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**TRANSLATION STRATEGIES IN THE PROCESS OF
TRANSLATION: A PSYCHOLINGUISTIC INVESTIGATION**

MASTER THESIS

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**VERTIMO PROCESO STRATEGIJOS: PSICHOLOGINGVISTINIS
TYRIMAS**

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GLOSSARY

1. **Black-box** – a device or theoretical construct with known or specified performance characteristics but unknown or unspecified constituents and means of operation; something that is mysterious, especially as to function.
2. **Checking** – discernible testing of a preliminary solution to a translation problem.
3. **Concurrent Verbalization** – voiced expressions during task performance.
4. **Elements of Translation Strategies** – the smallest detectable problem-solving steps occurring within translation strategies.
5. **Empirical Research** – the search, based on what is experienced or seen rather than on theory.
6. **Initial Solution** – the first statement that solves a problem or explains how to solve the problem.
7. **Introspection** – specifically, the act or process of self-examination, or inspection of one's own thoughts and feelings; the cognition, which the mind has of its own acts and states.
8. **Linguistic Unit** – one of the natural units into which linguistic messages can be analysed.
9. **Long-Term Memory** – the phase of the memory process considered the permanent storehouse of retained information.
10. **Mental Process** – the performance of some composite cognitive activity; an operation that affects mental contents.
11. **Monitoring** – verbatim repetition of source or target language text segments in order to control and test their accurateness.
12. **Rephrasing** – paraphrasing of source or target language text segments.
13. **Proofreading** – the critical revision of a text. In translation, this task mainly consists of checking aspects of spelling, grammar and syntax plus the general coherency and integrity of the target text.
14. **Psycholinguistics** – the study of the influence of psychological factors on the development, use, and interpretation of language.
15. **Retrospection** – the act or process of surveying and reviewing the past.
16. **Revising** – reading a text to identify errors, inconsistencies, incorrect grammar and punctuation, poor or inappropriate style, conformance with the source text, and making appropriate changes and corrections to the text.
17. **Short-Term Memory** – the phase of the memory process in which stimuli that have been recognized and registered are stored briefly.
18. **Source Language** – language in which a text to be translated is written, or in which a speech to be interpreted is spoken; the language of the original text or speech.

19. **Source Text** – the text to be translated; the original text, as opposed to the translated text.
20. **Target Language** – language into which a text is translated or a speech interpreted.
21. **Target Text** – the translation; the end result of the translation process.
22. **Text Segment** – one of the constituent parts into which a text is divided.
23. **Think-Aloud Protocol** – a method in which the participants verbalize their thoughts, feelings, and opinions while they are completing the task of translation. (It was originally applied for cognitive psychologists to obtain data about the way in which humans cognitively process information (Ericsson & Simon, 1980)).
24. **Translating** – the act of rendering written text from one language into another.
25. **Translation** – the end result of the process of transferring the meaning of a written text from one language into another.
26. **Translation Problems** – those text segments, which the subjects cannot translate or which the subjects have tried to translate but whose results they then consider to be inadequate.
27. **Translation Strategy** – procedure, which the subjects employ in order to solve translation problems.
28. **Translation Unit** – the source segment and the corresponding target segment, which are recorded as equivalents.
29. **Translator** – a person who transfers the meaning of written text from one language into another.
30. **Word-for-Word Translation** – translation that closely follows every word in a source language text.

ABBREVIATIONS

TAPs – Think-Aloud Protocols

STM – Short-Term Memory

LTM – Long-Term Memory

RP – realizing a translation problem.

VP – verbalizing a translation problem.

→**SP** – search for a (possibly preliminary) solution to a translation problem.

SP – solution to a translation problem.

PSP – preliminary solution to a translation problem.

SP_{a,b,c} – parts of a solution to a translation problem.

SP \emptyset – a solution to a translation problem is still to be found (\emptyset).

SP= \emptyset – negative (\emptyset) solution to a translation problem.

PSL – problem in the reception of the source language text.

MSL – monitoring (verbatim repetition) of source language text segments.

MTL – monitoring (verbatim repetition) of target language text segments.

REPHR.SL – rephrasing (paraphrasing) of source language text segments.

REPHR.TL – rephrasing (paraphrasing) of target language text segments.

CHECK – discernible testing of a preliminary solution to a translation problem.

OSL – mental organization of source language text segments.

OTL – mental organization of target language text segments.

REC – reception (first reading) of source language text segments.

[TS]com – comment on a text segment.

TRANS – transposition of lexemes or combinations of lexemes.

T – translation of text segments without any problems involved.

→**T_{2,3,...n}** – conceiving a second, third, etc. translation version.

ORG – organization of translation discourse.

SL – Source Language

TL – Target Language

ST – SOURCE TEXT

TT – Target Text

IL – Inter-language

L1 – Native Language

LL – Language Learner

TS – Translation Student

INTRODUCTION

Recently, the interest in the translation science has been shifted towards the empirical investigations of the process of translation. A wide span of research works was enhanced by the belief that the processes, which take place in the translator's head while he or she is translating, are as important as the perception of translation as the final product of the translated text in relation to the source text. The translated text can provide a comparably incomplete and misleading assumptions about the process of translation, i. e. ignoring and eliminating both problems and successful strategies of the translation. Insofar as it is not possible to directly observe the human mind at work, a number of attempts have been made at indirectly accessing the translator's mind. One such attempt, which has been steadily gaining ground in translation research, has been to ask the translators themselves to reveal their mental processes in real time while carrying out a translation task. Such a method of data collection is known as "thinking aloud". Starting from 1980 Think Aloud Protocols (TAPs) have become a major instrument in process-oriented translation studies.

Viewing translation mainly as a problem-solving process, some scholars (Færch and Kasper 1987, Krings 1987) have put forward the suggestion that it should be possible to study it by means of TAPs, and have set up experiments to test this hypothesis. Most early TAP studies were conducted with foreign language learners or translator trainees. The major early concern of researchers working within this paradigm was the analysis of "translation strategies". A translation strategy is defined as "a potentially conscious procedure for the solution of a problem which an individual is faced with when translating a text segment from one language into another" (Færch and Kasper 1987:5). Translation strategies range from a subject's realization of a translation problem to its solution or to the subject's realization of its insolubility for him or her.

Process-oriented translation studies and empirical investigations have been carried out, among others, by Lörcher (1986), Krings (1987), Jääskeläinen (1990), Séguinot (1996), Chesterman (1998). Researchers have focused on various aspects of the translation process including professional and student approaches (Séguinot 1989; Tirkkonen-Condit 1989), problem-solving strategies (Krings 1986, Lörcher 1991), cognitive planning (Hölscher and Möhle 1987), and many more. Research works in translation in Lithuania have been carried out in the aspects of sociology and linguistics (Ambrasas-Sasnavas 1978), creative translation (Vabalienė, 2002), equivalent translation of business terms (Marina, Suchanova 2001), translation in foreign language teaching (Pravackaitė, Sakalauskienė 2002), computer translation (Tamulynas, Žemaitis 2002).

The languages involved in the process-oriented translation researches have varied as well, depending on where the research has been carried out, including German and French (Krings 1986), English and French (Gerloff 1986), German and English (Lörscher 1991), Finnish and English (Jääskeläinen 1990). However, the translation process, in the aspect of translation strategies, when Lithuanian and English languages are concerned, has not been widely investigated and there is very little contributed to this topic. Hence the **novelty** of the work is the psycholinguistic investigation of the translation strategies used in the process of translation of language learners (LL) and translation students (TS) while translating from English into Lithuanian.

The **aim of our work** is to present and analyse empirical data of the psycholinguistic investigation into the translation process.

The work seeks to achieve the following **objectives**:

1. To put forward models, which portray the translation process.
2. To provide theoretical and empirical framework of TAPs.
3. To present the classifications of translation strategies occurring in the process of translation.
4. To introduce the procedure and results of the psycholinguistic research.

The **object** of the research is the identification of specific translation strategies among language learners and translation students.

This work presents the **research problem** that could be stated as follows: *Every individual with a command of two or more languages also possesses a rudimentary ability to mediate between these languages, and to produce either sign-oriented or sense-oriented translations.*

Applied research methods:

1. *Literary analysis* provided a possibility to review numerous issues concerning translation performance.
2. *Think-Aloud* method has proved its usefulness in studying mental translation process.

The first part of the work expounds on models and available definitions of the translation process. **The second part** presents theoretical and empirical framework of thinking-aloud technique. It also introduces the reasons why such method is used in the investigation concerning the process of translation. **The third part** of the work deals with the concept and classifications of translation strategies in the process of translation. In **the fourth part** of this work the procedure and results of our investigation are provided.

The procedure and results of this psycholinguistic investigation of the translation strategies were presented at the students' conference at Šiauliai University in March 2005.

1. THE TRANSLATION PROCESS

Researchers and educators in translation have been interested in the processes of translation wishing to uncover the mystery of translation. Through the psycholinguistic development it became evident and was commonly acknowledged that translation is a process. A number of researchers and theorists have directly and indirectly discussed the translation process and have constructed models of the translation process. In this section let's consider models of the translation process provided by Kade (1968), Nida (1969) and Diller and Kornelius (1978).

1.1. Kade's 1968 Model

In Kade's 1968 model, translation is situated within a framework of communication theory. The author claims that a communication-theoretical approach to translation has certain advantages because it can isolate the various factors involved in translation and can stimulate their further investigation in related disciplines, such as micro- or macro-linguistics, psychology or aesthetics (Kade 1968). This scholar distinguishes between a narrow, micro-linguistic concept of translation, which restricts itself to the change of code from source language to target language, and a wider, communication-theoretical concept of translation.

The wider concept of translation in the sense of a communication process in which two languages are involved is graphically represented in **Figure 1** (Kade 1968: 7):

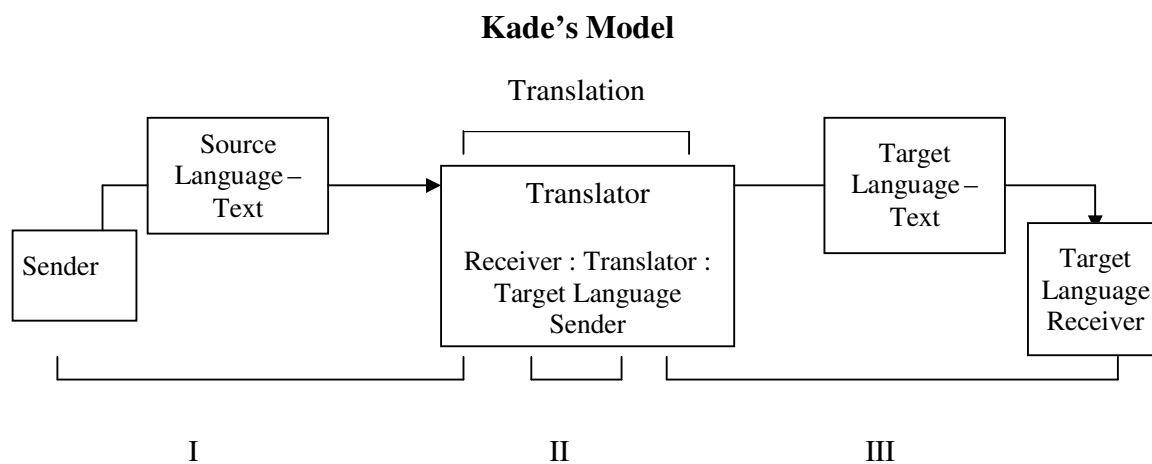


Figure 1. Kade's model of the translation process (1968)

In accordance with the model, communication consists of three phases of which the former has to be successfully completed for the latter to occur. In phase I communication between a sender and the translator in his/her function as receiver takes place. This communication is established through a text in the source language. Phase II is characterized by a change of code from source language to target language and is realized by the translator. The

third phase (III) schematises the communication between the translator in his/her function as target language sender and target language receiver by means of a target language text.

Thus, translation comprises part of phase I, i.e. the decoding of the source language text by the translator as receiver, the whole phase II, i.e. the change of code of the source language text by the translator, and part of phase III, i.e. the translator’s realization of the source language text’s message in the target language text for the target language receiver (Kade 1968: 7).

1.2. Nida’s 1969 Model

Nida’s 1969 model of the translation process is based on his hypothesis that:

A careful analysis of what goes on in the process of translating has shown that, instead of going directly from one set of surface structures to another, the competent translator actually goes through a seemingly roundabout process of analysis, transfer, and restructuring. (Nida 1969:484)

The phases involved in the translation process – Analysis, Transfer, Restructuring – are depicted in **Figure 2** (Nida 1969:484):

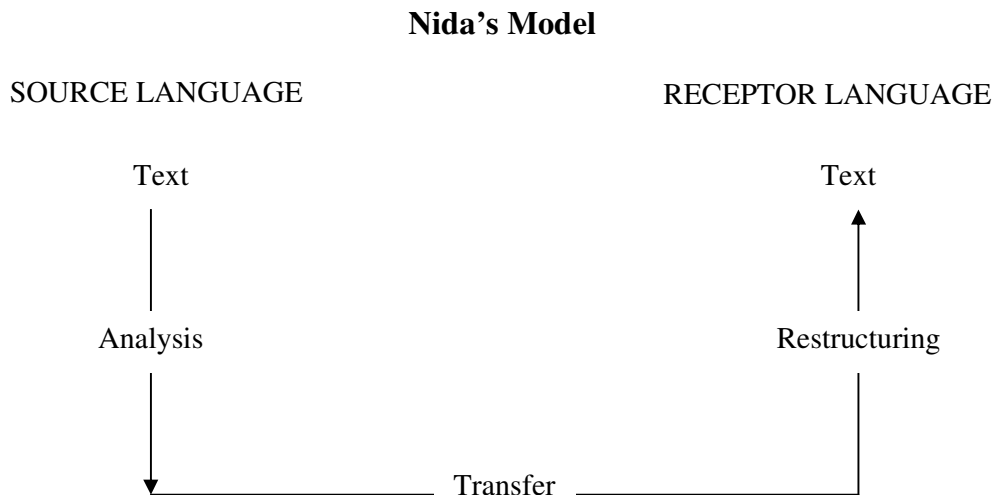


Figure 2. Nida’s model of the translation process (1969)

In the first phase, the translator analyses the message of the source language “into its simplest and structurally clearest forms” (Nida 1969:484). The analysis of the source language text has three aspects: grammatical, referential-semantic, and connotative. In the grammatical analysis, surface structures are transformed back into kernels, following early transformational generative grammar, i.e. complex language structures are transformed into simple ones by the translator. The referential-semantic analysis delimits the potential range of meaning of lexical items, so that their specific meaning in the respective context can be exactly detected. For example, the lexeme *water* in the sentence “She drank the water” is unmistakably recognizable

as a noun, whereas in the sentence “She will water the plants”, it clearly functions as a verb. The analysis of the connotative component of meaning is primarily a stylistic one and comprises every linguistic unit from the sounds and sound configurations to the entire discourse. Connotative analysis does not, however, comprise “the emotive response to the thematic content of the communication”, because “this is something outside the realm of linguistics” (Nida 1969:491).

The second phase in the translation process is transfer. It operates on the level of the kernels or near-kernels. In this phase three types of changes systematically occur with reference to the source language text: complete redistribution (it concerns idiomatic expressions, such as English: *stowaway* – Lithuanian: *keleivis be bilieto*), analytical distribution (it occurs when a single lexeme in the source language corresponds to a combination of lexemes in the target language, for example, English: *newsprint* – Lithuanian: *laikraštinis popierius*), synthesis (it occurs when a combination of lexemes in the source language corresponds to a single lexeme in the target language, for example, English: *stuffed potato dumplings* – Lithuanian: *didžkukuliai*).

In the third and last phase of the translation process, i.e. synthesis and restructuring, the kernels transferred into the target language are transformed into surface structures. This process of synthesis is highly dependent on the structure of the target language and has both formal and functional dimensions (Nida 1969:493). Among the formal dimensions are the stylistic level and the text type, which the production of the target language text tries to realize.

1.3. Diller and Kornelius’s 1978 Model

The model of Diller and Kornelius (1978:16) is represented graphically in **Figure 3**:

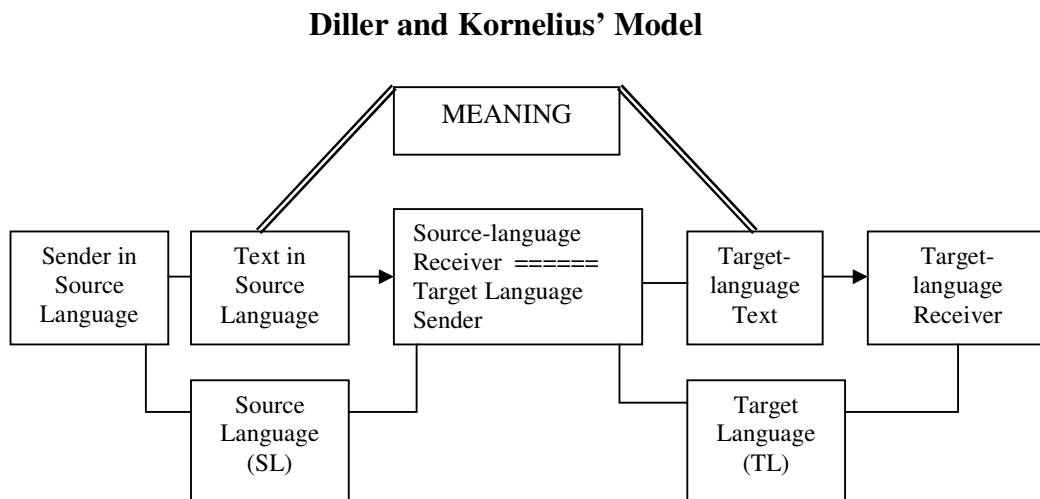


Figure 3. Diller and Kornelius’ Model of the translation process (1978)

According to this model, a sender produces a text in a source language. The translator functions both as a source language receiver of the source language text and as a target language sender who produces a target language text for a target language receiver. The crucial criteria for the target language text to be a translation of the source language text are a change of the linguistic code (SL→TL) and the equivalence of meaning of the two texts. Thus, equivalence of meaning functions as the constant factors both inter-lingually and inter-textually. According to Diller and Kornelius (1978:16), meaning comprises seven components:

1. the object a text-segment refers to;
2. the kind of reference;
3. the features, qualities, etc. ascribed to the object by a text-segment;
4. the kind of ascription;
5. the illocutionary force of the text-segment;
6. the way in which the illocutionary force is realized in the text-segment;
7. the intended characteristics of the illocutionary act.

The enumeration of these components shows that meaning, according to these scholars, comprises much more than semantics. A source language text and a target language text can only be considered to be equivalent in meaning when they are semantically, pragmatically and stylistically equivalent (Diller and Kornelius 1978:10, 16).

Three models, analysed above, claim to capture the translation process. These models attempt to approach the translation process in a prescriptive way. As a consequence, none of the models of the translation process can account for the psychological reality of translating. No conclusions can be drawn from the models as to what goes on in the head of a translator when she/he renders a source language text into target language. All the models approach their object of investigation in a theoretical, not empirical way. The components of the translation process and their assumed interaction, as outlined in the models, have been construed rationalistically by logical assumption not by empirical orientation.

Regardless of some important works done in order to define translation as a process, a universal explanation of the translation process is not available so far. This can be explained in terms of the confusion and disagreement among translation researchers about what constitutes a translation process. It seems no study to date has really dealt with the issue of process in a more pragmatic manner. The literature we have about the translation process very rarely goes beyond stating that translation is a process, with very few serious attempts at explaining and defining what a translation process is or mapping it out. Confusion between two aspects of the translation process still exists among both researchers and practitioners, and one cannot help but have the

impression that these perspectives are unprofessional and far-removed offering no immediate practical applications.

