian substitutes are available, translators have to transcribe and use calque words such as *Intrastatas* and *Pridėtinės vertės mokestis*. The only difference that Lithuanian translators have introduced when translating the term *value added tax* is the adoption of the acronym *PVM* (*VAT*) in the Lithuanised text to reduce the length of the Lithuanised language string and to avoid the truncation of the message. In addition to this, the acronym *PVM* is frequently employed in various word combinations, i.e. *PVM mokėtojas* (*VAT*

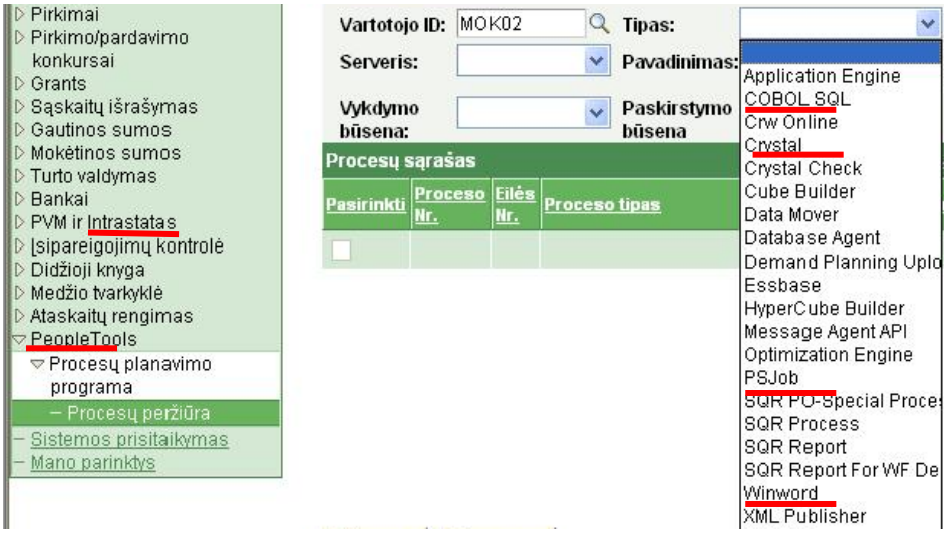
payer), *PVM deklaracija* (*VAT return*) or *PVM norma* (*VAT rate*), that are used in the Lithuanian accounting system.

Loans and calques are characteristic of IT terminology in the Lithuanian language. Example 6 demonstrates a case when the *loan/calque* word *Crystal*, which denotes a type of a report provided by *PeopleSoft*, remains unchanged in the Lithuanised version of the software. The sample illustrates how the product and the English language affect the Lithuanian language and culture, as the brand-name of the software and a type of a report is transferred in the Lithuanised version with no changes and transcription. On the one hand, no changes are possible because the name *Crystal* is a brand-name that is familiar to both IT specialists and users of ERP systems. The transcription of the realia name *Crystal* according to the rules of the Lithuanian language requires the letter *C* to be replaced by the letter *K*, i.e. *Krystal*. This might cause misunderstandings and break the intellectual property right. On the other hand, a beginner Lithuanian user of *PeopleSoft* is provided with no information about what *Crystal* is, and s/he has to individually explore how the name of the report is pronounced and how the report is processed.

It also has to be emphasised that the software itself lends many loans and calques to the target texts due to many names that are *PeopleSoft* specific. Such words or word combinations are regarded as proprietary brand-names, and no Lithuanian counterparts can be offered. Therefore, they are simply assimilated by the Lithuanian language. For instance, *PeopleTools, PeopleBooks, PeopleSoft fields* (Lith. *PeopleSoft laukeliai)*, and other syntagmas are transferred into the Lithuanian target texts with no modifications. Here the contradiction between the producers of the software and end-users becomes self-evident. When labelling a product, producers should select a notional word that would be easily perceived by the user. Yet the producers select exclusive words that users do not understand. If Lithuanian *PeopleSoft* users are fluent speakers of the English language, they can easily comprehend the meaning of the blends by means of common sense. For instance, *PeopleTools* can be

perceived as part of the software that provides processing and reporting tools for users; such a meaning could be inferred from the lexeme *tools*. And *PeopleBooks* designates help documents and explanations embedded in the noun *books*. Yet, if the software user has never studied English, s/he might get confused and puzzled, since English-based blends *PeopleBooks, PeopleTools* signify no information at all.

Despite this, the communication of the software and the Lithuanian user is maintained by means of expanded menu items. For example, menu item *PeopleTools* in the picture below is extended and some explanation is provided: *Procesų planavimo programa* (*process scheduler*). When the user reads this information, s/he can logically assume that *PeopleTools* is a process planning program. On the other hand, this illustrates the impact of the product and the English language on the Lithuanian language and culture. The picture below demonstrates an assimilation of *PeopleSoft*- and IT-specific loans / calques into the Lithuanian language.



Picture 7. Loans / calques in the Lithuanised version of *PeopleSoft*

Language units in picture 7, *Intrastatas, PeopleTools* and a huge list of process names, specifically *Crystal, PSJob, SQR, Winword* and others, are simply replicated in the Lithuanised version of *PeopleSoft*; no explanations can be inserted in the Lithuanised version due to space restrictions. Moreover,

many of the terms above, *nVision*, *COBOL*, *nVision-ReportBook*, are intended for IT specialists and programmers who are familiar with such terminology. In addition, considering the impact of the English language as the global language on other languages and the ability of the Lithuanians to speak English[15], Lithuanian users of *PeopleSoft* should face no problem when encountering *PeopleSoft*- and IT-specific blends, such as *PeopleTools* or *PeopleBooks* that are composed of two roots: *People* and *Tools*, or *People* and *Books*. However, by means of such loans and calques the impact of the product and the English language on the Lithuanian language is evidenced.

The name of *transposition* as a syntactic strategy of translation has been borrowed from Vinay and Darbelnet (1958). This strategy, as Chesterman observes, involves micro-level word-class changes, for instance, when during the process of translation verbs are replaced by nouns, nouns by verbs, adjectives by nouns, and the like (1997: 95). This strategy also embraces structural changes and is one of the most frequently applied translation strategies. The analysis of the adaptation of *PeopleSoft* language strings to the Lithuanian language reveals that cases of transposition have been numerous, i.e. verbs are altered by nouns, adjectives by nouns and the like. The examples below serve as a good illustration of transposition:

SL[7]: *Add/update; Maintain; Approve*.
TL[7]: *Pildymas/atnaujinimas; Tvarkymas; Patvirtinimas*.
SL[8]: *Approve* vendor; *Define* items and attributes.
TL[8]: Tiekėjo *patvirtinimas*; Prekių ir požymių *apibrėžimas*.
SL[9]: *Disposable*; *Serial* control.
TL[9]: *Perleidimas*; *Serijos* kontrolė.

The cases above demonstrate that in the process of translation of the English language strings into the Lithuanian language, the English verbs undergo a change when they are substituted by the Lithuanian nouns (examples 8, 9). All menu components of the original version of the software are

[15] Lithuanians are regarded to be multilingual since 92 per cent of all Lithuanians speak one foreign language, 51 per cent – two foreign languages, and 16 per cent – three. This is far beyond the European average of foreign language speaking skills where 56 per cent master at least one foreign language, 28 per cent – two foreign languages, 11 per cent – three, and 44 per cent – none (EC, 2006).

conveyed by means of verb forms, since such a form is common and most frequently applied in English- or American-based software; meanwhile all menu components in Lithuanised program are conveyed by means of nouns. In many cases English verb forms could be easily rendered in Lithuanian verb forms, i.e. infinitives. For example, *Approve vendor – Patvirtinti tiekėją; Define items and attributes – Apibrėžti prekes ir požymius, Review customer information – Peržiūrėti pirkėjo duomenis*. However, noun forms, i.e. *Tiekėjo patvirtinimas* (*approval of a vendor*), *prekių ir požymių apibrėžimas* (*definition of items and attributes*), *pildymas* (*addition*), *tvarkymas* (*maintenance*) are more commonly applied to name and identify subjects. Besides, the usage of noun forms in the Lithuanian version of the software allows avoiding ambiguity, because English verb forms can be translated into the Lithuanian language as infinitives, i.e. *Change item status – pakeisti prekės būseną*, and as verbs in the imperative mood, i.e. *Change item status – Pakeisk prekės būseną* (the second person in a singular form), and more formal *Pakeiskite prekės būseną* (*Please, change*). Such micro-level modifications of a word class provide evidence that the target language changes the language of the product.

On the other hand, when English verb forms are substituted with Lithuanian noun phrases, the meaning of statements undergoes a slight, micro change, since English verb forms inform, encourage, advise, and tell users what, where and how they are supposed to do, for example *add* and *update, maintain.* This is the way the original *PeopleSoft* version communicates and maintains a dialogue with the final user. Meanwhile, simple statements expressed by noun forms in the Lithuanised version, i.e. *pildymas ir atnaujinimas* (*add and update*), or *palaikymas* (*maintain*), reduce conversationalism[16] and communication of the software with the final user at the minimum. The illocutionary change from commands, advice and

[16] Conversationalism/conversational feature denote a feature of electronic discourse that is perceived as a form of interactive communication in a digital medium (Davis and Brewer 1997). The term *Conversationalism* / *conversational style* is perceived here as the usage of spoken speech (Crystal 2004; Leonavičienė 2006).

instructions in the English version to simple statements in the Lithuanised language strings suggests that the Lithuanian users are not given any piece of advice regarding some commands or actions that have to be performed. Lithuanian users are authorised to make decision themselves. Moreover, it is possible to assume that English verb forms are more frequently selected in the original version of the software due to liquidity of words, i.e. ability to be easily turned into nouns from verbs without any modifications. At the same time, cases of transposition, when verbs of the source text are replaced by nouns in the target text, overlap with the pragmatic strategy, the illocutionary change that is described in chapter 6.4.

The exploration of the usage of *transposition* in translation from English into Lithuanian allowed to observe several cases when adjectives of the source texts were changed by nouns in the target texts. Example 9, *Serial control – Serijos kontrolė* (*series control*)*; Disposable –Perleidimas* (*disposal*) demonstrates the case when English adjectives become nouns in Lithuanian. Nouns phrases are selected instead of adjectival word combinations, because noun phrases are commonly used to denote and define things in the Lithuanian language. Therefore *serijos kontrolė* (*series control*) and *praleidimas* (*disposal*) are more acceptable than *serijinė kontrolė* (*serial control*) and *perleidžiamas/išmetamas* (*disposable*). The usage of the Lithuanian adjective *perleidžiamas* is also ambiguous, as it provides no information of what is disposed. Meanwhile, the noun *perleidimas* (*disposal*) informs the user of the Lithuanised software about the process performed, i.e. the disposal of assets. Though the communication of the software and the user is neutral, the user obtains sufficient information to run software processes.

The next syntactic strategy has been observed during the analysis of *PeopleSoft* localisation and is identified by Chesterman as *unit shift* (1997). The name of the strategy has been assumed from Catford's classification of shifts (1965/2002). A morpheme, word, phrase, clause, sentence and paragraph are defined as units, whereas a shift denotes a change (Chesterman 1997: 95).

A strategy of *unit shift* occurs very often, since in the process of localisation and translation a unit of the source text is altered by a different unit of the target text. Such modifications are quite numerous. For instance, a word combination of the source text can be transferred as a sentence in the target text. Some examples of unit shifts are presented below:

SL[10]: *Case sensitive*
TL[10]: *Skirti didžiąsias ir mažąsias raides*.
SL[11]: Manage all *item-related* options
TL[11]: Tvarkyti visas *su prekėmis susijusias* parinktis
SL[12]: Enter a request and response below. These will be used to authenticate you.
TL[12]: Įveskite klausimą (užuominą) ir atsakymą, pagal kuriuos bus tikrinama jūsų tapatybė.

The original English phrase *case sensitive* in illustration 10 becomes a sentence in the Lithuanised text and also involves an addition as a type of pragmatic strategies: new information about the recognition of the upper and lower case letters is added in the Lithuanian language string. The back translation of the Lithuanised language string in example 10 is as follows: *recognise upper and lower case letters.* The original phrase is altered by a Lithuanian sentence; as a result, the statement is more informative and presents an emphatic command to the user about the need to differentiate between upper and lower case letters when checking the match of a text segment. For example, during the case sensitive search, the segments *CASE* and *Case* are treated as two different items. The original English phrase *case sensitive* can be translated into the Lithuanian phrase *jautrus klaviatūros registras* (*sensitive keyboard register*). Yet, such a translation of the English phrase *case sensitive* might be misleading, because it indicates the fact that the keyboard is sensitive to the touch of the computer user. If the message is transferred in such a way, i.e. *jautrus klaviatūros registras* (*sensitive keyboard register*)), it misinforms the user and presents no information about the significance of capitalised and non-capitalised letters in text matches.

In example 11, the English compound *item-related* becomes a phrase expressed by means of an attributive construction in Lithuanian: *su prekėmis susijusias* (*options that are related with items*). The original English language

string defines the component of *PeopleSoft* software that informs users about item-related functionality of one of *PeopleSoft* modules. This module allows *PeopleSoft* users to define item controls, brand-names, hazard codes, item listing and the like. The English word combination *item-related options* can be rendered in the Lithuanian language as *prekių parinktys* (*item options*). Such a translation explicitly embeds the following characteristics of items: size, colour, origin, price and the like. Yet, the original phrase *item-related options* entails wider sense since it instructs users about the management of various item-related options (review of item-related information, item reports, set up of item types) other than item attributes (size, colour and similar). In order not to narrow the meaning of the Lithuanian language string and to retain all the information that is entailed in the original language string, the translator is left with no choice but to replace the English compound with a Lithuanian phrase, *tvarkyti visas su prekėmis susijusias parinktis*.

In addition, when the original language string is rendered into the Lithuanian, a phrase structural change occurs: the singular English noun *item* is altered by the plural noun in the Lithuanian language: *prekės / prekėmis* (*items*). The plural form of the noun embraces the juxtaposition of an object to the multiplicity of a group of objects. The usage of a singular noun in the Lithuanised language string, *tvarkyti visas su preke susijusias parinktis*, is grammatically correct. However, if the Lithuanian message is formed by means of a singular noun *prekė* (*item*), the meaning of item management options is not retained, since such a language string implies the management of various options related with only one and particular item. Thus, with a view to provide Lithuanian users with a wider and more generic sense, the plural form *prekės* (items) is selected. Though this slight change might be disregarded, it still reveals how the target language changes the product.

And the last example related to the *unit shift* illustrates a case when two independent sentences of the English language string are substituted by one Lithuanian complex sentence composed of the main and dependent clauses.

The first English sentence in the pair of language strings 12 becomes the main clause in the Lithuanised version. Meantime the second English sentence turns into a dependent clause. Yet, the English sentences in illustration 12 can be transferred into the Lithuanian language by means of two independent sentences, i.e. *Žemiau įveskite klausimą ir atsakymą* (*Enter a request and response below*.). *Jie bus naudojami jūsų tapatybei patvirtinti* (*These will be used to authenticate you*.). Both sentences are grammatically correct; however the second sentence contains some stylistic mistakes that are related to the usage of pronouns, *jie* (*they / these*) and *jūsų* (*your*). The excessive application of pronouns is regarded as a poor writing style in the Lithuanian language, thus pronouns are either omitted or replaced with nouns.

Meantime in the English language pronouns help to identify objects of conversation. Seeking to avoid of being accused of poor and low quality localisation, the translator decides to apply the strategy of *unit shift* and alters the two original independent clauses by one complex sentence in the Lithuanised language string. This obviously modifies the language of *PeopleSoft* software but allows maintaining the proper and polite conversation of the software with the Lithuanian target user. The omission of the adjective *below* and the concretisation of information by virtue of adding the noun *užuomina* (*hint*) that follows the object *klausimas* (*question / request*) in the main clause and the addition of the noun *tapatybė* (*identity*) in the sub-clause do not distort the meaning of the original English language string. Besides, the application of the *unit shift*, *addition* and *omission* makes the Lithuanian language string highly informative and acceptable to Lithuanian users.

With reference to Chesterman (1997) another syntactic strategy for consideration is *phrase structure change*. This strategy comprises modifications that might occur in a phrase. They are number and definiteness change, modifications of person, tense and mood. The language unit can remain unaltered in both the source and target texts; however it undergoes some internal micro-level structural changes. Since such modifications are

quite numerous, this syntactic strategy has been quite frequently applied to Lithuanise *PeopleSoft*. The examples below illustrate cases of *phrase structure change*.

SL[13]: Duplicate *Vendor*
TL[13]: Pasikartojantys *tiekėjai*
SL[14]: *Item* Categories; *Vendor priorities*; Approve *amounts*
TL[14]: *Prekių* kategorijos; *Tiekėjų eiliškumas*; *Sumos* patvirtinimas
SL[15]: *Select* a Language
TL[15]: *Pasirinkite* kalbą
SL[16]: The folder name %1 *has been deleted*.
TL[16]: Aplankas „%1“ *buvo pašalintas.*

The analysis of both English and Lithuanian language strings leads to the evidence that the change of number, i.e. from singular in the source texts to plural in the target texts or vice versa, is most frequently applied. Illustrations 13, 14 demonstrate such a modification; for example, *vendor – tiekėjai* (*vendors*), *item categories – prekių kategorijos* (*categories of items*), *vendor priorities – tiekėjų eiliškumas* (*priorities of vendors*) entail a change from singular in the original version to plural in the Lithuanised version of *PeopleSoft*. In many cases when singular English nouns have been translated using plural Lithuanian nouns, singular forms of the Lithuanian nouns could have been also selected, i.e. *vendor – tiekėjas*, *item categories – prekės kategorija*, *vendor priorities – tiekėjo eiliškumas*, *process scheduler request – proceso planavimo užklausa*, and the like. All the suggested versions of the Lithuanised language strings are well structured and explicit. Despite the fact that the change of number is graphically negligible, yet it introduces the transformation of meaning.

The grammatical category of number, as Gilbert Rappaport profiles, encodes quantification of objects and a binary opposition of one referent to a plurality of referents (2006). All the language strings in examples 13 and 14 represent components of *PeopleSoft* that usually define generic information about a number of functions, processes and transactions that can be performed by means of *PeopleSoft*. Therefore, the localisation of the language strings should inform the user about a variety of actions that can be performed using

data of vendors, items, customers, journals, reports and the like. This is the reason why plural noun forms are selected in the Lithuanised examples above. And if the common singular nouns of the English language strings in examples 13 and 14 are rendered as singular nouns in the Lithuanian language, the user of the software is misguided, for s/he gets instructions about the processing of only one transaction related to one vendor, one amount and one item category instead of many other transactions possible.

Meanwhile such patterns as *approve amounts – sumos patvirtinimas* (*approve amount*) or *vendor priorities – tiekėjų eiliškumas* (*priority of vendors*) involve a change from plural in the English language to a singular noun in the Lithuanian language string. In the cases above, the Lithuanised versions of the original language strings are composed by means of singular noun forms instead of the plural ones, since the context of the message informs users about the approval of one particular amount and the priority of one vendor. Moreover, the translation of the language string *vendor priorities* as the word combination *tiekėjo eiliškumai* that is formed by means of adding the plural ending – *ai* appears to be rarely used in the Lithuanian language: the performance of the search of the word *eiliškumai* in the *Corpus of the Contemporary Lithuanian Language* returned no matches. The phrase structure change applied in the examples above makes the message of the software more acceptable to the Lithuanian user of *PeopleSoft*. At the same time the application of singular noun forms in place of plural forms in language strings *sumos patvirtinimas* (*approve amount*) as a substitute for *sumų patvirtinimas* (*approve amounts*) and *konkurso įvykio sukūrimas* (*create event*) instead of *konkurso įvykių sukūrimas* (*create events*) is culture related. Lithuanian culture is monochronious; it means that Lithuanians prefer focusing on one scheduled task instead of several tasks at a time (Chodzkienė 2010). The Lithuanised language strings embed the fact that multi-tasking is not characteristic to Lithuanians as they prioritise, focus and perform one action meticulously, i.e. approve one amount instead of several, and create one event rather than many.

This explains why singular noun forms are selected in Lithuanian language strings.

However, the change of number does not drastically change the meaning of a message or a word communicated by the software to the target user. The main idea of the Lithuanised language strings is evident regardless of whether a singular or a plural form of a noun is employed. In some cases the change of the category of number could be ignored or even treated as an inadvertent slip of translators. On the other hand, the replacement of the category of number is determined by the contexts and peculiarities of the software localised.

Example 15 contains the modification of grammatical person in the Lithuanian version. The grammatical category of person signals the participant role of an individual in a communicative situation. The original English language string *Select a Language* is not person-restricted, since it might be equally treated as a phrase with the second person in both singular and plural. The English language lacks this distinction in the pronominal system. Meanwhile the Lithuanian instruction *Pasirinkite kalbą* apparently entails the second person in plural that is formed by means of the second person of the verb *select*. Though the pronoun of the second person is not present in the Lithuanised language string, it is signalled by the ending of the verb, i.e. *pasirinki**te*** (*please select*).

The second plural person *jūs* in the Lithuanian language is equal to Spanish *Ustedes*, German *Sie*, Russian *Вы* and other. Due to the usage of the verb form of the second plural person, the Lithuanian language string is rendered as a polite request and instruction. The original language string could be localised using the familiar singular second person: *pasirink kalbą*. Yet such a message, which is acceptable for the US culture, becomes rude, impolite and inappropriate because it shows no respect for the user in the Lithuanian context. The formal style of communication in Lithuanian settings is considered to be appropriate in maintaining and strengthening business and customer relationship; therefore this style is transferred to many on-line based

services (e-banking, e-declaration or e-mail systems) and software that is localised. For instance, the screenshot (picture 10) demonstrates the communication of e-banking software with customers in Lithuania. Formal and neutral way of communication is selected. The webpage of the bank demonstrates respect and consideration for clients by means of polite address formed by adding the second plural person morpheme to verb forms: *įveskite atpažinimo kodą* (*please enter your ID*), *saugokite slaptus duomenis* (*please protect confidential data*), *sudarykite tiesioginio debeto sutartį* (*please sign the contract of direct debit*) and other. Similar style of communication is selected during the process of *PeopleSoft* localisation to the Lithuanian market.

Picture 8. Screenshot of an online e-banking system in Lithuania. Source: www.seb.lt

Finally, example 16 demonstrates tense change: English passive present perfect *has been deleted* might be translated into Lithuanian as *yra pašalintas*, but the Lithuanian sentence uses the passive voice of past simple tense, i.e. *buvo pašalintas* (*was deleted*). This type of change is determined by the system of tenses in the Lithuanian language, since the Lithuanian language contains simple, past and future tenses but is devoid of perfect and continuous tense forms. If the present perfect tense of the original language string emphasises the result of the action that happened at an unspecified time before now when the exact time is not important, the past simple tense in the Lithuanian message highlights the action that took place and was completed once in the past.

