English Applied Linguistics PhD Programme
Graduate School in Linguistics
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The role of second language English in the process of learning third language German

PhD Dissertation

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Szeged
2012

Acknowledgements

I am sincerely grateful to my supervisor, Donald W. Peckham for his guidance and encouragement throughout writing my dissertation. I owe sincere and earnest thankfulness to all the instructors of the English Applied Linguistics PhD Programme of the Graduate School of Linguistics at the University of Szeged for inspiring me to carry out this research and for sharing insights and offering useful comments on my work in the field of TLA.

I am thankful to have shared the years of graduate studies with people some of whom have become co-authors and friends. I would like to express my heartfelt thanks to some of my language teachers at elementary school and high school, who made me interested in language learning and who sowed the seeds of what by now has grown into a comparative approach to learning and teaching languages.

I am obliged to many of my colleagues at the Department of the English Language Teacher Education and Applied Linguistics for their support and sympathy at the different stages of the research.

And last but not least, I am deeply indebted both to the subjects who took part in the research for their cooperation and to their German teachers without whose dedication this study would have been impossible.

Abstract

The field of third language acquisition (TLA) has become a rapidly developing branch of the study of second language acquisition in the past two decades. The aim of the present dissertation is to contribute to the international research by involving subjects with a Hungarian mother tongue. To that end, the present longitudinal study was designed to investigate the learning processes of L1 Hungarian subjects learning L2 English and L3 German. The participants were 53 secondary school learners in two treatment groups and two control groups with as homogeneous linguistic biographies as possible. The treatment groups – representing two different age groups – were provided with special instruction on the cross-linguistic similarities and differences of English and German. The data sources included two major types, those based on the subjects' own perceptions of their learning processes in the form of questionnaires and interviews and those based on objective tests in the form of placement tests, think-aloud translation tasks and vocabulary knowledge scale tests. The combination of data collected by the different methods supplemented each other to reveal how the special instruction changes the participants' perceptions and achievement. The analysis indicates that the comparative instruction had a positive influence on the subjects' L3 learning. As regards the differences between the treatment groups, it is concluded that the less experienced L3 learners were influenced by the comparative instruction to a greater extent than their more experienced counterparts. A further finding of the research is that the effect of instruction seems to be more emphatic on less successful language learners. The results of the present dissertation suggest that L1 Hungarian language learners' L3 learning processes can both be accelerated and facilitated if the learners are instructed with a cross-linguistic approach to the languages they learn.

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". . . mastering the vocabulary of most European languages means simply learning to recognize a number of old friends under slight disguises, and making a certain effort to learn a residue of irrecognizable words, which, however, offer less difficulty than they otherwise would through being imbedded in a context of familiar words. . ." *(Sweet, 1899: 66)*

1 Introduction

The past two decades have witnessed an increasing interest in the field of third language acquisition (henceforth TLA) research. While traditionally it used to be the field of second language acquisition (henceforth SLA) that researched foreign language teaching and learning, it is a new branch of language acquisition research, the research of third language acquisition, that deals with issues regarding multiple language learning situations. Ever since 1987, when the first book on TLA (Ringbom 1987) was published and, thus, the field had established itself as a new research area on its own, it has undergone both significant development and specialisation. This interest is rooted in the fact that the majority of the world's population is multilingual (e.g. Crystal 1997) rather than monolingual, and present-day research is focussed on the processes prevailing in multilingual communities and/or among multilingual individuals.

Although TLA is a very recent field, the versatility of multilingual situations has already created a certain diversification of research areas within the field, depending on the various types of multilingual acquisition processes. TLA experts have been engaged in the study of children who grow up using three languages at birth, as well as that of bilingual children learning an additional language. Some others have studied bi- and multilingual speech communities, while the present dissertation aims to contribute to a fourth subfield, namely, to that of the study of individuals learning two foreign languages, an L2 and an L3. TLA has become a subject of interest from a sociolinguistic, a psycholinguistic and an educational point of view.

In the past few years, researchers studying third language acquisition processes in the multilingual mind from an educational point of view have concluded that an additional language learnt beyond the mother tongue and the first foreign language makes a qualitative difference, not only a quantitative one. The complexity of TLA is best explained by Cenoz and Genesee's claim that TLA is much more complex than SLA because of the greater number of languages involved, and because of 'the factors and processes associated with second language acquisition and bilingualism as well as unique and potentially more

complex factors and effects associated with the interactions that can take place among the multiple languages being learned, and the processes of learning them' (1998:16). This idea is further developed and refined by researchers developing models for L3 processes. Based on mono- and bilingual speech production models, researchers in the past years have attempted to describe the nature of TLA with the help of models. Three models, Groseva's Foreign Language Acquisition Model (1998), Meißner's Multilingual Processing Model (2004) and Hufeisen's Factor Model (1998, 2005) have emerged as influential ones to describe the uniqueness of third and additional language learning as a process and the richness of the background knowledge that third language learners possess and second language learners do not.

There are several factors that influence third language acquisition processes. Odlin (1989), Cenoz (2001), De Angelis (2007), Jarvis and Pavlenko (2007) and Hall and Ecke (2003) elaborated lists of factors affecting the acquisition of third and additional languages in varying degrees of detail. Some of the factors seem to emerge as crucial ones, such as the cross-linguistic influence between, and the language proficiency in each of the languages involved, as well as the order of acquisition, the age of the language learners and the degree of their language awareness.

From the point of view of third language learners, cross-linguistic influence seems to be one of the most decisive phenomena due to several reasons. First of all, the existence of similarities and differences between languages in a linguistic sense can occur at basically all linguistic levels; some of the levels, such as the level of lexis, orthography and phonology have been studied more extensively from the perspective of TLA, while others, such as that of syntax, semantics and morphology are explored to lesser degrees. Secondly, beyond the similarities and differences between languages in a linguistic sense, the importance of the language learners' own perceptions need to be emphasised; it is the perceived similarities and differences between languages that play a role when recognising novel elements of a target language. Depending on what the language learner perceives to be similar or different, three different levels of similarity relations can be differentiated (Ringbom 2006): a similarity relation, a difference relation and a zero relation between the source language and the target language.

Another important influential factor seems to be the level of proficiency in the source language(s) and the target language. Although research in this area is still to be conducted, the results that are already available seem to indicate that depending on the level that the learner is at, cross-linguistic influence plays different roles. Even less researched, though

nevertheless very important areas are the order of the acquisition of the different languages, the age of the language learners at the time of learning the different languages as well as the degree of their language awareness.

Although research in the field of TLA is very recent in general, several studies have been published describing the language learning situation of learners studying more than one foreign language in the international context. However, Hungarian learners have scarcely been subject to such studies, whereas the principles and considerations underlying TLA research are relevant for learners whose mother tongue is Hungarian. Although Hungary is a fundamentally monolingual country with few linguistic minorities, there is a significant number of citizens who are involved in multilingual processes since they are engaged in learning foreign languages. This is especially true for language learners in the Hungarian education system with Hungarian as their mother-tongue most of whom have to learn two foreign languages either simultaneously or in succession. While the National Core Curriculum regulates the number of languages and the target levels that learners have to reach by the end of their high school education, it does not prescribe any harmonisation of the learning processes of the two compulsory foreign languages. Therefore, foreign languages are typically taught as if the language in question were the only foreign language ever learnt by the learner.

The research presented in this dissertation aims at understanding Hungarian learners' third language learning processes with a long-term aim to contribute to creating a curriculum that acknowledges the differences between learning (and teaching) a foreign language as a second or as a third (or fourth, etc.) language, and thus possibly facilitates and makes more effective the complex task of language learning.

As follows from the above, the research presented in the present dissertation is concerned with exploring the learning process and the effects of the knowledge of one foreign language on a further one. Since English and German are the foreign languages most frequently chosen by Hungarian high school learners, the target group of the present research is Hungarian high school learners of English and German at different stages of their foreign language studies. My ambition is not only to understand L1 Hungarian learners' L3 learning processes better but to go one step beyond that and suggest that the research results can be used for making practical suggestions regarding the comparative teaching of two languages.

In my view it is the understanding of the typological relationship of the two languages, English and German that plays the most crucial role in the L3 learning processes of L1 Hungarian learners. In agreement with the findings of several researchers based on a

variety of language combinations (e.g. Garrison 1990, Dolinskaya 1993, Granger 1993, Gabryś-Barker 2006, Caplan-Carbin 2006), my earlier studies (e.g. Tápainé Balla 2007, 2008a, 2008b) with L1 Hungarian subjects learning L3 English or German have confirmed that while some similarities may easily be noticeable for learners, others are less salient and therefore a chance is missed to utilise already existing, cross-linguistic knowledge for the facilitation of L3 learning if these differences are not focused on in the classroom.