In “The Translation Process”, Séguinot confidently declares, that “process part is relatively easy to explain because it has to do with making activities-in-progress the object of scientific enquiry” (1989:1). However, she does not offer a definition of the process.

Attempting to present a professional and industrial perspective of the translation process, Sager defines translation as “a range of deliberate human activities, which are carried out as a result of instructions received from a third party, and which consist of text production in a target language” (1994:116).

Wilss defines the translation as “a psycholinguistic formulation process, in the course of which, the translator, by a sequence of textually concatenated code-switching operations, reproduces a SL message in a TL in order to enable the TL native speaker, who has no knowledge of the respective SL, to understand this particular message and to act, or to be more precise to react, according to his own discretion” (1982:177). Yet, this scholar does not attempt to define, delimit or map out the translation process.

Nevertheless, the empirical investigations of the translation process seem to be especially important for three reasons as far as the psycholinguistic investigation and teaching of translation is concerned: 1) it can be expected that only on the basis of empirical studies of translation performance hypotheses about processes in the translator's head can be formed; 2) it can be assumed that empirical studies of translation performance will yield general insights into language processing, into aspects of the mental processes of speech reception and speech production as well as the mental strategies employed by the language learner; and 3) it should be possible to make use of knowledge of the translation process for teaching translation. If certain translation strategies turn out to be successful, it might be worth considering teaching these strategies in one way or other.

2. THINKING ALOUD AS A METHOD OF DATA COLLECTION

Empirical and systematic investigations of the process of translation are comparatively new. The simultaneous appearance of several independent research projects analysing the translation process in the middle of 1980s occurred because of the developments in the neighbouring disciplines: psychology had freshened up the studies concerning mental processes and this was reflected in the choice of appropriate or reasonable research methods. The tendencies in psychology had influence on psycholinguistic research, including investigation concerning the second language learning (e.g. Cohen and Hosenfeld 1981), and, through the second language research, on translation studies.

The process of translating can be approached and examined using several different methods. Protocols of introspection and retrospection (Fraser 1993; Kohn and Kalina 1996), diaries (e.g. Halonen 1994), questionnaires (e.g. Youssef 1989), and interviews (e.g. Jänis 1996; Leppihalme 1994) can be used as data on what is happening in the process. Several computer tools have been created to gather data on the process (e.g. Jakobsen 1998; Lorenzo 1998; Podolskaya 1998).

For the reason that the present study deals with think-aloud protocol analysis, our concentration will be on thinking-aloud protocol (TAP) studies rather than those employing other methods of data collection. The following review will be reasonably general and will emphasize the main approaches within the field of TAP studies on translating.

The empirical investigations into translating in which data has been collected by asking subjects to translate texts and to think aloud while doing it have become known as think-aloud protocol studies of translation, “protocol studies” (Chesterman 1995), “translation process analysis” (Fraser 1996), or “the psycholinguistic model” (Neubert 1991; Neubert and Shreve 1992). These labels are justified as far as data elicitation is concerned; however, they might also make it difficult to see some important differences between the TAP studies, which, in fact, apart from being generally aimed at revealing the contents of the “black box” in translation, often share little else than the method of data collection. TAP studies in translation vary in terms of subject populations (e.g. language learners, translation students, professional translators) (e.g. House 1988; Kiraly 1990; Valkeavaara 1995), translation tasks (oral vs. written translation) (Lörscher 1991; Seguinot 1996), text-types (e.g. news articles, advertisements, travel brochures, editorials) (Tirkkonen-Condit 1993; Laukkanen 1993), sources and target languages (Gerloff 1988), access to reference material (Matrat 1992), giving a specific translation brief (Fraser 1993), limited or unlimited time (House 1988). In addition, the TAP studies represent a wide variety of definitions of translating, research interests and objectives, and methods of analysis.

As was mentioned above, the data of the present study has been collected by using a method borrowed from psychological research, namely, the method of thinking aloud. In short, the method means organizing an experiment in which subjects are asked to perform a task, in this case a translation task, and to verbalize their thoughts during the task performance. The subject's task performance is recorded on audio- or, preferably, on video-tape, and the tapes are then transcribed into protocols. The resulting recordings, think(ing)-aloud protocols, or TAPs for short, are then subjected to analysis.

2.1. Ericsson and Simon's Framework

The theoretical framework for TAP experiments is provided mainly by the work of Ericsson and Simon (1984). These scholars analyse a model of human cognition as information processing in their significant book. They discuss extensively the conditions of access to process on the basis of a large number of psychological studies. In short, Ericsson and Simon argue that verbal reports, elicited with care and analysed with an awareness of their limitations, provide rich and useful data on human thought processes. Their theory of verbalization is based on the information-processing approach in cognitive psychology, which, in turn, relies on the analogy of minds as computers. The most general assumption of Ericsson and Simon's theory is that human cognition is information processing. A second assumption is that information is stored in several memories having different capacities and accessing characteristics. More specifically, the multi-store model of memory (Atkinson and Shiffrin 1968) postulates that there are three kinds of memory stores: sensory registers with large capacity and very brief duration, short-term memory (STM) with small capacity and relatively short duration, and long-term memory (LTM) with essentially unlimited capacity and duration of storage. The memory system operates serially: sensory registers record stimuli from the environment; part of the stimuli are attended to in STM; part of the information attended to in STM is stored in LTM, from which they can later be retrieved back to STM for further processing. Eysenck and Keane (1990: 24) characterize the difference between STM and LTM as follows: STM contains information, which is currently being processed, whereas LTM contains information, which has left consciousness. According to this framework, only information currently held and attended to in STM is available for verbalization (Ericsson and Simon 1984:11). This difference is very important because the cognitive processes as well as information that is not currently being noticed, cannot be reported but must be deduced by the analyst on the basis of the verbalizations.

Further in their model Ericsson and Simon (1984) hypothesize that, for verbally encoded information, which can be reported in the same form as the one in which it was heeded, the

verbalization does not interfere with the cognitive process. The only effect of thinking-aloud is the slowdown of the performance. This model has several implications, but we will consider those, which are relevant to our analysis.

First and foremost, only concurrent verbalization of thoughts can be claimed to properly reflect the mental states of a subject carrying out a relatively long task, which, according to Ericsson and Simon (1984), takes longer than ten seconds to complete. On completion of such “long” tasks, part of the information moves on to LTM, leaving behind recovery signs only in STM: in such cases, the following verbalization has been found to be difficult and often incomplete (Ericsson and Simon 1984). Moreover, ruling out the possibility that a subject is interpreting her/his own thought processes or even generating them once again, instead of retrieving them from LTM, can be extremely problematic under these circumstances.

Secondly, in order to make sure that the reports actually reflect mental states without distorting them, it is important that the subject does not feel he/she is taking part in social communication: although conversation is obviously a much more natural situation, it involves reworking thoughts in order to make them conform to socially established norms, and this is a process, which might sensibly modify the attended information. The interaction between subject and experimenter (or between subjects) should therefore be avoided or at least reduced to a minimum.

Thirdly, practice and experience may influence the amount of processing carried out in STM, so that fewer mental states will be available for verbalization to subjects experienced in a task. This process, known as “automation”, is explained by Ericsson and Simon in the following way: “before overlearning has occurred, processes have to be interpreted, with substantial feedback from intermediate processing stages in STM. Overlearning amounts to compiling these processes, so that fewer tests are performed when they are being executed, hence less information is stored at intermediate stages in STM” (1984:127). Automatic processes are therefore faster and more efficient than processes, which are under conscious control. However, they are also less flexible and more difficult to modify when it is necessary.

Finally, this model takes into account the effects of personality and personal history over the data collected through TAPs. The amount of relevant information held in LTM cannot possibly be controlled for, as an experimental situation would require, nor is it possible to control for the amount of knowledge reported on in relation to the performance given (Ericsson and Simon 1984). In other words, there exist individual differences in knowledge and capability to verbalize thoughts, which can have a big influence on the gathered data. The problem here is connected with the object of study: individual differences exist, and research should not conceal them. However, it seems advisable to try and limit the effects of individual differences as much

as possible, and to take them into account during the analysis, in order to obtain more reliable and general data.

2.2. TAP Studies on Translation Process

Think-aloud protocols have been used to extract information about the underlying mental processes necessary to bring to an end a given task in a great number of studies on cognitive processes in translation. Empirical research concerning translation processes dates from the 1984 study by Dechert and Sandrock. Since their pioneering work, several other studies have appeared that also concentrate on psycholinguistic translation processes and a common methodology, the collection and analysis of introspective verbal data through talk-aloud protocols (Gerloff 1986; Königs 1987; Krings 1986; Lörcher 1986). The objective of these studies was to investigate the actual nature of the mental processes and strategies involved in translation. Before these studies were done, no empirical data were available on mental processing during translation. Each of these research studies helped to advance the understanding of translation processes, and the results have consistently supported the utility of talk-aloud data collection and protocol analysis in the translation studies. A brief overview of these analytical methods and empirical results follows.

2.2.1. Dechert and Sandrock (1984)

The subject of this study was an advanced university student of English philology who produced introspective data while doing a written translation. The original text was in English and was taken from a foreign language textbook designed for use at the tenth grade level. The subject was limited to fifteen minutes for the translation and was allowed the use of dictionaries. In addition to taping the subject's verbalizations during production of the translation, Dechert and Sandrock (1984) recorded the time the subject spent thinking and talking about each translation unit.

Dechert and Sandrock (1984) noted the following patterns in the data:

1. The sentence was the basic unit of translation.
2. Once a solution had been found for the translation of a source text unit, subjects tended to keep their initial solution.
3. There was a strong tendency to retain the syntactic structure of the source text despite divergences from the norms of usage of the target language.
4. There was a tendency to translate at the lowest (word) level and to move to the next translation unit level when the initial attempt failed.

2.2.2. Gerloff (1986)

In Gerloff's (1986) pilot study at Harvard University, five American students of French produced a think-aloud protocol while translating a text from French into English. The subjects were not permitted the use of dictionaries. The scholar's devised system for analysing the talk-aloud protocols provided categories for identifying linguistic levels of the source text at which individual translation strategies operated:

1. morpheme or phoneme
2. word
3. group (more than one word, not a complete clause)
4. clause
5. sentence

This system allowed Gerloff (1986) to look at the amount and proportion of processing done in each language and at each linguistic level of analysis. The system permitted comparisons of analyses across subjects to determine whether, for example, professional translators tend to translate larger units than do novices. Similarly, translators' strategy preferences could also be identified.

2.2.3. Krings (1986)

Krings' (1986) dissertation is one of two major empirical studies published to date on the psycholinguistics of translation. In his review of previous talk-aloud studies on translation, this scholar identified certain problems, which he attempted to avoid in his own study.

First, the text chosen in the Dechert and Sandrock (1984) study was too simple. Krings (1986) believes that translation units that are not problematic will usually be translated automatically and will not be verbalized. This would explain why Dechert and Sandrock (1984) found relatively few translation problems. Krings (1986) was also suspicious of the ratio of time spent translating a source text segment to the time spent reading it. In the Dechert and Sandrock (1984) study the ratio was only three to one, whereas the mean ratio in Krings' (1986) study was about twenty-five to one, indicating the relative simplicity of Dechert and Sandrock's (1984) text. Krings (1986) had his students translate a text that included many potential translation problems, expecting that such a text would elicit more processing data than an easier text.

Krings (1986) criticizes Gerloff's 1986 study on the grounds that the research objective was primarily to examine comprehension and production from the perspective of second-language use; there was no specific intent to investigate professional translation processes. As a result, Gerloff (1986) does not distinguish between (a) comprehension problems, (b) combined comprehension and expression problems, and (c) expression problems. Krings (1986) also cites

Gerloff (1986) for failing to identify what she means by the term *translation strategy*. Because she does not define the term, her study cannot distinguish between strategic (controlled) and nonstrategic (automatic) aspects of text processing. Krings (1986) claims that Gerloff (1986) makes a serious error when she assimilates strategies into processes. Because she directly categorizes each verbalization into one of the thirty-five process categories, she suggests that there is a one-to-one correspondence between strategies and processes. As Krings (1986) correctly points out, the literature on verbal data has established that this cannot be assumed to be the case: “although verbal data do give evidence of mental processes, they cannot be claimed to be isomorphic with those processes” (Krings 1986:264). The implication is that Gerloff’s (1986) system of quantification is more problematic than it appears to be. In Krings’ (1986) own study, there is no claim of one-to-one correspondence between verbal data and processes. Instead, verbal reports are interpreted as indicators of strategy use which allow the researcher to draw conclusions about underlying processes.

Krings’ (1986) eight subjects were German university students close to completing their master’s level teaching degrees in English. Four of the subjects translated into English and the other four into German. Introspective data were collected on audiotape during translation production. The scholar’s data analysis yielded 117 translation strategies and suggested two hypotheses or models explaining translation processing, one to describe the second language to the first language translation processes and the other to describe the first language to the second language translation processes. These models take the form of flow charts that outline the sequence of identifiable cognitive processes related to any given translation problem; the models use the terminology of the communication strategies of Færch and Kasper (1980). Krings (1986) found that most of the basic strategy categories were the same in both language directions, but the order of application of the strategies depended to a great extent on language direction. The models proposed by this scholar suggest that his subjects’ translation procedures were applied linearly, i. e. moving in systematic progression from one strategy to the next.

2.2.4. Lørscher (1986)

In Lørscher’s (1986) study, German subjects (who were studying to be English teachers) translated a written text orally into English while producing talk-aloud data. Lørscher (1986) claimed that this was a more natural process than a written source-to-written target translation accompanied by verbal data. To obtain mainly unedited and unanalysed data, this linguist asked the subjects to think aloud only. In this way he wanted to make sure that the method of data collecting would have the least influence possible on the mental processes of task performance. Thinking-aloud was also requested because it is a type of concurrent verbalization, i. e.

verbalization during task performance. In contrast to retrospective reports, subjects are not exposed to a memory loan, which means that the information they externalise is potentially more complete. In his analysis of translation processes Lörscher (1986) concentrated on translators' problems and on what they thought aloud when they found themselves confronted with such problems. This scholar claims, that solving translation problems is often carried out, as a series of steps and such step-by-step nature of translation problem solving is a further favourable precondition for thinking-aloud to yield much reliable data on the ongoing mental processes. As a result of this study Lörscher (1986) created a model for the strategic analysis of the translation process.

2.2.5. Königs (1987)

This study involved five German subjects, two second-semester university students of Spanish philology, two students nearing the completion of their master's level program in Spanish, and one professional German translator. The subjects translated two texts taken from a travel brochure that had originally been written in German and subsequently translated into Spanish. The subjects were videotaped while they translated and produced think-aloud data.

Königs (1987) identified two types of translation units, (a) units translated spontaneously (i.e. for which the translator had identified a one-to-one correspondence with a target language unit) and (b) units posing translation problems. He determined that this second kind of unit was problematic because of (a) gaps in the translator's second language competence, (b) gaps in the translator's translation competence, (c) specific linguistic translation difficulties at the word, sentence, or text level, (d) specific content difficulties, or (e) performance difficulties. According to Krings (1986), the differentiation between spontaneously translated units and problematic units is found in all of the investigations of translation processing done to date. Krings (1986) later criticized Königs' (1987) study for its use of a previously translated text. In his opinion, any errors made in the original translation (from German into Spanish) could unduly affect the back translation; it is also likely that the Spanish text would be syntactically assimilated to the German text in ways that authentic texts would not be. Krings (1986) therefore recommends that only authentic texts would be used for this type of processing research.

These pioneering studies have to a great extent proved the applicability of talk-aloud research to empirical studies on translation processes. Although each study may vary slightly, the expectation is that subjects challenged with a specific task, such as translating, will verbalize whatever comes to mind while performing the assigned task. The verbalizations are recorded, transcribed and analysed. The anticipated outcome is that these verbalizations will give a better understanding of "the levels, steps, units of processing, the role of the interaction of the source

and target language, the amount of proceduralization, the origin and course of search processes, and the times used for these processes” (Dechert and Sandrock 1986:120). Each school had its own interpretations of TAPs method: limited time and the use of dictionaries (Dechert and Sandrock 1984), constructed system of categories for identification of the linguistic levels (Gerloff 1986), models for the first to the second language and vice versa translation processes (Krings 1986), oral translation of the written text (Lörscher 1986), and the usage of unoriginal text for the identification of translation units (Königs 1987). Nevertheless, all the researchers use TAPs as indications of what might be going on in the “black box”, since thought processes cannot be directly observed.

From all these considerations, it is clear that verbal report data are useful for making hypotheses about mental processes if we take into account the conditions under which the data was externalised, and their characteristic limitations. Or, as Ericsson and Simon put it: “Verbal reports, elicited with care and interpreted with full understanding of the circumstances under which they are obtained, are a valuable and thoroughly reliable source of information about cognitive processes. They describe human behaviour that is as readily interpreted as any other human behaviour. To omit them is only to mark as terra incognita large areas on the map of human cognition that we know perfectly well how to survey” (1980:215).

Nonetheless, lets consider the advantages and disadvantages of think-aloud protocols in more detail.

2.3. Advantages and Disadvantages of TAPs

During the last years, a lot has been said and written about the advantages and disadvantages of thinking-aloud. First of all lets consider the advantages of this method of data analysis. Gerloff, defining the think-aloud protocol as “a moment-by-moment description which an individual gives of his/her own thoughts and behaviours during the performance of a particular task” (1987: 137), admits, that one can indeed gain access to many thought processes that one could not have accessed otherwise. The think-aloud protocol offers one main advantage over retrospective methods: it does not require long-term recall of information, for the report is made *as* the process is happening (Gerloff 1987). Subjects are less likely to forget, interpret, or elaborate on their thoughts than if they have to report them after the fact.

Fraser states, that thinking-aloud is “more appropriate for eliciting the principles, which are being used to resolve individual difficulties or underpin the translator’s more strategic approach to a specific task” (1996: 68).

Seliger (1983), not quite accepting this method for data collection, does admit, however, that introspective data may be useful for generating, if not for testing, hypothesis, about mental processing.

According to Börsch's opinion, "researches increasingly tend towards believing that think-aloud and self-observational procedures are the only way to get access to what happens inside human beings when thinking or acting" (1986: 203).

As a conclusion in his study involving thinking-aloud method, Lörcher (1991) points out that thinking-aloud is a useful tool for collecting data about mental processes in general, and translation processes in particular, if to take into account the conditions under which the data are externalised and their inherent limitations.

Lewis (1982) enumerates the following advantages of thinking-aloud:

1. Subjects' comments help to identify a problem as well as its causes.
2. Subjects discuss problems as they occur when details are fresh in the user's memory.
3. Minor problems that cause annoyance or confusion but don't affect task completion times are more likely to be detected by thinking-aloud testing.
4. Subjects' comments help to reveal their subjective attitudes towards the interaction.
5. Thinking-aloud testing can be used with incomplete prototypes or mockups, since it doesn't attempt to measure task completion times.

So, from all these considerations, we can conclude, that due to memory limitations, concurrent and undirected reporting is likely to capture more of the process (less is forgotten) more reliably (less is distorted). This method remains a valid means of accessing something of the translator's thought processes, providing information about how translators approach the task, how they solve problems and make decisions.