Moreover, the passive voice in the Lithuanian language string that is composed by virtue of the simple past tense of the verb *to be* (*buvo*) and the past participle *pašalintas* (*deleted*) implies the quality or status of a subject (folder name) caused by the action of another agent. The original English sentence, *The folder name %1 has been deleted*, could be transferred in the Lithuanian language as follows, *Aplankas yra pašalintas* (*the folder is deleted*). Such a translation of the message does not change the meaning of the original language string significantly and only emphasises the fact that the action is related to present with no information about the completion of the action. In some cases the action can still continue after the moment of communication. Therefore, past tense is selected as a better solution to localise the Lithuanian language string. The message clearly states the completion of the action and is more appropriate to the Lithuanian user. The example demonstrates how the target language changes the language of the product. Though both the original and the Lithuanised language strings emphasise the action, i.e. completion of the action in the Lithuanian language string and the result of the action in the English language unit, the Lithuanised statement defines the past time of the action.

Such a Lithuanisation of the statement when by means of *phrase structure change* the tense form of the original message is substituted by a different tense in the Lithuanian version is also culture specific, since the usage of diverse tenses is related to different conception of the philosophical category of time. According to the findings of the research[17] that was conducted in Lithuania in 2012 and aimed to analyse the perception of time by different cultures, Lithuanian culture is conceived as monochronious (one task at a time is thoroughly performed according to the agenda where time is used as a tool to plan a day and set priorities) and linear active (since the most important thing is to achieve the aim, actions are planned, time tables developed, and actions

[17] More about the perception of the Lithuanian culture can be found under the links below: http://www.uki.vu.lt/file/Verbum/2010/1/07_chodzkiene.pdf, http://www.best-career-match.com/cross-cultural-communication.html.

are organised while completing one task at a time) (Chodzkienė 2010). Lithuanians consider time as a valuable commodity and, as Loreta Chodzkienė argues, tend to live in the past and emphasise the past (2010). The focus and the importance of the past in the Lithuanian culture explains why past simple tense is preferred to simple present to Lithuanise the language string in example 16. The analytical micro-level insights reveal the influence of the Lithuanian culture on the language of the product.

In addition to this, the composition of acronyms and abbreviations in the Lithuanian language units as compared to the source texts could be assigned to this strategy. Though such types of phrasal changes have not been identified by Chesterman (1997), they occur and introduce micro-level modifications of a phrase. There have been many cases observed when a word combination of the source text is replaced with a translated acronym. For example, *Unit of Measure* of the source texts has been changed by *MV* (*Matavimo vienetas – Unit of* Measure), *Withholding tax – PMPPŠ* (*Pelno mokestis prie pajamų šaltinio*), *Accounts Receivable* as *GS* (*Gautinos Sumos*), and *Accounts Payable – MS* (*mokėtinos sumos*). In many instances, micro-level modifications of words and phrases are determined by *PeopleSoft* software, i.e. a limited number of characters per language unit. Therefore, the usage of acronyms in the Lithuanised version is influenced by software and internationalisation errors. During the stage of programming some space reserve should have been left with reference to the lengthening of the target text. For example, the word combination *withholding tax* is rendered in the Lithuanian language as a five-word combination: *pelno mokestis prie pajamų šaltinio.* The Lithuanisation of the language string becomes too long, and the translator is forced to make the language string both shorter and meaningful. The only way out in this situation is an introduction of the acronym that becomes a tool to save some space for addition and insertion of other significant information.

The screenshot (picture 9) illustrates the usage of the acronym in the Lithuanised version of the software.

Picture 9. Acronym usage in the Lithuanised version of *PeopleSoft*

In the screenshots above, the Lithuanised word combination *PMPPŠ pavadinimas* (*Withholding name*) entails the acronym *PMPPŠ*. If the acronym is written in full words together with the noun *name*, the Lithuanised word combination becomes extremely long: *pelno mokesčio prie pajamų šaltinio pavadinimas*. The software would truncate such a language string, and the user could lose some information; thus the acronym is used.

On the other hand, the usage of acronyms is not always determined by the software. During the analysis of *PeopleSoft* localisation several cases of the usage of acronyms as substitutes for the original English words have been observed. For instance, the term *voucher* has been replaced with *mokėtinų sumų sąskaita MSS* (*invoice of accounts payable*), while the bookkeeping term *item* has been substituted by *pirkėjo sąskaitos balanso elementas* (*balance element of customer's invoice*). The noun *voucher* could be translated into the Lithuanian language as *čekis* (*cheque*), *talonas* (*ticket*), *orderis* (*voucher*) or *pakvitavimas* (*receipt / voucher*). However, none of the possible translations are selected as the equivalent of *PeopleSoft* term *voucher*, since *PeopleSoft PeopleBooks* defines voucher as "supplier invoices" (Oracle / PeopleSoft 211: 22). The descriptive translation of the terms *supplier invoice* in the Lithuanian language is *tiekėjo sąskaita*. The term entails the meaning of invoices that are brought to customers and are recorded in the general ledger as accounts payable. However, the literal translation, *tiekėjo sąskaita*, cannot be selected because the term *vendor account* is transferred in the same way, *tiekėjo sąskaita*. The word combination is already employed in the module of *Vendors* to process various invoices and accounts. The Lithuanian translation *tiekėjo*

sąskaita is rather ambiguous: the final user could easily get confused whether the invoice is processed by *Accounts Payable* module or by *Vendors* module. The translator substitutes the noun *voucher* for an acronym *MSS* that stands for a word combination *mokėtinų sumų sąskaita* (*invoice of accounts payable*) with the purpose of differentiating between the two terms and considering the logical reference of supplier invoices to accounts payable. The selection of the substitutes is defined by the Lithuanian language and the absence of acceptable translation for the term *voucher*.

Cases of abbreviation are numerous as well. The usage of abbreviation also reveals the impact of the software on the target language; abbreviations, like acronyms, serve as an instrument to reduce the number of characters per particular language unit if the Lithuanian language string gets too long. For instance the contracted forms and abbreviations in English, such as *Adj* (*Adjustment*), *Acct* (*Account*), *Bal* (Balance), *Defn* (*Definition*), *Ind* (*Indicato*r) and many others, have been replaced with their counterparts in the Lithuanian language, namely *Kor.* (*Koregavimas*), *Sąsk*. (*Sąskaita*), *Bal*. (*Balansas*), *Apibr*. (*Apibrėžimas*), *Ind*. (*Indikatorius*), and the like. Though such a strategy helps to prevent the truncation of Lithuanised language units and provide meaningful information, it might cause some misunderstanding: users might interpret acronyms and abbreviated words differently. For instance *K* in the Lithuanised version of *PeopleSoft* might stand for both *kaina* (*price*) and *kiekis* (*quantity*). To avoid such confusion, final target users are forced to memorise the meaning of acronyms, contractions and abbreviations, whereas translators must ensure the consistent use of acronyms, contractions and abbreviations and introduce different acronyms, contractions and abbreviations for different words.

By means of acronyms and abbreviations, the language of the Lithuanised *PeopleSoft* becomes cryptic; without extensive glossaries, not every user could easily follow commands and processes of the software. The application of acronyms, contractions and abbreviations aggravate the process of

communication of software with Lithuanian users. For instance, nobody could understand the meaning of such language units as *SŽĮ tipas* (*standartinės žurnalo įvesties tipas – standard journal entry type*), *išrinkti atvirus PU* (*išrinkti atvirus pirkimo užsakymus – select open purchase orders*), *LGP koregavimas* (*leidimo grąžinti prekes koregavimas – returned material authorisation adjustment*) and others without the glossary of acronyms and terms. The group of translations provided software users with the glossary of acronyms and abbreviations.

The coinage of new acronyms and abbreviations is determined by the product localised (internationalisation errors do not allow to increase the number of characters per language string) and is creatively exercised by translators to save space for other meaningful units. Sometimes it influences the target language negatively. The analysis of the usage of acronyms and abbreviations has demonstrated several cases when the rules of the Lithuanian language have been ignored. In many cases it is related to orthographic mistakes. For example, picture 9 demonstrates a case when the language unit is localised incorrectly. The original fieldname *SetID* is transferred into the Lithuanian language as *nustatytas ID*. The software uses the short field, *Set ID*, that has to be composed of seven characters with spaces. Thus the full translation of the attribute *nustatytas* is impossible due to truncation. The word combination is abbreviated as *Nust.ID.* and does not comply with the orthographic rules of the Lithuanian language, according to which words and abbreviated words are separated by spaces: *Nust. ID.* However, the Lithuanised version, *Nust. ID.*, exceeds the maximum number of characters per short field label, since it is eight characters long. The word combination can be shortened by means of abbreviating the word *nustatytas* to the first letter, i.e. *N*. but the adjective *neigiamas* (*negative*) is already abbreviated to the first letter; thus, such an abbreviation of the attribute *nustatytas* cannot be selected.

The omission of the word *nustatytas* is also unsound because *PeopleSoft* users would be confused about what kind of ID they are required to enter. This

situation constrains the translator who is made to provide orthographically inaccurate Lithuanisation of the language string: *nust.ID*. This notwithstanding, s/he cannot be blamed for such an error-prone translation, because the choice is related to technical errors of internationalisation. The possibility to increase the number of characters per particular *PeopleSoft* item should have been planned and accommodated. This could have prevented from incorrect Lithuanisation of language strings such as *nust.ID, įr.įs.data (įrašo įsigaliojimo data – effective date*), *el.paštas* (*e-mail*), *gr.kodas* (*grupės kodas – group code*), and others. By means of increasing the number of characters the quality of product localisation could be improved.

In terms of space restriction software localisation becomes similar to audio-visual translation. When subtitling a film, the translator is forced to use fewer words but reveal more, since the text on the screen can be presented in two lines, composed of forty characters and displayed on the screen for eight seconds. Though during software localisation no time limitations are applied, translators also have to make a decision of what to omit and what to leave.

Based on Chesterman's (1997) classification of translation strategies, *clause structure change* is approached as another type of syntactic strategies. It involves micro-level modifications of the structure of constituent elements of a clause. This usually entails the change of order of subject, verb, object, complement and adverbial, active voice versus passive, finite versus infinitive structures, and transitive versus intransitive. Though complete and long sentences are not characteristic to graphical user interface (all tables involve short field-labels that are space-restricted), *clause structure change* has been identified when performing the micro-level structural analysis of the original and the Lithuanised versions of *PeopleSoft*. The biggest portion of clause structural changes has been found in messages that appear on the screen when some mistakes occur due to users' negligence, i.e. when they forget to fill in system fields with specific information. The instances of *clause structure change* are enlisted below:

SL[17]: At least one Process Type needs to be defined for the Job Definition.
TL[17]: Užduoties apibrėžime turi būti nurodytas bent vienas proceso tipas.
SL[18]: This query has been disabled by an administrator.
TL[18]: Administratorius pažymėjo šią užklausą neaktyvia.
SL[19]: The Process Category %1 is currently disabled for the Server %2.
TL[19]: Šiuo metu serveris %2 negali naudoti proceso kategorijos %1.

In many cases the application of *clause structure change* as a strategy of translation is determined by the rules of the Lithuanian language. The examples of *clause structure change* reveal how the Lithuanian language affects the product localised. The first case (pattern 17) entails a *clause structure change*: the order in the compared English and Lithuanian language strings is rearranged. The English sentence is structured by means of the following order, *Attribute + Subject + Verb + Object/Complement*, whereas the Lithuanian sentence is composed in the following way, *Adverbial modifier of place + Verb + Attribute + Subject*. Example 18 illustrates a case of voice change in the Lithuanised language string: the passive voice of the English sentence, *This query has been disabled*, has been transformed into the active voice in the Lithuanian language string, i.e. *Administratorius pažymėjo šią užklausą neaktyvia* (*An administrator has disabled this query*). Further, the change of modality of the clause evokes the modification of the word order in the Lithuanised language unit. If the original English language unit is formed as *Subject* (*receiving the action – This query*) + *Passive Verb* (*has been disabled*) + *Object* (*doing the action – an administrator*), the Lithuanised language string is composed by means of active voice: *Subject* (*doing the action – Administratorius*) + *Verb* (*pažymėjo*) + *Object* (*receiving the action – šią užklausą*) + *Modifier* (*neaktyvia*). The application of passive voice constructions is characteristic of the English language, especially its scientific and technical discourse. Since *PeopleSoft* language strings represent technical discourse, passive voice dominates. In the meantime, the usage of active voice is typical to direct conversations in the Lithuanian language. Therefore, passive constructions of the original English language are frequently replaced with active constructions in the Lithuanian language (Armalytė, Pažūsis 1990).

An active voice sentence is the smallest meaningful unit of communication that is employed to convey, transfer and send some information. Well-known information is usually presented at the beginning of the Lithuanian sentence, whereas the new information is usually placed at the end. Such a structure helps to emphasise and transmit new information. The most important piece of information in language string 18 is the fact that *the query has been disabled*. The attention of the user is focused on new information, namely *disabled query*, by means of using active voice, which is more acceptable to Lithuanian language users due to the simplicity of the sentence structure. Thus, to Lithuanise the language string in example 18, the clause structure change (the transformation of passive voice into active) is exercised.

Moreover, example 18 also involves the application of the semantic strategy of translation since the verb form *disabled / to disable* is changed by *to mark / marked.* As the online *Longman Dictionary* implies, the English lemma *disable* expresses the seme of disability, i.e. when a machine or piece of equipment cannot be used. The verb form *disable* is translated into the Lithuanian language as *daryti bejėgiu* (*make somenone helpless*) or *nepajėgiu* (*make someone powerless*). The adjective *disabled* also entails the seme of disability and could be translated into the Lithuanian language as *neįgalus* (*handicapped*, *invalid*). This meaning is usually employed to convey information about people who have either physical and mental disorders. Though both Lithuanian words are lexemes of standard Lithuanian and the adjective *neįgalus* is used in different legal acts, the syntagma *žmogus su negalia* (*a man with disability*) is also frequently used. This is related to the movement of equal rights and the encouragement to integrate the disabled into the Lithuanian society. The noun *invalidas* (*an invalid*) might be treated as an insult. However, the personified and metaphorical status of a *disabled query* is rather unusual for Lithuanian language speakers. To take this into consideration and to make the message informative, the new information about

the query *marked as inactive* is added in the Lithuanised language string: *užklausą pažymėjo neaktyvia.* The slight semantic change of meaning as a type of sense-for-sense translation does not distort the meaning of the original language string, since if the query is disabled: it does not function. And if the query does not function, it is inactivated. This piece of information is transferred to Lithuanian users of the software.

The last pair of language strings in illustration 19 demonstrates a case when both the word order and the voice are changed in the Lithuanian sentence. The alterations of the grammatical structure of passive versus active voice and the rearrangement of the word order related with passive versus active voice are again determined by the target language and evidence the impact of the target language on the product. Moreover, the Lithuanian sentence includes a modification of an infinitive form of the verb *naudoti* (*to use*) that is employed together with the auxiliary modal verb *negali* (*cannot*), whereas the English language string is expressed by means of a non-infinitive present simple passive voice construction, *is currently disabled*. The last example also demonstrates a case of the application of a semantic strategy (*disabled* is transformed into *cannot use*), since the English verb form *is disabled* is rendered in the Lithuanian language as *cannot be used*. If to compare the Lithuanisation of the lemma *disabled* in examples 18 and 19, different translation of the original unit *disabled* can be noticed: *pažymėti neaktyvia* (*mark as inactive*) and *negali naudoti* (*cannot use*). Both translations emphasise slightly different meaning that is context- and the Lithuanian language structure-dependent. The former Lithuanisation is rather neutral, while the latter is the subjective evaluation of the reality against the content of the message, expressed by means of modality that is devoid in the original language string. Additionally, the peculiarities of the Lithuanian language in sentence structure and word order motivate the usage of *information change* (*addition and omission*). The information about *the disabled query* and process category is omitted in the Lithuanian language string, but information about the

disability of the server and user to use some process category and query is added.

Sentence structure change, defined by Chesterman (1997) as a syntactic strategy of translation, has been also identified during the analysis of *PeopleSoft* localisation. The strategy indicates changes between the main and dependent clauses. For instance, the main clause of the target language text is transformed into a sub-clause followed by the main clause. Consider the examples below:

SL[20]: Invalid Process Category %1 found for the Server has been removed, please save the change.
TL[20]: Rasta su serveriu nesuderinama proceso kategorija %1, kuri buvo pašalinta. Išsaugokite pakeitimus.
SL[21]: You cannot save the Process Monitor Filter with a blank user ID.
TL[21]: Negalite išsaugoti procesų peržiūros filtro, jeigu nenurodėte vartotojo ID.

Example 20 demonstrates a case when the English compound sentence by means of *sentence structure change* is transformed into a complex sentence that is followed by another independent clause. If the English sentence is structured as a compound sentence that is formed of two independent clauses, the Lithuanised sentence entails two sentences. The first is a complex sentence made up of an independent clause, *Rasta su serveriu nesuderinama proceso kategorija %1* (*invalid process category %1 has been found*) and a dependent clause, *kuri buvo pašalinta* (*which has been removed*). The other independent clause, *please save the change*, is rendered as a separate independent sentence, *išsaugokite pakeitimus* (*please save changes*). Though this type of strategy is described as a syntactic strategy, it could be also defined as a pragmatic strategy, since sentences are split into two complex and independent sentences mainly because of convenience. The following sentence, *Išsaugokite pakeitimus, nes rasta su serveriu nesuderinama proceso kategorija %1, kuri buvo pašalinta* (*Please save the change since invalid process category %1 found for the server has been removed*) becomes too lengthy for the final user to grasp at a glance. Long passages and sentences require additional effort and become time consuming since software users have to reread the message

several times to understand the main idea. Besides, the language of GUI tends to be simple; therefore simpler structures and shorter sentences are selected to Lithuanise *PeopleSoft*.

Example 21 introduces another case of *sentence structure change* because the English language string is expressed as a simple independent clause, whereas the Lithuanian sentence becomes a conditional sentence: *jeigu nenurodėte vartotojo ID* (*If you have not entered user's ID, you cannot save the process monitor filter*). The English syntagma *a blank user ID* can be literally translated into the Lithuanian language as *tuščias / neužpildytas vartotojo / naudotojo ID* (*empty / blank user / consumer ID*). When transferred in the following way, *Negalite išsaugoti procesų peržiūros filtro su neužpildytu vartotojo ID*, the message becomes unusual and does not communicate the adequate information for the Lithuanian user. Such a message informs the Lithuanian user of *PeopleSoft* that *a filter with a blank user ID cannot be saved*. However, this is not the filter with a blank user ID but the process monitor filter that cannot be saved, if the field with a user ID is blank. In order to present this information and maintain the dialogue of the software with the final Lithuanian user, a conditional sentence has been chosen.

Moreover, if the English sentence includes the subject of the clause containing the personal pronoun *you*, the Lithuanian sentence is transformed into an impersonal main clause, where the verb forms *negalite* (*you cannot*) and *nenurodėte* (*you have not indicated*) designate the polite form of the second person in singular. This form of address is inherent in communicative situations with strangers, the seniors and the elderly. The address that is expressed by virtue of the second singular plural in the Lithuanian language is appropriate for communication of acquaintances, friends and colleagues of similar ages in daily settings. In formal surroundings the direct address *tu* (*the second singular person*) instead of *jūs* (*the second plural person*) is considered to be impolite and is regarded as a breach of etiquette. Since there is no information about a person behind the computer screen, formal and polite

address is used in the Lithuanised language strings. Moreover, the usage of the second plural person reveals hierarchical relationships in the Lithuanian culture that is still regarded as a hierarchical culture, i.e. hierarchy is established at work, in the society and the family (Baltrimienė 2005); thus showing respect and deference to elder people and authority is appropriate and recommended.

As Chesterman argues, *a cohesion change* as a type of syntactic strategy impacts the usage of intra-textual reference, ellipsis, substitution, pronominalisation, repetition and the use of linking words in target texts (1997). Though language strings in both the original and the localised versions of *PeopleSoft* do not occur as a coherent text but rather as fragments, i.e. language strings or units, the program seems to communicate with the user coherently. And this is achieved by means of the translation strategy. The examples are the following ones:

SL[22]: You cannot select *the same process* as the recovery *process*.
TL[22]: Negalite pasirinkti *to paties proceso* atkūrimo *procesu*.
SL[23]: This query has been disabled by an *administrator*. Contact your *query administrator*.
TL[23]: *Administratorius* pažymėjo šią užklausą neaktyvia. Kreipkitės į *užklausas tvarkantį administratorių*.

The Lithuanised language string in example 22 presents a cohesion change conveyed through a determinative pronoun composed of a demonstrative pronoun *tas* (*that*) and a substantivised pronoun *pats* (*self*), meanwhile the English language string contains the definite article and the pronoun *same*. Though slight, the cohesion change, together with the retained repetition of the lexeme *process* in the Lithuanian language string, emphasises the difference of two processes the user has to select. By means of the cohesion change the software both communicates information about two different processes to Lithuanian target users, and makes them stay alert when selecting the right process.

In the second example the coherence of the English language unit is achieved by virtue of the repetition of the noun *administrator*, whereas the cohesion in the Lithuanian language unit is activated differently. In both English sentences, for instance 23, the noun *administrator* is employed as an

object. The noun *administrator* is also repeated in both Lithuanian sentences, i.e. as a subject of the first sentence and the object of the second sentence. This graphical layout of the noun *administrator* when the word is the first and the last in the message creates a frame to attract the attention of the user and emphasise information. Besides, the Lithuanised sentence reveals responsibilities and action of the administrator, *užklausas tvarkantis administratorius* (*the administrator who handles queries*), while the English sentence focuses on the relationship of the administrator and the user, *your query administrator*, that might be easily rendered in the Lithuanian language as *savo užklausų administratorius* (*your query administrator*). The possessive pronoun *your* of the original English sentence is omitted in the Lithuanian sentence and changed by the participle: *tvarkantis administratorius* (*handling/arranging administrator*). Despite the fact that the possessive pronoun is dropped, the Lithuanian software user understands that s/he has to contact not any but the specific administrator.