The longitudinal study designed for the purposes of the present dissertation therefore had a dual aim: first, to design materials based on comparing and contrasting the structures and the vocabulary of English and German, and second, to use these materials with two groups of secondary school language learners representing two different age groups and two different levels of proficiency, that is with the two treatment groups of this study. The ultimate question this dissertation aims to answer is whether L1 Hungarian language learners benefit from a special teaching material designed with the purpose of outlining cross-linguistic similarities and differences between the two foreign languages learnt by them, namely, their L2 English and L3 German. Both the learners' own perceptions of their learning process as well as their objective development were tested at regular intervals in the course of four months. A variety of data collection instruments were utilized in order to get the results. The results obtained from the two treatment groups are contrasted against the results of two control groups. The data provides information about the subjects' own subjective evaluation of their learning process and, in the form of vocabulary tests, their actual strategy development.

My dissertation is structured in such a way that after the present introductory chapter, I review relevant TLA literature (Chapter 2), including terminological issues, factors potentially influencing TLA, models that TLA researchers have created and some methodological considerations. Before going on to presenting the research questions that the present dissertation aims to answer in Section 3, I will also summarize the most relevant empirical studies in the field. The research design together with the data collection instruments are introduced in Section 4. In the various subsections of Section 5 I will present the data obtained with the help of five different data collection instruments followed by an analysis of the results. The general research question will be revisited and answered within the framework of a general discussion in Section 6. Section 7 will serve the purpose of drawing the conclusions on the basis of the research results in the hope that having answered my research questions, I can point at further implications that my research entails.

2 Literature review

In the present chapter I will provide an overview of various issues addressed by the field of third language acquisition with the goal of placing my research in the context of this rapidly developing field. I will start out by explaining some basic terms that are central to the field (2.1). In order to be able to define specific third language acquisition-related terminology, I will have to start out by drawing a borderline between second language acquisition (SLA) and third language acquisition (TLA) in section 2.1.1. My explanation will also touch upon some terminological inconsistencies that currently exist (2.1.2) because, as mentioned in the introduction, the field of TLA has just recently started to be explored and is currently in a phase of rapid development. In section 2.2 I will outline the factors that, according to the research findings currently available, exert a major influence on the acquisition of languages beyond the second one. Individual sections will be devoted to cross-linguistic influence (2.2.1), language proficiency and exposure (2.2.2), order of acquisition (2.3.3), the age of learners (2.2.4), and the language awareness of learners (2.2.5). In the past few years, some models emerged that have attempted to describe the multifaceted nature of third language acquisition, and section 2.3 will provide an overview of three such models. Finally, I will describe difficulties that are related to creating appropriate research designs (2.4) and review empirical research carried out in the field of TLA in section 2.5 with the aim to point out that the process of third (or additional) language acquisition is a unique one in many respects. The reviewed literature will provide the foundations for me to show that the findings of the field are relevant both for learners and for teachers and thus provide an impetus for further research (2.6).

2.1 Terminology

As I have mentioned in the introduction above, research on multilingualism in general is a relatively new area: the establishment of the field can be linked to the end of the 1980s, when the first works devoted solely to the topic were published (e.g. Ringbom 1986, 1987; Kellerman 1986; Llisterri and Poch 1987; Odlin 1989). Since then there has been a major increase in the number of the published research results and theoretical articles, while at the same time the field has started to develop into several subfields.

However, as I will show in the present chapter, multilingualism research still counts as very recent. One remarkable indicator of the novelty of the field is that its name has not been consistently established. The roots of multilingual research can be found in bilingualism

and SLA research, and, as Hufeisen explains, the first results of TLA research were frequently the by-products of other investigations or insights based on the everyday practice of foreign language teaching (Hufeisen 1998:176). I will devote different sections to clarifying the major differences between the TLA and SLA approaches and to shedding light on the wide scope of areas TLA research addresses. Indeed, various authors even apply different definitions when describing their own research, therefore I find it important to collect the most important aspects the definitions in the field must entail, and I will then provide definitions that are suitable for the purposes of the present dissertation.

2.1.1 SLA versus TLA

While there is a general agreement among scholars that there is a significant difference between the acquisition of the native language (L1) and the acquisition of a second language (L2), there seem to be two opposing views as regards the acquisition of a second and third (and further) languages. On the one hand, as Singh and Carroll (1979:51) put it, 'there is no reason to assume that L3 learning is any different from L2 learning. Learning a third language is […] learning just another second language'. The proponents of this view see that the acquisition processes of learning a second, third or any further languages are basically the same, and there is no major difference between an L2 or an L3 (or Lx) learner.

On the other hand, researchers studying third and additional language acquisition argue that it is essential to differentiate between the different types of acquisition, since both prior language knowledge and the experience gained through learning a previous language or previous languages have a significant impact on the acquisition of a further language (e.g. Dolinskaya 1993, Groseva 1998, Köberle 1998, Hufeisen 1998 and 2004, Agafonova 1997, Güler 2000, Lindemann 2000, Pál 2000, Hammarberg 2001, Ringbom 2001 and 2005, Winters-Ohle and Seipp 2001, Gibson and Hufeisen 2003, Meißner 2004, Neuner 2004, Hammarberg and Hammarberg 2005, Hedquist 2005, Singleton and Little 2005, De Angelis 2007, Hufeisen and Marx 2007, Oebel 2007, Kacjan 2010, Tápainé Balla 2007, 2008a, 2008b, 2009a, 2009b, 2011).

At the same time, we must note that the majority of the world's population is at least bilingual and/or speaks more than one language on a daily basis. Even learners who are monolingual by birth learn second, third and additional languages starting in their early childhood and continuing throughout their lives. If we consider the situation on our own continent, we must bear in mind what the recommendation of the European Union is: 'In line with the resolution of the Council of Education Ministers of 31 March 1995, it is becoming

necessary for everyone, irrespective of training and education routes chosen, to be able to acquire and keep up their ability to communicate in at least two Community languages in addition to their mother tongue,' (White Paper on Education and Training, 1995:47).

In order to be able to account for multilingual acquisition processes, it is necessary to conduct research describing phenomena related to learning third or additional languages. What is more, the versatility of multilingual situations has already created a certain diversification of research areas within the field, depending on the several types of multilingual acquisition processes such as the study of children growing up with three languages from birth (e.g. Hoffmann and Widdicombe 1999), studies of bilingual children learning an L3 (e.g. Pál 2000, Cenoz 1997, 2000, 2001, 2003, 2005, Muñoz 2000), studies involving bi- and multilingual speech communities such as immigrants and minorities (e.g. Brizić 2006, Dégi 2008 and 2011, Volgger 2010) and studies involving monolingual individuals learning an L2 and an L3 (e.g. Lindemann 2000, Neuner et al. 2003, Boócz-Barna 2006, 2007, 2009, 2010, Cedden 2007, Kacjan 2010, Kırkıcı 2007).

As mentioned above, the earliest research results related to the learning or acquisition of languages beyond the second one were born under the cover term 'second language acquisition' (SLA). In the understanding of many scholars, the term second language acquisition tends to refer to any languages learned beyond the first one, irrespective of the number of further languages the learner is familiar with; thus, multilingualism and multilingual acquisition used to be considered as simple variations to bilingualism and second language acquisition (Sharwood Smith 1994, De Angelis and Selinker 2001). At the same time, more recent research suggests that multilingualism should be considered to be the umbrella term, and, thus, bilingualism treated as one possible variant of multilingualism, and in a similar vein, second language acquisition should be seen as a variant of multilingual acquisition or third or additional language acquisition (e.g. Jessner 2008:18, Gibson and Hufeisen 2003:88) (concerning the inconsistencies on the naming of the field, see the following section, 2.1.2). It is not the purpose of the present dissertation to support arguments for or against considering either SLA or TLA to be the umbrella term, however, it needs to be established that an ever-growing amount of research is directed towards the differences between second versus third or additional language learning which all seem to pinpoint that there are major differences both between second and third (and additional) language learners as well as between the underlying learning processes.