Nevertheless, in spite of definite advantages, each method of data collection also has its vulnerable spots, i.e. disadvantages. One of the main criticisms of introspective data is that the findings can never be complete; not all of the mental processes associated with a cognitive task will be verbalized. However, the supporters of introspective methods have discounted this criticism. They claim that even if verbal reports are necessarily incomplete and do not reveal everything, what they do reveal, is important. Criticism has been directed towards the think-aloud method for various reasons, the primary ones being that: 1) not all mental processes are accessible to verbal reports, 2) the instruction to verbalize may interfere with the normal thinking process, and 3) the verbal reports may be incomplete or incorrect (Börsch 1986: 200).

Ericsson and Simon (1980: 235) specify that the types of mental processes that are not accessible to verbal reports are automatic processes (i.e. those that are not carried out under

conscious attention). As Færch and Kasper (1987: 13) have pointed out, non-professional translators carry out large parts of their task under conscious attention, so this criticism is not an important one for our investigation.

The criticism that verbalization can interfere with the normal thinking process is directed primarily at the use of think-aloud methods in non-linguistic tasks, such as the resolution of mathematical problems. Ericsson and Simon (1980: 227) predict that direct verbalization of information that is already verbally encoded changes neither the course and structure nor the speed of cognitive processes.

There are various reasons why verbal reports may be incomplete or incorrect. Ericsson and Simon explain that when subjects “are working under a heavy cognitive load, they tend to stop verbalizing or they provide less complete verbalizations” (1980: 243). Seliger and Shohamy (1989: 170) claim that subjects who are inexperienced with thinking-aloud tasks may find it difficult to perform two tasks simultaneously, and thus fail to verbalize important information. Subjects may also not verbalize thoughts they do not consider intelligent or that they consider to be self-evident. However, as Ericsson and Simon (1980: 243) emphasize, the incompleteness of reports does not render them useless. The data reported may be unclear, but even unclear accounts provide an informative glimpse at processes that cannot be accessed otherwise.

One of the main reasons given for inaccuracy in verbal reports is that subjects may be overly eager to please the experimenter and verbalize thoughts they feel the experimenter wants to hear, but which are not necessarily their own. However, such a drawback is minimized, when the subject and the experimenter are in good relations. Furthermore, the effect of such behaviour is undoubtedly less significant than in indirect reporting methods (e.g. questionnaires) or even in retrospective methods, for in think-aloud situations, the subjects simply do not have much time to think about what they should say.

Consequently, every drawback may be precluded if the details of the method are clear to the investigator, if the preparation for the procedure is thought-out, and if the interpretation of the results is accurate. Thinking aloud provides information about such processes as reflection, reasoning, self-revision, required for translation, and also about translation strategies, employed by the language learners and translation students, which is why we have chosen this method for our investigation.

3. TRANSLATION STRATEGY

Studies concerning translation strategies operating in the process of translation have been carried out only recently. However, the attention in these research works is paid to the smallest details of the whole translation event. The most essential thing in the translation process is a translation strategy or an arrangement of strategies that provide the construction within which translation decisions are made. Every translation situation requires a different translation strategy and each translator has his or her own translation strategy or set of such strategies. Although these strategies compose the very essence of the translation process, the literature on translation rarely discusses them. Translators discuss and argue about their plans, approaches and strategies for producing translations, but the issue has not received a great deal of attention in translation studies until recently. Moreover, although translation scholars now speak about translation strategies, they rarely give their definitions of the translation strategy, with one or two exceptions (Lörscher 1991). Furthermore, there seems to be some uncertainty regarding the definition of the term “*strategy*”.

The notion of strategy originated in military science and denotes the wide-ranging preliminary planning of a war including all essential military as well as non-military factors. In a metaphorical sense, the notion of strategy is used in various disciplines, such as economics, psychology, and political science; it is also used in non-technical, colloquial language. In literature, translation strategies are often referred to and associate with methods, techniques, procedures and types. Contrary to the common belief, translation types are not production strategies. They are the outcomes of a strategy that begins with a decision to take a certain approach to translation and to choose a certain type of translation, for example, literal, semantic, communicative, etc.

Before going further into the subject of definition of the translation strategy, it is important to define the term *strategy* itself since it seems that different translation researchers and practitioners use it in somewhat different senses. The Webster’s Dictionary defines *strategy* as:

1. The science or art of planning and directing large-scale military movements and operations.
2. The use of or an instance of using this science or art.
3. The use of a stratagem.
4. A plan or method for achieving a specific goal.

The last part of the definition is the most relevant to our discussion of translation strategies. A strategy is a plan or method for achieving a specific goal. In this sense, we can

define a translation strategy as the overall plan or outline employed by the translator to achieve a specific translation goal; a strategy consists of techniques, procedures, and methods that bear on the translation product as it develops.

Lets consider other definitions of the translation strategy. In the following part of our work the short analysis of the definitions of a translation strategy given by some translation scholars is provided.

3.1. Definitions of Translation Strategy

Bialystok (1990) and Lörcher (1991) indicate that the notion of strategy has not been clearly and evidently defined in linguistics. According to Bialystok (1990), vigorous debate among researches has failed to yield a universally acceptable definition. In the same way, Lörcher observes that the notion of strategy “denotes highly different phenomena, and very rarely it is defined precisely” (1991:68). Cognitive psychologists seem to be faced with the same problem: “As the concept of strategy has become more prevalent, it has also become increasingly ambiguous – investigators rarely define it explicitly” (Kail and Bisanz 1982:232).

Nevertheless, researchers get exceedingly interested in translation strategies, but only some of them try to distinguish translation strategies from other related notions, such as translation method and translation rule. Only Königs (1987) and Wilss (1983) differentiate between translation strategies and translation methods. According to them, translation strategies denote procedures, which are applied when a source language text is transferred into the target language. These procedures can result in an optimal translation. Translation methods are tried and tested procedures, which, when applied systematically by the translator, ensure a high degree of success (Königs 1987).

A concept of strategy, which differs considerably from the one outlined above, is maintained by Hönig and Kussmaul (1982). According to them, a translation strategy appears to be a problem-solving device, which can be applied when a translator is challenged with a translation problem. A translation strategy goes before the process of transfer and of target-language text production. These scientists also claim, that strategic considerations concern the hierarchically highest decisions to be made by the translator. They partly determine and partly delimit the decisions, which are to be made on the hierarchically lower levels, such as syntax and lexis.

Lörcher (1991) begins his discussion of strategy by focusing on the differences between *strategy* and other related concepts, namely *method*, *plan*, *rule*, and *tactics*. Goal-orientedness appears in all of these concepts as a definitional criterion. According to Lörcher, strategies

differ from methods for the reason that strategies are individual by nature, while methods are “supra-individual, tried and tested procedures with which goals can be achieved with a high degree of probability”. In relation to plans, Lörcher maintains that although strategies contain an element of planning, they are to be regarded as separate, since “whereas plans represent action mentally, strategies contain procedural knowledge” (1991:70). Rules differ from strategies because they are socially prescriptive and going against them usually results in punishments. Finally, tactics, as opposed to strategies, which refer to sequences of actions, “control a concrete action or part of it within the entire process” (Lörcher 1991:70).

After his research this scholar developed a descriptive concept of strategy and defined translation strategy as “a potentially conscious procedure for the solution of a problem, which an individual is faced with when translating a text segment from one language into another” (Lörcher 1991:76). In his study, which is the most extensive investigation of translation strategies published to date, Lörcher (1991) states, that each strategy is formed of a sequence of core elements, which can be combined in different ways. A translation process, in turn, is formed of a series of strategies, which can also be combined differently.

Viewing strategies as problem-solving mechanisms, Lörcher (1991) argues that translation strategies have their starting point in the realization of a problem by the translator who employs these strategies to solve the problem. However, a problem is first recognized and identified, then a solution is worked out, put into action, monitored and controlled. Thus, according to this scholar, within a structure of decision-making, it can be argued that the starting point of a translation strategy is in the solution phase since selecting a strategy involves a decision to choose a solution from among alternatives.

The other linguist, investigating translation strategies, is Séguinot (1991), who views strategies as both the conscious and the unconscious procedures and to both unconcealed tactics and mental process. One more representative of similar research is Snell-Hornby (1988), who, on the other hand, believes that translation strategies consist of identifying and creating multiple relationships in both cultural association and language at the semantic and phonological levels. According to this scholar, the ultimate goal of any translation strategy is to solve the underlying problem of translation-mediated communication and to remove the external and internal constraints imposed on the translation process in order to unlock potential alternatives.

Jääskeläinen, who in her licentiate thesis deals with subjects’ attention units, characterizes translation strategies as follows: “they are a set of loosely formulated rules or principles which a translator uses to reach the goals determined by the translating situation in the most effective way” (1990:15). This characterization seems to be in line with the broad definition of strategy proposed by Kail and Bisanz: “for present purposes, then, strategy refers to

a set of internal cognitive procedures, a set that can be modified and is presumed to account for observed patterns of behaviour” (1982:240).

Despite of slightly different interpretations of the notion of translation strategy, individual differences of translators and the typical variability of the translation process, there are regularities that point at the possibility of establishing systems and classifications of translation strategies.

3.2. Classifications of Translation Strategies Occurring in the Process of Translation

3.2.1. Krings' Classification

The main focus of attention in the experiment reported in Krings (1986) is the identification of translation problems and translation strategies on the basis of TAPs. With regard to translation strategies, Krings (1986) suggests that translation strategies can be classified as strategies of *comprehension* (inferencing and use of reference works), *equivalent retrieval* (especially interlingual and intralingual associations), *equivalent monitoring* (such as comparing Source Text (ST) and Target Text (TT)), *decision-making* (choosing between two equivalent solutions) and *reduction* (for instance of marked or metaphorical text portions). **Figure 4** represents the model graphically:

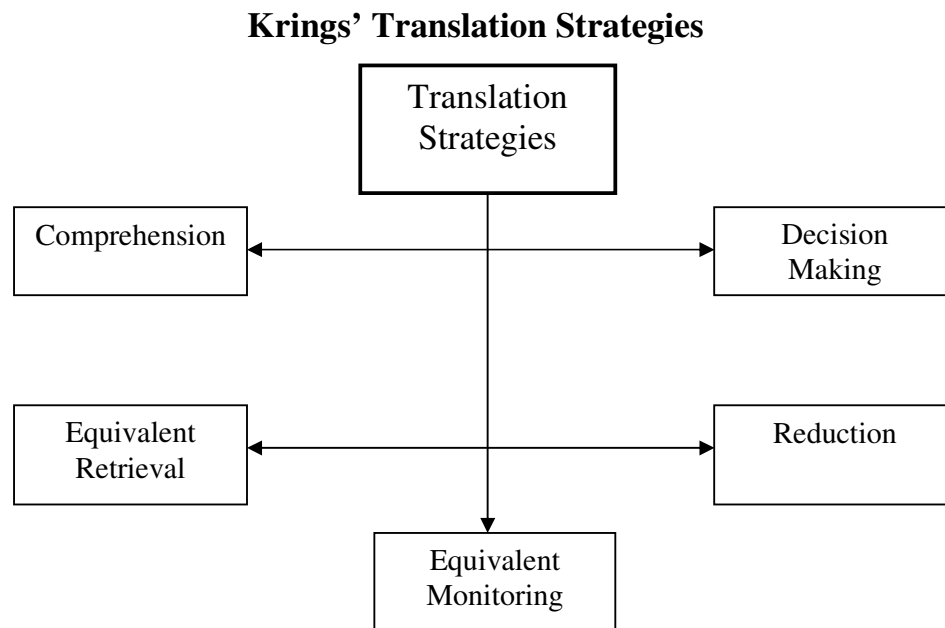


Figure 4. Graphical illustration of the classification of translation strategies after Krings (1986)

3.2.2. Gerloff's Classification

In her early studies of the translation process, Gerloff (1986) was very interested in the unit of processing. In her pilot study, she examines second language learner processes of text analysis using a translation task, looking in particular at the cognitive operations underlying comprehension and production of language, and at the relationship that exists between these two processes (Gerloff 1986). In using a translation task, she elicits information about retrieval strategies and strategies of analysis, editing and inference for purposes of both comprehension of the second language and production of the first language (Gerloff 1986: 244). As a result of her investigations, this scholar proposes a more complex classification of strategies than Krings (1986), and identifies such categories of translation strategies as *problem identification*, *linguistic analysis*, *storage and retrieval*, *general search and selection*, *text inferencing and reasoning*, *text contextualisation*, and *task monitoring*. The classification is depicted in **Figure 5**:

Gerloff's Translation Strategies

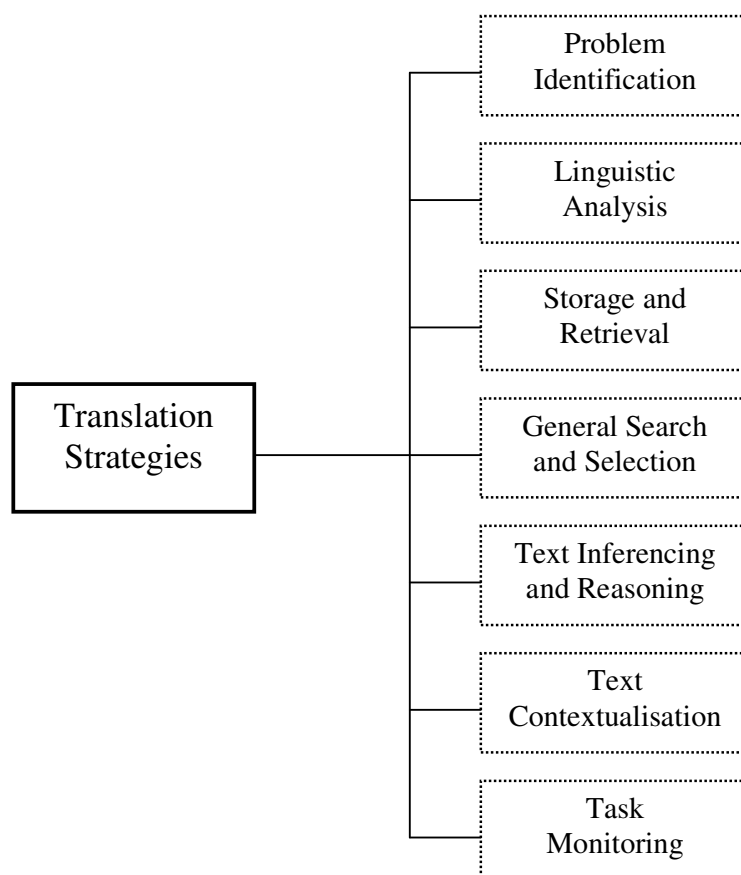


Figure 5. Graphical illustration of the classification of translation strategies after Gerloff (1986)

3.2.3. Mondahl and Jensen's Classification

One more classification of translation strategies is provided by Mondahl and Jensen (1996). In their discussion of the use of lexical search strategies, the scholars distinguish *production* from *evaluation* strategies. The former are further subdivided into *achievement* strategies and *reduction* strategies. An achievement strategy is characterized by the translator's attempt to remain as close to the source text as possible, i.e. to retain the communicative goal of the primary text producer. Among achievement strategies there are *spontaneous association* and *reformulation*. Spontaneous association resembles brainstorming: the translator is aware of the problem and has to operate on the basis of associations, which come spontaneously; the translator scans the field and may retrieve several possibilities that he/she has to choose from. One more type of the achievement strategy is the reformulation of the source text in either the translator's first language or second language – a reformulation that the translator feels does not change the overall meaning of the element. Among reduction strategies, which are characterized by their essentially corrective nature, are avoidance and unmarked rendering of marked items. The willingness to select reduction strategies is related both to the translator's linguistic competence and to her translation maxims. Finally, evaluation strategies involve, for instance, reflecting on the adequacy and acceptability of translation equivalents. This classification of translation strategies is presented in **Figure 6**:

Mondahl and Jensen's Translation Strategies

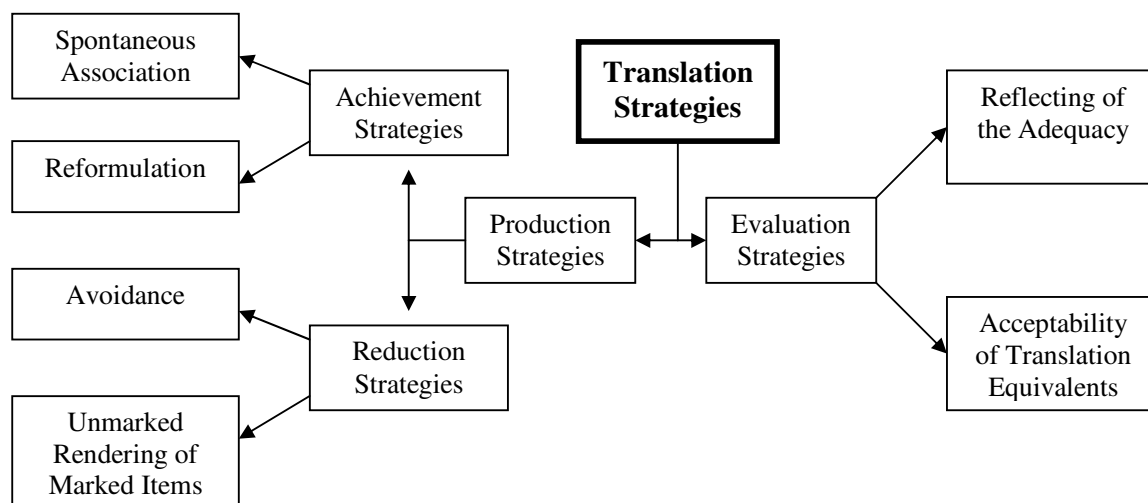


Figure 6. Graphical illustration of the classification of translation strategies after Mondahl and Jensen (1996)

3.2.4. Séguinot's Classification

Further lets consider one more classification of the translation strategies, provided by Candace Séguinot (1996). In “Some Thoughts about Think-Aloud Protocols”, this linguist explains that translation can be non-linear and that though a translation has been found, the mind continues to look for alternatives and comes back to the same item or structure. She also says there is evidence of parallel processing where the translator works on more than one item, structure, etc. at a time. (Séguinot 1996). Consequently, this scholar identifies four types of translation strategies operating in the translation process, namely *interpersonal* strategies (brainstorming, correction, phatic function), *search* strategies (dictionaries, world knowledge, words) *inferencing* strategies (rereading ST and TT, consult) and *monitoring* strategies (reread ST and TT, consult, compare units). **Figure 7** shows the graphical illustration of this classification of translation strategies:

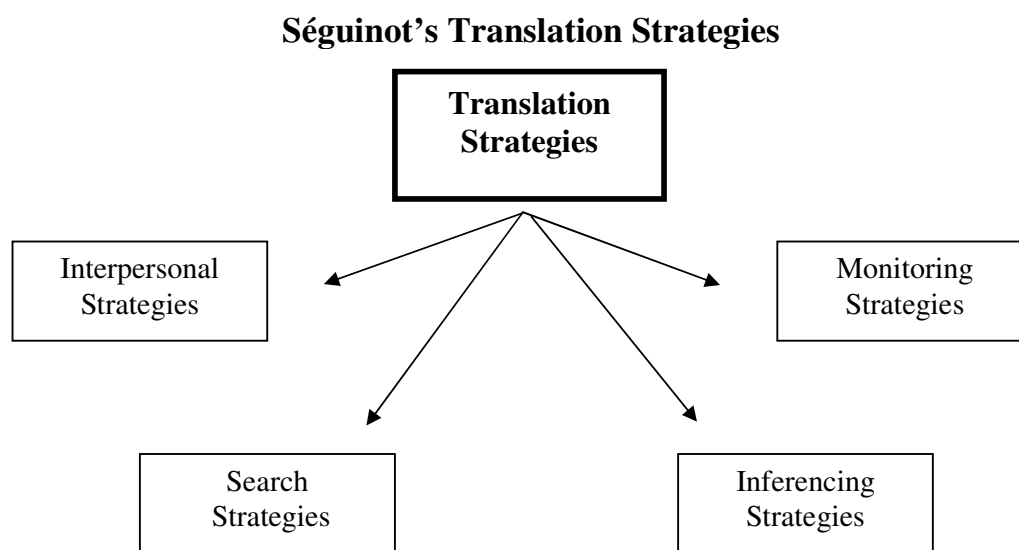


Figure 7. Graphical illustration of the classification of translation strategies after Séguinot (1996)