The omission of the possessive pronoun *your* of the English sentence is influenced both by peculiarities of the Lithuanian language (the extensive usage of pronouns is considered to be improper) and the Lithuanian culture as opposed to the American and other Western cultures. The omission of the possessive pronoun in the Lithuanised version of *PeopleSoft* reflects the cultural dimension of collectivism versus individualism, i.e. when self-identity of members of the society is defined in terms of "we" as a member of a bigger group, and "I" as an individual[18] (Hofstede 2010). Lithuanian culture is oriented towards collectivism, whereas Western cultures are individualistic cultures. In terms of Hofstedian dimensions, American culture is highly individualistic, the index score of the dimension is 91 (Hofstede 2010), while the Lithuanian score on individualism / collectivism is 50 (Baltrimienė 2005). This explains why the possessive pronoun is dropped out in the Lithuanised

[18] Collectivism versus individualism is one of the six cultural dimensions defined by Geert Hofstede. The six cultural dimensions are used to describe national cultures. More can be found under the link http://geert-hofstede.com/dimensions.html.

version of the language string. If members of the American society tend to take care of themselves as individuals, Lithuanians identify themselves as loyal members of a bigger group. Thus, the message *Kreipkitės į užklausas tvarkantį administratorių* (*Contact an administrator managing / handling queries*) is appropriate for the communication of software with the final user. Such a message is coherent and by means of adding an attribute *užklausas tvarkantis* (*managing / handling queries*) becomes more concrete for the Lithuanian user. At the same time the Lithuanised language string indicates the administrator as a member of the group.

Furthermore, it has to be mentioned that example 23 also demonstrates an application of the semantic strategy of *abstraction change*, since the Lithuanian sentence defines the type of an administrator more explicitly. The Lithuanian message informs software users that this is the administrator who manages queries, *užklausas tvarkantis administratorius.* Moreover, the same example entails the application of the pragmatic strategy of addition (information change), because additional information about the query administrator is added. The Lithuanian indicative sentence becomes more explicit by means of adding the participle *tvarkantis* (*handling / arranging / managing*).

The next syntactic strategy is defined by Chesterman (1997) as *level* (i.e. phonology, morphology, syntax and lexis) *shift* and occurs when the mode of an expression is changed from one level to another. For example, a polite request in the source language can be expressed by means of lexis, whereas in the target language it is expressed via syntax or morphology. The instances below demonstrate several cases of *level shift*:

SL[24]: *To set* trace flags, *click* here.
TL[24]: *Norėdami* nustatyti įrašų požymius, *spauskite* čia.
SL[25]: *Workflow* notification controls
TL[25]: *Veiksmų sekos* kontroliniai duomenys
SL[26]: *Please select* a different Process type and/or Process name.
TL[26]: *Pasirinkite* kitą proceso tipą ir/arba proceso pavadinimą.

The application of *level shift* is determined by target language peculiarities, i.e. the Lithuanian language is highly inflectional in comparison with the English language where the inflection has been only partly retained. The pair of language units in example 25 demonstrates a case of the application of the strategy of *level shift* since the polite form of the imperative mood in the English language unit is expressed by means of lexis, i.e. infinitive constructions *to set* and the second person both singular and plural *click here.* Meanwhile, the polite form of the instruction and address in the Lithuanian language unit is expressed through morphology, i.e. the usage of endings instead of words, *norėdami nustatyti* (*if you wish to set*) <...>, *spauskite* (*please click*). The morphemes of the second person plural form of the verbs *norėdami*, *-ami,* and *spauskite, -ite,* implicitly indicate the second person plural pronoun *jūs*. This form is invoked to address a group of people and an individual with a need to show deference, formality and seniority and is, therefore, selected to localise *PeopleSoft*.

The use of compound nouns in English and their translation into the Lithuanian language also illustrates the application of *level shift*. In instance 26, the English compound noun *workflow* is formed by blending two words, whereas the Lithuanised language string entails a syntagma that is composed of two separate lexemes, i.e. *veiksmų seka* (*flow of actions*). If the English compound is recognised as one unit, the Lithuanised word combination entails two separate units that are arranged by means of two lexemes where the first noun agrees with the second.

The last pair of language units in example 26 reveals a case of *level shift* because the polite request in the English sentence is expressed through the lexical items, i.e. *please select*, and the Lithuanian suggestion and/or instruction is conveyed via morphology and lexis, since the ending of the second plural person is added to the infinitive verb form *pasirinkti* (*select*) and the word *please* is omitted in the Lithuanian version of a sentence.

The Lithuanisation of the passage, *Prašom pasirinkti/prašom pasirinkite kitą proceso tipą <...>* (*please select / we ask you to select a different process type*), is also acceptable but is not selected, since such a message becomes longer and too formal. Software language tends to be simple because users have to quickly react to commands, instructions and requests with no additional effort. The message, *Pasirinkite kitą proceso tipą <...>*, is easier read and perceived than the formal instruction, *Prašom pasirinkti / prašom pasirinkite kitą proceso tipą <...>*. The choice of a shorter Lithuanian language unit demonstrates the fact that translation and localisation are carried out with a specific target user in mind.

The last type of syntactic translation strategy as described by Chesterman (1997) is *scheme change*. This strategy denotes modifications that are made during the translation of rhetorical schemes (parallelism, repetition, alliteration, metrical rhythm). According to the translation scholar, when the strategy of scheme change is applied, the scheme of the source text might be retained in the target text with no changes and could be presented as the following equation: *ST scheme X → TL scheme X.* The scheme of the source text might be replaced by a different scheme of the target text: *ST scheme X → TL scheme Y* (Chesterman 1997: 100). The scheme of the source text can be dropped in the target text: *ST scheme X → TL scheme Ø*. And a scheme can be added in the target text despite the fact that it does not exist in the source text: *ST scheme Ø → TL scheme X* (Chesterman 1997: 100). The schemes may remain unchanged or can be modified according to the needs of the target texts.

Software texts are obviously not poetic texts: they cannot be read as coherent and complete texts that are marked by clear beginning and end. *PeopleSoft* language units may be read by applying the up-down and down-up approach instead of the linear coherent from left to right, since software language strings can be viewed from any place and any direction: right to left, up down and other. Despite this fact, the application of *scheme change* during *PeopleSoft* Lithuanisation has been observed. The examples below present

some cases of *scheme change*, detected when comparing the original English and the Lithuanian language units of *PeopleSoft* software.

SL[27]: Enter any information you have and click Search.
TL[27]: Įveskite turimus duomenis ir spustelėkite „Ieškoti“.
SL[28]: Find an Existing *Value* / Add a New *Value*
TL[28]: Rasti *reikšmę* / Nauja *reikšmė*

The first group of language units in example 27 presents a case when the metrical rhythm is retained in both the English and Lithuanian language strings, since both sentences are composed of seven rhythmical groups. In this way the scheme of the original text is retained in the Lithuanised text: *ST scheme X → TL scheme X* (Chesterman 1997: 100). The rhythmical pattern of the Lithuanian language string does not deviate from the original rhythmical pattern because of the aim to be as close to the original text as possible. This is accomplished by means of another strategy of translation, literal translation, since the Lithuanised language string is almost identical to the English language unit.

The only difference between the language strings in case 27 is the modification of the informal and immediate instruction of the original version to a polite and formal request of the Lithuanian message that is introduced by means of the second plural person and that is appropriate in a conversation of strangers. Another graphically visible change is the use of quotation marks to identify the search button. If names of menu items, buttons, commands, fields, values, components and the like in the original language units of *PeopleSoft* are indicated by means of writing the first capital letter of a word in the middle of a language string, i.e. *Enter any information you have and click Search*; *Find an Existing Value*; *Enter Message Number*, the names of software components in the Lithuanised version of *PeopleSoft* are marked by quotation marks or a different structure of the language string, i.e. *Įveskite turimus duomenis ir spustelėkite „Ieškoti“* or *Įveskite turimus duomenis ir atlikite paiešką* (*enter any information you have and perform search*). The usage of quotation marks to identify specific information is imposed by the rules of the Lithuanian language. Moreover, only proper nouns and names of companies

can be capitalised in the middle of a sentence. Since *Ieškoti* (*Search*) stands for a name of a button of the software, it has to be separated by quotation marks or italicised in the Lithuanian language string. Otherwise, the appearance of the name of the button *Ieškoti* (*Search*) would not comply with the rules of punctuation and the first capital letter would look odd for Lithuanian users. On the other hand, the usage of quotation marks helps the translators to become visible. This is related with the application of *visibility change* as a pragmatic strategy of translations that will be thoroughly discussed in the subsequent chapter on pragmatic strategies of translation.

Sentences in sample 28 illustrate a case when certain words are deliberately repeated; *value* in the original English language unit and *reikšmė* (*value*) in the Lithuanian language unit. Moreover, a change of alliteration can be witnessed in the selected pair of the original and Lithuanised language units. If the consonants *d* and *v* are repeated in the English language unit, consonant *r* is alliterated in the Lithuanised one. The alliteration of the consonant *r* serves two purposes: it emphasises the noun *reikšmė* and attracts the attention of the user, and retains the same rhythmical scheme in both word combinations. The adjective *existing* is deliberately omitted in the original language string in order to strengthen the alliteration of the consonant and make the language unit more coherent. The adjective is not needed in the Lithuanian language string due to redundant information. The Lithuanisation of the message, *rasti esamą / egzistuojančią reikšmę*, is even illogical, since values, information and data are always searched among the existing data, and the computer cannot search for a non-existing item. Thus, due to additional and unneccesary information, embedded in the adjective *existing*, the adjective is dropped in the Lithuanian language string.

The analysis of all the syntactic strategies employed to Lithuanise GUI of *PeopleSoft* software according to the classification of Chesterman (1997) demonstrates that all the syntactic strategies are applied during the process of localisation. Transposition, phrase, clause and sentence structure change as

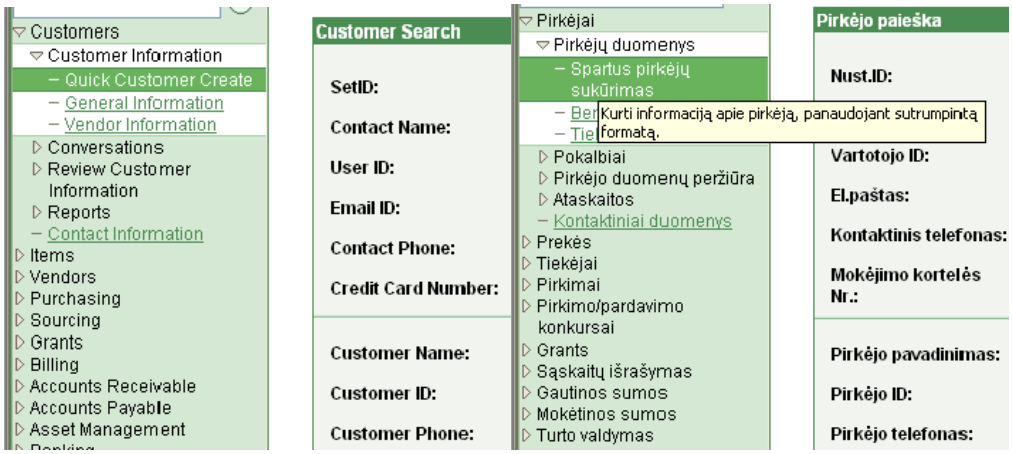
well as level shift prevail during the process of *PeopleSoft* Lithuanisation, since the use of the translation strategies is determined by peculiarities of the Lithuanian language and culture. Literal translation as a type of syntactic strategies is also frequently utilised to Lithuanise the original language units, since the usage of the strategy of literal translation makes the Lithuanised text as close to the original as possible. Cohesion change and scheme changes are less prevalent because complete, linear texts are not characteristic to software units; however, such strategies have been identified as well. The analysis of syntactic strategies of translation shows that all translation strategies are related to micro-level structural changes. Lithuanian culture is past oriented; therefore, past tense is usually selected instead of present tense. Hierarchy is much preserved in the Lithuanian culture, and it is reflected in the address used to communicate with the software user. As Lithuanians are the representatives of monochronious culture, they focus on one scheduled task instead of several. This characteristic is embedded in the use of phrase structure change when plural nouns are replaced with singular noun forms. At the same time the examination of syntactic strategies applied to localise *PeopleSoft* reveals the impact of the product on the target language and culture. The extensive usage of acronyms and abbreviation and loans / calques application provides such evidence. Moreover, the analytical insights reveal that syntactic strategies are closely interrelated with semantic and pragmatic strategies; therefore, the application of some syntactic strategy triggers the application of either a semantic or a pragmatic strategy that are explored in the subsequent chapters of the thesis.

5.3. Semantic strategies

If syntactic / grammatical strategies of translation are related to syntactic and grammatical modifications that occur during localisation of the linguistic content of the original English language of the product, semantic strategies are associated with manipulation of meaning. Paradigmatic relations of lexemes in

the original and Lithuanised *PeopleSoft* language strings can be revealed by means of the analysis of ten semantic strategies of translation, namely synonymy, antonymy, hyponymy, converses, abstraction change, distribution change, emphasis change, paraphrase, trope change and other semantic changes (Chesterman 1997) that have been recognised during the process of *PeopleSoft* localisation. The analysis of the semantic strategies merges with micro-structural analysis (Lambert and van Gorp 1985/2006), since both types of examination reflect the use and selection of words, dominant structures and forms of speech reproduction.

The first of the semantic strategies suggested by Chesterman (1997) that has been applied to Lithuanise the English language units into the Lithuanian language units is *synonymy*. This strategy occurs when translating a synonym or a near-synonym is selected to avoid repetition and achieve both coherence and the proper style. The application of synonymy as a case of semantic translation strategy is rather limited to Lithuanise *PeopleSoft* language units due to the fact that the inbuilt *PeopleSoft* translation engine and translation environment block the usage of synonyms. If a particular field label and item is once translated and approved, the translation of the item is automatically saved and archived in the database as the proper translation. This means that the same word, field label, menu item or word combination is always translated in the same way and no synonyms or changes can appear. If any changes are made within a translation unit and saved, they automatically occur in all language units with the translation segment. For instance, if the field-label *customer* is rendered into the Lithuanian language as *pirkėjas* (*buyer*), no absolute synonyms, namely *vartotojas* (*consumer*), *klientas* (*client*) and *naudotojas* (*user*) can be selected. Whenever the lexeme *customer* is applied in the original *PeopleSoft* version, the system retrieves the same Lithuanian counterpart *pirkėjas.* The screenshots of the original and Lithuanised *PeopleSoft* environment demonstrate the use of the same lexeme *pirkėjas* (*customer*) in all language units that contain the lexeme *customer*.



Picture 10. The same lexeme in the original and Lithuanised versions of *PeopleSoft*

Despite this fact, some cases of the application of *synonymy* have been recognised in the message catalogue that entails longer sentences and notifies software users about the malfunctioning and errors of the software.

SL[29]: Missing information for *file dependency*. This process is marked to have *file dependency*.

TL[29]: Trūksta duomenų apie *bylų priklausomumą*. Pažymėta, kad procesas yra *susijęs su byla*.

SL[30]: More than 1000 rows *will be returned*, this may take long time. You should consider using filters to reduce the number of rows *to be returned*.

TL[30]: Rezultatuose *bus pateikta* daugiau negu 1000 eilučių; operacija užims daug laiko. Turėtumėte nurodyti filtravimo kriterijus, kad *būtų rodoma* mažesnė rezultatų apimtis.

The examples above demonstrate cases when the same text and language units of the original English language units are translated as near synonyms in the Lithuanian language strings. For instance, in sentences 29 the noun *dependency* is rendered in the Lithuanian language as *priklausomumas* (*dependency*) and *susijęs su byla* (*file-related, file-connected*). Meanwhile in the language strings of sample 30 the English simple future passive voice *will be returned* is transferred into the Lithuanian as *bus pateikta* (*will be presented*) and *bus rodoma* (*will be shown*). In both examples the original English sentences maintain the same word combinations: *file dependency* and *rows returned*. The Lithuanised language strings entail synonymous translation of the English syntagmas; however, both Lithuanian language strings can be rendered without synonymous expressions, i.e. *Šiam procesui priskirtas bylų*

priklausomumas and *Turėtumėte nurodyti filtravimo kriterijus, kad būtų pateikta mažesnė rezultatų apimtis*. The usage of synonyms in the Lithuanian language strings allows avoiding the repetition of the same lexemes, since the application of the same word patterns is considered to be stylistically inappropriate. At the same time the first sentence is too difficult to understand; therefore, the synonymous word combination, *su byla susijęs*, provides possibilities to express the essence of the instruction more precisely and ensures the maintenance of the dialogue between the software and the user.

Antonymy as another type of semantic strategy of translation is employed when a translator decides to choose an antonymous lexeme with a negation element in the target text as compared with the source text (Chesterman 1997). This semantic strategy has also been identified during the analysis of the Lithuanisation of English language strings of the software. Consider the examples below:

SL[31]: The process name for the specified process type *can be maximum of eight characters*.
TL[31]: Proceso su nurodytu tipu pavadinimas *negali būti ilgesnis negu 8 simboliai*.
SL[32]: *Leave fields blank* for a list of all values.
TL[32]: *Neįvedus kriterijų*, bus rodomos visos reikšmės.
SL[33]: The Process Category %1 *is currently disabled* for the Server %2.
TL[33]: Šiuo metu serveris %2 *negali naudoti* proceso kategorijos %1.

All illustrations above contain instances of antonymous translation. For instance, the passage of Lithuanian sentence 31, *negali būti ilgesnis negu* (*cannot be longer than*) is a contextual antonym of the English syntagma *can be maximum of*. Despite this fact, the original English message could be literally localised, *proceso su nurodytu tipu pavadinimą gali maksimaliai sudaryti 8 simboliai*. Meanwhile, the beginning of the English language string in case 32 *leave fields blank* could be rendered into the Lithuanian language as *palikite tuščius laukelius.* However, in place of the suggested adaptation, antonymous translation, *neįvedus kriterijų* (*if criteria are not entered*), is selected due to several reasons.

First of all, literal word-for-word translation is not always appropriate since it may sound unnaturally. For instance, the message *palikite tuščius*

laukelius visų reikšmių sąrašui (*leave blank fields for a list of all values*) is vague and does not instruct the target user of what needs to be done. Such a message could disrupt the communication of the software and the user. Secondly, the Lithuanised language strings inform the Lithuanian users of what might happen if something is not performed, while the English langauge strings are more neutral. In both Lithuanised language strings antonymous translation is expressed by means of a negation that is composed of the negative particle *ne* (*not*). The negation conveys a specific assertion of the opposite thing and demonstrates the impact of the Lithuanian language on the product.

Moreover, if the double negation in the English language is grammatically incorrect, it is acceptable in the Lithuanian language. The use of the double negation in the Lithuanised language string 31, i.e. *negali būti* <...> *negu* does not turn the negating message into the assertive. Here, with reference to Labutis (2002), the double negation serves as a rhetorical device of emphasis as the negation highlights and reinforces the message, i.e. *the process type cannot be longer than eight characters.* The double negation in the message becomes a categorical claim (Labutis 2002: 121). It embeds the meaning of necessity, obligation and inevitability to (not) perform something. The user's attention is immediately attracted by such a message which communicates as a stronger instruction, reminder and warning and forces users perform certain actions.

The last pair of language strings also presents a case of antonymous translation. The Lithuanian sentence entails a syntactic translation strategy of clause structure change, i.e. the passive voice of the original sentence is replaced with the active voice in the Lithuanian sentence with antonymous translation. The Lithuanised language string embraces active voice constructions due to the peculiarities of the Lithuanian language, i.e. active voice constructions are preferred to passive voice structures. The original language string is transferred into the Lithuanian language as follows: *šiuo*

metu serveris %2 negali naudoti proceso kategorijos %1 (*currently the Server %2 cannot use the Process Category %1*). The direct and literal translation of the original message, i.e. *proceso kategorija %1 yra šiuo metu neprieinama serveriui %2*, though grammatically correct, is stylistically inappropriate. And the application of the strategy of antonymous Lithuanisation determines clause structural change (the active over passive voice and the change of word order) and stresses the idea *negali naudoti* (*cannot use*) that is stronger emphasised in the Lithuanian message.

Hyponymy continues the description of semantic translation strategies. Hyponymy, as Chesterman observes, occurs when a superordinate in the source text is rendered as a hyponym in the target text, a hyponym of the source texts is replaced by a superordinate term in the target text or a hyponym/superordinate of the source text remains unchanged in the target text (1997). The exercise of *hyponymy* as a semantic strategy of translation to Lithuanise *PeopleSoft* language strings has been observed due to the fact that the usage of the strategy allows expressing information for the final user more explicitly and/or in a more generalising way.

SL[34]: Contact Info / Process Instance
TL[34]: Kontaktiniai duomenys / Proceso numeris
SL[35]: Item group / Process Details / Distribution Details
TL[35]: Prekių klasifikatorius / Proceso informacija / Paskirstymo informacija

Several instances of hyponymy when a superordinate word, i.e. hypernim in the original English language unit is translated as a hyponym in the target text are presented in language strings 34. The nouns *information* and *instance* are replaced with hyponyms *duomenys* (*details*) instead of *information* and *numeris* (*number*) in place of *instance* in the Lithuanian language unit. If the original language units are rather abstract, the Lithuanian language strings become more concrete since the meaning of a hyponym is more differential. For instance, *process number* is more specific in comparison with *process instance*. It is obvious that in both cases the superordinates could remain in the Lithuanian language strings; however, such messages would be ambiguous. The language units *kontaktinė informacija* (*contact information*) and *proceso*

atvejis (*process instance*) make the messages obscure because it is not clear what kind of contact information has to be entered and what the process instance is related to. The localised software has to ensure the immediate dialogue of the software and the final user and hyponyms that make the message of the software more explicit are chosen.

Language units in example 35 demonstrate the opposite case of *hyponymy*, i.e. when hyponyms of the source text are altered by superordinates in the target text; therefore, a wider and more abstract meaning is assigned to the Lithuanian language units. *Prekių klasifikatorius* (*item classification*) instead of *item group*, *proceso informacija* (*process information*) and *paskirstymo informacija* (*distribution information*) as a substitute of *process details* and *distribution details* become more generic in the Lithuanised field labels. In all the cases except for the first one, i.e. *prekių klasifikatorius*, hyponyms could be used in the Lithuanian language strings since the meaning of the message does not change much. Lithuanian software users perceive the utterances *process information*/*process details* and *distribution information*/*distribution details* similarly. Yet, the application of hypernims in the Lithuanian language units arranges information in a hierarchical way since the meaning of hypernims embeds the meaning of hyponyms.

And the language unit *prekių klasifikatorius* (*item classification*) that replaces the word syntagma *prekių grupė* reveals the impact of Lithuanian and European regulations. The term *prekių klasifikatorius* represents the international classification of goods and services that was ratified by Nica treaty and is followed in Lithuania. As *PeopleSoft* software is localised to the Lithuanian market, it has to both meet the needs of the Lithuanian market and comply with the rules and regulations that are exercised in Lithuania and the European Union. Taking this into consideration, it has been decided to replace the hyponym *prekių grupė* with the superordinate *prekių klasifikatorius*.