2.1.2. Naming the field, inconsistencies

As I have shown in the previous section, there is a need for the establishment of a field separate from SLA. However, the new field is so recent that so far there has not emerged one unified label to designate it; instead, there are several attempts to find an adequate name. The first complete book devoted fully to third or additional language acquisition was published as recently as in 2007, in which the author, De Angelis (2007:8-12), discusses the problem of naming the field. She has found that in the literature we can find at least four different terms to denote the phenomenon, and while all of them offer certain advantages, some of them are also problematic. One such name is *multiple language acquisition*, which, on the one hand, refers to more languages being acquired, but, on the other hand, the expression 'multiple' has the implication that the acquisition of the languages happens at the same time. Naturally, this is not the situation in the case of many language learners, therefore this term is not precise enough. Another label, *multilingual acquisition* is similarly imprecise, as the expression 'multilingual' refers more to the learner rather than the language or languages in question. A much more precise label to the field is *third language acquisition* abbreviated with the acronym *TLA*. While TLA actually describes that what happens is really the acquisition of a language beyond the first and the second, however, because of it including *third*, it gives the wrong impression of excluding languages beyond the third. The term proposed to be the most precise one, *third or additional language acquisition* indeed includes all the languages acquired after the second, the objection to this being that because of its length, it is quite impractical to use. In agreement with De Angelis (2007), I consider this term to be the most adequate, nonetheless, I will continue to refer to it with the abbreviation TLA and yet will mean the acquisition of a third, and/or any further foreign languages. When discussing Hungarian language learners' language learning situation and processes, I will apply the term *multilingual acquisition* in the sense defined by Cenoz's (2000) as 'the process of acquiring more than two languages'.

Although this dissertation is not intended to provide a comprehensive overview of the wide range of definitions of multilingualism, it is still necessary to clarify what I mean by multilingualism and whom I consider to be multilingual individuals since the research presented in the present dissertation involves language learners who are monolingual by birth and are in the process of becoming multilingual in later stages of their lives. Relevant literature on the topic differentiates between the individual and the societal definitions of mono-, bi- and multilingualism, however, for the purposes of the present dissertation it suffices to focus on the individuals.

Kemp (2009:13) defines monolinguals (or monoglots) as ‘individuals who use one language and may be proficient at using a number of different varieties of the language together with different registers’. Bilinguals, in contrast, are individuals who have the ability to use two languages, and multilinguals are people, who are able to use 'three or more languages, either separately or in various degrees of code-mixing’ (McArthur, ed. 1992:673, cited in Kemp 2009:15). An important issue to discuss here is the question whether we should consider monolinguals learning a second or a third language bi- or multilinguals (see also De Angelis and Selinker 2001). De Angelis and Selinker (2001) argue that if we accept Grosjean’s argument that a ‘bilingual is not the sum of two complete or incomplete monolinguals; rather he or she has a unique and a specific linguistic configuration’ (Grosjean 1985:467, cited in De Angelis and Selinker 2001:45), then it follows that we should consider a multilingual ‘a speaker of three or more languages with unique linguistic configurations, often depending on individual history’ (De Angelis and Selinker 2001:45). Similarly, Kemp (2009:15) claims that ‘[m]ultilinguals may not have equal proficiency in or control over all the language they know’.

Cenoz, Hufeisen and Jessner (2003:2) include bilinguals under the umbrella term of multilinguals in that they define a multilingual person as one ‘who is able to communicate in two or more languages’. They maintain that ‘the ability to communicate covers a broad spectrum of proficiencies from having a native-like command of more than one language to the general ability to function and communicate in more than one language at almost *any* proficiency level. (Cenoz, Hufeisen and Jessner 2003:2, my emphasis). In this sense, the broadest definition of individual multilingualism is provided by Krumm (1996:206, cited in Agafonova 1997:4), in that Krumm considers people as ‘theoretically multilingual’ if they are able to ‘acquire, master and actively use several languages’.

The definitions discussed above all point in the direction that bilingualism as a phenomenon is different from multilingualism. At the same time, together with TLA researchers, I argue that learning a second language is very different from learning a third. Research into multilingualism reveals that multilingual acquisition is more complex than second language acquisition because it implicates ‘all the factors and processes associated with second language acquisition and bilingualism as well as unique and potentially more complex factors and effects associated with the interactions that can take place among the multiple languages being learned, and the processes of learning them’ (Cenoz and Genesee 1998:16), therefore it is vital to differentiate between SLA and TLA (e.g. De Angelis and Selinker 2001).

When addressing research in the field of third language acquisition, discussions regarding multicompetence or multilingual competence should also be mentioned. The multicompetence perspective, first introduced by Cook in 1991, describes the linguistic competence of multilinguals. This perspective allows us to view language learners as language users who have at their disposal an 'extended and integrated linguistic repertoire' (Edwards and Dewaele 2007:235) which is grounded in their actual linguistic practices rather than as incompetent speakers of a language. Also, this individual multilingual competence should be perceived as a dynamic and ever-evolving system (cf. Dewaele and Pavlenko 2003: 137). It is important to stress that the term multicompetence both describes a technique (Edwards and Dewaele 2007) and an ability – which becomes more complex as the input is more complex – to use several languages (Hall, Cheng and Matthew 2006: 230), see also: Dégi and T. Balla (2012 in press).

It is not always a simple venture to decide which language or languages qualify as a person's first, second, third, or additional languages, since there are several factors that can be considered, such as the chronological order in which the languages were acquired or the levels of proficiency achieved in the case of each language. Hufeisen's (1998:168–169) suggestions relating to creating terminology are that both chronological order and the levels achieved in the individual languages should be marked when talking about a person's languages. This picture is further complicated by the fact that language users frequently have different competences in different languages, but at the moment there is no general agreement among scholars for a unified system of labelling. In the present dissertation I will use the term first language (L1) to refer to the learners' mother tongue, and L2, L3, L4 etc. to refer to additional languages that they have encountered. In the case of bilingual speakers I will proceed as follows: e.g. an L1/L2 English/Hungarian person learning L3 German and L4 French means that the person is English-Hungarian bilingual by birth and has learnt two further languages in his/her later life, namely, German and French. If it is important to make a distinction between whether it is the level of proficiency or the acquisition order which serves as the basis for numbering the languages, I will provide a thorough explanation.

Throughout the dissertation no distinction will be made between the terms language learning and language acquisition: both are used to refer to the process of learning a new (foreign) language.

2.2 Factors affecting the acquisition of a third (and additional) language

As argued above, there are significant differences between the acquisition processes of a second or a third (or further) language. We have seen that learning a language learned beyond the second one does not merely make a quantitative difference but also a qualitative one. During the relatively short history of TLA research, scholars have made attempts to describe the factors that influence the acquisition of languages beyond the second one. As I will show in the following paragraphs, the lists of factors provided by individual researchers partly overlap with each other, but at the same time they vary in length and degree of elaboration.

In the present section I will review how different researchers have approached the problem of classifying the several potential factors that play a role in the acquisition process of a third (or further) language in general. In sections 2.2.1 through 2.2.5 I will also show that there is a multitude of different kinds of influences and that there is great variability concerning the interactions of these factors, causing TLA to be a field that is rather challenging to research, since there are several variables to consider during data collection.

Odlin (1989) draws a dividing line between structural and non-structural factors. In his description structural factors include semantics, syntax and pronunciation and he lists the following seven non-structural factors: the learner's personality, age, literacy, level of proficiency, aptitude and linguistic awareness as well as the social context in which the language is being acquired.

Cenoz (2001) differentiates between the following seven factors: 1) psychotypology, that is the learner's perception of the linguistic distance between the language being acquired and the languages already familiar to the learner is a major factor in the learning process; 2) the level of proficiency both in the target language as well as in the other languages known by the speaker; 3) the context of acquisition, 4) the language mode, 5) the foreign language effect, 6) the age of the learners, and 7) the recency of use. De Angelis's (2007) more recent list includes, similarly to Cenoz's (2001), the linguistic distance, source and target language proficiency, the recency of use and the acquisition context. Additionally, De Angelis (2007) mentions the length of exposure to a non-native language environment as well as the order in which the languages are acquired as further factors. Jarvis and Pavlenko's (2007:174) list includes five categories: 1) linguistic and psycholinguistic factors, 2) cognitive, attentional and developmental factors, 3) factors related to cumulative language experience and knowledge, 4) factors related to the learning environment, and finally, 5) factors related to language use. Three of Jarvis and Pavlenko's factors are further subdivided into narrower

categories. Linguistic and psycholinguistic factors include the issue of cross-linguistic similarity, language use, frequency, recency and salience, as well as markedness and prototypicality and last, linguistic context (p. 175). Cognitive, attentional and developmental factors are subdivided into the level of cognitive maturity, developmental and universal processes of language acquisition, cognitive language learning abilities and attention to and awareness of language (p. 190) and factors related to cumulative language experience and knowledge include the issues of age, length, frequency and intensity of language exposure, length of residence, general level of proficiency and number and order of acquired languages (p. 197).