3.2.5. Jääskeläinen's Classification

Jääskeläinen (1993), in studying translation strategies, primarily concentrates on identifying the translators' focus of attention during their translation processes. What concerns the classification of the translation strategies, this scholar distinguishes between *global strategies*, which refer to the translator's general principles and preferred model of action, and *local strategies*, which refer to specific activities in relation to the translator's problem-solving and decision-making. Such distinction led the linguist to two hypotheses: (1) global strategies are relatively inconsistent in the non-professional translation processes, whereas professional and

semi-professional processes are more consistent in terms of global strategies; (2) in relation to local strategies, there may be considerable differences between successful and less successful translation processes. The difference may not be so much in the nature than in the distribution of strategies (Jääskeläinen 1993). Jääskeläinen's (1993) classification of translation strategies is presented in **Figure 8**:

Jääskeläinen's Translation Strategies

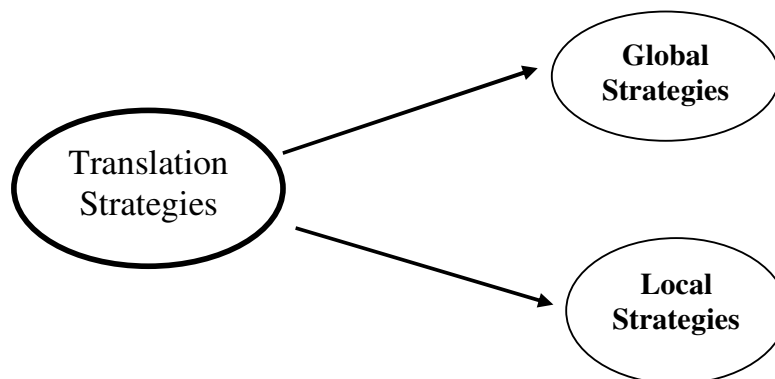


Figure 8. Graphical illustration of the classification of translation strategies after Jääskeläinen (1993)

3.2.6. Lörcher's Classification

Finally, let's consider the classification of translation strategies, presented by Lörcher (1991). This linguist developed a model for the strategic analysis of the translation process. The model consists of three hierarchical levels: the first and lowest contains those phenomena, which can be interpreted to be elements of translation strategies, i.e. the smallest detectable problem-solving steps; the second level captures the materialization of translation strategies, and the third and the highest level comprises the translation versions. Elements of translation strategies can be distinguished as to whether they are *original* or *potential*. The former exclusively occur within strategic, i.e. problem-solving, phases of the translation process and are thus original elements of translation strategies. The latter also occur within non-strategic phases of the translation process.

Lörcher (1991) provides 22 elements of translation strategies:

Original Elements of Translation Strategies

- RP : Realizing a Translation Problem
- VP : Verbalizing a Translation Problem
- SP : Search for a (possibly preliminary) Solution to a Translation Problem
- SP : Solution to a Translation Problem
- PSP : Preliminary Solution to a Translation Problem
- SPa,b,c: Parts of a Solution to a Translation Problem
- SP∅ : A Solution to a Translation Problem is still to be found (∅)
- SP=∅ : Negative (∅) Solution to a Translation Problem
- PSL : Problem in the Reception of the SL Text

Potential Elements of Translation Strategies

- MSL : Monitoring (verbatim repetition) of SL Text Segments
- MTL : Monitoring (verbatim repetition) of TL Text Segments
- REPHR.SL : Rephrasing (paraphrasing) of SL Text Segments
- REPHR.TL : Rephrasing (paraphrasing) of TL Text Segments
- CHECK: Discernible Testing (=Checking) of a preliminary Solution to a Translation Problem
- OSL : Mental Organization of SL Text Segments
- OTL : Mental Organization of TL Text Segments
- REC : Reception (first reading) of SL Text Segments
- [TS]com: Comment on a Text Segment
- TRANS : Transposition of lexemes or combinations of lexemes
- T : Translation of Text Segments without any problems involved
- T2,3,...n: Conceiving a Second, Third, etc. Translation Version
- ORG : Organization of Translation Discourse

Lörscher's model contains five types of translation strategies:

Type I: RP – (P)SP#/SPØ

Type II: RP – →SP (P)SP#/SPØ

Type III: (RP) – VP – (P)SP#/SPØ

Type IV: (RP) – (→SP) – VP – (→SP) – (P)SP#/SPØ; at least one →SP must be realized

Type V: (...) (P)SPa/ SPaØ (...) (P)SPb/ SPbØ (...) (P)SPc/ SPcØ

According to Lörscher (1991), a translator may produce several translation versions and it can happen because of some reasons: unsuccessful solving of a translation problem at the first attempt, the wish to optimise the target language text production by conceiving a more adequate translation version, or the search for the alternative target language text segment. **Figure 9** shows the graphical illustration of this classification of translation strategies:

Lörscher's Translation Strategies

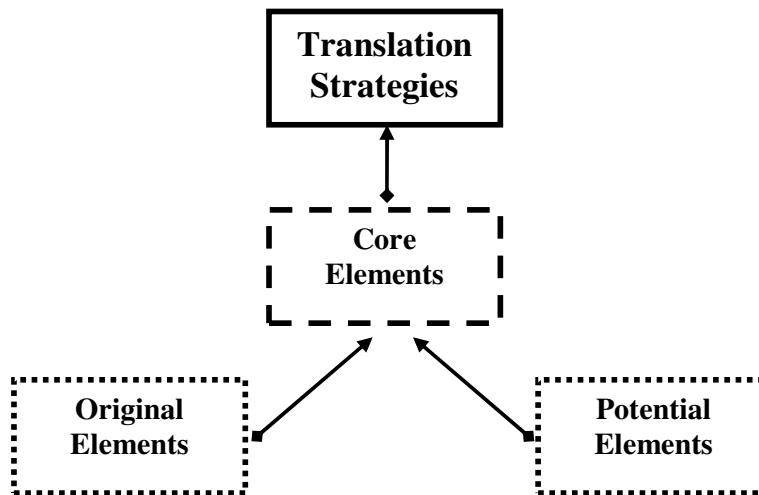


Figure 9. Graphical illustration of the classification of translation strategies after Lörscher (1991)

In sum, a number of TAP studies, especially early ones, have been concerned with the recognition and classification of translation strategies. Several classificatory schemes have been provided, adopting labels like *global / local*, *production / evaluation*, *reduction / achievement*, *monitoring (and revising)*, *search*, *comprehension*, *equivalent retrieval*, *decision-making* and so on.

On the whole, the presented classifications of the major investigators (Krings 1986, Gerloff 1986, Mondahl and Jensen 1996, Séguinot 1996, Jääskeläinen 1993) of the translation strategies can be compared to the classification provided by Lörcher (1991) and the equivalents can be found. However, not all elements of Lörcher's (1991) translation strategies have equivalents in the mentioned classifications. For example, there are no equivalents for original elements, such as VP (verbalizing a problem), SP a,b,c (parts of a solution), and PSL (problem in the reception of text). Potential elements of Lörcher's (1991) translation strategies, such as REC (reception of text segments), [TS]_{com} (comment on a text segment), ORG (organization of translation discourse) and →T_{2,3,...n} (conceiving a second, third, etc. translation version) also do not have equivalents in other classifications. Thus, taking into consideration the subtleties of Lörcher's (1991) classification, which provide a possibility to analyse our subjects' translation strategies in much detail, we decided to use his classification for our investigation.

3.3. On the Concept of “Translation Problem”

No matter what translation strategies were or will be devised and proposed by scholars for the translation and teaching of translation there will always be translation problems, which, as Newmark said, “are the heart of translation theory” (1988: 21). So, if translating is a problem-solving behaviour, then it is necessary to define what a problem is and in particular, a translation problem.

Mayer (1983: 5) defined a problem as consisting of three parts:

1. The problem is presently in some state.
2. It is desired that it be in another state.
3. There is no direct, obvious way to accomplish the change.

In translating a text, the text is originally in the state of being a source text, and the desirable state is for it to be transformed to a target text. And usually, there is no “direct” way to accomplish this aim (unless, of course, we are talking about “direct translation”, which is rarely an optimal solution).

In translation studies, there is a large amount of literature devoted to the solving of translation problems, frequently under the rubric of “translation strategies”. Lörcher, for

example, said that “translation strategies have been defined by me as *procedures which the subjects employ in order to solve translation problems*” (emphasis original) (1996:26). This scholar defines the translation problems from the perspective of the subject, not of the analyst. In other words, “only those text segments which the subjects cannot translate or which the subjects have tried to translate but whose results they then consider to be inadequate, represent *translation problems*” Lörcher (1991:80).

The investigation of the cognitive processes of translation also sees translating as a problem solving behaviour, as can be seen from Jääskeläinen’s (2002) summary of recent think-aloud protocol studies. The author in her own studies relating to translation strategies and translation problems is trying to avoid the use of translation problem as a unit of analysis because its use as a concept referring to individual difficulties in translation has been criticised to specific kinds of universal problems (e.g. Nord 1987). So, in her earlier work (Jääskeläinen 1990) the term “translation problems” was replaced by the term “*attention units*”, which were defined as: “those instances in the translation process in which the translator’s ‘unmarked processing’ (i.e. effortless or uncontrolled processing) is interrupted by shifting the focus of attention onto particular task-relevant aspects” (Jääskeläinen 1990:173).

Another linguist Ali Darwish (1999), in his work “A Theory of Constraints in Translation” also uses different term “*constraints*” while speaking about various problems in translation. According to him, translation is a process that is foiled by many constraints at different levels and various stages. These constraints affect the perceived and desired quality of translation and dictate the choices and decisions the translator makes. The ultimate goal of any translation strategy is to manage and remove these constraints. Understanding how these constraints work within the translation system and how they can be managed and ideally removed within a model or a framework of constraint management certainly benefits both the translator and the translation assessor (Darwish 1999).

In sum, all three terms, i.e. *translation problem*, *attention units* and *constraints* occur in the literature concerning translation studies, and all of them have the same meaning and the same idea: the difficulties in receiving a source language text segment or in finding a target language text segment, which is considered to be equivalent to the corresponding source-language text segment. In our investigation we have chosen to use the term *translation problem* since this term defines most clearly the problematic places, which occur during translation.

Thinking-aloud method as well as Lörcher’s (1991) translation strategies will serve as the instrument for our empirical research involving translations produced by language learners and translation students.

4. EMPIRICAL INVESTIGATION OF TRANSLATION STRATEGIES

From the studies and their results analysed and presented above it is clear that empirical investigations of the translation process is developing into an important object of research. The findings of such research have important implications for translation theory, translation-teaching methodology, as well as for the research into text reception and text production.

In this part of the work, the investigation will be presented the aim of which is to analyse translation strategies of language learners and translation students, as represented empirically in a corpus of our data, in order to find out the most and the least successful translation strategies.

In the following subsections the research setting (4.1.), experimental conditions (4.2.), the participants (4.3.), text type (4.4.), notational conventions (4.5.), methodological remarks (4.6.), data analysis and findings of the research (4.7.), which include the translations of the translation student *Subject 2* (4.7.1) and language learner *Subject 1* (4.7.2.), the types (4.7.1.1. and 4.7.2.1.) and potential elements (4.7.1.2. and 4.7.2.2.) of the employed strategies as well as translation problems (4.7.1.3. and 4.7.2.3.) occurring in their translation and the comparison of translation processes of the two groups (4.7.3.) are given.

4.1. The Research Setting

This study was conducted with a group of translation students and language learners at the Faculty of Humanities, Šiauliai University, during the period from March to May 2004. All translations were recorded using tape-recorder.

4.2. Experimental Conditions

The subjects were familiar with the task to be performed (i.e. translation), so they had only to get used to thinking aloud and being recorded while performing the tasks. We decided that training was not necessary, because it tends to influence the behaviour of the subjects somewhat, and this was the effect we were trying to avoid.

Prior to the recording, all the translators were given oral instructions in Lithuanian, in order to make sure the experiment seemed as realistic as possible. They were told the text would be a newspaper article on language. They were given unlimited time but were not allowed to use any reference material. This was done to prevent problem-solving processes from being blocked or broken off too early by simply adopting ready-made solutions. After these instructions, the subjects were given the written texts. The cassette recorder was switched on and was not switched off until the subjects had declared their translations finished.

The informants had to translate written text orally from English, their inter-language, into Lithuanian, their mother tongue, because researchers and practitioners of translation often regard translating into the mother tongue as the more, if not the only, acceptable working style of translation. Sofer, for example, explains: "...generally speaking, one translates from another language into one's own native language. This is because even years of study and experience do not necessarily enable one to be completely at home with an acquired language" (1998:34). Newmark (1988) is also suspicious of someone who translates into a target language without being a native speaker of it. He claims that "when one is doing a 'communicative translation' (as opposed to 'literal translation', for example), whether you are translating an informative text, a notice or an advert, 'naturalness' is essential. That is why you cannot translate properly if the TL is not your language of habitual usage" (1988:26).

After the translations had been recorded on cassette, they were transcribed in order to make them accessible for the subsequent analysis.

4.3. The Participants

Two groups of subjects representing two levels of translation expertise were recruited: language learners and translation students. The group of the language learners comprised five students of natural sciences, who had chosen a specialized course in English, while group of the translation students comprised five students studying English. Professional translators were not included in our research because according to Kussmaul and Tirkkonen-Condit (1995) using professional translators for think-aloud-protocols is counter-productive, since subjects tend to fall silent when the task in hand is so routine that it requires little effort, and for professional translators this happens a lot.

Think-aloud method involves a very detailed analysis and accurate transcript therefore the previously analysed studies contain the translations produced by fairly small number of informants (Dechert and Sandrock (1984) – one subject, Gerloff (1986) – five subjects, Krings (1986) – eight subjects, Königs (1987) – five subjects). For the same reason our data comprise the translations of ten informants. The two groups of participants took part in the same think-aloud experiment where they were asked to translate the unknown text from English into Lithuanian while at the same time verbalizing their thoughts. All they said was audio taped. The recording experiments were done without researcher's presence, as all the participants chose to be alone during the audio recording.

4.4. Text-type

We chose a text in the field of language, because we felt that this is an area that would not be completely unfamiliar to the subjects. Many people come into contact with the subject of

language either through their studies at the university or through the mass media. Consequently, most subjects should have had at least some exposure to the general subject field and should have at least some of the background knowledge required for translating in this field.

In view of the subjects' heterogeneous competence in foreign language, it was quite difficult to find adequate text for translation. The text should be of non-professional registers, stylistically unmarked, and its length should not exceed about 15 typewritten lines to make sure that it was not beyond the subjects' powers of concentration. So, for our investigation, we have chosen a newspaper article. The selected text is entitled "English language poised to lose its dominance" taken from *Toronto Star* news section 2.27.2004. The text was subjected to a few changes: it was abbreviated, the syntax remained unchanged, but a few very unusual terms were removed. The text includes lexical and morpho-syntactic subtleties, which would provide interesting material for our investigation:

English language poised to lose its dominance

Section: News, pg. A14

The world faces a future of people speaking more than one language, with English no longer seen as likely to become dominant, a British language expert says in an analysis. "English is likely to stay one of the world's most important languages for the near future, but its future is more problematic - and complex - than most people understand," language researcher David Graddol said. "Monolingual speakers of any variety of English - American or British - will experience increasing difficulty in employment and political life, and are likely to become confused by many aspects of society and culture around them," he said. The part of the world's population that speaks English as a native language is growing smaller. The idea of English becoming the world language is in the past. Instead, its major role will be in creating new generations of bilingual and multilingual speakers, Graddol reports. A multilingual population is already the case in much of the world and is becoming more common in the United States. The Census Bureau reported last year that nearly one American in five speaks a language other than English at home, with Spanish leading, and Chinese growing fast.

4.5. Notational Conventions

In the domain of performance analysis, scientists generally agree that orally produced utterances must first be transcribed and that the transcript is the basis of any interpretive approach to the data. For the reasons of standardization of the transcription the following notational conventions were used in this study:

1. Utterances in the mother tongue (= Lithuanian) were transcribed literally according to the acoustic impression they produce on the transcriber.
2. Utterances in the foreign language (= English) were transcribed in standard orthography.
3. Utterances, which relate to one category of analysis, were noted continuously, comprising one or several lines in the transcript.

4. Utterances shorter than a line in the transcript, which relate to one category of analysis, occupy the particular line alone.
5. The lines were numbered consecutively so that a transcribed utterance or part of it can be found without difficulty.
6. Broken off or continuing utterances were indicated by (...).
7. Additional information like “quickly”, “aloud”, etc. was noted in round brackets together with the respective utterance.
8. Pauses are noted by the number of seconds and the small letter ‘s’ both in round brackets, e.g. (5s).
9. When an utterance corresponded to more than one category of analysis, the two or more categories were noted with an oblique line (/) between them, e.g. RP / →SP (i.e. realizing a problem and searching for a solution).
10. When an utterance could be related to two different categories for analysis from two different aspects of analysis, the symbols of the two categories were connected by the equals sign (=), e.g. REPHR.TL = SP2 (i.e. rephrasing of the target text segment and the second solution to a problem).
11. When utterances were relating to other utterances, as is the case with comments, monitorings, rephrasings, and others, the related utterance was indicated after the category of the relating utterance. Thus, the categories [(TS)]_{com} (i.e. comment on a text segment), MTL (i.e. monitoring of target language text segment), REPHR.TL (i.e. rephrasing of target language text segment), etc., either have the categorial symbol or the line number of the utterances they relate to appended to them in round brackets, e.g. MTL (SP2) (i.e. monitoring of target language text segment, which is the second solution to a translation problem), REPHR.TL(42) (i.e. rephrasing of target language text segment, which is in the line no.42). When the related utterance immediately preceded the relating utterance, the former was not noted specifically.

4.6. Methodological Remarks

The methods employed in researching the object of investigation will be dealt with in this section. A distinction will be made between methods and procedures for the *elicitation* of data and those for the *analysis and evaluation* of data.

Among the methods for the elicitation of data, thinking-aloud as a procedure for collecting data, which yield insights into mental processes, is of decisive importance. The

origins, theoretical framework, advantages and disadvantages of this method are discussed in section 2 (Thinking aloud as a method of data collection) of the present work in more detail.

The analysis and evaluation of data is carried out by means of an interpretive approach, as this is customary in performance analysis. In the process of interpretive reconstruction, certain data are interpreted as (observable) indicators of (unobservable, mental) translation strategies. The analysis is carried out on the basis of the transcripts and the recordings. In the present investigation the interpretive approach will help to distinguish the most and the least successful strategies of the language learners and translation students.