Converses introduce one more type of semantic strategies of translation and reveal the impact of the Lithuanian language on the product localised.

Converses are pairs of words, usually verbs, that express the same idea but from opposing points of view (Chesterman 1997). Converses are usually described as a variety of antonyms, thereby both semantic strategies of translation, i.e. antonymy and converses intermingle and in some cases an antonymous semantic strategy of translation can be regarded also as a converse semantic strategy of translation.

SL[36]: Start time is *greater* than end time.
TL[36]: Pradžios laikas yra *vėlesnis* už pabaigos laiką.
SL[37]: *Sourcing* administration
TL[37]: *Pirkimo/pardavimo* konkursų administravimas

The original and Lithuanised language strings above illustrate cases when the strategy of converse translation is applied. When the first pair of language units in example 36 is approached in terms of the semantic perspective, it is observed that the Lithuanised language string entails a converse lexeme *vėlesnis* (later) which replaces the original English lexeme *greater*. Both messages present different perspective of the same communicative situation, i.e. information about differences of the start and end time. However, the English lexeme *greater* emphasises the sememe of value of time that needs to be entered in the field next to the label *start time*. This is the numeric value of the start time but not start time itself that is greater than the numeric value of the end time. Meanwhile, the Lithuanian message reveals the perception of time differences in the Lithuanian language and explicitly conveys the semes of earliness and lateness of time which are not embedded in the English language string. If the original message is rendered into the Lithuanian language directly, i.e. *pradžios laikas yra didenis už pabaigos laiką*, the message becomes illogical and unacceptable for Lithuanian users. The perception of time in the Lithuanian language is related with the binary opposition of *ankstus / vėlus* (*early / late*) and *ankstesnis / vėlesnis* (*earlier / later*) rather than *greater / smaller*, therefore the syntagma *didesnis pradžios laikas* (*greater start time*) is semantically inappropriate. The choice of different lexemes to convey a meaningful message to the Lithuanian software users

demonstrates the role of the Lithuanian language when Lithuanising *PeopleSoft*.

The original and Lithuanised language strings in example 37 demonstrate a slightly different case of the application of converses to Lithuanise the language string *sourcing administration*. The original lexeme *sourcing* is altered by lexemes that introduce two opposing points of view, i.e. *pirkimo/pardavimo konkursai* (*purchase-sales tenders*). The Lithuanised language string emphatically reveals and informs software users about two different semantically and logically interrelated actions of buying and selling since someone can buy only then when somebody sells something. Word combinations that entail both converses *pirkimas* and *pardavimas* are frequently used in the Lithuanian language, i.e. *pirkimo-pardavimo konkursai*, *pirkimo-pardavimo sutartis* (*purchase-sales contract*), *pirkimo-pardavimo kaina* (*purchase-sales price*).

Moreover, the translation of the original term *sourcing* is not approved in the Lithuanian language since there are no dictionary entries related with the word *sourcing* in many English-Lithuanian dictionaries (*EUROVOC,* i.e. the online EU multilingual thesaurus, *Biznio banko biržos terminų žodynas*). The original message is rather abstract despite the fact that the lexeme *sourcing* implicitly embraces both actions of purchasing and selling. Therefore, translators localise the lexeme in a descriptive way, i.e. state the information that is embedded in the original term explicitly. The message could be Lithuanised in the following way, i.e. *pirkimo/pardavimo administravimas* (*administration of buying and selling*). Yet, the use of converses *pirkimo/pardavimo* and the addition of the new information by inserting the noun *tender* (since the lexemes form a semantically, grammatically and logically linked syntagma *pirkimo/pardavimo konkursai*) makes the Lithuanised language unit informative. In addition to this, the term *pirkimo/pardavimo konkursai* reflects regulations of the Republic of Lithuania

and reminds software users about rules that have to be strictly followed in organisations during the procedure of procurement.

Another type of the semantic strategies of translation that has been identified during the micro-level structural analysis is *abstraction change*. This type of strategy appears when a translator decides to select more abstract items in the target text instead of concrete items of the source text or chooses more concrete messages in the target text instead of abstract language units of the original (Chesterman 1997). The strategy of abstraction change has been observed during the analysis of the translation of language strings of both the original and localised versions of *PeopleSoft*. The examples below illustrate cases of abstraction change.

SL[38]: Source goods and services.
TL[38]: Prekių ir paslaugų pirkimo/pardavimo konkursai.
SL[39]: Inactivate Vendors
TL[39]: Būsenos „Neaktyvus“ nustatymas
SL[40]: Maintain Bidder
TL[40]: Dalyvio duomenų tvarkymas

Examples in sentences 38 and 40 present cases of abstraction change when a more abstract syntagma of the source text is rendered in a more concrete manner in the target text and the strategy of abstraction change is applied with an aim to make the communication of the software and the final target user coherent and successful. The message is successfully transmitted to the user only then when s / he understands what kind of tasks and processes need to be performed. For instance, the source language unit *source goods and services* is transferred into the Lithuanian language as *tenders for purchase and sales of goods and services.* The communication of the Lithuanised software with the target user becomes more neutral (due to cases of transposition, i.e. when verb forms are replaces with noun forms). Recommendations and instructions that are expressed by means of verb forms in the original language strings, i.e. *maintain*, *source*, advise and instruct software users about successive actions.

Meanwhile, noun forms in Lithuanian language strings just introduce and state specific information with no encouragement to perform certain tasks. To maintain though neutral but coherent dialogue of the software and Lithuanian users, additional and specific information is added to the Lithuanian language strings, i.e. *prekių ir paslaugų pirkimo / pardavimo konkursai* and *dalyvio duomenų tvarkymas* (*maintenance of bidder's details*). The statement in example 38 becomes informative and clear by means of converses (*pirkimo / pardavimo – purchase / sales*) and addition (*konkursai – tender*). The language string also asserts that sourcing is related to the announcement of legal tenders for purchase / sales of goods and services.

And the Lithuanised language string 40 informs software users about the possibility of maintaining the data of bidders. Again the additional information is inserted to make the Lithuanian message explicit and ensure the communication of the software and the user. *Maintain Bidder* might be translated into the Lithuanian language as *Tvarkyti dalyvį.* However, such a translation would be vague since the utterance does not indicate what exactly needs to be maintained, i.e. the bidder or bidder's details. When the lexeme *details* (*duomenys*) is enclosed in the Lithuanian language string, the message becomes understandable, since the software states what kind of actions need to be completed when maintaining bidder's information. Moreover, both examples embrace the pragmatic strategy of information change, i.e. addition, and the syntactic strategy of transposition, since the verb *source* in sample 38 becomes a plural noun in Lithuanian *konkursai* (*sourcing*) and the verb *maintain* in instance 40 is replaced with the noun *maintenance* (*tvarkymas*).

Language strings 39 illustrate a case when the message of the source text becomes more abstract in the target text. *Inactive vendors* is a function of *PeopleSoft* that allows disabling the participation of a vendor in sourcing by ticking a checkbox to indicate the inactive status of the vendor. If the English message explicitly states that vendors are made inactive, the Lithuanian message is translated in an abstract way as *Būsenos „Neaktyvus" nustatymas*

(*selection of status "Inactive"*). More abstract translation of the Lithuanian message is selected due to several reasons.

First of all, the noun *tvarkymas* (*maintenance*) substitutes the original verb form *inactive* to retain the same constructions throughout the entire system, i.e. noun forms are used instead of verb forms to describe components of the software, for instance, *access General Ledger – prieiga prie Didžiosios knygos, close Ledgers – knygų uždarymas*. Secondly, the original lexeme *inactivate* does not have a counterpat in the Lithuanian language and can only be rendered in a descriptive way, i.e. *padaryti neaktyviu, neveikiančiu, neveiksniu* (*make inactive, inoperative, toothless*). The use of a descriptive translation requires the change of the structure. If the original message tells users to inactivate vendors, the Lithuanised language string informs users about a possibility to set inactive status. Since the original message cannot be translated into the Lithuanian language as *padaryti tiekėją neaktyviu, neaktyvinti tiekėją, neaktyvuoti tiekėjo* due to semantically and grammatically inappropriate word combinations, the translator is forced to omit some langauge units, i.e. *tiekėjas* (*vendor*) and make the message abstract.

The Lithuanian language string becomes vaguer because it is not clear who is granted inactive status, the context of the software (headings and columns of tables) helps users understanding what kind of actions are performed. In such a way the conversationalism of the software with the user is maintained. At the same time other translation strategies of transposition and information change strengthen the transmission of the message to Lithuanian users. The verb *inactivate* is changed by the adjective *inactive* and two nouns *būsena* (*status*) and *nustatymas* (*selection*) are added and replace the lexeme *vendor* that is omitted in the Lithuanian word combination.

Distribution change as a semantic strategy of translation entails either expansion or compression of meaning. This alteration, as described by Chesterman (1997), occurs when the same semantic component is expanded into more items or more semantic components are compressed into fewer

items. Cases of the application of the strategy have been identified during the analysis of the Lithuanisation of *PeopleSoft* texts. Some illustrations of distribution change are presented below:

SL[41]: Manage existing events, *process awards*, and view history.
TL[41]: Tvarkyti konkurso įvykius, *priskirti laimėtoją* bei peržiūrėti istoriją
SL[42]: Print Crystal invoices, invoice registers and *salary* detail reports.
TL[42]: Spausdinti Crystal sąskaitas faktūras, sąskaitų faktūrų žurnalus ir *darbo užmokesčio* duomenų ataskaitas.

The micro-level analysis of sentences in example 41 illustrates a case of compression of the English syntagma *process awards* that is rendered in the Lithuanised language string as the word combination *priskirti laimėtoją* (*assign a winner*). The strategy of distribution change is applied to make the Lithuanian message more explicit and acceptable to the Lithuanian software users. The verb *priskirti* (*assign*) is of a narrowed meaning in comparison to the verb *process*, which might be regarded as the superordinate of the verb *assign* (*priskirti*). The English plural noun *awards* is substituted with the singular lexeme *laimėtojas* (*winner*). By means of the distribution change, hyponymy and abstraction change the message becomes coherent and acceptable to the Lithuanian users.

Sample 42 presents the opposite case of *distribution change*, i.e. the expansion of the lexeme *salary*. The English hyponym *salary* is substituted with a Lithuanian syntagma *darbo užmokestis* (*payroll*) that might be treated as a hypernim and refers to the payroll system of *PeopleSoft*. The meaning of the Lithuanian sentence is expanded to provide more information for the target users. The original message encourages users to print only salary-related reports, whereas the Lithuanian language string instructs users about the possibility to print payroll reports. The Lithuanised language string also reflects the Lithuanian business accounting standards.

The analysis of the original English language string evidences differences of salaried (monthly) payments and wages (weekly payments). The Lithuanian language string does not differentiate between the terms *salary* and *wage* due to the fact that it is more customary to receive earnings on a monthly rather

than weekly basis. Therefore, the syntagma *darbo užmokestis* is selected since it implicitly embeds sememes of the lexemes *salary*, *wages* and *hourly pay*. Besides, the lexeme *darbo užmokestis* is accurately understood by the users of the Lithuanised version of *PeopleSoft*.

The investigation of another semantic strategy of translation, i.e. *emphasis change* (Chesterman 1997) allows observing the way the target language and culture modifies the localised software. The strategy is applied to shift the thematic focus and the emphasis of the source text to other items of the target text. This strategy occurs when the emphasis is either added or reduced. The language strings of the English and Lithuanian language below display some examples of emphasis change as a type of semantic translation strategy that have been detected during the study of the original and Lithuanised texts of the software.

SL[43]: *Only* show events I created
TL[43]: Mano sukurtų įvykių peržiūra
SL[44]: Use *my* search defaults
TL[44]: Naudoti numatytas reikšmes

The language strings under discussion illustrate the reduction of the emphasis in the Lithuanised versions. The English language strings focus on specific information, i.e. in sentence 43 the restriction and a strong request to show *only* the events that were created by the user is expressed, whereas the language string 44 demonstrates the urge to use search defaults of the user. Both original commands convey a strong sense of ownership embedded in the personal pronoun *I*, the possessive pronoun *my* and the adverb *only*. The use of pronouns also reflects strong sense of individualism that, according to the Hofstedian cultural dimensions, is typical of the US culture (2010). At the same time the original messages reveal the role of the user. In many cases it is the software that commands, orders, tells, instructs and advises users what to do. The messages show the superiority of the user over the software that is emphatically conveyed by means of pronouns and the imperative mood of verb forms, i.e. *show* and *use*.

Meanwhile, the Lithuanian language strings shift the emphasis on the syntagmas *įvykių peržiūra* (*review of events*) and *naudoti numatytas reikšmes* (*use of search defaults*). The language units are Lithuanised in the following way due to several reasons. First of all, commanding and authoritative tone of communication that is expressed by means of possessive and personal pronouns and the imperative mood of verbs in the original language strings is unacceptable in formal communicative (Lewis 2006). Therefore, the tone of the Lithuanian messages is mitigated by virtue of the omission of the adverb *only* and the substitution of the personal pronoun with possessive pronoun in example 43, and the dropping out of the personal pronoun *my* in language string 44. The omission of personal and possessive pronouns and the change of emphasis can be explained by means of the cultural dimension of individualism (as described in section 5.2). The sense of individualism is not so strong in the Lithuanian, thus Lithuanians are likely to choose *we* instead of *I* or avoid using the lexemes at all and make the message at a macro-level neutral, i.e. *naudoti numatytas reikšmes* (*use search defaults*), when the indicative mood is selected instead of the imperative in direct forms of speech reproduction.

Paraphrase strategy is defined by Chesterman (1997) as another type of the semantic strategy of translation which occurs when some semantic components are translated in a free and loose way by means of paraphrasing. This type of the semantic translation strategy is characteristic to translation of idioms, phraseological units and other language items alike. Idiomatic expressions and phraseological units are not typical of software texts since the micro-level structural analysis has revealed that the language of *PeopleSoft* software is usually simple and plain. Still, several cases of the application of *paraphrase strategy* to translate the original English language strings into the Lithuanian language have been detected.

SL[45]: Job name is not unique.
TL[45]: Užduoties pavadinimas sutampa su kitos užduoties pavadinimu.
SL[46]: Run to Crystal
TL[46]: Rezultatai Crystal ataskaitoje

The instances above do not contain any idiomatic expressions, yet both Lithuanised language strings illustrate cases of paraphrasing. For instance, the English language string *Job name is not unique* could be transferred into the Lithuanian language by means of the syntactic strategy of literal translation, i.e. *užduoties pavadinimas nėra unikalus / vienintelis* (*job name is not unique/single*). Instead, the translator emphasises the fact that the name of the job coincides with the name of another job, i.e. *užduoties pavadinimas sutampa su kitos užduoties pavadinimu* (*job name coincides with the name of another job*). The language string is Lithuanised in the following way with the view of making the Lithuanian message comprehensible to Lithuanian users. The message *užduoties pavadinimas nėra unikalus* is vague and the user will hardly perceive the implied meaning of the message. Meanwhile, the paraphrased language string both informs users about completely coincidental names and invites them to change the name.

A similar explanation might be provided to analyse the language units in example 45. The original English language string *Run to Crystal* could be changed by the Lithuanian language string *Vykdyti Crystal ataskaitoje*. However, such a language string is not clear because it does not indicate the object. The communication of the software and final user is successful when both participating parties understand the message in the same way, thus, the strategy of paraphrasing is applied to maintain the dialogue of the interlocutors. The Lithuanian language unit is paraphrased as follows, i.e. *rezultatai Crystal ataskaitoje* (*Results in Crystal report*). The Lithuanised message focuses on the provision of specific query results by means of Crystal reporting software, therefore the message becomes explicit. The addition of the lexeme *ataskaita* (*report*) next to the brand-name of software, i.e. *Crystal* informs and defines the meaning of *Crystal.* The name *Crystal* already embeds the sememe of reports and reporting because *Crystal* is a name of software for processing reports. Yet, if the brand-name is not followed by a defining lexeme *ataskaita*, unsophisticated users might find the language string difficult to understand.

The information change that is accommodated by means of the omission of the verb *run* and the addition of the noun *rezultatai* (*results*) turns the Lithuanised language string into a meaningful word combination.

The strategy of paraphrase is related with another type of semantic strategy of translation, i.e. *trope change* that is usually applied to translate rhetorical tropes. The researcher Chesterman indicates that strategy occurs when: 1) a trope of the source text is retained as a trope in the target text, i.e. *ST trope X→TT trope X*; 2) a trope of the source text is replaced by a different trope in the target text, i.e. *ST trope X→TT trope Y*; 3) a trope of the source text is removed in the target text, i.e. *ST trope X→TT trope Ø*; and 4) a trope does not exist in the source text but is used in the target text, i.e. *ST trope Ø →TT trope X* (1997: 105).

Literary texts with figurative elements of speech is not an inherent quality of *PeopleSoft* language strings, despite this, trope modifications have been found during the comparison of the original and Lithuanised language units. The abundance of trope changes could be explained by the fact that metaphors are omnipresent and rife in both computer science and computer related texts. Computer programs, computer office work, malfunctioning, parts of software and hardware make use of office, animal, illness and other conceptual metaphors (Boyd 1993; Ungerer and Schmidt 2006). The following examples illustrate the application of the *trope change* strategy in the target text language units against the source text language units.

SL[47]: Administration home
TL[47]: Administravimo pradinis puslapis
SL[48]: Event Workbench / System architecture
TL[48]: Įvykio darbastalis / Sistemos architektūra
SL[49]: Tree manager
TL[49]: Medžio tvarkyklė
SL[50]: The Process Category %1 is currently disabled for the Server %2.
TL[50]: Šiuo metu serveris %2 negali naudoti proceso kategorijos %1.
SL[51]: Parent record / node
TL[51]: Aukštesnio lygmens mazgas

The analysis of the original and Lithuanised language strings of *PeopleSoft* provides the evidence of cases when the trope of the source text is

retained in the target text have been identified. This is demonstrated in samples 48, 49 where metaphors of the source text, i.e. *event workbench*, *system architecture* and *tree manager* remain in the target text, i.e. *įvykio darbastalis*, *sistemos architektūra* and *medžio tvarkyklė*. Tables and pages used to create sourcing events are compared to *workbench* (*darbastalis*). The structure of the software is considered to be similar to a *tree* and *architecture* both in the original and the Lithuanised versions of the software. Many other examples of source text metaphors entailed in the target text could be presented, i.e. *People Books – PeopleSoft Knygos*, *Journals – Žurnalai* (when financial modules and tables are compared to journals), *General Ledger – Didžioji knyga* (a financial module of *PeopleSoft* is compared to a book) and other.

The application of the same metaphors that compare the work of software with office work in the original and Lithuanised language strings exhibit the influence of the product and source language / culture on the target language / culture. Metaphors reveal world perception, categorisation of objects, the way of thinking and cognition (Lakoff, Johnson 1980/2003; Lakoff 1987). People usually invoke metaphoric expressions to name less familiar phenomena and objects by means of more familiar and comprehensible objects. Computers, programs, software and hardware were developed in the West. Hence, it could be assumed that metaphors which are invoked to name software, hardware and parts of computer, originated there.

With the boom of the Internet and the spread of *Microsoft*, computers migrated to many parts of the world together with the metaphors. When many computer programs became available for Lithuanian users, the terminology to name new things and phenomena did not exist. Therefore, many neologisms likewise metaphoric expressions were adopted and assimilated by the Lithuanian language and culture. Moreover, the office work in Lithuanian does not differ much from the office work in the US, therefore US culture and language based metaphors became acceptable and common to Lithuanian

language speakers. This is the reason why the Lithuanian language strings retain the same tropes of the original language strings.

Instance 47 might also be assigned to this group when the same trope remains in the target text. The *administration* of bidding and sourcing events is compared to the *administration* of an office and office work, thus the program work is compared to the metaphor of office work. The same example 47 entails a case when the trope of the source text is replaced with another trope. This alteration already reflects the impact of the target language and culture on the product localised. The original English syntagma, i.e. *Administration home* entails the metaphor of program page being compared to *home* and the domestic atmosphere. The English language string compares office environment with home.

Meanwhile, Lithuanians are not likely to associate their office with their home. The worldview and the mythical attitude shaped mindset of Lithuanians reveals the conception of *house* and *home* to be associated with the shrine and fortress of soul (Vyšniauskaitė 1999/2004). *House* and *home* is perceived as a sacred, mysterious and at the same time familiar place, where generations resided. Moreover, house is considered to be the centre of the world (Gaudiešiūtė 2007). The perception of the notion *namas, namai* determines the change of trope in the Lithuanised language string. Since sacred things cannot be associated with daily and office-based routine, the metaphor of *home* is replaced with *pradinis puslapis (the home page / first page*). The administration of software is associated with a book and the process of opening the first page of the book, i.e. opening of the main software page. The feature of figurativeness is retained in the Lithuanian version, despite the fact that the trope is realised by means of a different vehicle (explaining element), i.e. *page* (*puslapis*). However, such a message is acceptable and clearly understood by the target users.

Instance 51 presents a case when a trope is introduced in the target text though it is not present in the source text. The Lithuanian version contains a

personification since the *server* is compared to a human being who is or is not able to run particular processes, i.e. *Šiuo metu serveris %2 negali naudoti proceso kategorijos %1* (*the Server %2 cannot currently use the Process Category %1*). The use of the trope in the Lithuanised sentence is determined by the application of the syntactic strategy of clause structure change, which modifies the passive voice of the original language string to the active voice in the Lithuanian language string. By means of the active voice the subject of the sentence is altered. If in the original English message the lexeme *server* occupies the place of the object, i.e. doer of the action, it becomes the subject doing the action in the Lithuanian language unit. The clause structure change also transforms the perspective of the original and the Lithuanian sentences, since agents of the sentences change.

The last pair of language strings illustrates a case when the trope of the source text is dropped out in the target text. The original language unit entails the metaphor of hierarchical family relationship used to describe hierarchical order and levels of records and nodes of *PeopleSoft* system, i.e. *parent record*/*node*. Yet, the metaphor is not retained in the Lithuanised language string, which is localised as follows, i.e. *aukštesnio lygmens įrašas*/*mazgas* (*record* / *node of a higher level*). The message is Lithuanised by means of paraphrasing since literal and direct translation would produce an unusual and strange syntagma and metaphor *tėvinis įrašas / mazgas* or *pirminis įrašas / mazgas*. The Lithuanian adjectives *tėvinis* (*parent*) and *pirminis* (*primary / source*) are not used to describe hierarchical levels and word combinations *tėvinis įrašas/mazgas* or *pirminis įrašas/mazgas* would be ambiguous for Lithuanian users. Therefore the metaphoric comparison of records and nodes by means of establishing hierarchical family relations is not maintained in the Lithuanian language unit. The omission of the trope and the application of paraphrasing turn the Lithuanian language string into a comprehensible utterance.