Perhaps the most detailed list of factors potentially influencing TLA is provided by Hall and Ecke (2003:73). In their classification, they identify five major domains which they subdivide into further categories. The first category is that of the learner factors, which describe the individual variation, with subcategories such as psychotypology and metalinguistic awareness, motivation, attitude, age, learning style and strategy use and degree of anxiety. The second category includes the learning factors, which describe the circumstances of the acquisition process, such as order and time-course of learning, the proficiency and fluency achieved in each language involved, as well as the amount of exposure to and use of each language, the recency of exposure and use, 'L2 status', the learning context (instructional, natural, etc.), the size of the vocabulary and the type of bi/multilingualism. The third category includes the language factors, and it is concerned with what kind of languages are involved and what the degree of formal relationship between them is, that is, factors such as typological distance (also called objective similarity by other authors), the historical distance, the degree of contact, and the type of writing systems. The fourth category is called event factors, referring to the situations in which the language is actually used, that is, language mode (monolingual/bilingual), language control, style (formal/informal), task type, interlocutor, degree of monitoring, processing direction (comprehension/production), and modality (written/spoken). The last of Hall and Ecke's factors is the category of word factors, which includes the relevant characteristics of the words involved specifically in the process, that is, the degree of form similarity with competitors (phonological/orthographic), the number of form competitors (neighbourhood density), the degree of frame (lemma) similarity with competitors, the number of frame (lemma) competitors, the degree of concept similarity with competitors, the number of concept competitors, the degree of combined similarity (indirect and true cognates), content vs. function word status, abstractness vs. concreteness, frequency, frequency of competitors,

recency of exposure or use, and, finally, completeness of representation. Hall and Ecke's first three categories are the ones that overlap with the categories mentioned in the previous paragraphs and they are the most researched ones as well. A list as detailed as Hall and Ecke's sheds light on the great number of potential variables that one encounters while engaging in TLA research.

As we have seen, the authors cited above have applied a great number of different categories and subcategorised them on the basis of several further aspects. The fact that some categories emerge more frequently than others and that some categorisations are more elaborate than others provides us with further evidence to prove that the field of TLA counts as very new and that there is a multitude of subfields to research.

In the following sections I will provide an account of the most relevant research results in the individual categories. The topics of the individual sections coincide with the factors that are most frequently mentioned in the literature and with the ones that I myself consider to be the most relevant. They will also provide a solid basis for further sections of the present dissertation, especially of chapter 4, in which I describe the research design considered for the purposes of my research.

2.2.1 Cross-linguistic influence

As we have seen, all researchers reviewed above mention – in one form or another – the effect of one language on another as one of the major factors influencing third or additional language acquisition. Cross-linguistic influence is not only an inevitable but also a very complex phenomenon. Section 2.2.1, therefore, is devoted to explaining what cross-linguistic influence is (2.2.1.1), how the similarities and differences can be understood as objective or subjective (2.3.1.2), what type of similarity relations are perceivable for language learners (2.2.1.3), and what linguistic levels can be subject to cross-linguistic influence (2.2.1.4).

2.2.1.1 Transfer versus CLI

The study of cross-linguistic influence is by all means older than that of TLA and is rooted in language contact and second language acquisition research. The term cross-linguistic influence, CLI, was coined by Sharwood Smith and Kellerman (1986) to stand for the phenomenon which in earlier definitions was referred to by various labels, such as transfer, interference, avoidance, borrowing or language loss.

Odlin (1989:6) explains that whenever speakers not sharing the same language meet and need to communicate, we have a language contact situation at hand. In language contact situations language mixing may occur in the form of combining the characteristics of the different languages involved, in the form of borrowings from one language into another or of code-switching, in which certain elements of different languages are interchanged (Odlin 1989:6-7). Language transfer may take place in different language situations such as language contact and dialect contact phenomena and foreign language learning.

An early definition provided by Weinreich (1953:1) defines interference as 'instances of language deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language'. Odlin (1989:27) provides a similar definition: 'transfer is the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired'. Odlin (1989:36-41) extends his definition to include positive, facilitative transfer as well as negative transfer phenomena such as underproduction or overproduction, production errors, misinterpretations, and, also, the differences of the length of time that the individual learners need to acquire the target language (see also Murphy 2003:3). Sharwood Smith and Kellerman (1986:1) gave the name cross-linguistic influence to the field which they defined as 'those processes that lead to incorporation of elements from one language to another'. The umbrella term they provided is neutral and does not imply whether the outcome of the CLI is viewed negative or positive.

In the behaviourist paradigm transfer was viewed as the influence of already established habits on the learning of new habits and depending on how successfully the new habits were formed, the outcome being either positive or negative transfer. If the instances of transfer resulted in error because old, habitual behaviour is different from the new behaviour that is being learned, behaviourists talked about negative transfer, whereas the transfer counted as positive if it resulted in correct performance because the new behaviour was the same as the old (Faerch and Kasper 1986, Odlin 1989, Arabski 2006).

In contrast, in the cognitivist paradigm transfer is considered to be a problem-solving procedure, or 'strategy', whereby learners carry over what they already know about their first language to their performance in their new language. Negative transfer or interference, thus, occurs, where the patterns of the two languages do not coincide, while positive transfer or facilitation occurs if the two languages have features in correspondence (Faerch and Kasper 1986, Odlin 1989, Arabski 2006).

Throughout the decades when Contrastive Analysis dominated CLI research, the idea that native language has an influence on the acquisition of a foreign language was widely accepted (e.g. Csapó 1980, Odlin 1989, Wei 2003). Wei (2003:58) concludes that starting with the 1940s and 1950s for decades to come language transfer was considered a major factor affecting foreign language acquisition. Contrastive Analysis concentrated on errors committed by language learners. It had as its aim to get to know those errors and, via a comparative approach to teaching languages, to prevent language learners from making them. In more recent SLA research, however, three lines of criticism of the Contrastive Analysis Hypothesis (Wei 2003, Odlin 1989) have been worded. The first objection raised is that it is doubtful whether contrastive analysis is able to make accurate predictions regarding errors or transfer. The second is that it would be very troublesome to compare all the possible language combinations and work out methodologies for teaching them, and, third, that many researchers doubt that the results of Contrastive Analysis are relevant for teaching, since learners frequently produce errors that are not attributable to cross-linguistic differences while not producing the ones predicted by the Contrastive Analysis Hypothesis (Wei 2003:58-59). From the perspective of TLA research, the Contrastive Analysis Hypothesis has a further shortcoming, namely, that it mostly considers transfer between the learner's L1 and the target language, that is, between two languages only, whereas TLA is concerned with the interaction of at least three languages in the multilingual mind (e.g. Gass and Selinker 2001, Wei 2003).

All in all, the phenomenon labelled cross-linguistic influence is one of the major contributing factors in TLA research. In the following sections of my paper, especially when citing sources using the term *transfer* rather than *cross-linguistic* influence, I myself will occasionally use the label *transfer*, but, unless otherwise indicated, always in the same sense as the general cover term *cross-linguistic influence*. As I will show in later sections, a large proportion of TLA research is concerned with how the languages known by the individual interact with each other and influence the learning process of a language beyond the second one. Moreover, when speaking about cross-linguistic influence, there are two different, although to certain degrees overlapping notions to differentiate (cf.: 2.2.1.2) depending on whether we mean the concrete, linguistic similarities and differences or the ones perceived subjectively by the individual.

2.2.1.2 Objective versus subjective similarity (and difference)

In the literature we can find several different terms to describe two different, yet related phenomena that are crucial to the understanding of TLA acquisition processes. While

the terms structural factor (e.g. Odlin 1989), psychotypology (e.g. Kellerman 1977, Cenoz 2001), linguistic distance (e.g. De Angelis 2007), cross-linguistic influence (e.g. Ringbom 1986, 1987) and linguistic and psycholinguistic factors (e.g. Jarvis and Pavlenko 2007) seem to have been used as synonyms by numerous sources, it is necessary to point out that these terms actually describe an objective and a subjective approach to the issue. This inaccuracy and inconsistency in the terminology is clarified by Jarvis and Pavlenko (2007:177), who introduce the terms *objective similarity (and difference)* to describe the actual degree of linguistic similarity (and difference) between the languages involved versus *subjective similarity (and difference)* to describe the similarity (and difference) between the languages perceived by the language learners. Although there is a difference between objective and subjective similarity (and difference) in the linguistic sense, TLA research seems to conclude that from the point of view of L3 learners, the latter one has a more significant role. In what follows I will use the term *psychotypology* to refer to the subjective similarities and differences between the languages, and the expressions *linguistic distance* and *cross-linguistic influence* to describe the objective similarities and differences between languages in the linguistic sense.