4.7. Data Analysis

In this section the data, which was collected during the psycholinguistic investigation, will be described and later illustrated by two translations: oral translation produced by translation student (subsection 4.7.1) and oral translation produced by language learner (subsection 4.7.2). We have taken those translations (*Subject 2* from translation students and *Subject 1* from language learners), which most of all reflect the general features of the whole corpus of translations produced by the two groups in our investigation.

The data corpus consists of three interdependent types of data:

1. The translations, i.e. the respective target-language texts which the subjects externalise as the end products of their process of text production;
2. The thought-aloud utterances in which intermediate stages as preliminary results of text production reveal themselves verbally, and in which meta-utterances such as comments on certain passages, realized problems, problem-solving and text processing strategies can be found;
3. The paralinguistic phenomena (e.g. speed, rhythm, key, voice quality, etc.), which accompany the utterances mentioned in 1. and 2. above, and the temporal variables (e.g. rate of articulation, pauses, repetitions, self-corrections, etc.), which partly overlap with the former.

On the whole, all three types of data are interconnected with each other, and often it cannot be decided definitely to which of the three types of data a performance and process is to be assigned. Also, it must be taken into account that in practice, the most frequently occurring kind of translation, i.e. written translation, either contains only the end products of text production or the end products plus certain intermediate steps, i.e. preliminary versions. Meta-utterances as well as data belonging to type 3 are obviously not to be found in written translations. Consequently, all these three types of data will help us to analyse the domain of translation process of our subjects in more detail.

4.7.1. Translation of the Translation Student *Subject 2*

In this subsection the translation produced by translation student *Subject 2* will be reproduced in transcript (**Table 1**) and analysed with regard to its strategies and their elements. The comments concerning the actions taken by the subject while she is translating and the shortenings used for these actions are given on the right side of the table. A detailed description of the translation strategies employed by the subject will be given afterwards. However, due to the limited space of the paper, in this subsection we will give only an extract from the transcript of this translation. The complete translation is given in the appendix (1).

Translation IL – L1 (*Subject 2*)

No.	Text	Categories of Analysis	Comments
1.	(Reads text aloud)	REC	The first reading of the text is categorized as REC.
2.	Dabar taip,	ORG	The subject organizes (initiates) the discourse.
3.	English language poised to lose its dominance	OSL	The first unit of translation is determined.
4.	(3 seconds)	OTL	During this pause, the subject probably organizes various parts of the title of the SL text.
5.	Anglų kalba	T	The subject verbalizes the first part of translation.
6.	(2 seconds)	RP	The subject realizes a translation problem.
7.	poised to lose its dominance	VP+CT	The problem and part of its context are verbalized.
8.	(1 second) anglų kalba	MTL (6)	Verbatim repetition of utterance No. 6.
9.	(2 seconds)	→SP	The subject searches for a possible solution.
10.	poised to lose its dominance	MSL (8)	Verbatim repetition of utterance No. 8.
11.	anglų kalba	MTL (6)	Verbatim repetition of utterance No. 6.
12.	(2 seconds)	OSL	The next unit of translation is determined.
13.	jau praranda	SP	A solution to the translation problem is found.
14.	anglų kalba jau nebėra dominuojanti	REPHR. TL (14) / SP2	The subject finds another solution to the problem. It is a rephrasing of No. 14.
15.	The world faces a future of people speaking more than one language	REC	Reading is categorized as REC.
16.	(2 seconds)	RP/→SP	The subject realizes a problem and starts searching for a solution.
17.	Pasaulyje	SP	A solution to the translation problem is found.
18.	(4 seconds)	CHECK	Here, the subject probably tests the preceding TL text segment.
19.	ne, (2 seconds)	TS (TL) (21) –	As the result of checking the subject rejects the translation of the TL text segment 21 and considers it to be inadequate.
20.	ateityje	REPHR.TL (21)	Utterance 21 is rephrased.
21.	The world faces a future	VP	The subject verbalizes the problem.
22.	(2 seconds)	→SP	The subject searches for a possible

			3	solution.
27.	ai, ateityje žmonės vis dažniau	SP	}	A solution to the problem is found and
28.	kalbės ne tik viena kalba			verbalized.

Table 1. The transcript of the translation produced by the translation student *Subject 2*.

The analysis above captures and makes visible the translation strategies, their elements, and the translation versions. All in all the translation contains twenty six strategies: one strategy is based on the type I (i.e. when the subject immediately after the realization of a translation problem finds a solution) basic structure, six strategies are based on the type II (i.e. when a subject after the realization of a translation problem searches for a solution, finds and verbalizes it) basic structure, two strategies are based on the type III (i.e. when a subject after the realization of a translation problem verbalizes that problem and then finds a solution) basic structure, fourteen strategies are based on the type IV (i.e. when a subject after the realization of a translation problem starts searching for a solution and verbalizes it; this type additionally contains two potential phases of searching for a solution) basic structure, two strategies are based on the type Va (i.e. when a subject after the realization of a translation problem solves it by working out solutions for the parts which constitute that problem) basic structure, and one strategy is based on the type Vb (i.e. when a subject after the realization of a translation problem solves it by alternately verbalizing the parts which constitute that problem and successively works out solutions for them) basic structure. This can be illustrated as follows:

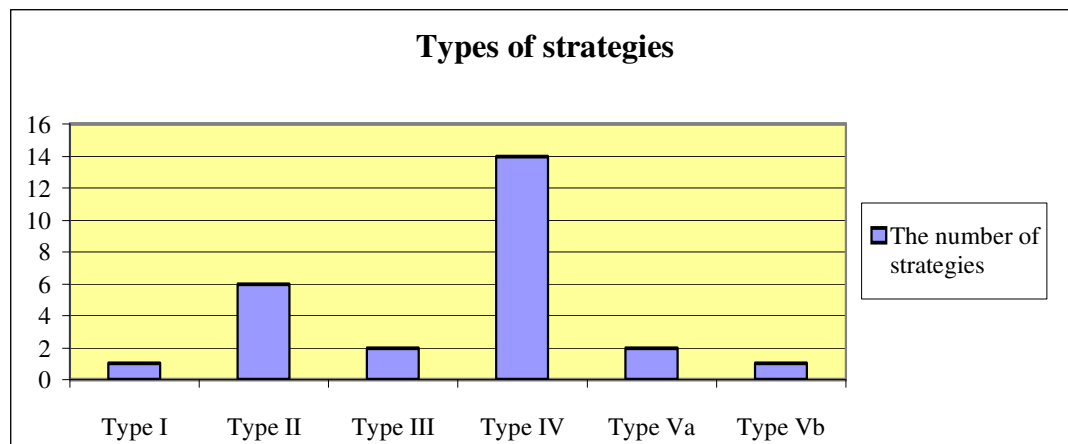


Figure 10: Types of strategies employed in the translation of the translation student *Subject 2*

All strategies used in the translation are of basic structure, which means that when the subject is faced with the translation problem she solves it very quickly or realizes the insolubility after having made a comparatively low strategic effort.

4.7.1.1. Types of Strategies Employed in the Translation

The strategy of the type I was used only once in the translation. According to this type, a subject, immediately after the realization of a translation problem, finds a preliminary solution to the problem or realizes its insolubility at the particular time. Such usage of the type I in the present translation means, according to Lörscher, that “a TL text segment, which the subject considers equivalent to a respective SL one is stored in the subject’s memory, but is temporarily not accessible to her” (1991:220). It means that when the subject concentrates on the problematic SL item, she succeeds in making the equivalent TL element available to her. The fact that the subject used this type only once indicates that she doesn’t possess enough TL equivalents for SL lexemes stored in her memory.

The most frequent type of strategies employed in this translation is type IV. This type is acknowledged when a subject realizes a translation problem, possibly starts searching for a solution, and verbalizes it. After the verbalization, the subject may find a solution either immediately or after a further phase of searching, or the subject may realize that she cannot solve the problem at that particular time. According to Lörscher, “problems, for which the subjects have no TL equivalents stored in memory and for whose solution paraphrasing and construction processes in the target-language are required, are solved by using type IV strategies” (1991:224). Consequently, we can interpret that this subject tries to solve most translation problems with the help of rephrasing, checking and reconstructing the TL segments.

Speaking about the successfulness of the translation, it should be mentioned, that our observations on the success of translation strategies are based on a concept of success, which is oriented towards what the subjects consider success. Thus, translation strategies are successful to the extent to which the subjects succeed in bringing about what to them are partial, preliminary or final solutions to translation problems. It is evident that what the subjects consider to be successful and what the analyst does often do not coincide. It is just evident and can be documented empirically that subjects quite often find target-language text segments, which they consider as solutions to problems, but which apparently are translation errors. Nonetheless, strategies, which bring about such “solutions”, are to be considered successful in view of the concept of success used here.

Lets briefly discuss what structures were successful, i.e. brought about preliminary or partial solutions to translation problems. In the present translation, produced by translation student, there were no unsuccessful translation strategies, and this is a common feature in all translations, produced by translation students. When confronted with translation problems this subject employed almost all possible types of strategies:

- Type I – when she immediately, after the realization of a translation problem, found a solution (for example, the lines 80 – 83 in the transcript);

- Type II – when she, after the realization of a translation problem, searched for a solution, found and verbalized it (for example, the lines 20 – 21, 160 – 161, 169 – 177, etc. in the transcript);

- Type III – when she, after the realization of a translation problem, verbalized it and then found a solution (for example, the lines 25 – 27, 128 - 129 in the transcript);

- Type IV – when she, after the realization of a translation problem, twice started the search for a solution and then verbalized it (for example, the lines 7 – 16, 70 – 79, 109 – 117, etc. in the transcript);

- Type Va – when she, after the realization of a translation problem, solved it by working out solutions for the parts, which constitute that problem (for example, the lines 31 – 46, 48 – 52, in the transcript);

- Type Vb – when she, after the realization of a translation problem, solved it by alternately verbalizing the parts, which constituted that problem, and successively worked out solutions for them (for example, the lines 92 - 106 in the transcript).

The successfulness of the translation is also due to the potential elements (CHECK (testing of a solution), MTL (monitoring of target language text segments), MSL (monitoring of source language text segments), REPHR.TL (rephrasing of target language text segments), etc.) occurring in the translation.

4.7.1.2. Potential Elements of Strategies Employed in the Translation

Altogether there are twenty nine potential elements in the translation: three instances of rephrasing of TL text segments (REPHR.TL), five instances of monitoring of SL (MSL) text segments and nine instances of monitoring of TL (MTL) text segments, and twelve instances of checking (CHECK). This can be graphically illustrated as follows:

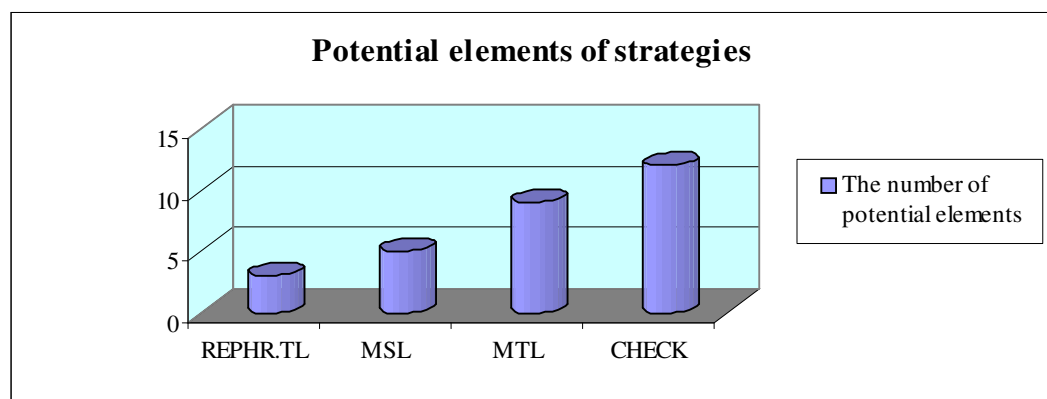


Figure 11: Potential elements of strategies employed in the translation of the translation student *Subject 2*.

The most frequent potential element used in the translation is CHECK. CHECK means the testing of preliminary solutions to translation problems. As a result of checking, the solution can be confirmed or rejected. In the latter case, the subject either tries to work out another solution or the problem remains unsolved. In this translation the checks, which result in a confirmation of solution, represent the majority of the cases. It means that the solutions given by the subject are frequently checked before the subject acknowledges them to be adequate solutions, whereupon the strategy terminates successfully. Success or failure of a strategy is obviously the result of checking, which plays a highly successful part in the process of working out new, adequate solutions.

The least frequent potential element of translation strategies in this translation is rephrasing of TL text segments (REPHR.TL). Rephrasing means taking up text segments and verbalizing them, not verbatim, but in a different form from the original. Rephrasing of text segments constitute a process of further addressing of a problem. In the present translation none of the strategies in which this element occurs terminates with a zero-solution, i.e. no solution is given. This is also true about other translations in our data corpus. The fact that REPHR.TL leads to a preliminary or partial solution makes this strategy element an extremely successful one. However, the translation student *Subject 2* tries to solve translation problems using in most cases other potential elements, as checking or monitoring. Consequently, her translation is not so stream-lined, well-formed and complete as it might have been.

4.7.1.3. Translation Problems Occurring in the Translation

The translation problems, which can be found in the data corpus, can be grouped into three categories:

- a) lexical problems
- b) syntactic problems
- c) lexico-syntactic problems

Lexical problems refer to single lexemes of the SL text for which the subject has no corresponding TL lexemes available. Syntactic problems refer to the syntactic structure of the SL text segment for which the subject has no corresponding TL structure available. It is not the transfer of the lexemes, but their syntactic arrangement to make an adequate TL text segment, which constitutes the problem. Lexico-syntactic problems occur when both lexical and syntactic phenomena constitute the translation problem for the subject, or when it is not possible to differentiate between either of these phenomena.

There are twenty six translation problems in the translation of the translation student *Subject 2*. All problems occurring in this translation can be attributed to the three groups

mentioned above: 64 % are lexical translation problems, 16 % are syntactic problems and 20 % are lexico-syntactic translation problems. This can be illustrated as follows:

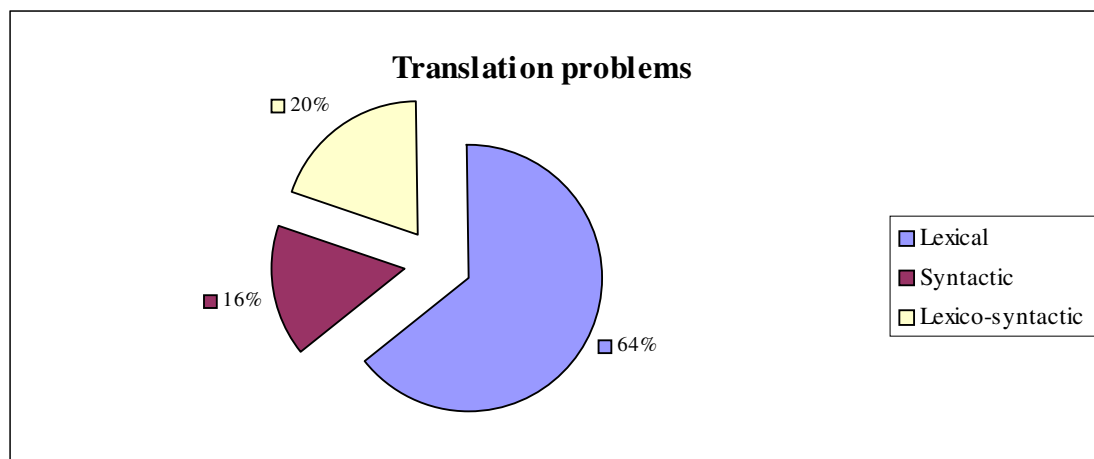


Figure 12: Translation problems occurring in the translation of the translation student *Subject 2*.

The biggest part of all problems is of lexical kind. Here we will give some examples and explanations of such translation problems:

Example 1

Text: *The world* (Line No.17)

Translation: **Pasaulyje, ateityje** (Line No. 21 and Line No. 24)

In this example the translator realizes a problem of lexical kind. She cannot translate the word in English at once and is searching for a solution. It takes two seconds to find a preliminary solution, but the following utterance reveals that she has changed her mind after the testing of this preliminary solution and rejects the translation by rephrasing it.

Example 2

Text: *British language expert* (Line No. 47)

Translation: **Britų kalbos ekspertas** (Line No. 51)

Here the subject is not able to transfer the target language text segment at once and tries to solve this translation problem by dividing it into separate parts. Some potential elements are involved as well. After several pauses she manages to give the translation.

Example 3

Text: *Most people understand* (Line No.71)

Translation: **Supranta dauguma žmonių** (Line No.79)

In this case the translation student, when encountered with translation problem of lexical kind, verbalizes it, then uses verbatim repetition and after two pauses of three and four seconds finds the solution and verbalizes it.

Example 4

Text: *In employment* (Line No.128)

Translation: **Darbe** (Line No.129)

In this example of lexical translation problem the subject first of all verbalizes the problem and after a very short pause gives a preliminary solution. As the translation continues, it is considered that this is the solution for the problem.

Example 5

Text: *Part of the world's population* (Line No.162)

Translation: **Ta pasaulio dalis** (Line No.164)

In this instance the translator verbalizes the translation problem several times, she employs potential elements and after several pauses provides a solution to the problem.

Syntactic problems have the smallest part of all translation problems. Some examples of such translation problems follow:

Example 1

Text: *Seen as likely to become dominant* (Line No.34 and 35)

Translation: **Tikriausiai taps dominuojanti** (Line No.46)

Here the translator encounters a syntactic problem and starts searching for a solution. After verbalizing it, she pauses several times, repeats the same target language utterances and after testing the syntactic structure of the translation, provides a solution to the problem.

Example 2

Text: *Will experience increasing* (Line No.119)

Translation: **Patirs didėjantį** (Line No.120)

In this case the student realizes syntactic translation problem and after four seconds verbalizes it. The search for a solution continues and she employs such potential elements as testing and verbatim repetitions of the source language text segments. This translation problem ends with a solution and the subject continues with the translation.

Example 3

Text: *Are likely to become confused* (Line No.130)

Translation: **Tikriausiai bus pasimetę** (Line No.138)

In this example the translator first of all tries to solve this translation problem by dividing it into several parts. Verbatim repetitions of source and target language texts utterances, repeated verbalizations of the problem and several pauses lead to a solution of this translation problem.

The lexico-syntactic problems are also not so frequent in the translation. Some examples of such translation problems follow:

Example 1

Text: *Poised to lose its dominance* (Line No.8)

Translation: **Jau nebėra dominuojanti** (Line No.15 and 16)

This example shows the combination of lexical and syntactic translation problems. The translator pauses for two seconds before verbalizing the problem. She uses several verbatim repetitions of source and target language utterances, employs rephrasing of the target language utterance and finally solves this translation problem.

Example 2

Text: *Society and culture around them* (Line No.140)

Translation: **Dėl visuomenės ir kultūros, kuri ji supa** (Line No.144 and 145)

Here the subject first of all verbalizes the translation problem and after two seconds repeats the target language utterance preceding this translation problem. The four seconds pause allows her to provide a possible solution to the problem.

Example 3

Text: *Will be in creating* (Line No.196)

Translation: **Bus kuriamas** (Line No.199)

In this example the student realizes the translation problem and verbalizes it. After a pause of two seconds she gives a solution to this translation problem and repeats the whole translated sentence. She continues the translation without testing this solution.

Considering everything that has been mentioned and analysed in this subsection, it is clear that the translation of the translation student *Subject 2* is more sign-oriented. This is indicated by the multitude of lexical translation problems, which also signify the lack of proficiency in the source language. However, the subject tries to solve not only lexical, but also syntactic and lexico-syntactic translation problems and this points to the fact that she tries to translate in a sense-oriented way as well.