The last semantic strategy of translation as included in the list of strategies by Chesterman (1997) is described as *other semantic changes* that might occur when translating from the source text to the target text. This group of strategies includes various modulations such as the change of sense, deictic direction and other. The performance of the micro-level structural analysis of translation strategies applied to localised *PeopleSoft* did not provide evidence about cases of other semantic modulations. The absence of other semantic modifications is related with features of GUI texts which are structured as separate chunks rather than coherent and complete texts.

The analysis of the application of the semantic translation strategies to localise *PeopleSoft* texts to the Lithuanian language renders a conclusion that all the semantic strategies of translation have been exercised to translate GUI language strings of *PeopleSoft*. All semantic strategies of translation are inherent in the Lithuanian language strings when compared with the source language units. The study of the semantic strategies of translation has also validated the fact that syntactic, semantic and pragmatic strategies are interconnected and intertwined. The use of one strategy of translation instigates the appearance of another strategy of translation, i.e. paraphrase change is closely related to the strategy of trope change that overlaps with literal translation, whereas the abstraction or emphasis change is similar to the strategy of information change. Moreover, the application of semantic strategies is determined by features of the Lithuanian language, i.e. semantic relationship of words, word valence and micro-level structure. Therefore, by means of language the influence of the target language and culture on the product has been traced and evidenced. The use of tropes, namely metaphors has supported the hypothesis of the thesis. Yet on the other hand, micro-level structural analysis has proved the impact to be bidirectional, i.e. the target language and culture affect the product, meanwhile the product makes impact on the target language and culture. The further micro-level structural analysis

of pragmatic strategies of translation will underpin the hypothesis in the following chapter of the thesis.

5.4. Pragmatic strategies

Pragmatic strategies of translation, identified by Chesterman (1997), make up the last group of translation strategies and deal with the selection of information to be presented in the target text that is written by a translator. The decision of what to leave out and what to select depends on a translator, who, as a representative of the target language and culture, becomes a gatekeeper and filters information available in the source text. This chapter provides a thorough description of ten pragmatic strategies, proposed by Chesterman (1997): cultural filtering, explicitness, information change, interpersonal change, illocutionary change, coherence change, partial translation, visibility change, transediting, and other pragmatic changes.

To begin with, *cultural filtering*, also referred to as naturalisation, adaptation or domestication, reveals how culture-specific items of the source text are rendered in the target texts so as to comply with the norms of the target language and culture. Exoticisation, foreignisation and estrangement would be the opposite of naturalisation, domestication and adaptation (Chesterman 1997). Since localisation seeks to provide a product that is adapted to the needs of the target audience, *PeopleSoft* software linguistic content is rife with *cultural filtering*. The examples below support this statement:

SL[52]: Statistics Institute
TL[52]: Statistikos departamentas
SL[53]: Country and State
TL[53]: Šalis ir apskirtis
SL[54]: Government Classifications
TL[54]: PVM klasifikacija

All the instances above demonstrate cases of domestication, since the names of all field labels that are characteristic to the American business accounting standards and US-based realia names are adapted or replaced with Lithuanian substitutes. The socio-political realia *Statistics Institute* is changed

into *Statistikos departamentas* (*The Department of Statistics*) that functions in Lithuania. The syntagma *Country and State* that represents administrative division of the United States in example 53 is adapted to the Lithuanian realities, *Šalis ir apskritis* (*country and county*), since the territory of Lithuania is subdivided into counties (the biggest administrative units) rather than states. The last pair of sentences in example 54 is also domesticated and the original language unit *Government Classifications* is substituted by the syntagma *VAT classification* instead.

All the cases of cultural filtering demonstrate the influence of the Lithuanian culture and language on the product (the source culture), as the strategy is applied to make the language units acceptable to the Lithuanian culture. The original language units reflect socio-cultural information that embraces historical and cultural experience of the US. The denotative and cultural elements of meaning, *state, government classifications*, refer to objects that are characteristic of the American legislation and culture but extraneous to the Lithuanian culture. In all the cases the original passages could be rendered literally: *statistikos institutas*, *šalis ir valstija* and *vyriausybės klasifikatorius / klasifikavimas.* Though all the syntagmas are grammatically and semantically correct, they convey no meaningful, Lithuanian life-related information to the users. Thus, the messages are domesticated to denote and represent Lithuanian culture and language: *Statistikos departamentas*, *šalis ir apskritys* and *PVM klasifikacija*.

Explicitness change as a pragmatic strategy of translation entails both explicitation and implicitation. *Explicitation* involves adding components to the target text which are implicit in the source text. Meanwhile, *implicitation* is the opposite of explicitation, as some elements of the source text are implicitly rendered in the target text (Chesterman 1997). Described as the most common translation strategy, it has been detected when comparing the source text and target text units of *PeopleSoft*.

SL[55]: Contact your query administrator for assistance.
TL[55]: Kreipkitės į užklausas tvarkantį administratorių.
SL[56]: Must use Contract Rate Date
TL[56]: Privaloma naudoti sutarties valiutos keitimo datą
SL[57]: Zero price indicator
TL[57]: Nulinė kaina
SL[58]: Match action
TL[58]: Suderinimas

A case of explicitation is demonstrated in example 56. The target text is made explicit in comparison with the source texts. The lexeme *rate* embraces the meaning of lexemes *currency* and *exchange* that are implicitly stated in the English language unit. The Lithuanised language string, *Privaloma naudoti sutarties valiutos keitimo datą* (*must use contract currency exchange rate date*) explicitly states information about the *currency exchange rate date* by means of adding a new meaningful syntagma: *valiutos keitimo* (*currency* exchange). If the original message is transferred without the explicitation, it becomes vague: *privaloma naudoti sutarties kurso datą*. The syntagma *sutarties kurso data* (*contract rate date*) becomes an empty word combination, since it denotes no specific financial or bookkeeping phenomenon. In the financial context, the lexeme *kursas* is usually associated with the syntagma *currency exchange*, since the lexeme is frequently agreed with the syntagma *valiutos keitimo kursas*. Therefore, the decision is made to add the word combination and make the message accurate: *privaloma naudoti sutarties valiutos kurso keitimo datą*. Taking into consideration that the meaning *keitimo kursas* (*currency rate*) is embedded in the sememe of *keitimas* (*exchange*), the word *kursas* (rate) is omitted in the Lithuanised language string. The omission does not cause any loss of the information and makes the message informative.

Other examples provide illustrations of implicitation. In all Lithuanian language strings in sentence pairs 55, 57 and 58, the explicit meaning of the source texts is replaced with more generic meaning in the target texts. The change is determined by both the product and the internal structure (morphology, semantics) of the target language. In many cases implicitness is applied to save space that is strictly limited in *PeopleSoft*. For instance, the

language units *suderinimas* (*matching*) and *nulinė kaina* (*zero price*) are considerably shorter in comparison to the word combinations *suderinimo veiksmas* (*match action*) and *nulinės kainos indikatorius* (*zero price indicator*). Moreover, the use of shorter language strings is not only product related. Here the principle of economy in language[19] manifests itself, i.e. language speakers tend to use less to convey more. The strategy is applied with the aim of omitting redundant information and stating it implicitly. For example, the Lithuanised message *kreipkitės į užklausas tvarkantį administratorių* (*contact query administrator*) embeds the reason for contacting the administrator. The modifier, *for assitance*, is dropped in the Lithuanian langauge string, as the reason for contacting the administrator is infered from the message itself. The Lithuanised message informs software users about the need to contact the administrator to solve some problems.

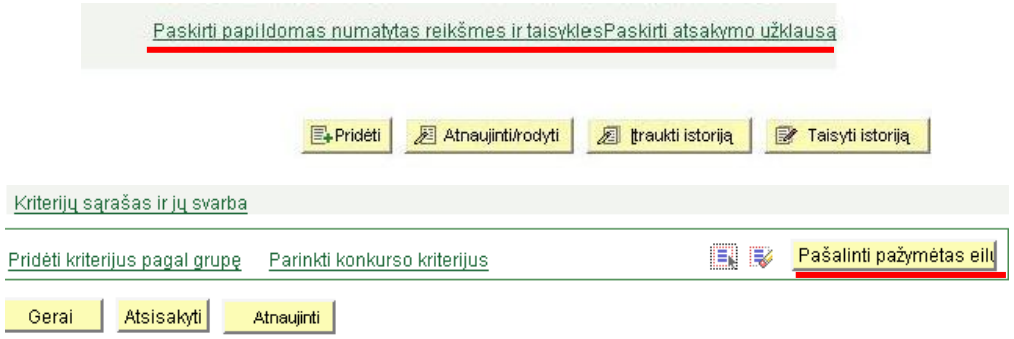
In other Lithuanian language units, the lexemes *indicator* and *action*, are also omitted, since they can be easily presumed from the remaining syntagmas, *nulinė kaina* (*zero price*) and *suderinimas* (*matching*). The meaning of the lexeme *indicator* is already embedded in the syntagma *nulinė kaina*: zero *price* is already a type of a financial and economic indicator in itself. The omitted words do not change the meaning of the original messages. If left, they would add surplus information to the Lithuanian language strings. To avoid this, the lexemes *indikatorius* and *veiksmas* are made implicit.

The application of explicitation change as a strategy overlaps with the application of the other pragmatic strategy of translation that is known as *information change*. This strategy involves either addition, when some relevant information that does not exist in the source text and cannot be inferred, is added to the target text, or omission, when the information that is irrelevant to the target text and can be inferred, is dropped (Chesterman 1997). Examples of

[19] The principle of language economy was observed by the linguist Whitney who stated that people always tend to reduce the number of words uttered unconsciously since human beings "economize on time and effort in the work of expression" (Whitney, 1877: 345).

information change have already been introduced in the previous sections of the thesis that analysed syntactic and semantic strategies of translation.

The strategies of addition and omission have been repeatedly used in the target texts. The application of omission is a direct result of the compression of language strings; language strings that are localised into the Lithuanian language are space-confined. If a message or a field label is longer than the maximum number of characters allowed per item, the language unit becomes truncated. An example of truncated language units is demonstrated in the screenshot below.



Picture 11. Truncated messages

Picture 11 illustrates the way the messages are truncated. The language units, *paskirti papildomas reikšmes ir taisykles* (*assign additional values and rules*) and *paskirti atsakymo užklausą* (*assign reply request*), are blended together. The number of characters exceeds the maximum number of characters allowed; hence, both language strings are displayed as one long sentence. Spaces that indicate the start and end of a meaningful passage are truncated. The name of the button *pašalinti pažymėtas eilutes* (*delete selected rows*) is also cut off, since the last word *eilutes* is truncated in the middle of the word, *eilu*. The deformed layout and incomplete presentation of software language strings impairs both the reading and perception of the target users. At the same time such technical mistakes reduce the quality of the localised product.

During the research of translation strategies applied in *PeopleSoft* localisation, a direct correlation among the economy principle of language, omission and truncation has been observed. To avoid truncation, translators are forced to leave out and omit certain words and word combinations in language strings. The examples of English language strings and their localised versions below serve as an illustration of omission. At the same time, the language strings show the bilateral and bidirectional influence of the product and the target language.

SL[59]: Find an *existing* value
TL[59]: Rasti reikšmę
SL[60]: Not veteran *owned small* business
TL[60]: Ne veteranų verslas

If to compare the English and Lithuanian language strings in examples 59 and 60 above, it is obvious that part of information is not presented in the Lithuanian language units. In example 59, *Rasti reikšmę* (*find a value*), the adjective *existing* is left out, since the adjective adds surplus information. The meaning of the lexeme *existing* is embedded in the syntagma *rasti reikšmę* (*find value*). It can be logically assumed that the server searches for a value among the existing values rather than non-existing ones. Meanwhile, in sample 60, *ne veteranų verslas* (*non-veteran business*), the Lithuanised string is composed without the attributes *owned small*. The lexemes are dropped, as the meaning of possession that the lexeme *owned* entails is expressed by means of morphology: the plural inflection *-ų* (*veteranų*) of the possessive case that is added to the noun *veteranai* (*veterans*). The adjective *small* is also omitted in the Lithuanian language unit because the translator believes it to be less important for the final user of the software. Thus, the emphasis of the language string is placed on the most important meaningful element, the syntagma *ne veteranų verslas* (*non-veteran business*), as opposed to quality of business that the lexeme *small* entails. Thus, the omission of such information does not hinder the understanding of final users.

In many cases, omission is applied to avoid surplus semantic information that is not needed, since the context of the software reveals the situation

evidently, i.e. every table has its name and headings of rows usually coincide with the name of the table; thus the same information that is presented by means of a table name and headings of table rows is repeated twice. Double presentation of the same information in the working environment (a page of the software) becomes excessive: reading the same information twice would be time consuming. The picture below demonstrates how the context of the software supplements the omitted information.

Picture 12. Omission suplemented by the context of the software

The screenshots of the original and Lithuanised versions of the software illustrate how the absence of the lexemes *existing* and *add* is covered by the context. The case of the lexeme *existing* omission has already been described above. The dropping of the verb *add* in the tab of the Lithuanised version is indicated by the button *add* that instructs the users what to do. By means of the omission, the message turns into a simple and neutral statement, *nauja reikšmė*. Such message does not hinder the perception of the user and, at the same time, conveys complete and comprehensible information.

Addition is the direct opposite of omission and is usually applied as a tool to render more meaning in the context; however, the analysis of the Lithuanised language strings has demonstrated that addition is less frequently applied in comparison to omission. Such a tendency is characteristic of software texts that are space-restricted, and insertion of supplementary information is not always technically possible. The possibility to extend the

language string has not been accommodated during the state of internationalisation. Despite that, cases of addition are noticeable: important information is usually inserted to avoid vagueness and ambiguities in the Lithuanised version of *PeopleSoft* software. In many cases of addition, the target language determines the need to define some field labels, actions or functions more precisely. Usually some descriptive adjectives/attributes are introduced to define nouns and convey information more explicitly. Sometimes words are added to form correct and meaningful Lithuanian word combinations that ensure the successful dialogue between the software and the user. Some examples below demonstrate cases of addition.

SL[61]: Voucher
TL[61]: Mokėtinų sumų sąskaita
SL[62]: New window
TL[62]: Atverti naujame lange

In the Lithuanian language unit of example 61, *Mokėtinų sumų sąskaita* (*account of accounts payable*), new information that indicates the type of account is supplied. In this case the addition helps to define the type of an account. The financial term *voucher* is polysemous and can be rendered into the Lithuanian language as *čekis* (*cheque*), *kvitas* (*receipt*), *orderis* (*order*) and *talonas* (*coupon*). However, none of the suggested translations are selected, since they do not match the context of the software. *PeopleSoft* defines the term *voucher* as a type of account. Since *PeopleSoft* contains various types of accounts, the need to differentiate between the types emerges. And by adding the attributes *mokėtinų sumų* (*accounts payable*), the translator indicates the specific type of the account and communicates accurate information to the target user.

In Lithuanian language unit 62, *Atverti naujame lange* (*Open in a new window*), the infinitive verb form *atverti* (*open*) is added to instruct the final user about the action of opening a table in a new window. The original language string implicitly informs users about the possibility to open a new window. The user infers that a new software window will pop up by clicking on the hypertext *new window*. The Lithuanian word combination *naujas langas*

also embeds the meaning of opening a new window of the software but does not state the action clearly. Therefore, the infinitive *atverti* is inserted, and thus the user gets specific instructions of what needs to be done. At the same time, the conversation between the Lithuanised software and the user becomes more fluent.

Interpersonal change that alters the relationship of the text/author and the reader entails the change of formality, emotiveness and involvement (Chesterman 1997). The application of the strategy to Lithuanise *PeopleSoft* has been also recognised, namely the change in formality. *PeopleSoft* was developed for the US market; hence, the product lacks formality that is expressed by means of the second person plural that is not so distinctive in the English language but exists in the Lithuanian, German, Russian, Spanish and other languages. If the dialogue of the original version of the product with the user appears to be informal, friendly and immediate, the dialogue of the Lithuanised version with the target user is more formal and neutral. The illustrations below demonstrate the change of formality in the Lithuanian version of *PeopleSoft*.

SL[63]: *You* are not authorized to update this Schedule.
TL[63]: *Jums neleidžiama* atnaujinti šio tvarkaraščio.
SL[64]: *You* must specify a userid to save the filter.
TL[64]: *Norėdami* išsaugoti filtrą, *turite* nurodyti vartotojo ID.

Lithuanised language strings 63 and 64 are more formal in comparison with the English language strings. The Lithuanian version of the sentences embeds respect and consideration for the user of the software. Different level of formality and involvement is expressed by means of linguistic politeness: the second plural person *Jums* and the inflections of verbs are used, despite the fact that the language strings could have been translated employing the second singular person, *Tau neleidžiama* (*you are not authorised*)*, norėdamas, turi nurodyti / nurodyk* (*if you want to save <…>, specify*). The Lithuanised language strings demonstrate more deference to the final user of the software. This way of communication is typical and acceptable to the Lithuanian culture, especially when interlocutors are not familiar with each other. The level of

formality and degree of involvement is determined by the Lithuanian culture. Lithuanian society is hierarchical and requires a certain formality (Lewis 2006; Chodzkienė 2010). Moreover, the use of linguistic politeness demonstrates both power distance (Hofstedian cultural dimension which reflects the distribution of institutional and organisational power and attitude to the decision made by power holders (2010)) and social distance, since one of the interlocutors (the user) occupies a higher position.

At the same time, both Lithuanian examples entail a higher degree of neutrality and reduction of emotiveness in comparison with the original version of *PeopleSoft*. The use of polite address increases the distance and, thus, the involvement of the participants in the communicative situation. The lower the involvement, the more unemotional and neutral communication becomes. This is again conditioned by the Lithuanian culture, since Lithuanians, as the researcher Inga Hilbig (2008) notes, focus more on the message delivered rather than the establishment of contact with the participant of a communicative situation[20]. Therefore, such a neutral way of communication is selected to Lithuanise the message sent by the software to the final user.

Illocutionary change is closely related with other strategies and involves changes of speech acts, i.e. the act of speaking or writing which effect the intended action (Chesterman 1997). Illocutionary change entails modifications of the mood from indicative to imperative, changes from statements to requests and the like. The application of the strategy of illocutionary change has been frequently used to localise *PeopleSoft*. The analysis also demonstrates the influence of the Lithuanian culture on the localised product. Consider the illustrations below:

SL[65]: *Print* Requisition
TL[65]: Pirkimo paraiškos *spausdinimas*
SL[66]: *Select* Copy Option
TL[66]: *Kopijavimo parinktys*

[20] Pragmatic research that examines the expression of linguistic politeness in the Lithuanian language has just started. The first results have been published by Hilbig in 2008.

Both examples, 65 and 66, demonstrate the illocutionary change since instructions and orders (directives), expressed by means of verbs *print* and *select* in the English language strings, are replaced with simple statements (assertives) in the Lithuanian language strings: *pirkimo paraiškos spausdinimas* (*requisition print*), and *kopijavimo parinktys* (*copy options*). Cases of illocutionary changes are numerous when comparing the original and the localised versions of the software. Menu items that are usually expressed by means of advice, instructions, commands and orders in the English version become simple assertions in the Lithuanian version, for instance, *inactive vendor – būsenos „neaktyvus" nustatymas* (*set of "inactive"status*), *review financial information – finansinės informacijos peržiūra* (*financial information review*), *close receipts – gavimų uždarymas* (*closing of receipts*) and other.

The *illocutionary change* as a pragmatic strategy of translation is closely related with the syntactic strategy of transposition which involves word-class changes, described in section 5.2. At the same time, illocutionary changes reflect micro-level structural changes in the form of speech reproduction. In both the original and Lithuanised versions of the software, direct speech is selected as the main form of speech reproduction to maintain the conversation of the software and the user. Yet, if instructions and commands that are expressed through the imperative mood dominate in the original version of the software, simple statements in the indicative prevail in the Lithuanised version. The original version of the software seeks to establish a friendly and immediate relationship with the user. By means of the imperative, the software advises, tells and informs users about actions to be performed. This reveals the authority of the software over the user of the original version.

Conversely, the Lithuanised version of the software focuses on the delivery of the message, communicated through the indicative. Simple statements that are used to inform either about facts or actions are more appropriate to the Lithuanian users and are selected in the Lithuanised version of the software. This way of communication is culture-specific and is

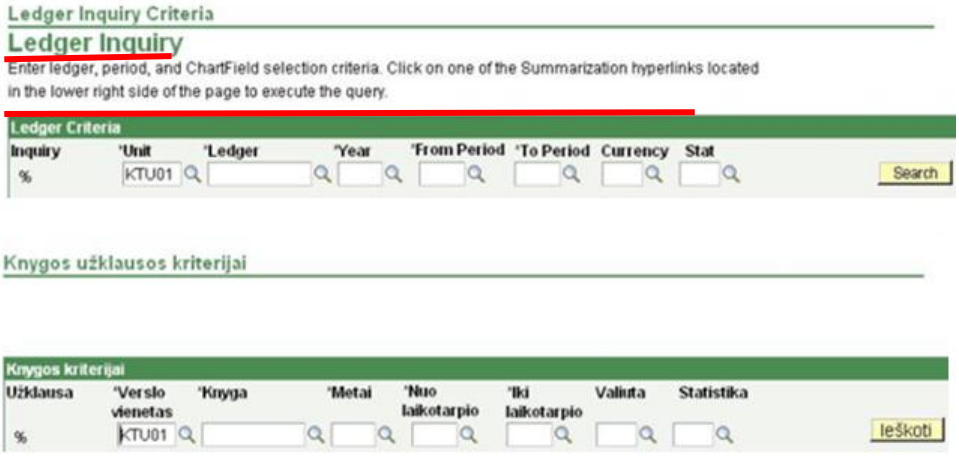
determined by the perception of hierarchy-related social and power distance, i.e. deference and distance that are demonstrated by means of linguistic politeness are always preferred in communicative situations with interlocutors of a higher status. Thus, polite and unemotional address and statements are chosen. Yet, the Lithuanian version of the software maintains the minimum level of conversation with the user in comparison with the English version, because Lithuanian users have to find out themselves what kind of operations and actions have to be carried out. By virtue of the illocutionary change, Lithuanian users of the software obtain more personal space, as neutral way of communication establishes certain distance between the interlocutors. In spite of being members of the society where the sense of collectivisms is deeply rooted[21], the Lithuanian users become more independent to pursue their actions. Instead of giving commands, the Lithuanised software states facts and delivers messages.