2.2.1.3. Similarity relations

As I have shown in the previous section, one important factor that influences the occurrence of CLI is whether the languages in question are similar to one another in one respect or another, and, more importantly, whether the language learner perceives them to be similar. Ringbom (2006:36) observes that depending on the learner's stage of proficiency and mode of learning as well as his or her personality, similarity between the languages may work differently. Although in most cases perceived similarities facilitate the learning process, it may happen, for example, in the case of false cognates that the similarity results in errors.

Ringbom (2006:37) differentiates three kinds of relations from the perspective of a language learner. In the case of a similarity relation the learner can 'establish a one-to-one relationship with another unit, usually in the L1'. Where related languages are involved, cognates and similar grammatical structures will facilitate learning, especially in the case of beginner learners. In the case of a difference relation, the learner can perceive both similarity and difference. For example, a Swedish learner of German will be familiar with the notion of grammatical gender, however, he or she will find that while there are two genders in his/her L1, there are three in the target language. This can lead to problems in comprehension and learning. Ringbom (2006:37) emphasises that most language learners do not have a

satisfactory amount of declarative knowledge of their own mother tongue, therefore it is the task of foreign language instruction to lay down the foundations for the target language in a way that it is also instructive and useful for the learning of prospective further new languages. The very same idea serves as a starting point for Groseva's (1998) Foreign Language Acquisition Model (cf.: 2.3.1) and the importance of instruction will be further outlined in section 2.5 of the present dissertation. The third scenario presented by Ringbom (2006:37) is when there is a zero relation between the source language and the target language, therefore the specific target language element cannot be related to an L1 aspect. This happens, for example, when an English learner of German is presented with the system of grammatical gender. Zero relations like this may lead to confusion and learning them may take up a relatively long time, especially at the early stages of learning.

2.2.1.4. Types of CLI

I have pointed out above that cross-linguistic influence can be conceptualised as a subjective phenomenon in a way as it is perceived by the language learner or an as objective one, understood in a language typological sense (2.2.1.2). At the same time, when languages are compared, there can be various degrees of similarities between them (2.2.1.3). In the present section I will provide an overview of a broad spectrum of the possible forms in which cross-linguistic influence may manifest itself.

As we will see, in agreement with Odlin (1989:23), there is room for transfer to occur 'in all linguistic subsystems' and in several domains: comprehension, learning, and production (Jarvis and Pavlenko 2007:176).

In general we can see that the greater the 'degree of congruence between the source and recipient language', the more likely it is that CLI will occur (Jarvis and Pavlenko 2007:176). However, as also explained in section 2.2.1.2, it has been observed that transfer does not solely depend on similarities in the linguistic sense, but it is possible for transfer to occur between languages that have lower degrees of congruence if the L2 learner or user perceives the languages, or at least certain elements of the languages, to be similar (Jarvis and Pavlenko 2007:176).

In order to capture the complexity of CLI, Jarvis and Pavlenko (2007:20) elaborated a detailed list which shows CLI types across ten dimensions. As we can see in Table 1, CLI can occur in several different areas of language knowledge and use, there are several options regarding the directionality of transfer and there are two different types of CLI regarding the

cognitive level, the type of knowledge, the intentionality, the mode, the channel, the form, the manifestation and the outcome.

In the paragraphs below I will describe the individual areas of language knowledge and use, with references, where relevant, to the directionality, the cognitive level, the type of knowledge, the intentionality, the mode, the channel, the form, the manifestation and the outcome as shown in Table 1.

Characterization of CLI types across ten dimensions

Area of language knowledge/use	*Intentionality*
phonological	intentional
orthographic	unintentional
lexical	*Mode*
semantic	productive
morphological	receptive
syntactic	*Channel*
discursive	aural
pragmatic	visual
sociolinguistic	*Form*
Directionality	verbal
forward	nonverbal
reverse	*Manifestation*
lateral	overt
bi- or multi-directional	covert
Cognitive Level	*Outcome*
linguistic	positive
conceptual	negative
Type of knowledge	
implicit	
explicit	

Table 1. Jarvis and Pavlenko's (2007:20) characterization of CLI types

Regarding directionality, cross-linguistic influence has generally been found to occur in four possible ways. The terms forward transfer and reverse (or backward) transfer refer to L1 to L2 transfer and L2 to L1 transfer, respectively (e.g. Gass and Selinker 2001:132, Jarvis

and Pavlenko 2007:21-22). Jarvis and Pavlenko (2007:22) have introduced the terms lateral transfer (to mean 'instances of CLI between post-L1 languages') and bidirectional transfer (to refer to cases 'where two languages that users know function synchronously as both source and recipient languages') (see also Pavlenko and Jarvis 2002).

As far as the cognitive level is concerned, we can differentiate between linguistic and conceptual transfer. Although more and more research is concentrated on the different cognitive levels at which the languages known by the language users can influence each other Jarvis and Pavlenko (2007:23), I will restrict myself to describing the linguistic transfer phenomena, since, as I will show in later sections of my dissertation, these are the ones that play the greatest role in the case of L1 Hungarian L3 learners.

Since their work is the most comprehensive one on the topic, in my overview I rely heavily on Jarvis and Pavlenko's (2007:61-111) section on linguistic transfer as regards both the structure and the contents of my summary.

When listening to people not speaking their mother tongue, the occurrence of phonological transfer is probably the most conspicuous type of linguistic transfer. A person's perception and production of speech sounds in a non-native language can be affected by knowledge of the sound system of another language (Jarvis and Pavlenko 2007:62). According to Bannert (2005:75), in research into second language learning of adults, 'in the area of phonology and phonetics a clear negative transfer, interference can be observed.' Groseva (1998) observed that while learners transfer elements of vocabulary and grammar from both their L1 Bulgarian and L2 English when learning L3 German, on a phonological level only the influence of the L1 is noticeable.

Research on phonological transfer is directed both towards the segmental and the suprasegmental level. Research shows that at a segmental level phonological transfer has been found both during perception and production, and regarding its directionality, forward, reverse and lateral (from L2 to L3, Hammarberg 2001 and Hammarberg and Hammarberg 2005) directions (Jarvis and Pavlenko 2007:62). At the suprasegmental level there is evidence for transfer both in perception and in production, and while forward transfer seems evident, little research has so far been carried out on reverse transfer (Jarvis and Pavlenko 2007:68-69).

Orthographic transfer, that is, the transfer resulting from different writing systems is an important phenomenon, especially in cases when orthography has an effect on speech production in a way that language learners pronounce L2 words 'following the sound-letter correspondences of their L1s' (Jarvis and Pavlenko 2007:70-71). This area needs to be

researched in more detail, since most research is directed towards the orthographic effects on written language (reading or spelling) revealing that a person's L1 writing system can have an effect on writing in an L2. Orthographic transfer can be forward or reverse, and there is evidence both for negative and positive transfer (Jarvis and Pavlenko 2007:70-71). There is a lack of research findings on lateral transfer, although a small-scale research carried out among L1 Hungarian learners with English and German as L2 and L3 (Tápainé Balla 2009a) shows some evidence thereof. An important finding worth mentioning in the area of orthographic transfer is that learners having different L1s make different types of spelling errors (Jarvis and Pavlenko 2007:70-71).

Lexical transfer 'is the influence of word knowledge in one language on a person's knowledge or use of words in another language' (Jarvis and Pavlenko 2007:72). Negative lexical transfer has been extensively researched under Contrastive Analysis and, as a result, several cases have been identified. The reason for this is that examples of negative transfer are more evident, and, therefore, easier to identify. Negative lexical transfer can be a result of 'morphophonological errors or semantic errors, or both' (p. 75). (For research on the contrastive study of English and Hungarian, see, for example, Dezső and Nemser 1980 and Dezső 1982 and for research on the contrastive study of German and Hungarian, see Juhász 1980). Morphophonological errors resulting from transfer are called instances of formal lexical transfer or formal transfer, and the most frequent forms they may take are the following: false cognates or false friends, 'which display formal similarity but partial semantic identity' (as defined by Granger 1993:45), unintentional lexical borrowing, which is an accidental 'use of a word from the wrong language' or 'coinage of a new word by blending two or more words from different languages'(Jarvis and Pavlenko 2007:75). The cases of semantic lexical transfer, lexicosemantic transfer or semantic transfer are most evident when an authentic target language word is used 'with a meaning that reflects influence from the semantic range of a corresponding word in another language' or when a calque is used in the target language that 'reflects the way a multi-word unit is mapped to meaning in another (p. 75).