4.7.2. Translation of the Language Learner *Subject 1*

In this subsection the translation produced by language learner *Subject 1* will be reproduced in transcript (**Table 2**) and analysed with regard to its strategies and their elements. The comments concerning the actions taken by the subject while he is translating and the shortenings used for these actions are given on the right side of the table. A detailed description of the translation strategies employed by the subject will be given afterwards. However, due to the limited space of the paper, in this subsection we will give only an extract from this translation. The complete translation is given in the appendix (2).

Translation II – L1 (Subject 1)

No.	Text	Categories of Analysis	Comments
1. 2.	English language poised to lose its dominance	OSL	The subject extracts the first unit of translation from the text, which falls under the category OSL.
3.	Čia “anglų kalba”	T	The first unit of translation is transferred to TL.
4.	(3 seconds)	RP/→SP	S 1
5. 6.	kažkaip “praranda savo dominavimą”	SP	
7. 8. 9. 10. 11. 12.	The world faces a future of people speaking more than one language, with English no longer seen as likely to become dominant, a British language expert says in an analysis.	REC	Reading is categorized as REC.
13.	(3 seconds) ehm (2 seconds)	OSL	After the reading, the SL text segment is mentally organized for its translation into TL.
14.	Pasaulio (1 second) žmonių ateitis	T	The first part of the SL text segment is translated.
15. 16.	kurie kalba daugiau negu viena kalba	T	The translation continues.
17.	(5 seconds)	RP/→SP	S 2
18.	anglų	SPa	
19.	(1 second) ehm (3 seconds)	→SP	A solution for the problem’s second part is searched for.
20.	nebebus daugiau toks	SPb	The second part of a solution is given.
21.	(2 seconds)	→SP	The subject continues searching for the remaining part a solution.
22.	dominuojanti	SPc	The third part of a solution is given.
23.	(2 seconds)	→SP	The subject continues searching for the remaining part a solution.
24. 25.	pasak britų kalbos ekspertų analize	SPd	The last part of a solution is given.
46. 47.	(1 second) dauguma žmonių supranta tai	REPHR.TL (45)	The subject rephrases the TL text segment No. 45.
48.	(5 seconds)	CHECK	The subject tests the adequacy of the given translation.
49. 50. 51. 52. 53. 54. 55. 56. 57.	Monolingual speakers of any variety of English – American or British – will experience increasing difficulty in employment and political life, and are likely to become confused by many aspects of society and culture around them, he said.	REC	Reading is categorized as REC.
58.	(3 seconds)	RP/→SP	S 3
59.	“Monolingual”, čia šito nežinau	SPØ	

Table 2. The transcript of the translation produced by the language learner *Subject 1*.

The analysis above shows the translation strategies, their elements, and the translation versions. On the whole the translation contains ten strategies: four strategies are based on the type II (i.e. when a subject after the realization of a translation problem searches for a solution, finds and verbalizes it) basic structure, one strategy is based on the type III (i.e. when a subject after the realization of a translation problem verbalizes that problem and then finds a solution) basic structure, five strategies are based on the type IV (i.e. when a subject after the realization of a translation problem starts searching for a solution and verbalizes it; this type additionally contains two potential phases of searching for a solution) basic structure, and one strategy is based on the type Va (i.e. when a subject after the realization of a translation problem solves it by working out solutions for the parts which constitute that problem) basic structure. This can be illustrated as follows:

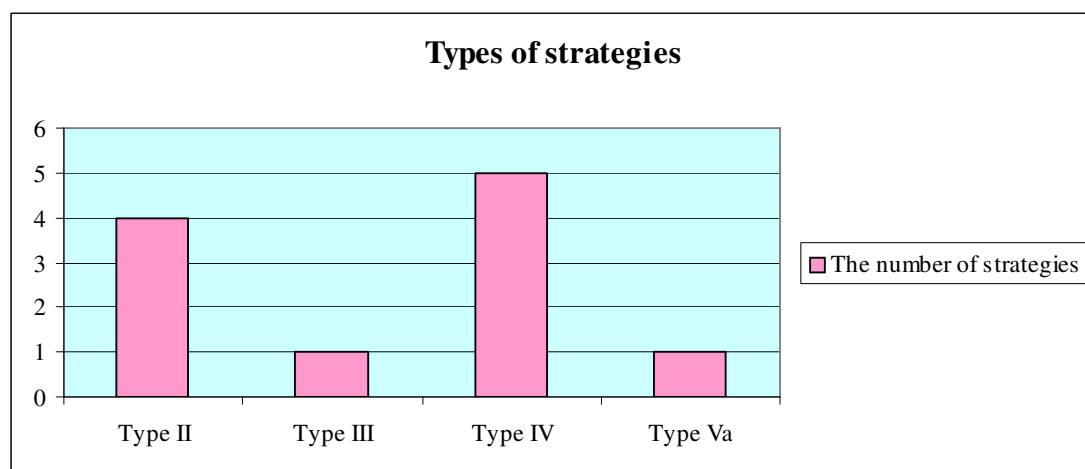


Figure 13: Types of strategies employed in the translation of the language learner *Subject 1*.

All strategies used in this translation are also of basic structure, which means that when the subject is faced with the translation problem he solves it very quickly or realizes the insolubility after having made a comparatively low strategic effort.

4.7.2.1. Types of Strategies Employed in the Translation

The least frequent strategies in this translation are of the types III and Va. According to the type III, a subject additionally verbalizes the respective problem, i.e. when the subject does not succeed in finding a TL equivalent to a SL item solely by putting the problematic item into his focus of attention, the subject can verbalize the SL item as a specific problem-solving activity. Such verbalization results in a further mental focussing on the problem. Such usage of the type III in the present translation means, according to Lörcher, that “a function of verbalization of a problem is to separate SL forms from their sense” (1991:223). This means that

in accordance with the sense comprised in this way, TL equivalents can be searched and worked out. The fact that the subject used this type only once indicates that he doesn't try to solve the translation problems by using additional verbalizations; he simply gives up and continues translating.

The type Va strategy, which is also used only once in this translation, is mainly used to solve complex problems if these can be split up into parts and solved successfully. According to Lörscher, "the problematic text segments do not function as units of translation, because they are too large and too complex to be processed in one go" (1991:226). This means, that when language learner *Subject 1* could not translate a very long and problematic text segment, he split it into parts and systematically transferred the shorter SL text segments word for word into TL. The usage of this type of translation strategy reveals that the subject preferred to concentrate on smaller units of translation and, moreover, to translate mainly word for word.

The most frequent type of strategies employed in this translation is type IV. As mentioned in the previous analysis, this type is acknowledged when a subject realizes a translation problem, possibly starts searching for a solution, and verbalizes it. After the verbalization, the subject may find a solution either immediately or after a further phase of searching, or the subject may realize that he cannot solve the problem at that particular time. Consequently, we can interpret that this subject tries to solve most translation problems, which occur due to the absence of the TL equivalents stored in memory, with the help of additional original and potential elements of the translation strategies, though the latter ones are very rare in this translation.

What concerns successful and unsuccessful translation strategies employed in this translation, it should be mentioned that out of total ten strategies there are even three unsuccessful ones, i.e. those, which do not bring about preliminary or partial solutions to the translation problems. The following are the unsuccessful types of strategies:

- Type II – when he, after the realization of the translation problem, searched for a solution, but could not find it (for example, the lines 58 – 59 in the transcript);
- Type III – when he, after the realization of a translation problem, verbalized it, but could not find a solution (for example, the lines 72 – 73 in the transcript);
- Type IV – when he, after the realization of a translation problem, twice started the search for a solution, but could not find any (for example, the lines 119 – 121 in the transcript);

Nevertheless, seven strategies of the type II, IV and Va are completed successfully and the solutions are provided:

- Type II – when he, after the realization of a translation problem, searched for a possible solution, found and verbalized it (for example, the lines 4 – 6, 64 – 67, and 161 – 164 in the transcript);

- Type IV – when he, after the realization of a translation problem, twice started the search for a solution and then verbalized it (for example, the lines 130 – 133, 134 – 136, and 144 – 148 in the transcript);

- Type Va – when he, after the realization of a translation problem, solved it by working out solutions for the parts, which constitute this translation problem (for example, the lines 17 – 25 in the transcript);

The incomplete success of this translation maybe is due to the lack of potential elements (CHECK (testing of a solution), MTL (monitoring of target language text segments), MSL (monitoring of source language text segments), REPHR.TL (rephrasing of target language text segments), etc.).

4.7.2.2. Potential Elements of Strategies Employed in the Translation

On the whole there are only twelve potential elements in the translation: four instances of rephrasing of TL text segments (REPHR.TL), and eight instances of checking (CHECK). The subject does not make use of such potential elements as REPHR.SL (rephrasing of source language text segments), MTL (monitoring of target language text segments), MSL (monitoring of source language text segments) in his translation at all. This can be graphically illustrated as follows:

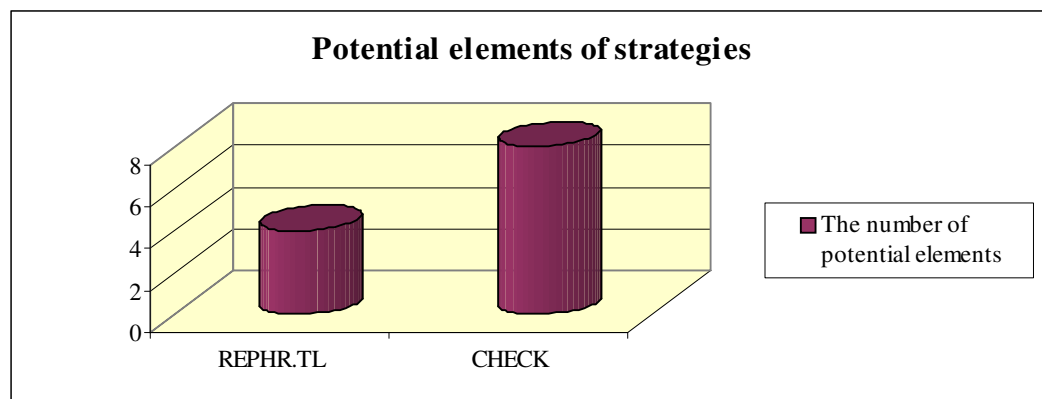


Figure 14: Potential elements of strategies employed in the translation of the language learner *Subject 1*.

The most frequent potential element used in the translation is CHECK. As was mentioned in the analysis of the previous translation, CHECK means the testing of preliminary solutions to translation problems. As a result of checking, the solution can be confirmed or

rejected. In this translation the checks are used to test the solutions before the subject acknowledges them to be adequate solutions, whereupon the strategy terminates successfully. Nevertheless, there are some CHECKS in this translation, which do not take part in the process of solving a translation strategy and consequently are employed as bound elements, which make no influence on the translation.

Less frequent potential element of the two in this translation is rephrasing of TL text segments (REPHR.TL). While rephrasing, the subject takes up text segments and verbalizes them, not verbatim, but in a different form from the original. In the present translation none of the strategies in which this element occurs terminate without a solution. However, the language learner *Subject 1* tries to solve translation problems using in most cases original elements (VP (verbalizing a translation problem), RP (realizing a translation problem), [SP]_{com} (solution to a translation problem with comments), etc.). This is the reason why there are so few potential elements, which usually help to solve more translation problems successfully and to produce a complete translation. Consequently, his translation leaves a lot to be desired.

4.7.2.3. Translation Problems Occurring in the Translation

There are ten translation problems in the translation of the language learner *Subject 1*. All problems occurring in this translation can also be attributed to the three groups mentioned in the previous analysis. On the whole there are 75 % lexical translation problems, 8 % syntactic problems and 17 % lexico-syntactic translation problems. This can be illustrated as follows:

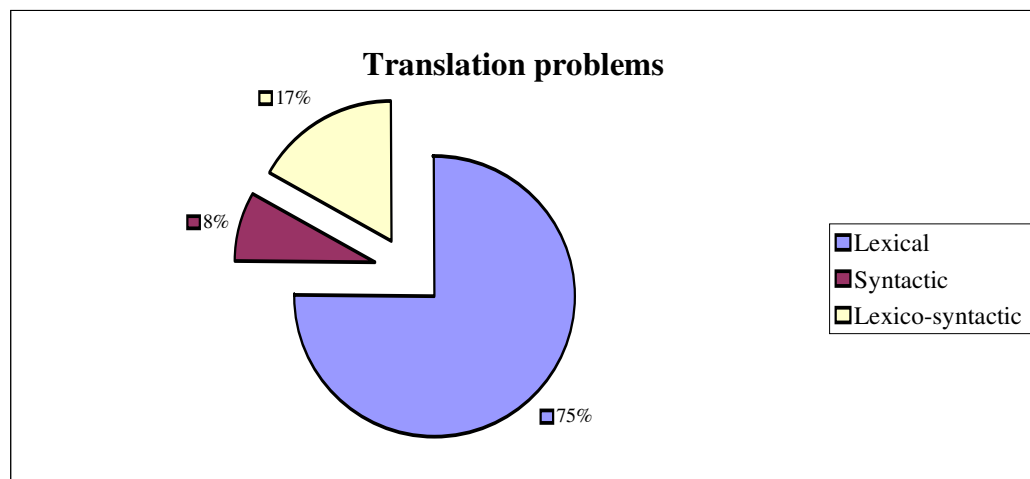


Figure 15: Translation problems occurring in the translation of the language learner *Subject 1*.

The biggest part of all problems is of lexical kind. Here we will give some examples and explanations of such translation problems:

Example 1

Text: *Will experience* (Line No.51)

Translation: **Patirs** (Line No.67)

In this example the student realizes a problem and pauses for three seconds. He starts searching for a possible solution and before giving it he makes one more pause. After this the language learner provides a preliminary solution, but after testing it, he rephrases the first solution and provides the second solution to the problem.

Example 2

Text: *Multilingual* (Line No.130)

Translation: **Multilingvistinė** (Line No.132)

Here the subject first of all verbalizes the translation problem. During the pause of two seconds he searches for a solution and manages to provide a solution to the lexical translation problem together with some comments.

Example 3

Text: *Common* (Line No.145)

Translation: **Naudojama** (Line No.147)

In this example the language learner, when confronted with the translation problem of a lexical kind, stops for four seconds and then verbalizes the problem. After searching for a solution he provides it in three seconds. Testing of this solution does not change his mind and he continues translating.

The syntactic problems have the smallest part of all translation problems. Some examples of such translation problems follow:

Example 1

Text: *Speaking more* (Line No.8)

Translation: **Kurie kalba** (Line No.15)

Here the language learner translates the source language text segment without much consideration. He makes two pauses, but does not verbalize the problem. After giving a solution, the subject does not employ testing or rephrasing of the solution and continues translating.

Example 2

Text: *No longer seen* (Line No.9)

Translation: **Nebėbus daugiau toks** (Line No.20)

In this example of syntactic translation problem the subject reads the extract from the source language text and after some pauses gives a solution. No potential elements are used in order to solve this translation problem.

Example 3

Text: *Speaks a language other than* (Line No.153)

Translation: **Kalba kitomis kalbomis** (Line No.166)

Here the student also first of all reads the extract from the source language text and after some pauses provides a solution. He does not make use of any of potential elements.

There are only two instances of the lexico-syntactic problems in the translation. Some examples of such translation problems follow:

Example 1

Text: *In an analysis* (Line No.12)

Translation: **Analize** (Line No.25)

The subject, while solving this translation problem of lexico-syntactic kind, first of all reads the source language text and then starts searching for a solution. After some pauses he manages to translate this part, but does not employ any potential elements.

Example 2

Text: *Nearly one American* (Line No.152)

Translation: **Netoli Amerikos** (Line No.164)

In this example the language learner first of all verbalizes the source language text segment and pauses for a search of a solution. After giving a preliminary solution, he tests it and after a pause of six seconds, the student rephrases the preliminary solution and without any more checking continues translating.

Considering everything that has been mentioned and analysed in this subsection, it is clear that the translation of the language learner *Subject 1* is only sign-oriented. This is indicated by the multitude of lexical translation problems and the vague occurrence of syntactical and lexico-syntactical translation problems. The subject does not try to analyse the whole text from the sense-oriented point of view. He is trying to translate only word for word and easily gives up when he has to deal with a problem intensively and to direct specific problem-solving activities towards it.

4.7.3. Comparison of Translations Produced by Translation Students and Language Learners

Before going to the differences of translations produced by both groups, let's discuss the similarities occurring in the translation process of these groups. Based on the observations of all the translators in this study, the translation process can be broken down into three general strategies:

- *understanding and reasoning*;
- *searching*;
- *revising*.

These strategies are not clear-cut or straightforward, and they overlap and reoccur throughout the translation process.

The *understanding and reasoning* part of the process is the most obvious, especially to the observer of the investigation. At this stage, the translators started by reading and becoming familiar with the text and eventually produced an equivalent target language text. To reach such results they used a number of strategies such as *reading*, *comparing the source and target texts*, *reading out loud*, *comparing language structures* and *working out acceptable equivalents*. All translators stayed very close to the structure of the source text, most commonly translating at word or sentence level. As can be expected, experience played a significant role in how the translators worked through the text, especially regarding syntactic structure.

The *searching* part of the translation process is mostly indicated by *pauses*, *verbatim repetitions* of source and target language text segments, and *comments on the possible solutions* to the translation problems. This general strategy quite often appears in and overlaps with understanding and reasoning as well as revision strategies.

Like the other stages, *revision* reoccurred many times throughout the translation process. Revision strategies included *rereading the text*, *comparing the source and target text for accuracy*, *verifying and changing lexical choices*, *adjusting grammatical structure*, *changing word order*, *revising syntax* and improving the overall flow of the text. In "Some Thoughts about Think-Aloud Protocols", Candace Seguinot (1996) explains that translation can be non-linear and that though a translation has been found, the mind continues to look for alternatives and comes back to the same item or structure. She also says there is evidence of parallel processing where the translator works on more than one item, structure, etc. at a time. The same can be said about our informants. Some of them did a final revision of their text once they had completed the translation and almost all of them were coming back to one or another target text segments with a new translation version after some time.

Now let's compare some aspects of the translation processes of translation students and language learners and present the differences as they could be interpreted from the collected data. Speaking about the distribution and frequency in the types of strategies, i. e. in the quantitative aspects of the translation strategies, dissimilarities between translation students and language learners can be noticed. Moreover, the process-oriented approaches to the translations between the two groups of translators differ quite considerably.

Firstly, we found out, that language learners take a mainly form oriented approach to the translations and translation students try to employ sense oriented procedures. In this way the inadequacy of translations with serious distortions of sense or violations of norms of target language text production are avoided.

Secondly, the translation students take considerably larger units of translations, i.e. the source language text segments, which the subjects extract and put into their focus of attention in order to transfer them into the target language as a whole. It means, that the processing system of translation students can obviously handle larger units than that of language learners. The former try to choose phrases, clauses or sentences as units of translation, whereas the latter concentrate more on syntagmas and especially on single words. As a result, translation students often realize problems while they are transferring a unit of translation into the target language. However, language learners mostly realize translation problems before they start translating because the units they extract from the source language text are much smaller and thus problems can be located more easily and more quickly. Furthermore, it is mainly problems of a local kind, especially lexical transfer problems arising from lack of competence in source language or target language, which the language learners are faced with. The translation students in this case are already trying to concentrate on global, formulating problems, with the optimal expression of sense according to the target language norms of text production.