Successful communication is ensured by means of another pragmatic strategy of translation, *coherence change*. This strategy deals with logical arrangements of information in the text. The pragmatic strategy is closely related with the syntactic strategy of *cohesion change*. Yet, the difference between *coherence* and *cohesion change* is the following one: the former is related with the logical arrangement of textual information, whereas the latter one entails the change of formal markers of textual cohesion (Chesterman 1997). At the same time, the analysis of *coherence change* discloses the arrangement of information, i.e. titles of software elements at a macro-level. This can be illustrated by an example in picture 13.

The original English page of *PeopleSoft* opens with a headline of the page that presents the page and its aim, succeeded by the introductory passage

[21] The perception of collectivism versus individualism in the Lithuanian culture and society is revealed by research findings related to the studies of the cultural dimension of collectivism and individualism by Loreta Chodzkienė (2010) and the ethnologial studies of the expression of individualism in the Lithuanian folklore and literature by Vaida Ivanauskaitė (2006).

about processes to be performed. These are followed by a table with the header that coincides with the headline of the page.



Picture 13. Cohesion change in the original and Lithuanised version of *PeopleSoft*

Nevertheless, the Lithuanian version does not contain the introductory sentences, and only the title of the page is indicated. It is followed by a table with a repetition of the header. Though some information is missing in the Lithuanian version of the page, the information is presented coherently and logically. The repetition of the same information in Lithuanian headings would be excessive; therefore, the translator decides to omit redundant and repeated data.

Language units that are underlined in red in the screenshot above are dropped in the Lithuanised version of the software. The omission of the passages does not constrain the understanding of the target users, since the heading of the page, *knygos užklausos kriterijai* (*ledger inquiry criteria*), presents information explicitly and coherently. The header of the table, *knygos kriterijai* (*ledger criteria*), and the first field label, *užklausa* (*inquiry*), reflect the information embedded in the heading of the page. Every chartfield of the table (*knyga – ledger*, *valiuta – currency*, *metai – year*, *laikotarpis – period* and the like) and command buttons (*pridėti – add*) hint at entering particular data. Thus, the detailed description of chartfields and instructions of the workflow that is available at the top of the original *PeopleSoft* version is not needed. In addition to this, the cohesion change reveals that the process of

localisation is carried out with a specific reader in mind. Reading of subsidiary information is time consuming, thereby people never read extensive instructions till the end and prefer skipping them. Taking this into consideration, the introductory sentence of the original version is ommited in the Lithuanised version with no damage to coherence.

The next pragmatic strategy that describes the way the target language and culture change the Lithuanised product is *partial translation*. It embraces different kinds of translation, such as summarising, transcription and the like (Chesterman 1997). Occurrences of partial translation are not numerous in the Lithuanised language strings. In many cases, the use of partial translation is closely linked with the syntactic strategy of *calque/loan* and the pragmatic strategy of *cultural filtering*. The application of partial translation is frequently applied to render either *PeopleSoft* specific or IT related brand-names and names of programs. For example:

SL[68]: Run SQR
TL[68]: Vykdyti SQR ataskaitą
SL[69]: Name: nVision-ReportBook
TL[69]: Pavadinimas: nVision-ReportBook

Illustrations 68 and 69 demonstrate cases when the Lithuanian language strings are partially translated. In the Lithuanised units, the acronym *SQR* which stands for *Structured Query Report* and the blend *nVision-ReportBook* that presents a web-enabled reporting application provided by *PeopleSoft* are not modified. No transcription, extension of the acronym, or comments related with the language units are available. This way of translation is determined by the product. Comments and detailed explanations cannot be used due to space restrictions imposed by the product. Moreover, the calques *SQR* and *nVision-ReportBook* are brand-names of products. If transcribed according to the alphabet (Q is not available in the Lithuanian alphabet) and the rules of the Lithuanian language, the brand-names would be barely recognised. *Eskjūa* (the transcription of *SQR* in Lithuanian) and *Envižnripotbuk* (the transcription of *nVision-ReportBook* in Lithuanian) do not remind the users of the original brand-names. The transcription of the names allows the users to at least

pronounce the original words correctly; nevertheless it distorts their presentation and violates proprietary rights. Therefore, the names are simply copied into the Lithuanian version of the software. The only difference that is observed is the slight domestication of language string 68 by means of addition. The noun *ataskaita* (*report*) is inserted as a tool to explain the name of the acronym to Lithuanian software users. Supposing the extension of the acronym *SQR* is not known to the users, the added lexeme *ataskaita* (*report*) conveys the meaning of the acronym.

On the other hand, the strategy of partial translation becomes a tool of foreignisation (the strategy of cultural filtering), since non-local items, *SQR, nVision-ReportBook, HTML* and the like, are introduced to the Lithuanian audience. The translators cannot domesticate the language strings. First of all, no Lithuanian counterparts are available to substitute the names and, secondly, these are proprietary brand names. Moreover, calques allow software users to differentiate between the objects that are local, familiar and Lithuanian and those that are strange, unfamiliar and non-Lithuanian.

Visibility change as a type of pragmatic strategy of translation involves a modification of the authorial presence (Chesterman 1997). The author might become apparent and visible to the reader by means of inserting footnotes, remarks, comments and other elements that disclose the presence of the author. The application of this strategy reveals macro-level structural changes (Lambert van Gorp 1985/2006) of the localised software. When the product is localised, the translator becomes the author of the message sent to the target audience. *PeopleSoft* does not entail large, coherent and extended literary text but only language strings; therefore, not many cases of visibility change, such as the insertion of footnotes, comments, explanations, have been observed. On one hand, footnotes and comments are impossible because elements of the graphical user interface have to be translated in a short and comprehensible way to ensure simple communication of the software and the final user. On the other hand, any comment, footnote, explanation extends the length of a

language string. Nevertheless, the visibility of the translator in the Lithuanised version has been detected and is presented in the examples below.

SL[70]: Enter any information you have and click Search.
TL[70]: Įveskite turimus duomenis ir spustelėkite *„Ieškoti“*.
SL[71]: Enter or view information about received advanced shipment receipts.
TL[71]: Išankstinių pristatymų važtaraščių *(IVP)* informacijos įvedimas ir peržiūra.

In language string 70, the visibility of the translator is signalled by quotation-marks that are added to name the button *Ieškoti* (*search*). Quotation marks are usually used in the Lithuanian language to point out and separate names of applications and programmes. Meanwhile, names of software, buttons and menu items are indicated by means of capital letters and / or an italicised font. The use of quotes is determined by punctuation rules of the Lithuanian language; hence, the visibility of translator in this case is unconscious and language determined.

On the other hand, the translators become guardians of the Lithuanian language and ensure the correct usage of standard Lithuanian. Many programmers, IT specialists and even final users are not so much concerned with the correctness of the Lithuanian language. The addition of quotes is sometimes even undesirable, since the punctuation marks reduce the number of characters allowed per language item. Yet, if the product is used publicly, it has to meet the requirements of both, language and culture. Moreover, correct punctuation, especially quotation marks, may serve as one of the main indicators to judge the quality of localisation. Different types of single and double quotations are used in various languages. The symbol, „“, presents the right version of quatation marks used in Lithuanian writings. The example above reflects the correct usage of the punctuation marks in the localised version of *PeopleSoft*.

Meanwhile in sample 71, the translator becomes visible through the insertion of the acronym *IVP* (*ASR – Advanced Shipment Receipts*) in brackets, i.e. *išankstinių pristatymų važtaraščių (IVP) informacijos įvedimas ir peržiūra*. The English acronym *ASR* is not available in the source text. Here an assumption could be made that the translator decides to introduce a new

acronym next to the words with the intention to apply the acronym in further pages of the software and save space for other characters. In this way the translator presents the acronym and its meaning to software users.

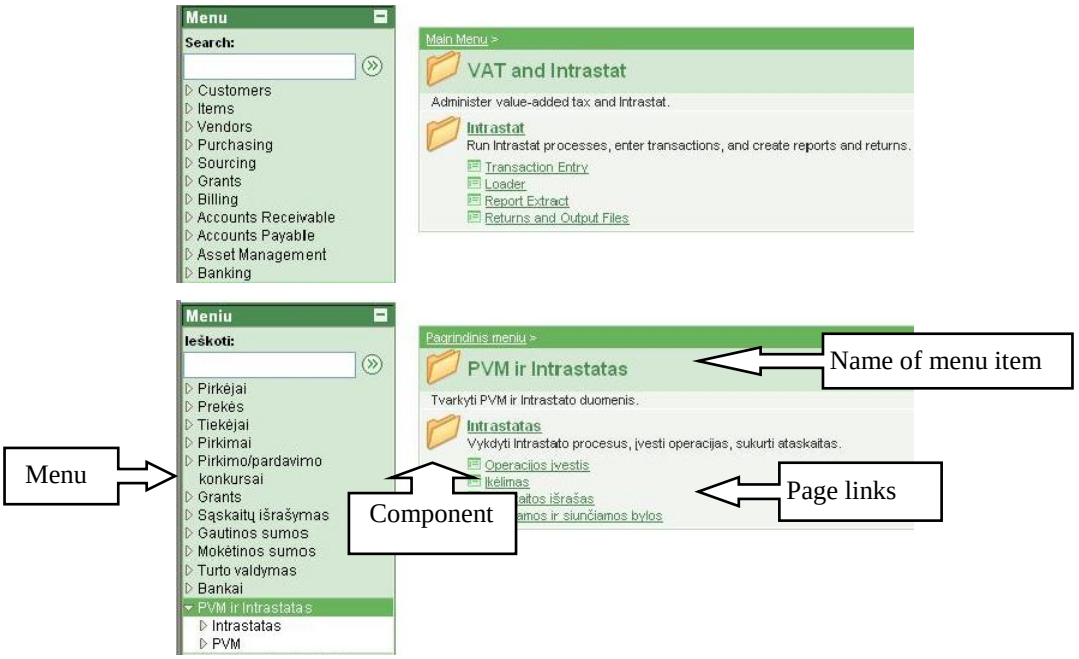
One of the last pragmatic strategies of translation as described by Chesterman (1997) is *transediting*. The name of the strategy implies that the strategy involves editing of the target text when the source text is poorly written. The application of the strategy has not been observed due to several reasons. First of all, language strings of the original version are rather short and are structured as word combinations. Besides, the language strings are clearly written. Although some spelling or grammar mistakes have been traced, they did not influence the process of translation. The translator did not have to drastically rewrite the source text to produce the target text. Consider the examples below:

SL[72]: The Process Category %1 is currently *disable* for the Server %2.
TL[72]: Šiuo metu serveris %2 negali naudoti proceso kategorijos %1.
SL[73]: Select "Default" if you would like the system to first look through the Purchasing default.
TL[73]: Pasirinkite „Numatytos reikšmės" jei norėtumėte, kad sistema pirmiausia ieškotų tarp pirkimo numatytų reikšmių.

In both examples above, the source text units contain minor mistakes; in sample 72, the word *disabled* is spelled incorrectly: the consonant *d* is missing at the end of the word, *disable*. And in instance 73, "if clause" is formed incorrectly. Such errors do not hinder the understanding of the language units and can be translated with no transediting. The appearance of the mistakes in the original text might be explained in the following way. *PeopleSoft* as a product has been developed by an international company where many employees are non-native speakers of the English language; therefore, the likelihood of grammar, spelling mistakes has been high. In addition to this, programmers, software engineers, project managers are not professionals of the language, which, again, increases the appearance of various minor mistakes.

The last type of pragmatic strategies, as identified by Chesterman (1997), is called *other pragmatic changes*. This group of strategies involves

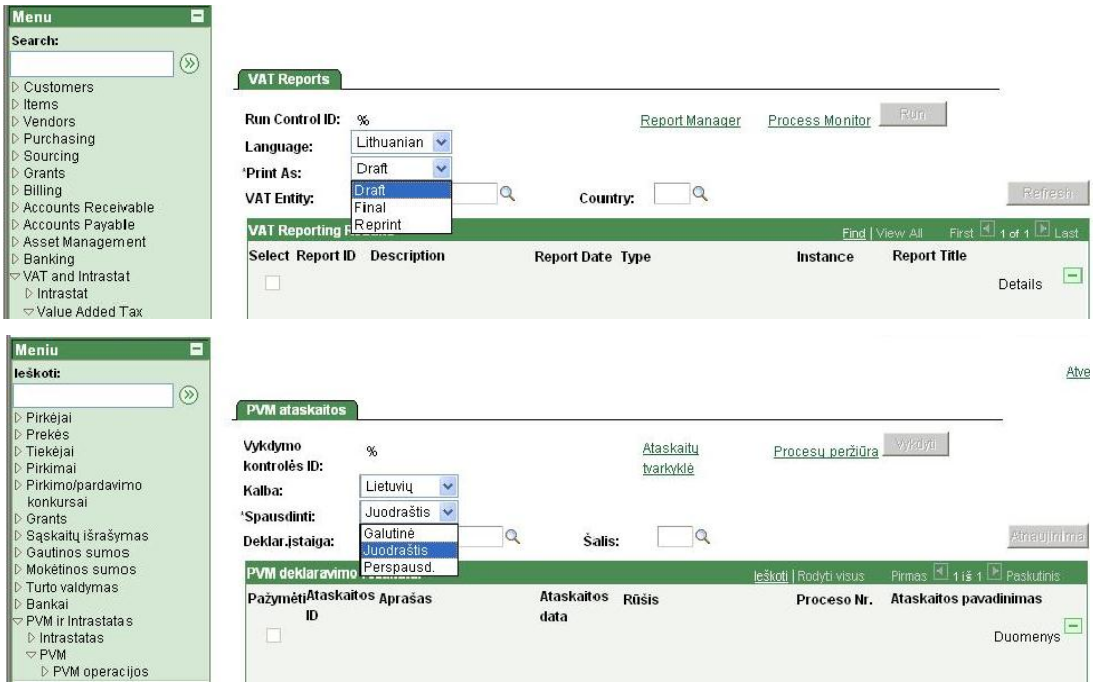
modifications of the layout of the source and target texts and the usage of different dialects. In terms of the layout of both *PeopleSoft* versions at a macro-level, not so many discrepancies have been noticed. In many cases the design of the original and the Lithuanised versions is the same. The linguistic content that is presented to software users by means of GUI is subdivided into menu items, components, pages and tables that are structured and composed of fields and translit values. The design is usually retained because of the essence of localisation, i.e. to provide all consumers with the same product all over the world. This means that the software used by an American is the same as the one used by a Lithuanian. The screenshots of the original and Lithuanised versions of the software illustrate the statement.



Picture 14. The layout of the original and Lithuanised versions of *PeopleSoft* (1)

Both screenshots in the picture above are identical. Menu items are dispalyed on the left of the screen, and the biggest part of the screen is assigned to the active menu component. The name of the menu item is presented at the top of the page and is followed by an explanatory statement in the imperative (the orignal version) and the indicative (the Lithuanised version) moods. Then components that the menu item consists of are located alongside hyperlinks

that allow accesing pages and tables assigned to the component. By means of clicking the hyperlink, the user opens a page with a table, where certain processes and functionas are performed. Consider the picture below:



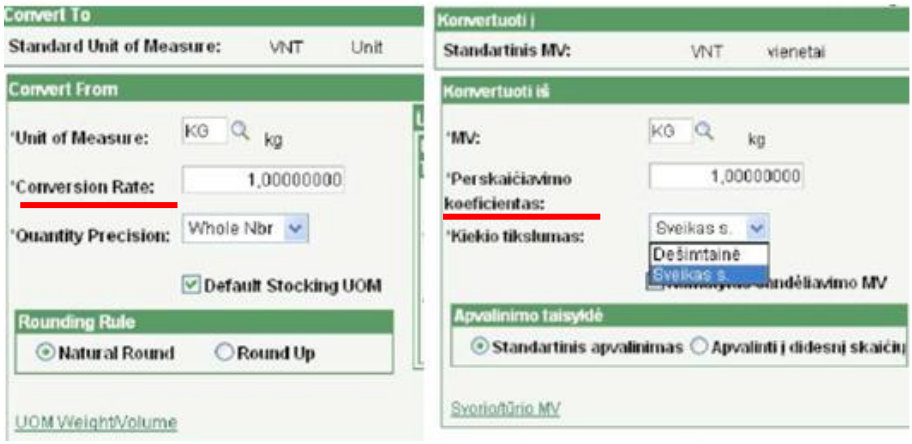
Picture 15. The layout of the original and Lithuanised versions of *PeopleSoft* (2)

The screenshots of the original and Lithuanised versions of *PeopleSoft* demonstrate the same design, i.e. colours, graphical arrangement and icons retained in both product environments. The active tab at the top of the page presents information about a specific task to be performed.

Nevertheless, some differences of the layout of the source and target texts have been encountered in the target texts and demonstrate macro-level structural changes of the localised *PeopleSoft*. The screenshots below can illustrate the difference of the layout best of all.

The underlined language string *Conversion Rate* is presented as one line in the source text, whereas the same language string in the Lithuanised version of *PeopleSoft* is arranged in two lines. It has already been mentioned that the Lithuanian language is inflectional, which sometimes increases the length of a language string. If the language string is longer, more space is required to avoid the truncation. The possibility of the increase of the Lithuanian language

strings has not been considered during the development and internationalisation of *PeopleSoft* product; thus there have been many cases observed when a long language string is displayed in two lines.



Picture 16. Differences of layouts in the source and target texts

The only way to retain the same graphical presentation is either to abbreviate one of the words, *perskaičiavimo koef.*, or use an acronym, PK. However, none of the options has been selected, because the software does not cut off the langauge unit in the middle of the phrase.

Another graphical difference that is visible when comparing the original and the Lithuanised version of the software is related with non-verbal changes of the design, i.e. background colour. This macro-level structural change is culture-specific and has been implemented by the entire localisation team. The group of translatos and software engineers had to adapt verbal and non-verbal content elements, such as colours, icons and other symbols. For instance, after the localisation of *PeopleSoft* for the Lithuanian market, the light blue background colour of the original software was changed into green which is considered to be a Lithuanian colour[22]. Green symbolises hope, good health, recreation (Zeller 2006) and the prevailing green colour of the Lithuanian landscape, whereas Lithuanians associate blue and marine blue colours with water, cold and peacefulness (Zeller 2006). Despite the fact that blue is

[22] Lithuanian colours are colours of the flag of the Republic of Lithuania, i.e. yellow, green and red. The traditional Lithuanian textile and the most popular patterns of the textile reflect the colours of the national flag.

considered to be the safest global colour, a decision to replace blue with green to reflect the Lithuanian culture, landscape and the typical Lithuanian traditional textile patterns and song context[23] was made. The example of the background colours of the localised and the original software environments is presented in the screenshot of *PeopleSoft* below. The first screenshot in blue on the left reflects the original background colour of *PeopleSoft*, meanwhile green and dark green were chosen as the colour of the localised version of *PeopleSoft*.

Picture 17. Background colours in the localised and original versions

As the screenshots demonstrate, the font and graphical layout are identical in both versions of the software. The only striking difference is the modification of brand names. The name of *PeopleSoft* is substituted with *LieMSIS*. The change of the names indicates that the product is developed for

[23] Lithuanian songs, especially folklore, frequently entail the description of green fields, forests and valleys. For instance,
Geltona spalva – tai saulė (Yellow is the colour of the sun)
Žalia – tai laukų spalva (Green is the colour of fields)

Kaip puikūs slėniai sraunios Dubysos (How lovely valleys of the torrential Dubysa)
Miškais lyg rūta kalnai žaliuoja <…> (The woody hills are as green as rue)

Kur giria žaliuoja, ten mano namai, (Where the forest is green, my home is there)
Kur Nemuns banguoja, tėvynės kraštai. (Where the Nemunas waves, my homeland is)

the Lithuanian market and enhances the illusion of the product being produced locally.

Analysis of other non-verbal elements, or icons, illustrates that the same symbols are used to designate specific commands, actions and processes in both the original and localised versions of *PeopleSoft*. Some icons,  (open folder),  (save),  (calendar),  (search),  (notify), and the like, need no explanations since they have become universal and are applied in other software, such as *Microsoft* and *Adobe Reader*. These icons need no adaptation, because Lithuanian users understand their meaning and functions. However, such pictures as the following ones  ,  ,  ,  and similar pictograms could be interpreted in various ways. For example, the first icon might be associated with job interviews and employment, and the last icon might stand for reporting and the Department of Statistics. Nevertheless, all the icons are preserved in the Lithuanised version with no modifications. Lithuanian users face no difficulties in perceiving the meaning of the pictures, because headlines that introduce the page reveal the meaning of the icon. For instance, no additional explication is needed to perceive the following records: 

, 

, 

and 

. Yet, the application of the same icons witnesses the influence of the product on the target culture. By means of the icons new images are introduced to the Lithuanian users.

The analysis of the occurrences of pragmatic strategies of translation in the target (Lithuanian) language strings evidences the fact that almost all pragmatic strategies, except one, i.e. transediting, have been identified in the target texts. The pragmatic strategies are mostly related with macro-level structural changes of the software, i.e. information, explicitness, layout change and the like. Information, explicitness and illocutionary changes are the most frequently applied pragmatic strategies of translation to localise *PeopleSoft*. The absence or rare appearance of some pragmatic strategies (transediting

and/or partial translation) in the target text is determined and limited by features of software text, specifically space-restricted language strings. The analytical insights also evidence that many pragmatic strategies of translation are culture-specific. Cultural filtering, information change, interpersonal and visibility changes demonstrate how the Lithuanian language and culture affect and modify the product localised. Nevertheless, some pragmatic strategies, such as cultural filtering, partial translation and layout, reveal bidirectional influence of both the product and the target language and culture on each other. The pragmatic strategies mentioned above (cultural filtering, layout) might be determined by both the giving and the receiving cultures.

Finally, the examination of the pragmatic strategies proves that the translation strategies are interrelated and sometimes one translation strategy might be treated as another. For example, coherence change (pragmatic strategy) coincides with cohesion change (syntactic strategy), illocutionary change (pragmatic strategy) with transposition (syntactic strategy), and partial translation, and cultural filtering (pragmatic strategies) with loan/calque.

6. *PEOPLESOFT* LOCALISATION AS A NETWORK OF COMMUNICATION

Localisation in terms of communicative and *ANT*-based approaches has been defined in section 3. This part of the thesis applies both perceptions of translation / localisation, P1 and P2, and focuses on a unique case of *PeopleSoft* Lithuanisation with a goal to explore how the act of communication/interaction has taken place during the process of *PeopleSoft* localisation, examine the communication of human and non-human actors involved, and describe localisation in terms of intercultural communication and a network that has developed during the process of *PeopleSoft* implementation. The role and influence of the agents of *PeopleSoft* network is emphasised with an aim to explore the impact of the localised product on both the target language and culture and vice versa.