Ringbom (2001) found that semantic transfer is only likely to occur from the L1 or from a source language in which the speaker is proficient (see also Jarvis and Pavlenko 2007:79-80), whereas formal transfer is likely to occur from a source language perceived to be similar to the recipient language (Jarvis and Pavlenko 2007:81). Evidence for lateral lexical transfer was found by Hammarberg (e.g. Hammarberg 2001 and Hammarberg and Hammarberg 2005) when an L1 English speaker transferred words from her L2 German when

learning L3 Swedish. When analysing the lexical transfer phenomena of L1 Dutch speakers learning English and French both as L2s and L3s, Dewaele (1998, cited in Jarvis and Pavlenko 2007:87) found that learners with L2 French and L3 English transfer more from their L1 Dutch, while there is more evidence for transfer from L2 English in the production of L3 French speakers, thus raising the issue that the direction of the transfer may be language-specific (Jarvis and Pavlenko 2007:87).

Studies on morphological transfer have concluded that the transfer of bound morphemes is a restricted phenomenon, its occurrence mostly restricted to cases when the languages involved are related. Also, there are no strict constraints on the directionality of morphological transfer phenomena, since there is evidence both for reverse and lateral transfer (Jarvis and Pavlenko 2007:96).

Syntactic transfer in forward and reverse directions occurs in most areas of syntax (e.g. adverbial placement, underproduction of relative clauses, overproduction of cleft sentences) and both in comprehension and production (Jarvis and Pavlenko 2007:98-102). There is a lack of research results on lateral transfer as well as a great need for research on cross-linguistic influence in the field of syntax, since language learners would benefit from a comparative approach, that is, directing their attention to syntactic similarities and differences between languages and, thus, positive transfer could be initiated. Furthermore, cross-linguistic influence is present beyond the segment, word and transfer levels, affecting also the level of discourse, pragmatics and sociolinguistics to different degrees and in different forms (pp. 102-110).

In the present section I have described one of the major factors that influence third or additional language acquisition, namely, cross-linguistic influence. When discussing the role of CLI in TLA, I differentiated the former definitions of transfer from the more recent notion of cross-linguistic influence arguing along with Sharwood Smith and Kellerman (1986:1) that this theory-neutral umbrella term describes the phenomenon the most appropriately (2.2.1.1). Furthermore, in agreement with Jarvis and Pavlenko (2007:177), I pointed out that a distinction needs to be made between similarities and differences that are present in the languages in a linguistic sense and what the language learners themselves perceive to be similar or different (2.2.1.2), and that there are different degrees of similarities (Ringbom 2006: 36-37). Listing the multitude of the possible CLI types in 2.2.1.4 served the purpose to show that linguistic transfer is present at all levels and in various forms. In the present dissertation it is my goal to show that even though cross-linguistic transfer occurs naturally,

language learners are not consciously aware of the cross-linguistic similarities and differences of the languages they learn or learnt. This lack of awareness prevents a full exploitation of the advantages that the existence of such cross-linguistic similarities entails as a potential learning aid or learning strategy. Therefore, I claim that it should be the task of language teachers to encourage learners to take advantage of CLI as a strategy, thus making their learners' learning process less complicated and more economical.

2.2.2 Language proficiency

As we can see from the lists of factors presented in 2.2 above, there are several other factors beyond CLI that influence third or additional language acquisition. Many of the reviewed authors agree that the level of language proficiency both in the source language or languages (2.2.2.1) as well as in the target language (2.2.2.2) may contribute to the occurrence of cross-linguistic influence. It needs to be stated that the number of studies conducted in this area of TLA is limited and because of the numerous differences in the approach of the studies as well as the versatile linguistic biographies of the subjects involved in them, it is difficult to draw a uniform conclusion.

It seems that the level of language proficiency in either the source or in the target language influences the extent of cross-linguistic effects. However, while some studies directed towards this area claim that the more proficient speakers are in the languages in question, the more likely it is for cross-linguistic influence to occur, some other studies have reached conclusions that contradict this.

Some authors (e.g. Tremblay 2006, De Angelis 2007, Hall and Ecke 2003) claim that language exposure also plays a significant role in L3 learning. Although exposure to language can encompass a variety of means from the language being the environmental language of the learner to foreign language classroom contexts, it is probable that language proficiency and exposure are two interrelated factors in the sense that the longer the learner is exposed to the language in one form or another, the more likely it is for him or her to reach a higher level of proficiency. A factor that is somewhat less tightly connected to language proficiency is the recency of use (e.g. Cenoz 2001, Hammarberg 2001, Jarvis and Pavlenko 2007). Because of their relation to language proficiency, I will discuss language exposure and recency of use along with source language proficiency in 2.2.2.1.

2.2.2.1 Source language proficiency

Before considering source language proficiency, first we need to think about what role or roles the individual source languages may have in the process of learning an additional language. As opposed to the division of cross-linguistic influence phenomena into instances of either positive or negative transfer (cf. 2.2.1.1.), Cenoz (2003) proposes a different approach. She suggests a continuum, the two extreme ends being interactional strategies and transfer lapses. Interactional strategies are defined by Cenoz as 'intentional switches into languages other than the target language' and their presence is dependent on whether the speaker is in a bilingual or monolingual mode (Cenoz 2003:107). In contrast, transfer lapses are non-intentional switches which seem to occur automatically (Cenoz 2003:107, see also Table 1 for Jarvis and Pavlenko's 2007:20 classification). In her study on Basque-Spanish bilingual children learning L3 English, Cenoz (2003:114) has found that both Spanish and Basque are relied on as source languages (or suppliers), but they play different roles. Basque filled the role of the default supplier in the case of interactional strategies and Spanish in the case of transfer lapses. Cenoz's (2003) conclusions do not coincide with Hammarberg's (2001) findings. In his case study Hammarberg (2001) investigated language switches occurring in the speech of a multilingual speaker with L1 English, proficient L2 German and L3 Swedish and found that in L3 Swedish production L1 English was the default supplier, while German was used as a source for interactional strategies. There are several explanations for the difference between Hammarberg's (2001) and Cenoz's (2003) findings. There is a difference in the typological distance between the languages involved, the roles the individual languages played both in the lives of the participants as well as during the data collection, and also while Hammarberg's multilingual subject was an adult, Cenoz's subjects were elementary school children.

Ringbom's (2001) findings are comparable to the above-mentioned two examples. Based on his studies on participants with Finnish and Swedish as their L1s and L2s learning L3 English, he found that regardless of whether Finnish or Swedish had an L1 or an L2 status, all the language switches produced by the learners originated in Swedish, the language typologically closer to the target language than Finnish. Ringbom (2001:62) emphasises that apart from typology, source language proficiency is a vital factor, since the speaker needs to be proficient in the language that he switches from. In a much earlier study Ringbom (1986) already arrived at a similar conclusion. He found that crosslinguistic influence between the L2 and a further language is restricted to 'obvious formal similarities between individual lexical items', and it is only possible to utilize more of the CLI features if the learner has a

‘native-like or highly fluent and automatized’ knowledge in the L2 (Ringbom 1986:160). The higher the learners’ proficiency in the source languages, the more likely it is that the similarities between the source and the target languages will be perceived (ibid.).

In the three examples mentioned so far, the subjects were fluent in two supplier languages. Next I will give an account of scenarios where language learners are only proficient in their L1, but regarding their L2s and L3s, they are at different levels of proficiency.

In section 2.2.1.3 above I have listed Ringbom’s (2006) three categories of the relationship the source and the target language can have with each other from the perspective of the language learner. Contrary to his earlier remarks on source language proficiency (cf. Ringbom 1986 quoted above), Ringbom claims that perceived similarities between the source and the target language facilitate learning, ‘especially at the early stages’ (2006:37), while in the case of perceived differences or zero relationship problems may arise. This is confirmed by small-scale studies with beginner L3 learners (Tápainé Balla 2007, Rast 2010, cf.: 2.5.1.2 below) that have shown that learners with lower levels of proficiency both in the target language and in the L2 source language or even with no previous knowledge in the target language at all (Gibson and Hufeisen 2003, Singleton and Little 2005, Tápainé Balla 2008a and 2008b, cf.: 2.5.1.2 below) are able to recognise cross-linguistic similarities and comprehend target language items that were not previously familiar to them.