Thirdly, language learners tend not to check those target language utterances according to their sense which they have translated and within which they didn't realize any problem. As a result, the translations of the language learners quite often reveal utterances, which contain grammatical mistakes, even in their mother tongue, violations of target language text production norms, or which make no sense. However, translation students tend to continuously check their target language text output, no matter whether it has been produced with or without any problems involved. So translation students often don't realize formulating problems before they check their utterances produced in target language. Such backward realization of translation problems is an important distinguishing factor of the translation processes of translation students versus language learners.

Finally, the translation students tend to test out their utterances produced in target language with regard to their stylistic and text-type adequacy. On the contrary, language learners only check the solutions to their problems, and this checking is done with respect to lexical equivalence and, to a lesser extent, to their syntactic correctness. They do not regard the stylistic and text-type adequacy as very important and significant. Thus their translation processes are dominated by lexis and syntax of the source language text. As a consequence, texts in the target language are produced which are often incomplete and unacceptable because they contain violations of target language norms of text production. In principle, such insufficiency can be avoided by the different read-through procedures generally employed by professional translators.

The comparison presented above can be illustrated as follows:

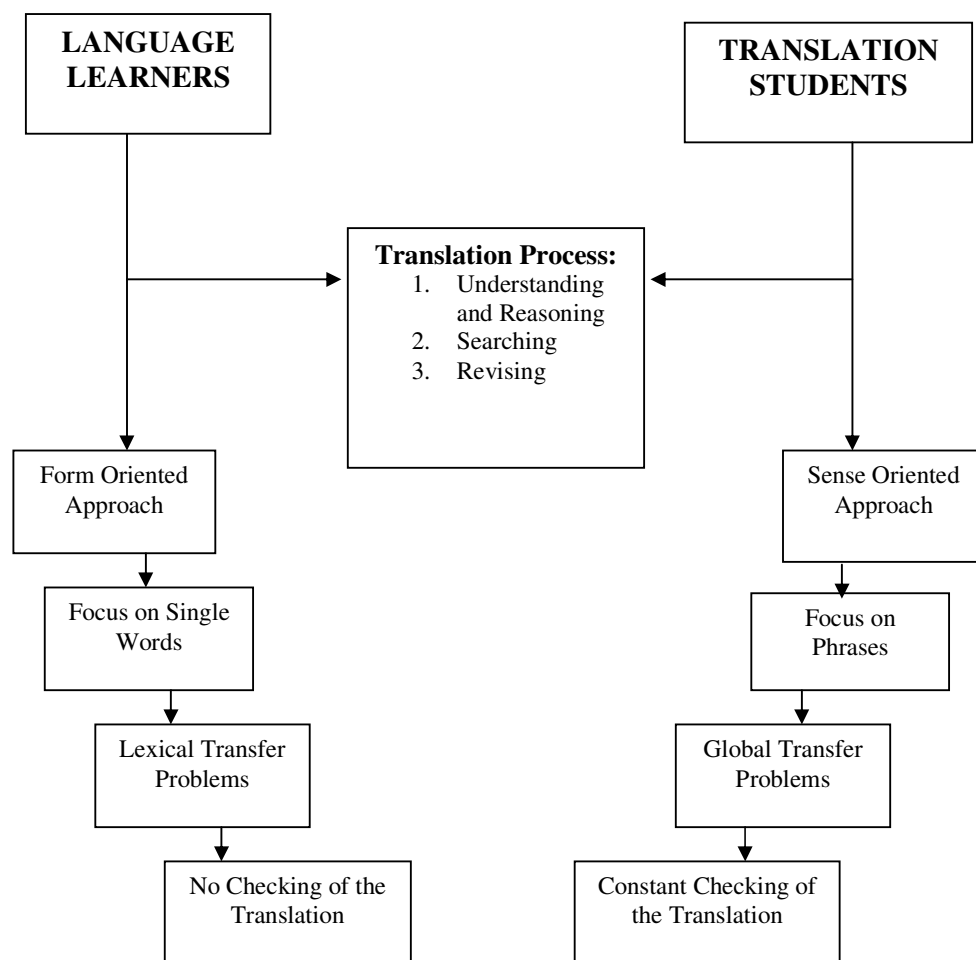


Figure 16: The comparison of translation processes of the translation students and language learners.

CONCLUSIONS

1. The analysis of the theoretical part of the work proves that due to the lack of empirical models of translation process the think-aloud protocols are useful to form hypotheses about processes in the translator's head.
2. Empirical studies of translation performance yield general insights into language processing, into aspects of the mental processes of speech reception and speech production as well as the mental strategies employed by language users.
3. Comparative analysis of different classifications of translation strategies allows us to make the claim that Lörcher's classification and definition of translation strategies provides us with the best possibility to analyse our informants' translation strategies in much detail.
4. Translation processes of language learners and translation students can be divided into three general strategies: understanding, searching and revising.
5. Translation processes of language learners and translation students are similar considering the distinguished strategies and differ considering the usage of potential elements (rephrasing, monitoring, checking) of translation strategies.
6. The hypothesis of our research work that every individual with a command of two or more languages also possesses a rudimentary ability to mediate between these languages, and to produce either sign-oriented or sense-oriented translations has been supported inasmuch as a great majority of the analysed translations produced by language learners are actually more sign-oriented and translations produced by translation students are more sense-oriented.

Further research on the translation process needs to be carried out. Investigations of such kind may be carried out along the following lines: the translation processes of translation students and professional translators could be compared, the influence of limited and unlimited time for the translations with access to reference material could be analysed and the translations from and into the mother tongue could be produced.

SUMMARY

Vertimo proceso strategijos: psicholingvistinis tyrimas

Pastaruoju metu vis daugiau dėmesio vertimo teorijoje ir praktikoje skiriama vertimo proceso, o ne rezultato analizei. Įsigali nuomonė, kad vertėjui verčiant, jo galvoje vykstantys procesai yra tiek pat svarbūs, kiek ir galutinis vertimo produktas. Galutinis rezultatas (išverstas tekstas) neatskleidžia vertimo problemų ir sėkmingų strategijų. Norint atskleisti vertimo proceso paslaptis, taikomi įvairūs psicholingvistiniai metodai. Vienas iš metodų, padedantis giliau pažvelgti į vertimo procesą, yra “mąstymas garsiai”, kai vertėjai išsako savo mintis vertimo metu.

Šio darbo tikslas – pateikti ir išnagrinėti empirinius duomenis, gautus pritaikant psicholingvistinį introspektyvos metodą – “mąstymą garsiai”, siekiant išsiaiškinti vertimo strategijas, naudojamas vertimo procese.

Mokslinio darbo pirmoje dalyje pateikiama teorinė medžiaga apie sukurtus vertimo proceso modelius, apie jau minėtą introspektyvos metodą ir apie strategijos sampratą vertimo kontekste. Taip pat pateikiamos kelios vertimo strategijų klasifikacijos.

Antroje darbo dalyje aprašoma tyrimo eiga ir analizuojami rezultatai. Po analizės paaiškėjo, kad besimokantieji anglų kalbos verčia gana neatsakingai, skuba ir neperskaito dar kartą to, ką išvertė, o vertimo studentai yra linkę nuolat grįžti prie išverstų frazių ir neretai pateikia kelias vertimo versijas. Empiriniai šio tyrimo duomenys pateikė neginčijamų įrodymų, kad vertimo studentai versdami stengiasi išvelgti gilesnę teksto prasmę, o besimokantieji anglų kalbos verčia atskirus žodžius arba žodžių junginius.

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APPENDIX 1

Translation IL → L1 (Subject 2)

Qualitative Analysis

No.	Text	Categories of Analysis	Comments
1.	(Reads text aloud)	REC	The first reading of the text is categorized as REC
2.	Dabar taip,	ORG	The subject organizes (initiates) the discourse.
3.	English language poised to lose its dominance	OSL	The first unit of translation is determined.
4.	(3s)	OTL	During this pause, the subject probably organizes various parts of the title of the SL text.
6.	Anglų kalba	T	The subject verbalizes the first part of translation.
7.	(2s)	RP	The subject realizes a translational problem.
8.	poised to lose its dominance	VP+CT	S 1 The problem and part of its context are verbalized.
9.	(1s) anglų kalba	MTL (6)	Verbatim repetition of utterance No. 6.
10.	(2s)	→SP	The subject searches for a possible solution.
11.	poised to lose its dominance	MSL (8)	Verbatim repetition of utterance No. 8.
12.	anglų kalba	MTL (6)	Verbatim repetition of utterance No. 6.
13.	(2s)	OSL	The next unit of translation is determined.
14.	jau praranda	SP	A solution to the translational problem is found.
15.	anglų kalba jau nebėra	REPHR.	The subject finds another solution to the problem. It is a rephrasing of No. 14.
16.	dominuojanti	TL (14) / SP2	
17.	The world faces a future of	REC	Reading is categorized as REC.
18.	people speaking more than one		
19.	language		
20.	(2s)	RP/→SP	S The subject realizes a problem and starts searching for a solution.
21.	Pasaulyje	SP	2 A solution to the translational problem is found.
22.	(4s)	CHECK	Here, the subject probably tests the preceding TL text segment.
23.	ne, (2s)	TS (TL) (21) –	As the result of checking the subject rejects the translation of the TL text segment 21 and considers it to be inadequate.
24.	ateityje	REPHR.TL (21)	Utterance 21 is rephrased.
25.	The world faces a future	VP	The subject verbalizes the problem.
26.	(2s)	→SP	S 3 The subject searches for a possible solution.
27.	ai, ateityje žmonės vis dažniau	SP	A solution to the problem is found and verbalized.
28.	kalbės ne tik viena kalba		
29.	with English no longer seen as	VP+CT	The problem and part of its context are verbalized.
30.	likely to become dominant		
31.	(3s)	RP/→SP	The subject realizes a translational problem and starts searching for a solution.
32.	anglų kalba	SPa	This is interpreted to be the first part of a solution.

33.	(2s)	→SP		The search for the remaining part of the solution goes on.
34. 35.	no longer seen as likely to become dominant	VPb+CT		The remaining part of the translational problem and part of its context are verbalized.
36.	(2s) ehm	→SPb		The subject searches for a solution.
37.	anglų kalba bus	PSPa		The subject utters a possible solution.
38.	(2s)	CHECK (37)	S 4	The solution uttered in No. 37 is tested.
39. 40. 41.	ateityje žmonės vis dažniau kalbės ne tik viena kalba, anglų kalba bus dominuojanti	PSPb		After checking, the subject gives one more possible solution to the problem.
42.	(4s)	CHECK		The subject probably tests the adequacy of the text segments.
43.	ne (1s)	TS (TL) (39-41) –		The subject considers the TL text segments 39 – 41 to be inadequate.
44.	anglų kalba tikriausiai	T		The subject starts producing a further translation version.
45.	(2s)	OSL/ OTL		Looking at the SL utterance, the subject mentally organizes the succession of the TL text segments within this translation version.
46.	tikriausiai taps dominuojanti	SP		A solution to the problem is found.
47.	the British language expert	OSL		The next unit of translation is determined.
48.	ehm (2s)	RP/→SP	S	The subject realizes a translational problem.
49.	Britanijos	PSPa	5	The subject verbalizes the first part of a possible solution.
50.	(2s)	CHECK (49)		During this pause, the subject checks the first part of the solution.
51.	ne, britų kalbos ekspertas sako,	TS (TL) (49) – PSPb		As the result of checking, the text segment 49 is rejected and the subject gives another possible solution to the problem.
52.	teigia	REPHR.TL (52)		The subject rephrases the verb in the utterance No.52.
53.	savo analizuojamame darbe	T		The translation goes on.
54.	(2s)	CHECK (53)		The utterance 53 is tested.
55.	analizuojamame darbe.	MTL (53)		Verbatim repetition of utterance 53.
56. 57. 58.	English is likely to stay one of the world's most important languages for the near future	OSL		The following unit of translation is determined.
59.	Anglų kalba, yra panašu, kad	T		The unit is transferred to TL.
60. 61.	bus viena iš dominuojančių kalbų pasaulyje	T		The translation continues.
62.	(3s) ehm (2s)	OSL		The subject determines the next unit of translation.
63.	pasaulyje artimoje ateityje	T		The translation continues.
64. 65.	but its future is more problematic	OSL		The next unit of translation is extracted.
66. 67.	bet jos likimas yra problematiškas	T		The translation goes on.
68.	and complex	OSL		One more unit of translation is extracted.
69.	ir komplikotas	T		The translation goes on.
70.	(4s)	RP/→SP		The subject realizes a problem and searches for a solution.
71.	than most people understand	VP		The problem is verbalized.
72.	(3s)	→SP		The subject searches for a solution.
73.	ai, anglų kalba yra panašu, kad	MTL (59),		Verbatim repetition of utterances 59,

74. 75. 76. 77.	bus viena iš dominuojančių kalbų pasaulyje artimoje ateityje, bet jos likimas yra problematiškas ir komplikotas	60, 61, 63, 66, 67, 69)	S 6	60, 61, 63, 66, 67, 69.
78.	(4s)	OTL		The subject mentally organizes the succession of the TL text segments in order to produce an adequate translation.
79.	tai supranta dauguma žmonių	SP		A solution to the problem is found and verbalized.
80. 81.	language researcher David Graddol said.	RP	S 7	The subject realizes a problem here.
82. 83.	anglų tyrinėtojas kažkoks Gradol pasakė.	SP		A solution is uttered.
84. 85. 86. 87. 88. 89. 90. 91.	Monolingual speakers of any variety of English – American or British – will experience increasing difficulty in employment and political life, and are likely to become confused by many aspects of society and culture around them	REC		Reading is categorized as REC.
92.	(2s)	RP/→SP		The subject realizes a problem and starts searching for a solution.
93. 94.	Monolingual speakers of any variety of English	VP		The problem is verbalized.
95.	(2s)	→SP		The subject searches for a solution.
96.	a, vienakalbiai	PSPa		A preliminary solution is found.
97.	(3s)	CHECK (96)		During this pause the subject probably checks the preliminary solution.
98.	ne,	TS(TL) (96) –		The subject considers the TL text segment 96 to be inadequate. She starts producing a further translation version.
99.	(2s)	→SP		The subject keeps searching for a solution.
100.	vienos kalbos,	PSPb	S 8	The subject utters a preliminary solution.
101.	ne,	TS(TL) (100)–		The subject considers the TL text segment 100 to be inadequate.
102. 103.	žmonės, kurie kalba tik viena kalba	PSPc		The subject utters a possible solution.
104.	(2s)	CHECK (102-103)		The subject tests the solution.
105.	ne,	TS (TL) (102-103)		The subject considers the TL text segments 102-103 to be inadequate.
106.	žmonės, kurie kalba tik angliškai	SP		The subject utters a solution.
107.	(6s)	OSL		Here, the subject probably informs herself in the SL text about the remaining part of the sentence to be translated.
108.	tai būtų amerikietis ar britas	T		The translation proceeds.
109. 110.	will experience increasing difficulty	VP		The subject realizes a problem here.
111.	monolingual speakers of English	MSL (93-94)		Part of the text segments 93 – 94 are repeated verbatim.
112.	(2s)	→SP		The subject searches for a solution.
113.	na, koks keistas sakiny	OSL	S 9	The subject tries to understand the sentence structure in the SL.
114.	(2s)	→SP		The subject searches for a solution.
115.	monolingual speakers of English	MSL (111)		Verbatim repetition of 111.
116.	vienakalbiai kalbėtojai iš	SP		The solution is found.

117.	įvairiausias			
118.	(2s) ehm (2s)	RP/→SP		The subject realizes a problem and starts searching for a solution.
119.	will experience increasing	VP		The translation problem is verbalized.
120.	patirs didėjantį	PSP		The subject utters a possible solution.
121.	increase	VP	S	Part of the problem is verbalized.
122.	didėja ar mažėja	→SP	10	The subject searches for a solution.
123.	(2s)	CHECK		The subject tests a possible solution.
124.	increase, decrease	MSL (121)		The subject repeats verbatim the text segment 121 and compares it with its antonym.
125.	didėja, gal	SP		The problem is solved.
126.	(2s)	OSL		The subject informs herself in the SL text about the remaining part of the sentence.
127.	patirs daugiau problemų	T		The translation continues.
128.	in employment	VP	S	The problem is verbalized.
129.	darbe ir politiniame gyvenime	SP	11	The solution is found.
130.	and are likely ... them	REC		Reading is categorized as REC.
131.	(2s)	RP/→SP		The subject realizes a problem and starts searching for a solution.
132.	ir tikriausiai bus sumišę	PSP	S	Preliminary solution is found.
133.	by many aspects	VP	12	The subject verbalizes a problem.
134.	ir tikriausiai bus sumišę	MTL (132)		Verbatim repetition of 132.
135.	ne,	TS(TL) (134) –		The subject considers the TL text segment 134 to be inadequate.
136.	ir tikriausiai bus	MTL (132)		The subject repeats verbatim a part of the text segment 132.
137.	and are likely ...	MSL (130)		Verbatim repetition of the first part of the SL text segment 130.
138.	ir tikriausiai bus pasimetę	SP		The solution is found.
139.	įvairiausiuose socialiniuose			
140.	society and culture around them	RP+VP		The subject realizes a problem and verbalizes it.
141.	(2s)	→SP		A solution is searched for.
142.	bus pasimetę įvairiausių	MTL (138-139)	S	Verbatim repetition of 138 – 139.
143.	(4s)	→SP	13	The subject keeps searching for a solution.
144.	dėl visuomenės ir kultūros, kuri	SP		The solution is found.
145.	jį supa			
146.	jis pasakė	T		The translation continues.
147.	ne, teigia	T2		The subject gives one more translation version.
148.	The part of the world's	REC		Reading is categorized as REC.
149.	population that speaks English			
150.	as a native language is growing			
151.	smaller.			
152.	(2s)	OSL		The subject mentally organizes part of the SL text and determines the next unit of translation.
153.	Ta dalis žmonijos, kuri kalba	T		The unit of translation is transferred to TL.
154.	anglų kalba kaip gimtąja, jau			
155.	mažėja			
156.	(3s)	CHECK		The subject tests the translation.
157.	ne,	TS(TL)(153-155) –		The subject rejects the translation.
158.	ta visuomenės dalis,	Ta		The subject translates the first part of the unit of translation.
159.	ne	TS(TL)(158) –		The translation is rejected.