6.1. Actors in the network of *PeopleSoft* localisation

Allocation of sufficient human resources, clear definition of roles of staff members involved in the project of localisation and explicit distribution and delegation of tasks for all members are of critical significance in any project of translation and localisation. Having described the process and the workflow of *PeopleSoft* localisation, it is essential to describe the role and tasks of the actors of the localisation project, since they had both direct and indirect impact on the software localised. Roles that are assigned to members of localisation team indicate the structure of the entire localisation project and the chain of commands of the localisation team. The characterisation of actors and their roles also reveals the way communication takes place.

According to *ANT*, an actor is any volitional agent that might be both human and non-human and exerts influence on other actors (Latour 1996, Law and Hassard 2004). During the development of *PeopleSoft*, the actors, both human and non-human, were accurately defined in the contract and other

internal documents (Internal document 2006a, September and Internal document 2006b, October). The entire project localisation team was made up of the team of *NobleStar System Corporations* and the Lithuanian team.

NobleStar implementation team was composed of Financial, Human Resources, Student Administration and Technical Departments. At the top of each department was the team leader, responsible for the management and organisation of the work of the department. Senior functional consultants and functional consultants were in charge of specific project implementation related tasks. Team leaders were accountable for coordination and supervision of the development and deployment of FIN, HR and SA modules, whereas the team leader of the Technical department was in charge of the coordination and implementation of *PeopleSoft* applications from the technical perspective. The list of staff members, their roles and responsibilities is presented in the table in Annex 2. The entire team was accountable to the project manager of the affiliate of *NobleStar Systems Corporation* in Lithuania whose decisions were coordinated with the Chief Executive Officer of *NobleStar Systems Corporation* in the United States of America.

The members of the Lithuanian team assisted in the work of all the departments of NobleStar team. Mainly they were software engineers, IT specialists - developers whose role was to help the technical team to carry out and coordinate the implementation of various programming tasks that were related with the Lithuanisation of FIN, HRMS and SA modules of *PeopleSoft*.

In addition to this, the Lithuanian side involved the following actors of the project. The highest decision making body that was assigned to coordinate the development and implementation of LieMSIS project, i.e. the Steering Committee, was composed of maximum ten members of process owners (i.e. Rectors of the Universities), project-piloting institutions, and members of the *Ministry of Education and Science*. The Steering Committee was managed by the coordinator who was in charge of the overall project coordination, decision making, management of finances and official affairs (Internal document 2004).

The Steering Committee was assisted by the program manager who was responsible for technical issues and technical staff, data conversion and integration, organisation of trainings and management of technical issues in translation (Internal document 2004). The Change Control Board involved 10 members, and its activities were related with the control and management of change requests.

Project and infrastructure administrator from the Lithuanian side was appointed to maintain and allocate funds, select trainers and training organisations, manage and organise training processes and work with translators. IT developers who were responsible for specific technical programming tasks, related with the development and localisation of the Lithuanian version of *PeopleSoft*, coordinated their activity with two *PeopleSoft* administrators and two database administrators. In addition, 16 key users were appointed to formulate the requirements for the specification and customisation of the software, to test the implemented prototypes of *PeopleSoft*, and to provide information about system errors or bugs that impede the functionality of the Lithuanised version of *PeopleSoft.*

The Department of Translation and Interpreting was responsible for translating the linguistic content of the software and other project-related documentation as well as the mediation of the intercultural communication between the two parties of the entire project team. At the top of the Department was the head of translators who was in charge of the management of the translation team, coordination and distribution of translating/interpreting related tasks and activities, communication of the translation team and other departments, and reporting to project managers and project administrators.

The lasts participant to take part in the process of LieMSIS development was a PR expert whose tasks were related with the dissemination of information about the progress status of *PeopleSoft* and LieMSIS development in the channels of mass media in Lithuania. The list of all the Lithuanian staff

members involved in LieMSIS implementation is presented in Annex 3, whereas the project organisation is presented in the figure below:

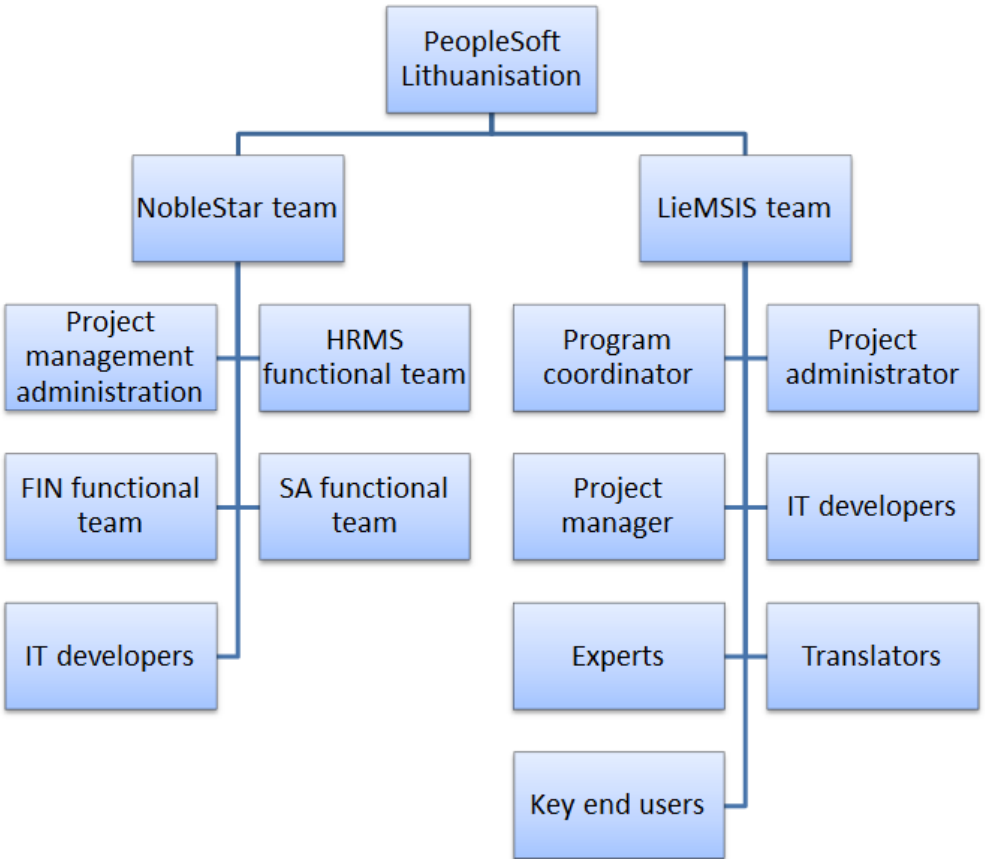


Figure 10. Actors and organisation of LieMSIS project. Source: created by the author of the thesis

The figure above demonstrates the interaction of all the participants of both *NobleStar Systems Corporation* and the Lithuanian team in terms of project and process management. All the members of the entire project team could be characterised as actors who collaborated together by virtue of a network and, thus, had both direct and indirect influence on each other and the software localised.

In term of non-human actors of the process of localisation both languages and cultures become self-evident participants, since the process of localisation / translation is intended for a specific culture and cultural aspects in particular need to be considered. Here the comprehension of the term *culture*

is based on the pivotal definition of culture as provided by Geert Hofstede, "the collective programming of the mind distinguishing the members of one group or category of people from others" (2010: 180). All the human actors who took part in the process of *PeopleSoft* localisation were representatives of specific cultures, i.e. American and Lithuanian; therefore, interacting and working as a team the participants of the project exerted influence on one another and the giving and the receiving cultures.

Finally, *PeopleSoft*, though being an artificial and human-developed product, acted both as the recipient of the action and the passive object that was modified to meet the local needs of Lithuanian users, and as an active agent. During the process of localisation the product has to be adapted and tailored to the needs of the target market and audience; thereby it is clear that the product localised has to be changed, i.e. the action is directed to the product. At the same time, the product as an artefact of the giving culture represents the norms and patterns of behaviour of that culture, specifically American culture, for the majority of software is US-based. The next part of the thesis explores the communication network of communication of *PeopleSoft* localisation team and the way the interaction took place.

6.2. Communication network in *PeopleSoft* localisation

Success of localisation directly depends on the ability of localisation team members to interact and collaborate together, since final results of the project / process of localisation are dependent on the effort of the entire localisation team. Communication, defined by the French as a social process, indicates an ability of individuals to exchange thoughts, messages, feelings by means of speech, verbal and non-verbal signs, signals, writing and behaviour (2010). During the process of communication a network of participants is formed, and the interaction is based on the classical and linear model of communication (French 2010) that involves the sender, the receiver, the message and the medium of communication. *PeopleSoft* localisation team was composed of

people of different ages, sexual orientation, cultures and religions. Though complex, the communication took place as the Lithuanisation of *PeopleSoft* progressed.

The entire network of participants / actors, both human and non-human, who took part in the process of communication, is graphically depicted in the figure below. The chart also reflects possible directions of communication that served as a means of exerting influence among actors. The missing directions of communication during the process of localisation are indicated by red lines. Herein *S* signifies *PeopleSoft* software, *C1* – the Lithuanian culture, *C2* – the American culture, *N* – Norms, *B* – Business owners, *V* – Values, *DV* – Developers, *IT* – IT staff composed of Lithuanian and NobleStar representatives, F – Functional team, *TR* – Translation team, *AD* – Administration and management team, *CL* – client, *D* – Distributors, *U* – Users.

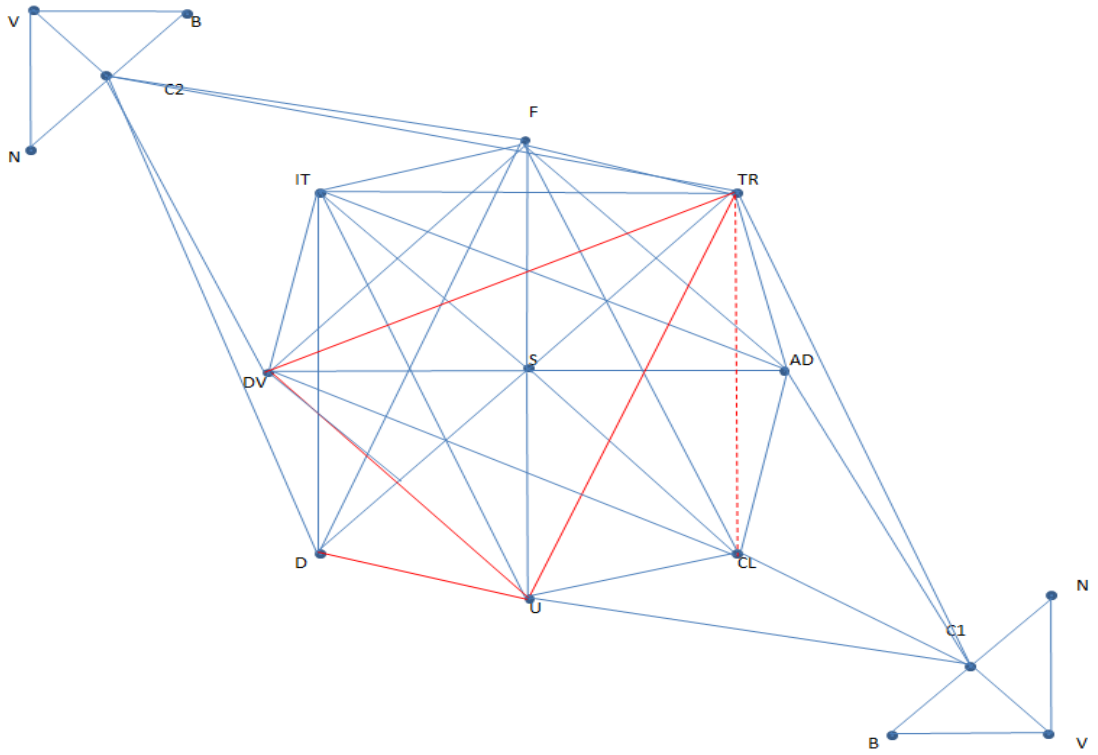


Figure 11. The communication network of actors in *PeopleSoft* localisation. Source: composed by the author of the thesis

The network of *PeopleSoft* localisation team involves human and non-human, man-made, animate and inanimate, and abstract objects, such as norms, values, patterns of behaviour and other, and in terms of *ANT*, might be described as limitless and boundless (Latour 1996). It has no beginning and end and might be further extended by virtue of adding the connection to other networks and systems, such as the development and localisation of other software, e.g. *Microsoft.* At the very centre of the network, the non-human and man-made actor of the interaction, *PeopleSoft* software – *S*, is located.

The software is one of the core actors, since all the other types of communication and links of the agents involved in the process centre around the software localised. IT engineers and programmers customise the software for the Lithuanian market, the translators adapt the linguistic content for the Lithuanian users, and the target users of the software get acquainted with the functionality of the software and express their needs according to which the software has to be Lithuanised.

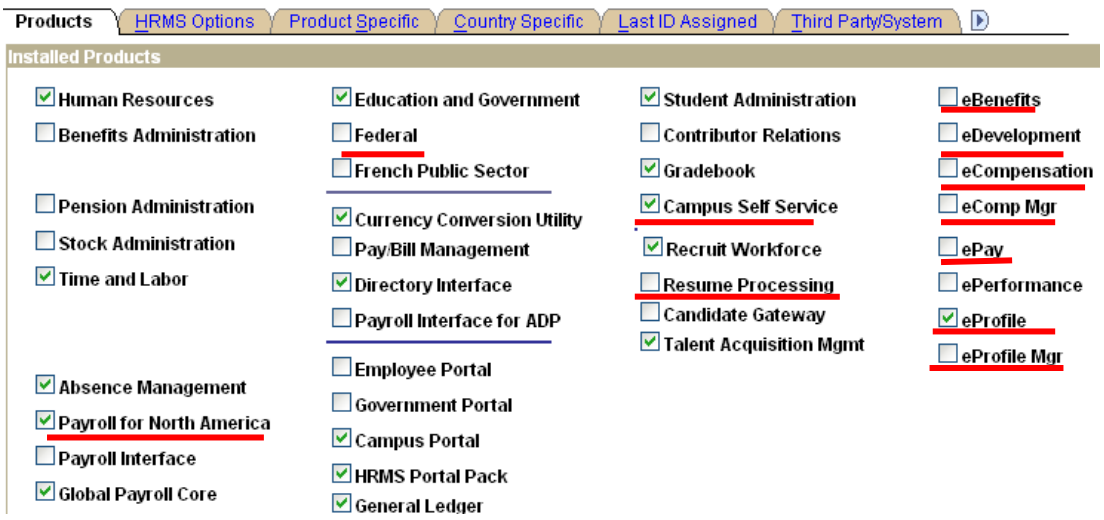
The software, the product, provides the end users with new applications and automated functionality, and introduces new business modules. For example, the possibility of using electronic services and functions, such as *eBenefits*, *eCampus*, *eDevelopment*, *eCompensation*, *ePay* and others, did not exist at that time of project implementation in Lithuania, since there was no integrated and computerised system that could handle such functionality. The opportunities were offered by *PeopleSoft* software that provided direct access to information and allowed finding or handling certain data via the internet-based server. On the other hand, the habits and traditions of handling information and managing various work- or study-related processes online in Lithuania were rare; thus, the assimilated online services both have entered Lithuanian business processes and have determined the adoption of new realia such as *el. Naudos*, el. *Profilis*, or el. *Veikla*. The advent of the new and integrated software tends to change working habits of Lithuanian academic culture and automates the manual work.

Moreover, the localised software changed business processes that prevailed in Lithuanian universities and colleges. Before the Lithuanisation of *PeopleSoft*, institutions of higher education worked in accordance with requirements underlined by the laws of *the Republic of Lithuania*, acts and Statutes of the universities, and decrees issued by other decision making and executive bodies. That being the case, universities handled processes individually. The arrival of the new software has committed the participant institutions and universities to standardise and unify processes of education administration and management, since the same system has to be implemented in about 100 participant institutions. The localisation of *PeopleSoft* also encouraged the cohesion of universities and colleges in Lithuania. Though officially collaborating and cooperating, the universities are rather competitive among themselves. The development of the standardised system has forced the representatives of the institutions of higher education in Lithuanian to meet and negotiate together.

The product localised also demonstrates the influence of the source language on the Lithuanian language in terms of punctuation. For instance, the key *Caps Lock* is Lithuanised as *Didžiųjų raidžių klavišas* (*caps lock key*). The name of the key in Lithuanian is obviously too long; therefore, the abbreviation *Didž* has been suggested and has already been approved in *The English-Lithuanian Dictionary of Computer Terms.* Yet, the abbreviation does not correspond to the punctuation rules of the Lithuanian language as discussed in section 5. The name of the key should be abbreviated as *Didž.* In the example above, no full-stop is available. This violates the Lithuanian grammar, unless the abbreviation *Didž* is treated in the same way as the abbreviations of chemical elements, Ca, Zn, Li and others in the table of Mendeleyev.

The product that is usually adapted and tailored to the needs and requirements of the receiving culture can be perceived as an artefact of the giving culture, since it presents and reflects the giving culture-specific features. The language (American English) of *PeopleSoft* serves as the first evidence of

the American origin of the product, and the linguistic impact of the product has been discussed in chapter 5 of the thesis. The screenshot of the table below from *PeopleSoft* software exhibits the product as an artefact[24] of the American culture. The field-labels, *Stock Administration, Payroll for North America, Global Payroll Core, Federal* (which stands for the US Federal Government), *Resume Processing* and others, that are underlined in the picture below, speak of the American realia. The word combination *Payroll for North America* reflects rules, legal requirements, law and norms that are used to calculate the payroll for the residents of North America and are obviously different from the ones that are used to calculate payroll in Lithuanian institutions. Meanwhile the lexeme *Federal* is an abbreviation of the title of the *U.S. Federal Government* and embeds the meaning of the central government of the United States, which signifies the administrative structure of the USA; thereby the language unit *Federal* as a US-specific word would look strange to name the Lithuanian Government.

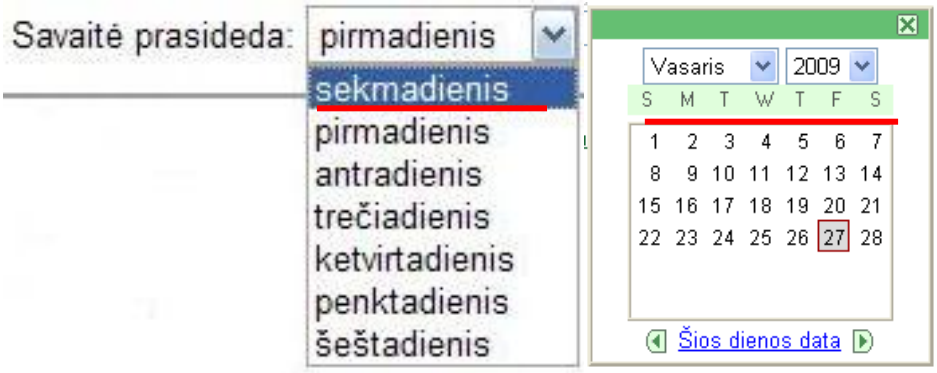


Picture 18. *PeopleSoft* as a US-based product and artefact

[24] The term "artefact" is usually used to describe some things that were made in the past and are historically important. Talking about software as an artefact one should think of it as a thing that is human-made, ages very quickly, since new software releases come out every half a year, and has a tremendous impact on modern society and human beings.

Field names, like *Resume Processing* as well as *Employee Self Service and Campus Self Service*, are also more characteristic of the US, since *Resume* is an American English substitute for the British and European *Curriculum Vitae* and introduce abilities to use the functionality of self-service that appeared to be rather limited and unusual at the time of software implementation (especially between 2000 and 2003) in Lithuania.

Even in the Lithuanised version of *PeopleSoft* software, the impact of the US culture is obvious. The two pictures below demonstrate screenshots of the localised *PeopleSoft* software and display two tables with the calendars and translated names of days; yet the sequence of days is characteristic to the English speaking culture. Monday is the first day of a week in the Lithuania language and culture, whereas Sunday is the start of the week in English speaking cultures. The wrong order of days and no agreement in a word combination *savaitė prasideda: pirmadienis* (*the week starts on Monday*) could be considered as a technical error that is caused by improper internationalisation or absence of the process of internationalisation as well as a lack of communication between the translators and IT engineers.



Picture 19. Calendar in the original and the Lithuanised versions of *PeopleSoft*

The incorrect order of week days in calendars is entrenched in the Lithuanian society. For example, *Microsoft PowerPoint* programme still does not offer correct Lithuanian date formats on slides.

Translators / localisers face culture-specific realia: date formats, names of organisations and institutions that reflect the American culture. Such language units either have to be accepted if no Lithuanian counterparts are available or substituted with corresponding Lithuanian objects. Encountering culture-specific terms, translators apply the strategy of domestication (as proposed by Schleiermacher (1813/2004) and followed by Venuti (2004)) when foreign text's culture specific items are neutralised and rendered in the target language and culture or cultural filtering (Chesterman 1997). For example, translators have domesticated such original language units as *Payroll for North America* that has been replaced with a generalisation *Darbo užmokesčio sistema* (*payroll*), while *Government Classification* has been substituted with *PVM klasifikacija* (*VAT classification*). By means of domestication, the target language and culture affect *PeopleSoft* software, whereas the software influences the target culture and language by virtue of introducing new items (for example, self-service) that have been discussed above.

Cultural beliefs, norms, values and other culture-related elements, such as decision making and problem solving process, time perception, directness and indirectness in communication that differ in low-context and high-context cultures[25], have to be addressed, since they form the background and circumstances, or context in which the interplay takes place. Though being rather trivial from the first sight, context-specific culture elements mentioned above determine the setting and circumstances of project implementation and become of paramount importance for establishing a socialising and communicating network and a project team. Different cultural backgrounds, knowledge, experience and the verbal and non-verbal way of communication

[25] Anthrophologist Edward Twitchell Hall introduced the term context to conceptualise cultures in terms of communication and the tendency to use high/low context messages during the act of communication. High-context cultures are relational, collectivist, intuitive, indirect and contemplative and focus on interpersonal and indirect relationship, whereas low-context cultures do not consider the significance of the context in the relationship and tend to be individualistic, action-oriented, logical and direct (1959, 1976) According to Hall "a high-context communication or message is one in which *most* of the informationis already in the person, while very little is in the coded, explicit, transmitted part of the message. A low-context communication is just the opposite; that is, the mass of the information is vested in the explicit code" (1990: 6). The subdivision of cultures into high-context and low-context cultures has been further elaborated in works of Lewis (2006), Hunt and Weintraub (2011).

determine the perception of the message that is sent during the act of communication, since people ascribe different meaning to the words uttered and thus exert influence on each other. If not considered carefully and with much precaution, culture-specific elements as actors of the localising network become impediments. This happened when localising *PeopleSoft*, as the team of localisation was comprised of an array of different low- and high-context (Hall 1976, Hofstede 1993, Lewis 2006) cultures marked by different perception of a problem, conflict solving, authority and hierarchy and other factors. Cultural and legal differences were identified as one of the difficulties that emerged between the parties *"keblumų bendradarbiaujant su partneriais iš JAV kilo ir dėl kultūrinių bei teisinių skirtumų/problems while communicating with partners from the USA occurred because of cultural and legal differences"*(Targamadzė in Donauskaitė 2007).