Exposure and/or length of residence is a factor that I consider to be strongly related to proficiency. L2 proficiency and L2 exposure are examined together as different yet related variables also by Tremblay (2006). In her study, Tremblay examined language shifts and lexical invention in the L3 German production of thirteen L1 English young adults, who had different levels of proficiency and different amounts of exposure in their L2 French. The results indicate a slight tendency that with the increase of L2 proficiency the influence of L1 decreases and that the L2 has a greater influence in the case of those learners who have had more exposure to their L2. Also, learners who have had more L2 exposure seem to be more capable of using their L2 knowledge as a strategy to solve lexical difficulties in L3 German. As we can see, Tremblay’s subjects’ L1 and L3 belong to the Germanic language family, while their L2 is a Romance language, therefore their L2 may be considered to be typologically somewhat further from both the L1 and the L3 than they are from each other. This might be a possible explanation of why it was the L1 that had the greatest influence on L3. My belief is that the analysis of the results would have been even more accurate if the

question of typological closeness, more precisely, the subjects' perception of the degree of similarity had also been explored.

Recency of use is also loosely connected to the notion of language proficiency. Cenoz hypothesises that 'learners are more likely to borrow from a language they actively use than from other languages they may know but do not use' (Cenoz 2001:10). Hammarberg (2001:36) provides evidence to prove this hypothesis, namely, he identifies recency as one of the potential factors that may influence which of the L3 learners languages assume the role of the supplier language. Together with other factors, like typology, proficiency (see above) and L2 status (see below), recency could lead to a higher level of activation (see also Jarvis and Pavlenko 2007:184-185). Another piece of evidence for the role of recency can be detected in Dewaele's (1998) study on L1 Dutch speakers learning L2 and L3 English and French. Dewaele found that there was a difference between L2 English/L3 French learners versus L2 French/L3 English learners regarding which language they rely on as a source for word coinages. He found that learners learning L2 French before L3 English relied more on Dutch, while learners with L2 English and L3 French relied more on English as a supplier language (see also Jarvis and Pavlenko 2007:185).

2.2.2.2. Target language proficiency

Research addressing directly the role of target language proficiency is still very limited. In this section I will present the results of two studies, both implying that the number of cross-linguistic items in the production of L3 learners seem to decrease as L3 proficiency increases.

Sikogukira (1993) studied L1 Kirundi university students with L2 French, learning L3 English and representing four different levels depending on which year of their studies they were in. The experiment aimed at examining whether the learners were willing to use French-English cognates. The results revealed that learners avoided the use of cognates (Sikogukira 1993:124) to different degrees and that the level of proficiency was influential regarding the subjects' performance in the target language (p. 125). There was a tendency for the subjects to avoid French-English cognates that had synonymous or hyponymous non-cognate English counterparts and instead of the cognate words they tended to use the non-cognate alternatives. At the same time, cognates the meanings of which differ in French and in English were used more frequently (ibid.). The results also showed that as the subjects' proficiency in L3 English increased, both tendencies decreased (p. 122).

Lindquist (2009) investigated the production of cross-linguistic lexemes in the speech of L3 French learners with a variety of L1 and L2 combinations (L1 Swedish, English main L2; Spanish L1, Swedish and English main L2s; English L1, Irish L2) and found that as the target language proficiency increases, less and less cross-linguistic items are produced. This means that 'the beginners are much more influenced by their L2s than the other learners' (p. 289). Lindquist's further finding is that beginner learners of L3 French resort to more L2s, while more advanced learners only resort to using L2 English and only to a lesser extent (Lindquist 2009). It needs to be added that Lindquist's subjects represent different age groups. The beginner learners were also the youngest ones, a second group consisted of secondary-school students, while the most advanced learners were university students, therefore the age factor cannot be neglected when evaluating the results.

The present subsection has aimed at summarising results of research conducted on the role of the language proficiency in the source language(s) and in the target language. The studies presented above confirm that language proficiency indeed seems to be an important factor while learning a third (or additional) language, however, no unified claim can be supported as regards how exactly proficiency effects TLA. The reason for this may, on the one hand, be the fact that research in this field is in the initial stages, and, on the other hand, as stated earlier, the enormous variability of the possible variables make it very difficult to arrive at generalizable research results.

The issue of target language proficiency will be addressed in Section 5 below, where I will present and analyse my own data collected for this present dissertation and show what role target language proficiency plays in the L3 learning of Hungarian high school students.

2.2.3 Order of acquisition

While it is relatively easy to define the acquisition order of bilingual speakers (L2 after L1, or L1 and L2 simultaneously), in the case of three languages involved, there are at least four different acquisition orders (Cenoz 2000:40): first, simultaneous acquisition of L1/L2/L3, second, consecutive acquisition of L1, L2 and L3, third, simultaneous acquisition of L2/L3 after learning the L1, and, finally, simultaneous acquisition of L1/L2 before learning the L3. With the addition of further languages the acquisition routes are complicated further, and the complexity may further be increased, for example, if we take into consideration that the acquisition process of one language may be interrupted when starting to learn a new language, and then, later it may possibly be restarted (Cenoz 2000:40).

The order in which the languages are acquired differs from person to person and frequently depends on outer circumstances, e.g. the language choice offered by the schools visited by the learners during their childhood and adolescence. A question asked frequently is whether there is an ideal order in which languages should be learnt. Once again, I have to emphasise that TLA research is a very young research field and although there have been attempts to provide answers to this question, the number of studies published on this issue is too low to be able to give a universal response. Also, because of the language combinations varying from one individual to another, an ideal order can only be contemplated with the consideration of all of the languages involved. For example, in the study by Deweale (1998) also quoted above in 2.2.2.1, it was concluded that there was a difference between the CLI-phenomena of learners depending on whether their L2 was English or French.

Cedden (2007) interviewed L1 Turkish learners learning English and German as L2s and L3s (N=15) and vice versa (N=14). In the interviews detailed questions were directed at how the learners viewed their levels of proficiency in English and German and how they viewed their own learning processes. The analysis of the data revealed that learners learning L2 German before L3 English hardly experienced any difficulties when learning their L2 and were able to achieve high levels of L3 knowledge in relatively short periods of time (Cedden 2007:5). At the same time, learners of L2 English and L3 German found it more difficult to learn L2 German. The problematic areas were the articles, the case system, passive constructions and the conjunctive (Cedden 2007:6). Comparing English and German in this respect, and applying Ringbom's categories, we can conclude that the problems occurred where there were difference relations present (cf. Ringbom 2006:37, above) and the differences in Groseva's terms (see 2.3.1 below) are that the L3 offers a wider paradigm than the L2. In Cedden's opinion, her findings should be taken into consideration by curriculum when designing the order in which languages are learnt at early ages (Cedden 2007:8).

Results of my own study (Tápainé Balla 2008b, see also 2.5.1.2 below) conducted among two groups of L1 Hungarian learners learning L2 English and L2 German prior to starting to learn L3 German and L3 English, respectively, support Cedden's conclusion about the ideal acquisition order of German and English for learners with a typologically distant L1. With the help of a task where learners had to translate the English and German versions of the same text from the language not yet known by them, I found that the L2 German group was more successful at translating from English than the L2 English group was at translating from German. This suggests that the German language has a greater facilitative effect on learning

English than English on German, thus, this result can be put forward when considering that German should be introduced at school prior to English (Tápainé Balla 2008b).

In my opinion there is a great need to investigate the issue of an ideal language acquisition order, since findings within this research area could potentially contribute to the curriculum planning in foreign language instruction in public education. Teaching the first foreign language with the insight that the learners will probably start learning a further one at some point of their education would result in more economical learning processes in the context of learning at least two languages beyond the mother tongue.

2.2.4 Age

As I have pointed out in previous sections of this dissertation, TLA is a field which is particularly difficult to research because of the multitude of variables that may potentially play a role in the acquisition process of a third or additional language. One of the less frequently studied variables is how the factor of age correlates with TLA processes. As it will be detailed in 2.5.1.1 below, one important difference between an L2 and L3 learner is frequently the age when the individual starts to learn the languages.

Even the little research we have available has yielded contradictory results. In her study with the involvement of Basque-Spanish bilingual children learning L3 English, Cenoz (2001) showed that 'older learners present more cross-linguistic influence than younger learners' (Cenoz 2001:16). The examined three groups of school children were aged 7, 11 and 14. All groups transferred more elements from Spanish, the language typologically closer to their L3 English, than from Basque. Considering the total number of transferred elements from either language, the oldest learners scored highest, although their proficiency in English was higher than that of the learners in the younger groups. Cenoz (2001) acknowledges that this finding contradicts previous findings, such as e.g. Ringbom (1987), reporting that the lower the proficiency, the more cross-linguistic influence there is. Cenoz (2001:16) proposes the explanation that all the subjects, including the older ones in her study, had quite limited proficiency and speculates that they might be 'less influenced by their knowledge of other languages when their proficiency is higher' (Cenoz 2001:16).