160.	(2s)	RP/→SP	S	The subject realizes a problem and starts searching for a solution.	
161.	ta pasaulio populiacijos, visų	SP		14	A solution is found.
162.	of the world's population	RP+VP			The subject realizes a problem and verbalizes it.
163.	(2s)	→SP	S	The subject searches for a solution.	
164.	ta pasaulio dalis, kuri kalba	SP	15	The solution is found.	
165.	anglų kalba kaip gimtąja jau				
166.	mažėja.				
167.	The idea of English becoming	REC		Reading is categorized as REC.	
168.	the world language is in the past.				
169.	(3s) ehm (5s)	RP/→SP		The subject realizes a problem and starts searching for a solution.	
170.	Išverskim gražiau	[→SP]com		The solution to be found is commented on.	
171.	Jei anksčiau buvo galvojama, kad anglų kalba taps dominuojančia, jau tampa nereali,	PSP	S	16	
172.					
173.					
174.					
175.	ne,	TS(TL) (173-174) –		The translation 173 – 174 is rejected.	
176.	dominuojanti, jau tampa	SP)	The solution is found.	
177.	praeitimi.				
178.	Instead, its major role will be in	REC		Reading is categorized as REC.	
179.	creating new generations of				
180.	bilingual and multilingual				
181.	speakers				
182.	ehm (2s)	RP/→SP	S	The subject realizes a problem and starts searching for a solution.	
183.	instead	VP			
184.	išskyrus jos	SP	17	A solution is found.	
185.	major role	OSL			
186.	didžioji	T1		The translation proceeds.	
187.	(2s)	RP/→SP		The subject realizes a problem and starts searching for a solution.	
188.	ai	→SP		The subject is searching for a solution.	
189.	(2s)	→SP		The subject is searching for a solution.	
190.	ne,	TS(TL) (186) –	S	18	The subject rejects the 186 translation.
191.	pagrindinė idėja	PSP		The preliminary solution is given.	
192.	(2s)	CHECK		The solution is tested.	
193.	ne, (1s) rolė	TS(TL) (191) – T2		The subject rejects the second part of the 191 translation and gives another version.	
194.	išskyrus jos pagrindinę, gal jėgą	T+SP)	The translation continues and the solution is found.	
195.	jėgą	MTL (194)		The subject repeats the last word of 194.	
196.	will be in creating	RP+VP)	The subject realizes a problem and verbalizes it.	
197.	(2s)	→SP			
198.	ai, išskyrus jos pagrindinę jėgą	SP)	A solution is found.	
199.	pagal kurią vistiek bus kuriamas				
200.	naujos				
201.	generation, tai	RP+VP	S	The subject realizes a problem and verbalizes it.	
202.	(2s)	→SP	20	The subject is searching for a solution.	
203.	karta	SP			
204.	naujos kartos, kurios kalbės	T		The translation continues.	

205.	bilingual and multilingual speakers	OSL		The next unit of translation is extracted.
206.	(2s)	RP/→SP	} S 21	The subject realizes a problem and starts searching for a solution.
207.	kartos, kurios kalbės daugiau nei viena kalba	SP		A solution is found and verbalized.
208.	(4s)	OSL		The subject informs herself in the SL text how far the translation has proceeded.
209.	Gradol rep... (1s)	OSL		The subject determines the next unit of translation.
210.	pranašauja Gradolas.	T		The translation goes on.
211.	Multilingual population	VP	} S 22	The subject verbalizes a problem.
212.	(3s)	→SP		The subject searches for a solution.
213.	mažoji populiacija	SP		The solution to the problem is found.
214.	is already the case in much of the world and is becoming more common in the United States.	OSL		The last unit of the SL text segment is determined.
215.	(3s)	RP/→SP	} S 23	The subject realizes a translation problem and starts searching for a solution.
216.	Multilingual	VP		The subject verbalizes the problem.
217.	mažakalbystė	SP		The solution to the problem is found.
218.	(2s) ehm (4s)	CHECK		The translation is tested.
219.	mažakalbystė jau tampa priimtina Amerikos Valstijose.	SP+	} S 24	As the result of checking, the solution is corroborated.
220.	The Census Biuro	OSL		One more unit of translation is determined.
221.	čia kažkoks biuras pranašauja,	T		The translation goes on.
222.	last year that nearly one American in five speaks ... at home	OSL		The following unit of translation is determined.
223.	(2s)	RP/→SP	} S 24	The subject realizes a translational problem and starts searching for a solution.
224.	“Census biuras pranašauja”, sakykim, nežinau, kas tas Census	[SP]com		A solution is given and commented on.
225.	(2s)	CHECK		The subject tests the possible solution.
226.	Cenzo biuras pranašauja	MTL (231)		Verbatim repetition of 231.
227.	(4s)	OSL		The subject mentally organizes the next part of the SL text.
228.	kad per pastaruosius metus	T		The translation goes on.
229.	nearly	OSL		One more unit of translation is determined.
230.	beveik vienas amerikietis iš penkių kalba kita kalba ne anglų namuose lyginant su ispanų ir	T		The translation goes on.
231.	(2s)	RP/→SP	} S 25	The subject realizes a translational problem and starts searching for a solution.
232.	Chinese growing fast	VP		The translation problem is verbalized.
233.	(2s)	→SP		The subject searches for a solution.
234.	ai, (1s)	OTL	} S 26	The subject mentally organizes the TL sentence for one more translation version.
235.	ispanų	SP		The solution is found.
236.	(4s)	RP/→SP		The subject realizes a translational problem and starts searching for a solution.
237.	kinų kalba tampa populiarnė.	SP		The solution is found.

Comment

The translation contains twenty six strategies:

- S1 : Nos. 7 – 16
This is the realization of a type IV basic structure with five elements embedded in it <MTL, MSL, MTL, OSL, REPHR.TL>. At the end of the strategy the translation problem is solved.
Type: IV + <MTL, MSL, MTL, OSL, REPHR.TL> + SP#
- S2 : Nos. 20 – 21
This strategy belongs to the basic structures, type II. A solution to the problem is found.
Type: II SP#
- S3 : Nos. 25 – 27
This strategy is based on a basic structure of the type III. A solution to the problem is found.
Type: III SP#
- S4 : Nos. 31 – 46
Strategy 4 realizes a basic structure of the type Va. It contains CHECK as a bound element and is followed by OSL as an embedded element. The strategy terminates with a solution to the problem.
Type: Va + CHECK + <OSL> +SP#
- S5 : Nos. 48 – 52
This strategy belongs to the basic structures, type Va with two bound elements, CHECK and REPHR.TL. A solution to the problem is found.
Type: Va + CHECK + REPHR.TL +SP#
- S6 : Nos. 70 – 79
Strategy 6 realizes a basic structure of the type IV with two embedded elements, MTL and OTL. The strategy terminates with a solution to the translation problem.
Type: IV + <MTL, OTL> + SP#
- S7 : Nos. 80 – 83
This is the realization of a type I basic structure. As the result of the strategy, a solution is found.
Type: I SP#
- S8 : Nos. 92 – 106
Here, a type Vb basic structure is realized. It contains two bound elements CHECK. The strategy terminates with a solution to the translation problem.
Type: Vb + 2CHECK + SP#
- S9 : Nos. 109 – 117
Strategy 9 realizes a basic structure of the type IV with three embedded elements, 2MSL and OSL. The strategy ends with a solution to the translational problem.
Type: IV + <2MSL, OSL> + SP#
- S10 : Nos. 118 – 125
This strategy belongs to the basic structures, type IV with one embedded element MSL and one bound element CHECK. A solution to the problem is found.
Type: IV + <MSL> + CHECK + SP#
- S11 : Nos. 128 – 129
This strategy is based on a basic structure of the type III. A solution to the problem is found.
Type: III SP#
- S12 : Nos. 131 – 139

Strategy 12 is the realization of the basic structure of the type IV with three embedded elements, 2 MTL and MSL. The strategy terminates with a solution to the translation problem.
Type: IV + <2MTL, MSL> + SP#

- S13 : Nos. 140 – 145
Strategy 13 is the realization of the basic structure of the type IV with one embedded element MTL. The strategy ends with a solution to the translation problem.
Type: IV + <MTL> + SP#
- S14 : Nos. 160 – 161
Here, a type II basic structure is realized. A solution to the problem is found.
Type: II SP#
- S15 : Nos. 162 – 166
This strategy is the realization of a type IV basic structure. The strategy ends with a solution to the problem.
Type: IV SP#
- S16 : Nos. 169 – 177
This strategy is based on a type II basic structure. A solution to the problem is found.
Type: II SP#
- S17 : Nos. 182 – 184
Here, a type IV basic structure is realized. The strategy ends with a solution to the problem.
Type: IV SP#
- S18 : Nos. 187 – 194
Strategy 18 is the realization of the basic structure of the type IV with one bound element CHECK. The strategy terminates with a solution to the problem.
Type: IV + CHECK + SP#
- S19 : Nos. 196 – 200
This strategy is based on a type IV basic structure. The strategy ends with a solution to the problem.
Type: IV SP#
- S20 : Nos. 201 – 203
This strategy is also based on a type IV basic structure. The strategy ends with a solution to the problem.
Type: IV SP#
- S21 : Nos. 207 – 209
This strategy is the realization of a type II basic structure. The strategy ends with a solution to the problem.
Type: II SP#
- S22 : Nos. 213 – 215
This strategy is based on a type IV basic structure. The strategy ends with a solution to the problem.
Type: IV SP#
- S23 : Nos. 219 – 224
Strategy 23 realizes a basic structure of the type IV. It contains one bound element CHECK. The strategy ends with a solution to the translation problem.
Type: IV + CHECK + SP#
- S24 : Nos. 230 – 233

Strategy 24 is based on a basic structure of the type II. A solution to the problem is found.

Type: II SP#

S25 : Nos. 242 – 246

Strategy 25 realizes a basic structure of the type IV with one embedded element OTL. The strategy terminates with a solution to the translation problem.

Type: IV + <OTL> + SP#

S26 : Nos. 247 – 248

This is a type II basic structure strategy. It ends with a solution to the problem.

Type: II SP#

APPENDIX 2

Translation IL → L1 (Subject 1)

Qualitative Analysis

No.	Text	Categories of Analysis	Comments
1. 2.	English language poised to lose its dominance	OSL	The subject extracts the first unit of translation from the text, which falls under the category OSL.
3.	Čia “anglų kalba”	T	The first unit of translation is transferred to TL.
4.	(3s)	RP/→SP	S 1
5. 6.	kažkaip “praranda savo dominavimą”	SP	
7. 8. 9. 10. 11. 12.	The world faces a future of people speaking more than one language, with English no longer seen as likely to become dominant, a British language expert says in an analysis.	REC	Reading is categorized as REC.
13.	(3s) ehm (2s)	OSL	After the reading, the SL text segment is mentally organized for its translation into TL.
14.	Pasaulio (1s) žmonių ateitis	T	The first part of the SL text segment is translated.
15. 16.	kurie kalba daugiau negu viena kalba	T	The translation continues.
17.	(5s)	RP/→SP	S 2
18.	anglų	SPa	
19.	(1s) ehm (3s)	→SP	A solution for the problem’s second part is searched for.
20.	nebebus daugiau toks	SPb	The second part of a solution is given.
21.	(2s)	→SP	The subject continues searching for the remaining part a solution.
22.	dominuojanti	SPc	The third part of a solution is given.
23.	(2s)	→SP	The subject continues searching for the remaining part a solution.
24. 25.	pasak britų kalbos ekspertų analize	SPd	The last part of a solution is given.
26. 27. 28. 29. 30. 31. 32.	English is likely to stay one of the world’s most important languages for the near future, but its future is more problematic – and complex – than most people understand, language researcher David Graddol said.	REC	Reading is categorized as REC.
33.	(2s) ehm (2s)	OSL	During this pause the mental organization of an SL text segment takes place.
34.	David Graddol pasakymu	T	The translation goes on.
35.	(2s)	OSL	Here again, the subject probably orients himself in the SL text where to proceed from in order to extract the unit of translation.
36.	anglų kalba būtu	T	The translation goes on.
37.	(1s) dominuojanti (1s)	T	The translation goes on.
38.	artimoje ateityje	T	The translation goes on.
39.	(2s)	OSL	Here the subject probably orients

			himself in the SL text where to proceed from with the translation.
40. 41.	bet jos ateitis yra labiau problematiška ir	T	The translation goes on.
42.	(2s)	OSL	The subject probably orients himself in the SL text where to proceed from with the translation.
43.	kompleksuota	T	The translation goes on.
44.	(3s)	OSL	The subject probably orients himself in the SL text where to proceed from with the translation.
45.	daugiau negu kai kurie	T	The translation goes on.
46. 47.	(1s) dauguma žmonių supranta tai	REPHR.TL (45)	The subject rephrases the TL text segment No. 45.
48.	(5s)	CHECK	The subject tests the adequacy of the given translation.
49. 50. 51. 52. 53. 54. 55. 56. 57.	Monolingual speakers of any variety of English – American or British – will experience increasing difficulty in employment and political life, and are likely to become confused by many aspects of society and culture around them, he said.	REC	Reading is categorized as REC.
58.	(3s)	RP/→SP	S 3
59.	“Monolingual”, čia šito nežinau	SPØ	
60.	(3s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
61.	iš įvairių rūšių anglų kalbos	T	The translation goes on.
62.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
63.	Amerikos ar britų	T	The translation goes on.
64.	(2s) ehm (2s)	RP/→SP	The subject realizes a problem and starts searching for a solution.
65.	pajus	SP1	A solution to the problem is found.
66.	(1s)	CHECK (65)	S 4
67.	patirs	REPHR.TL (65) SP2	As a result of the testing, the utterance No. 65 is rephrased. It is considered the second solution to the problem.
68.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
69. 70.	augantį sunkumą darbovietėse ir politiniame gyvenime	T	The translation goes on.
71.	(2s) taps(4s)	T	The translation goes on.
72.	confused	VP	S 5
73.	čia nelabai čia	SPØ	
74.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
75. 76.	daugelyje aspektų visuomenės ir kultūros	T	The translation goes on.
77.	(3s)	CHECK	The subject tests the given translation.
78.	The part of the world's	REC	Reading is categorized as REC.

79. 80. 81.	population that speaks English as a native language is growing smaller.		
82. 83. 84.	Dalis pasaulio populiacijos kuri kalba angliškai kaip vietine kalba	T	The translation goes on.
85.	(4s)	OSL	Here the subject extracts the next unit of translation.
86.	auga mažiau	T	The translation goes on.
87.	(5s)	CHECK	The subject tests the given translation.
88. 89.	turbūt anglų kalba auga mažiau	[TL (86)] com	The subject comments on the TL text segment No. 86.
90.	(5s)	OSL	The subject determines the next unit of translation.
91. 92.	The idea of English becoming the world language is in the past.	REC	Reception of a part of the SL text.
93.	Mintis, kad anglų kalba tampa	Ta	The first part of the unit of translation is transferred to TL.
94.	(3s)	OSL	The subject determines the next unit of translation.
95.	pasaulio kalba	Tb	The second part of the unit of translation is transferred to TL.
96.	(2s)	OSL	The subject determines the next unit of translation.
97.	yra praeityje.	Tc	The last part of the unit of translation is transferred to TL.
98.	(2s)	CHECK	The subject tests the preceding text segments.
99. 100. 101. 102.	Instead, its major role will be in creating new generations of bilingual and multilingual speakers, Graddol reports.	REC	Reading is categorized as REC.
103.	(1s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
104.	Graddol praneša, kad	T	The translation continues.
105.	(4s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
106.	be to, kad	T	The translation continues.
107.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
108.	“anglų kalbos”, čia “pagrindinė”	T	The translation continues.
109.	(1s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
110.	rolė	T	The translation continues.
111.	(3s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
112.	bus	T	The translation continues.
113.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
114.	kurti	T	The translation continues.
115.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
116.	naujas	T	The translation continues.
117.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the

			translation.
118.	generacijas	T	The translation continues.
119.	(2s)	RP/→SP	S 6
120. 121.	čia bilingual ir multilingual, tai čia ...	VP SPØ	
122.	(1s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
123.	tų kalbėtojų.	T	The translation continues.
124.	(3s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
125. 126. 127. 128.	A multilingual population is already the case in much of the world and is becoming more common in the United States.	REC	Reading is categorized as REC.
129.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
130.	Multilingual	VP	S 7
131.	(2s)	→SP	
132. 133.	Gal čia “multilingvistinė” turėtų būti populiacija, galvočiau	[SP]com	The subject gives a solution to the problem and comments on it.
134.	population is	VP	S 8
135.	(5s)	→SP	
136.	populiacija	SP	The subject gives a solution to the problem.
137.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
138.	jau yra	T	The translation continues.
139.	(1s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
140.	pagrindinis, dauguma	T	The translation continues.
141.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
142. 143.	dauguma pasaulyje ir tampa daugiau	T	The translation continues.
144.	(4s)	RP/→SP	S 9
145.	common	VP	
146.	(3s)	→SP	The subject starts searching for a solution.
147.	naudojama, gal	PSP	A preliminary solution is found.
148.	(2s)	CHECK+	The preceding TL text segment is tested. As the translation proceeds, the result of testing is probably a corroboration of the given preliminary solution.
149.	Jungtinėse Valstijose.	T	The translation continues.
150.	(1s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
151. 152. 153.	The Census Bureau reported last year that nearly one American in five speaks a language other than	REC	Reading is categorized as REC.

154. 155. 156.	English at home, with Spanish leading, and Chinese growing fast.		
157. 158.	Census Biuro praneša, kad paskutiniu metu	T	The translation continues.
159.	(2s)	CHECK (158)	The subject tests the TL text segment No. 158.
160.	paskutiniais metais	REPHR.TL (158)	As a result of checking, the subject rephrases the TL text segment No.158.
161.	(5s)	RP/→SP	The subject realizes a problem and starts searching for a solution.
162.	čia, Amerikoje	PSP	A preliminary solution is given.
163.	(6s)	CHECK (162)	The subject tests the TL text segment No. 162.
164.	netoli Amerikos	REPHR.TL (162) SP	The subject rephrases the TL text segment No.162 and this is considered to be a solution to the problem.
165.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
166.	kalba kitomis kalbomis	T	The translation continues.
167.	(1s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
168.	negu anglų namie	T	The translation continues.
169.	(3s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
170.	ispaniškai	T	The translation continues.
171.	(2s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
172.	ir kinietišškai	T	The translation continues.
173.	(3s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
174.	auga greičiau	T	The translation continues.
175.	(1s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
176. 177.	čia 'growing fast' aš nežinau apie ką ten	[SL] com	The subject comments on the SL text segment.
178.	(4s)	OSL	The subject informs himself in the SL text as where to proceed from with the translation.
179. 180.	“Anglų kalbos dominavimo pabaiga”, kažkas tokio.	T	The translation is finished.

Comment

The translation contains ten strategies:

- S1 : Nos. 4 – 6
This strategy realizes a type II basic structure. At the end of the strategy, a solution to the problem is found.
Type: II SP#
- S2 : Nos. 17 – 25
This strategy belongs to the basic structures, type Va. A solution to the translation problem is provided at the end of the strategy.
Type: Va SP#

- S3 : Nos. 58 – 59
 This strategy is based on a basic structure of the type II. This strategy terminates without a solution to the translation problem.
 Type: II SPØ#
- S4 : Nos. 64 – 67
 This strategy belongs to the basic structures, type II. Two bound elements are appended to it: CHECK and REPHR.TL. A solution to the problem is found.
 Type: II + CHECK + REPHR.TL + SP#
- S5 : Nos. 72 – 73
 Strategy 5 belongs to the type III basic structure. It terminates without a solution to the translation problem.
 Type: III SPØ#
- S6 : Nos. 119 – 121
 This strategy represents a basic structure of the type IV. At the end of the strategy a solution to the translation problem is not provided.
 Type: IV SPØ#
- S7 : Nos. 130 – 133
 This strategy belongs to the type IV basic structure. At the end of the strategy a solution to the translation problem is provided.
 Type: IV SP#
- S8 : Nos. 134 – 136
 This strategy represents a basic structure of the type IV. At the end of the strategy a solution to the translation problem is provided.
 Type: IV SP#
- S9 : Nos. 144 – 148
 This strategy is the realization of the type IV basic structure. It contains one bound element CHECK. At the end of the strategy a solution to the translation problem is provided.
 Type: IV + CHECK + SP#
- S10 : Nos. 161 – 164
 This strategy represents a basic structure of the type II. It contains two bound elements, CHECK and REPHR.TL. At the end of the strategy a solution to the translation problem is given.
 Type: II + CHECK + REPHR.TL + SP#