The cultural clash is self-evident. Lithuanian culture might be referred to as high-context, hierarchical, grandiloquent, highly educated culture and is collectivist, relational and especially past-, history- and tradition-oriented, or as Lewis observes, romantic and nostalgic (2006:369), where good manners are valued and rudeness unaccepted. American (Northern American) culture, on the other hand, is described by Richard Donald Lewis (2006) and James Hunt and Joseph Weintraub (2011) as low-context, aggressive, opportunistic, blunt culture that places an emphasis on individualism, action, facts, direct communication and single-minded pursuit of profit. In addition to this, the American team was not homogeneous in terms of cultures and was composed of representatives from Australia, England, Germany, India, Ireland, Lithuania, Mexico, the Netherlands, New Zealand, the Philippines, Poland, Scotland, the United States of America and other. Due to such an array and a mixture of high- and low-context cultures, the communication of localisation team managers, engineers, translators, functional and technical team members was more complicated.

The group of users of *PeopleSoft* localisation team constitutes a large team of animate actors from different cultures and countries. At the same time the term *group users* refers to all staff members of *PeopleSoft* localisation team, such as translators, functional analysts, IT developers, programmers and engineers, administrative and managerial staff. The final target users of *PeopleSoft*, i.e. book-keepers, process managers, teachers, lecturers, students and others, are also ascribed to the group of users. In terms of the impact of the agents mentioned it is obvious that translators and localisers (programmers, IT engineers and functional analysts) are the most active in impacting the software localised. Translation of the software's content and adaptation of non-verbal communicative elements function as means to exert influence on the product localised. In addition, translation becomes a vehicle to express two-way influence, i.e. the product impacts the target language and culture, and the target language and culture impact the product. For instance, by means of translation new English words that have no counterparts in the Lithuanian language enter and expand the Lithuanian vocabulary (*domain – domenas, triangulation – trianguliacija)*. At the same time some American-based realia and things that exist in the English speaking countries are replaced with words that represent Lithuanian objects (*COBRA – SODRA*).

In terms of communication and bonds established among human actors of *PeopleSoft* network, it has been observed that all the human agents of the localisation team interacted and were interdependent on each other. The communication of the administrative staff with other teams of localisation triggered actions of other team members through the decisions made. Functional, technical and translation teams coordinated the actions together. Translators provided equivalents of the English language units into the Lithuanian language on the basis of suggestion of functional and technical team members, whereas technical and functional analysis had to accommodate translations, suggested by translators. For instance, the Lithuanisation of the following original language strings *Governmental Classification*, *Certification*

Number, *Standard Industry Codes*, *Source* and the like demonstrate the collaboration of functional, technical and translation teams. Having examined the source units, the translators rendered the messages as follows: *vyriausybės klasifikacija*, *pažymėjimo numeris*, *standartinis pramonės kodas* and *šaltinis*. However, after the analysis of the translations with the members of the functional team, who are aware of the specific functionality of the commands and fields, new translations were provided: *PVM klasifikacija* (*VAT classification* instead of *Governmental Classification*), *3 šalių PVM registracijos numeris* (*Non-EU VAT registration ID* instead of *Certification Number*), *Juridinio status klasifikacija* (*Vendor classification* instead of *Standard Industry Codes*), and *PVM klasifikatorius* (*VAT type* instead of *Source*). The Lithuanised language strings demonstrate how the choice of translators was affected by the members of the functional team. The translators applied the pragmatic strategy of cultural filtering instead of literal translation based on the description of the functionality of the localised language strings provided by the consultants of the functional team. The network figure on page 190 illustrates the link between the translators and the members of the functional team depicted as a blue TR-F line.

The analysis of communication inside the team of *PeopleSoft* localisation emphasises the ability of translators and IT engineers, programmers and developers to communicate and establish appropriate relationships. From the first sight it seems obvious that both sides should work together. However, this usually does not happen and the communication of translators and IT specialists becomes a problem instead. Both Biau Gil (2005) and Pym (2004) mention the need of translators and IT specialists to work together. The parties in mind do not do that, since one side works with words (linguistic content) and the other engages with codes (programming of the linguistic content), but both of them forget that in digital environments words and codes merge together (Biau Gil 2005, 22) as all the information that is provided by means of GUI in a programming sentence is turned into zeros (0) and ones (1). Such an

isolation of translators and IT specialists did not occur during *PeopleSoft* localisation and both sides aided each other.

The exploration of the relationship of the agents of *PeopleSoft* network shows that some connections of the actors involved are missing. Since translation of software content is one of the core activities in the project of localisation, communication of translators with all the participants of the process of localisation have to be ensured in order to provide higher quality of the localised product. When translating *PeopleSoft*, the team of translators had no access to *PeopleSoft* developers and final users. The absence of the links between *PeopleSoft* developers and end-users is presented in red and red-dashed lines of figure 11 and poses some research restrictions. Due to the absence of link of translators with end-users, research data that explores the impact of the product localised on the target language and culture could not be collected.

The connection with *PeopleSoft* developers is crucial since developers can provide information about functionality and meaning of certain modules of the software, because not all the information is available in PeopleBooks (*PeopleSoft* manual and help) and technical experts are not always aware of particular information that is relevant when translating. Relationship of translators with final users is also important, since final users both were responsible for reviewing suggested translations of the software and conducted user acceptance testing. Since there were no links between the translators and users, no feedback about translations that could improve the quality of the product localised was provided to the team of translators.

In terms of localisation as an act of communication, *PeopleSoft* software becomes the medium of communication by virtue of which the message is sent. The direct communication and the dialogue between the software and its users occur, because the software is the author that forwards information, instructions, advice and prohibition to the user. The message is transmitted by means of such commands as *Expand All, Collapse All, Search, Check for*

Duplicates, Add/Update, Review, View all, Customise, Enter, Run, Log in and others. The dialogue and interaction of participants is successful only when the user understands what kind of data has to be entered for efficient processing of information. That is the communication is successful when the message received is absolutely the same as the message meant to be sent. Here the role of translators as mediators who decode the message becomes apparent. Yet, at the very highest level *PeopleSoft* itself becomes the message of the inter-cultural communication between the two cultures and parties, American and Lithuanian.

Before exploring *PeopleSoft* localisation as an act of intercultural communication, it is important to clarify that *PeopleSoft* localisation developed as an act of communication established by virtue of a socialising network of participants. The actors, human or non-human, real or artificial, were active members of the act of communication and equally influenced other agents of the network. To sum up the part of the thesis, it is obvious that *PeopleSoft* localisation as an act of intercultural communication takes place both directly when two cultures meet each other, and indirectly when one of the meeting sides is represented by culture specific product, i.e. software.

6.3. *PeopleSoft* localisation as an act of intercultural communication

In addition to being the act of communication, localisation might also be defined as an act of intercultural communication; thus, this sections aims to examine localisation in terms of intercultural communication and to reveal if localisation as an act of intercultural communication has any impact on the target culture. Intercultural communication is perceived here as the communication of two or more different societies, countries and cultures.

During the process of *PeopleSoft* localisation in Lithuania, the two parties that met were represented by two cultures, American and Lithuanian, for the giving party was from the US and the receiving party was from Lithuania. The

American side as a low-context culture[26] where any message is communicated directly interacted with the Lithuanian side that is higher on the context scale in comparison to the US. That being the case, the two parties had to negotiate together and reach a mutual understanding for the desired results.

The intercultural communication of the American and Lithuanian parties during the process of *PeopleSoft* localisation can be viewed both positively and negatively. Considering the fact that the American party wished to provide the Lithuanian side with the product that comes from the American culture that had not been available in the Lithuanian culture before, the act of intercultural communication is described as good-willing one. The US side can be characterised as the benevolent party which helps to develop a better world in which "no one is left out" (Fry 2003). By means of the product that the American party offered for the Lithuanian side it agreed to localise and adapt the software according to the needs of Lithuanian users and supply them with the product in their native language. This reveals the respect of the American side both to the Lithuanian culture and the language.

Another aspect why the intercultural communication of the American and Lithuanian sides could be positively considered is the fact that the American party assisted the Lithuanian party in the process of becoming equal to other cultures, since the Lithuanian side by virtue of the localised product was granted the right to obtain and exploit the same product like any other state, country or culture. This proves the intercultural communication of the two sides mentioned to be a positive and benevolent goal-oriented process. Therefore, the impact of localisation on the target culture is positive as well, i.e. the adapted software provides the target culture with tools that enable handling and dealing with processes (education and enterprise resource

[26] Hall describes countries by context on a scale ranging from low to high context countries. American Indian, Latin American, African American, Arabic, Korean, and Chinese are regarded as high-context countries, whereas German, Swiss, Scandinavian, North American, French, English, Italian are ascribed to low-context cultures (1976).

management) in a new and automated way that changes manually administered activities and operations, for example bookkeeping.

However, on the other hand, the process of intercultural communication of the American and the Lithuanian sides reveals negative aspects of the interaction in terms of social characteristics, since the communication of the American and Lithuanian sides was rather egoistic. The negotiation of the parties was benefit-driven, as both parties expected to obtain some gain (Pym 2010a). This is what both parties have to negotiate and express their wishes clearly. Otherwise they fail to communicate and none of the parties gains benefit.

During the development of the integrated and standardised system for institutions of higher education in Lithuania, the American party as the giving party provided the product, i.e. *PeopleSoft* software, and aimed at selling the licence of the product, since the primary aim of the party was to increase its return on investment by means of localising *PeopleSoft* product and occupy a bigger share of the global market. The observations of Lewis describe Americans as the ones whose decisions are not based on sentiments and who "aim to make as much money as they can as quickly as they can <…> and the dollar is considered at least almighty" (2006: 181). The desire of the American side to increase ROI and earn substantial profit could be illustrated by extracts from newspaper articles and press releases. Such descriptions as *JAV kompanija pateikė didesnes sąskaitas* (*issued bigger invoices*), *apetitai auga kas savaitę: papildomai 370 tūkstančiai Eurų* (*appetites are increasing every week: 370 thousand Euros additionally*), *nepagrįstai reikalavo papildomų pinigų sistemos diegimui* (*gratuitously required additional funds to implement the system*) prove the aim of the American side to be benefit-driven. Moreover, the American side stated that the project of *PeopleSoft* localisation was *loss-making* (*projektas JAV įmonei "NobleStar" buvo nuostolingas / the project for the US company NobleStar was loss-making*).

On the other hand, the quotes from newspaper articles and news portals indicate the clash of the two negotiating parties that was the direct outcome of insufficient knowledge of the target business culture and culture in general. Here the paradox of localisation as an act of intercultural communication is obvious, since localisation should be substantiated by mutual trust (Pym 2004). However, instead of trust the negotiating parties mistrust each other. The mistrust is the outcome of cultural differences and the lack of knowledge about the culture. Both parties, the American and the Lithuanian side, though equal partners, did not consider cultural differences, i.e. individualism versus collectivism, direct communication versus indirect, the suggestion of a solution individually rather than reaching a consensus in a group with sensible precaution. Insubstantial knowledge of culture increases the probability of misunderstandings. Americans, in Lewis' terms (2006: 182), lack knowledge of foreign cultures and believe they are the best and their norms are the only correct ones. During the implementation of the integrated system for institutions of higher education in Lithuania, the lack of knowledge about the Lithuanian culture, and especially the academic culture in universities, could be witnessed on the American side. Lithuanians, being well-educated and sometimes picturing the US as a dream land, know much about it. Yet, the confrontation emerged due to cultural differences mentioned before, i.e. the sense of being the best, not sentimental and benefit-oriented (the American side), and the strong sense of national identity, sentimental and not so small as the rest of the world believes (the Lithuanian side) (Lewis 2006).

In terms of the language used during *PeopleSoft* localisation as an act of intercultural communication, it should be mentioned that the English language was selected as the main language of communication; "according to the contract, project deliverables were to be based on the English language and [Lithuanian] Experts were to have required English language skills" (Internal document 2004). On one hand, English as the global language is widely used as the main language of intercultural communication and should cause no

hindrances for communicators of different countries and cultures. On the other hand, the English language is non-native language. During the process of *PeopleSoft* localisation, the majority of the localisation team was composed of non-native English speaking population: Lithuanians, Polish, Germans, Indians, Austrians, Mexicans and others. Being the foreign language, the lingua franca as a means of communication was a potential source of miscommunications and misunderstandings, since cognitive abilities of people from different cultures are language and culture-based (Ungerer and Schmidt 1996/2006).

To sum up the analysis of *PeopleSoft* localisation, as an act of intercultural communication, it becomes obvious that the process of localisation has both positive and negative impact on the two sides and cultures that meet during the act of intercultural interaction. It terms of positive impact the receiving culture, Lithuanian, obtains a product it has never had access before and becomes equal to other countries that already use the product, whereas the giving culture, American, acquires a bigger market share and increases its return on investment. The negative impact of localisation as intercultural communication is selfishness, since the process of localisation becomes benefit-driven. Moreover, the insufficient knowledge of cultures has negative effect on the process of localisation as, since insubstantial awareness of cultural differences results in clash between the cultures.

7. CONCLUSIONS

The analytical insights that have been obtained by means of approaching translation strategies that were applied to localise *PeopleSoft* software yields the following conclusions:

- The analysis of the historic origin of localisation, the examination of its diverse (computer and translation studies-based) conceptions and relationship with translation as well as the investigation of the phenomenon by virtue of applying functional translation theories, i.e. *communicative*, *Skopos*, and *Descriptive translation studies*, define localisation both as a multidisciplinary / multifaceted and linguistic phenomenon. The features of localisation (size, scope, content and complexity) can be also attributed to other types of translation and evidences localisation to be similar to translation. Digital medium would be the only distinct characteristic of localisation that differentiates it from translation. Linguistic (translation theory-based) comprehension of localisation as a linguistic phenomenon makes the grounds for localisation to be treated as a paradigm in *Translation Studies* and a new form of translation. Such a perception of localisation widens the scope of translation as a science, study and profession and translation itself becomes an umbrella term and a hypernim to embrace localisation. The linguistic understanding of localisation allows examining the phenomenon of localisation in terms of approaches validated by translation and sociology-based theories.
- The empirical research of the process of *PeopleSoft* Lithuanisation that has been grounded by traditional perception of translation and localisation has been carried out to test the applicability of the synthetic preliminary, micro- and macro-level structural analysis of translation strategies to examine the localisation of software language strings. The analysis has returned positive results, since almost all the types of syntactic / grammatical, semantic and pragmatic strategies of translation

have been identified in software language strings, and the synthetic micro- and macro-level structural analysis has proved to be an effective tool to study the localisation of software language units.

The results of the research have evidenced the syntactic / grammatical and semantic strategies of translation to be connected with micro-level structural changes of the software. Meanwhile pragmatic strategies reveal macro-level structural changes of the software. All translation strategies which are usually used to analyse translations of literary texts can be successfully applied to research the linguistic adaptation of software language strings. The successful synthetic and descriptive micro- and macro-level analysis of 30 translation strategies confirms the linguistic foundation of localisation and proves that localisation might be treated as a new type of translation marked by digital medium.

- The analytical insights obtained during the research of translation strategies demonstrate that the language and culture of the product affect the target language and culture. The impact of the American culture and language has been validated by the following strategies: loan / calque, phrase structural change and literal translation (syntactic strategies), paraphrase, synonymy and trope change (semantic strategies), cultural filtering, layout change and partial translation (pragmatic strategies). The Lithuanian language and culture adopts IT-related terminology, metaphors and new realia that reflect US-based thinking. The assimilation of new business models to handle processes in organisations confirms the influence of the product and American culture on the Lithuanian language and culture.

  The software localised also promotes the application of the economy principle of language in the Lithuanised version of the software. Technical parameters of the localised software, namely space restriction, force the extensive usage of acronyms, abbreviations and incorrect punctuation by means of which conversationalism of the

software with the final user is reduced and the message that is sent to the target user becomes encoded. Space restraints become the source of incorrect punctuation, when words are not separated by spaces in the Lithuanian language. This demonstrates negative impact on the Lithuanian language that directly pertains to internationalisation errors.

- The analysis of translation strategies proves that the target language and culture change the product localised. The majority of syntactic / grammatical, semantic and pragmatic translation strategies distinctly reveal culture-specific changes of the product induced by the Lithuanian language and culture. Transposition, unit shift, phrase structure change, sentence structure change, hyponymy, abstraction, distribution and emphasis change are more determined by internal features of the Lithuanian language (prevailing grammatical constructions and syntagmatic and paradigmatic word relations), whereas the majority of changes that are connected with pragmatic translation strategies and semantic strategies (trope change especially) are conditioned by the Lithuanian culture and worldview.

  The Lithuanian language modifies the software in verbal and non-verbal ways. Differences in the layout are determined by longer Lithuanian language strings, which confirms the existence of lengthening as one of translation universals. The Lithuanian version of *PeopleSoft* reduces the usage of capitalised words.

  The analysis of translation strategies has proved the impact of the localised product on the target (Lithuanian) language to be narrow, since only 8 strategies, namely, literal translation, loan / calque and rhetorical scheme change, synonymy and trope change, paraphrase and partial translation have confirmed the influence of the product on the Lithuanian language. This is one of the most important findings of the research that does not confirm the initial assumption that the product localised and respectively the source language and culture exert

considerable influence on the target language and culture. The rest of syntactic, semantic and pragmatic strategies of translation applied evidence the impact of the Lithuanian language and culture (since culture is expressed by means of language) on the product localised. The analytical insights obtained during the analysis of translation strategies employed to examine *PeopleSoft* Lithuanisation evidence the bilateral and bidirectional influence of the localised product (source culture and language) and the target language and culture on each other. The strategies of trope change and partial translation demonstrate changes triggered by the interaction of the target language / culture with the product language / culture.

- The translators as the volitional actors of the network that emerges during the process of localisation reveals the translators-localisers to be the most active human participants of the network who have a profound impact on the software localised and change the source language and culture of the product through translation strategies applied. The visibility of the translator-localiser in the Lithuanian version of *PeopleSoft* is revealed by means of the pragmatic strategy of visibility change. Meanwhile the software localised as the artefact of the US culture becomes one of the most vibrant artificial actors to establish relationships and affect other actors of the network.

Finally, on the basis of conclusions 1-2, the claim, i.e. localisation is a new form of translation marked by the digital medium and a new paradigm in Translation Studies, has been supported.

The conclusions 3-5 support the hypothesis of the thesis, i.e. despite the fact that the software implemented has to be adapted to the target language / culture, it tends to change the target language / culture.

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Annex 1. Synthetic Scheme for Translation Description

Lambert and van Gorp propose the following scheme:
1. *Preliminary data:*
– title and title page (e.g. presence or absence of genre indication, author's name, translator's name...);
– metatexts (title page, preface, footnotes – in the text or separate?);
– general strategy (partial or complete translation?).
These preliminary data should lead to hypotheses for further analysis on both the macro-structural and the micro-structural level.

2. *Macro-level:*
– division of the text (chapters, acts / scenes, stanzas...);
– titles of chapters, presentation of acts and scenes...;
– relation between types of narrative, dialogue, description; relation between dialogue and monologue, solo voice and chorus...;
– internal narrative structure (episodic plot?, open ending?...); dramatic intrigue (prologue, exposition, climax, conclusion, epilogue); poetic structure (e.g. contrast between quatrains and tercets in a sonnet);
– authorial comments; stage directions...
These macro-structural data should lead to hypotheses about micro-structural strategies.

3. *Micro-level:* Shifts on phonic, graphic, micro-syntactic, lexico-semantic, stylistic, elocutionary and modal levels:
– selection of words;
– dominant grammatical patterns and formal literary structures (metre, rhyme...);
– forms of speech reproduction (direct, indirect, free indirect discourse);
– narrative, perspective and point of view;
– modality (passive or active, expression of uncertainty, ambiguity...);
– language levels (sociolect, archaic / popular / dialect, jargon...).
These data on micro-structural strategies should lead to a renewed confrontation with macro-structural strategies, and hence to their consideration in terms of the broader systemic context.

4. *Systemic context:*
– oppositions between micro- and macro-levels and between text and theory (norms, models...);
– intertextual relations (other translations and 'creative' works);
– intersystemic relations (genre structures, stylistic codes...).

Annex 2. Actors, roles and responsibilities of NobleStar team

Role	Area of responsibilities
FIN TEAM	
Team lead	Coordinate and supervise development and deployment process of FIN application, AP/PO/SS
Senior Functional Consultants	GL, Interim solution, AR, BI , AM, INV, EX, Projects
Functional Consultant	GL/KK
Functional Consultant	AP, PO, SS
Functional Consultant	BI, AR, EX
Functional Consultant	AM, IN
HR TEAM	
Team lead	Coordinate and supervise development and deployment process of HRMS application and development of final Payroll solution. Core HR, HR conversion, Decrees
Senior Functional Consultant	GL, CA
PY/T&L Senior Functional consultant	Payroll calculation, T&L configuration
Functional Consultants	Payroll, T&L configuration, GL interface, Funding
TECH TEAM	
Team lead	Coordinate and supervise HRMS, FIN and SA applications implementation from the technical perspective.
Technical consultant	Decrees
PY Senior technical consultant	Payroll calculation development
Functional/Technical System translation support	HRMS/FIN/SA
SA TEAM	
Team Lead/Functional Consultant	Student Records-Study programs & study modules

Annex 3. Actors, roles and responsibilities of LieMSIS team

Role	Minimum number of people	Maximum number of people
Steering Committee (SC)	10	10
Program Management	1	1
Change Control Board (CCB)	10	10
PR Expert	1	1
Business Owners	16	32
Key Users	16	32
LieMSIS Developers	4	8
PeopleSoft Administrator	2	2
Database Administrator	2	2
Infrastructure Administrator	1	1
Trainers TR	2	3
LieMSIS Translation Experts	3	3
Totals	**68**	**105**

* Using the maximum number of people

Source: Internal document 2004.