2.2.5 Language awareness

Language awareness or, in other words, metalinguistic awareness is a further important factor which plays a role in the process of third language acquisition. It has been defined in several different ways in the literature, however, it is De Angelis's (2007:121)

definition that captures the notion best. She suggests that metalinguistic awareness be defined in a broad sense 'to refer to learners' ability to think of language and of perceiving language, including the ability to separate meanings and forms, discriminate language components, identify ambiguity and understand the use of grammatical forms and structures'. As De Angelis concludes, studies conducted on the metalinguistic abilities of monolinguals and bilinguals revealed that 'bilinguals develop a heightened awareness of the forms, meanings and rules of language' and that research with the participation of multilingual individuals yield to similar results (ibid.).

Two earlier studies, also highlighted by De Angelis (2007), emerge as the most significant ones from the perspective of gaining insight into the metalinguistic awareness of the multilingual mind. Jessner (1999 and 2003) examines Italian/German bilingual subjects while completing a written assignment with the help of a think-aloud protocol. Her examples reveal that, in an attempt 'to compensate for the lack of knowledge', the learners use compensatory strategies that are rooted in the learners' L1, L2 and L3 (Jessner 1999:205). Jessner attributes these strategies to the 'metalinguistic thinking' of the learner (ibid., see also De Angelis 2007).

Thomas (1988, cited in De Angelis 2007:119, see also Jessner 2008:29) drew attention to an increased awareness which may be associated with having received a formal instruction in the L2. She compared the metalinguistic awareness of monolingual L1 English subjects with that of bilingual, L1 English and L2 Spanish, subjects learning French (an L2 for the monolingual group and an L3 for the bilingual group) and found that those bilinguals who had been trained in formal settings had a heightened awareness compared both to the non-instructed bilingual and to the monolingual subjects (Thomas 1988:236, cited in De Angelis 2007).

Based on the above, it seems that it is not only the number of the languages that a multilingual speaker is familiar with, but that the way those languages were learnt has an impact on the language awareness of multilinguals. This is good news for L1 Hungarian learners, since typically they are involved in formal education as regards their language learning and, therefore, it reinforces my claim that it should be the task of language instructors to develop and exploit the metalinguistic awareness of their learners.

Section 2.2 has aimed at summarising some of the factors that might influence third or additional language learning. In the introductory part of the section I pointed out that there is a large number of such potential factors and in the individual sections of 2.2 I specified the

factors that had been researched the most extensively up till now, such as cross-linguistic influence (2.2.1), language proficiency and exposure (2.2.2), order of acquisition (2.3.3), the age of learners (2.2.4), and the language awareness of learners (2.2.5). These factors are important from the point of view of the research to be presented in later sections of the present dissertation, since, as we will see, these need to be considered when conducting research with the involvement of L1 Hungarian secondary school learner participants.

2.3 Theories and models

Researchers of multilingual acquisition have made attempts to model the learning of languages beyond the L1. Depending on the approach, we can differentiate sociolinguistic, psycholinguistic and educational models. The models are based either on earlier monolingual speech production models, or are the extensions of bilingual models. Some research within the field of neurolinguistics aims at exploring connections between the different stages of language development and those of brain development. The elaboration of these findings and their relation to TLA, however, would exceed the scope of the present dissertation.

In the following paragraphs I will give a brief overview of the sociolinguistic and psycholinguistic models, and then, since they are the most relevant ones from the perspective of the present research, in sections 2.3.1, 2.3.2 and 2.3.3 three educational models will be described in detail.

Using Levelt's (1989) monolingual speech production model as a basis, Clyne created the Model of Plurilingual Processing in which he included the speaker's multiple identity as a factor influencing language choice (Clyne 2003, Hufeisen and Marx 2007, Jessner 2008). Another sociolinguistic model, called Biotic Model of Multilinguality, was developed by Aronin and Ó Laoire (2004). This model makes a clear distinction between multilinguality and individual multilingualism and attempts to explain multilingual acquisition in multilingual societies (Aronin and Ó Laoire 2004, Hufeisen and Marx 2007, Jessner 2008).

Also expanding Levelt's model, De Bot (1992) constructed a psycholinguistic bilingual speech production model, called the Selection and Control Model, to describe how the selection and control processes operate in the production of a bilingual speaker (De Bot 1992, De Angelis 2007, Hufeisen and Marx 2007, Jessner 2008). Herdina and Jessner (2002) propose another psycholinguistic model, the Dynamic Model of Multilingualism, which is an innovative holistic model in the sense that it describes both first and second language acquisition, foreign language learning and language loss (Herdina and Jessner 2000, 2002). The dynamism of the language acquisition is represented with curves, and the authors argue

that the faster phases of language learning and acquisition in the early stages are followed by less active periods, which necessarily include language loss. In their view, language proficiency in the multilingual individual can be characterized by 'the individual language systems and their interaction' as well as the 'multilingualism factor' (Hufeisen 2005:35). The multilingualism factor is 'based on the changes in language awareness and language strategy development which develop through increased exposure to language acquisition (ibid.). In Williams and Hammarberg's (1998) psycholinguistic Language Switches Model languages assume different roles and functions in communication, and this becomes apparent through certain switches. The development of the model was based on Williams' (a linguist herself with L1 English and L2 German) learning L3 Swedish. One of their most important findings is that the native English language filled in a different function than L2 German. English was used for metalinguistic comments, while German served as the default supplier language, in other words, the source language for CLI (Hufeisen and Marx 2007). The list of models above would not be complete without mentioning Grosjean's Language Mode Hypothesis (1998, 2001, see also Murphy 2003, Jessner 2008, De Angelis 2007), according to which bilingual speakers may chose their language mode depending on various factors and can accordingly be in a monolingual mode or in a bilingual mode. Consequently, trilinguals can activate a mono-, bi- or trilingual mode (Jessner 2008:22).

The models listed above have contributed to the sociolinguistic and psycholinguistic theoretical foundations of the field of TLA. From the point of view of the present paper, however, it is more important to focus on the educational aspects of multilingualism. Since the main aim of my dissertation is to shed light on the language learning processes of L3 learners, it is crucial to understand the processes that determine the way language learners approach a third or an additional language. Therefore, in the following parts of the present section I will describe three influential educational models of multilingualism which all capture the complex and special nature of third or additional language learning.

2.3.1 Groseva's Foreign Language Acquisition Model (FLAM)

Based on her research with the participation of L1 Bulgarian, L2 English learners learning L3 German, Groseva (1998) elaborated the Foreign Language Acquisition Model (henceforth FLAM), according to which it is the L2, rather than the L1, which becomes the comparative and contrastive basis for all further languages (Groseva 1998). Groseva (1998:22) accepts the view that foreign or second language learning is a process during which the learner constructs hypotheses about the language being learnt by comparing it with the

mother tongue. Based on the feedback the learner receives, the hypotheses will constantly be evaluated, and judgements will be made about their correctness. During the learning process the learners aim at comparing their L1 and L2. However, as the learner achieves higher levels of proficiency, the role of the L1 decreases, since the learner has a more extensive knowledge on the L2. As a result, an L2 system is developed, 'which carries all the special features of the target language and includes interference phenomena from the L1 as well as learning and communication strategies that are special and had proved to be successful for the learner in the L2[1]' (ibid.). Groseva claims that this consciously learnt L2 will serve as the basis for the learning of all further languages, that is, a prospective L3 will be compared to the learner's L2 and not to his or her L1 (ibid.). Consequently the L2 becomes the model, a foreign language acquisition model, both for the system and for the learning process of an additional language (p. 23).

The FLAM is constructed in the minds of the individual learners while engaging in learning foreign languages. During the process of the construction of the FLAM there are two possible options. As the target language and the source languages are compared, the learner can arrive at two different conclusions. Either there is symmetry between the L1 and L2, because the surface structures of the L1 and the L2 are similar and, thus, the learner constructs a one-to-one relationship between the languages, or there is an asymmetrical relationship. The asymmetry can manifest itself in two different forms. If the L1 offers a wider paradigm than the L2 while constructing the FLAM, the learner has to simplify the system, whereas if the L2 offers a wider paradigm, then the learner, while checking and reconstructing the hypotheses, has the task to expand the L2 system accordingly. These processes result in FLAM, which includes all the hypotheses of language contrasts and similarities between L1 and L2, as well as learning and communicative strategies (pp. 23-24). Since the L2 is learnt and analysed consciously, it becomes more prominent in the learner's mind than the L1 and thus it will be used as a model in TLA.

2.3.2 Meißner's Multilingual Processing Model

Meißner (2004) developed his model to explain what processes take place during the learning of a language completely unknown to the learner. The model can best explain phenomena related to learning a language that is typologically close to a language already known by the learner. Similarly to Groseva's (1998, see 2.3.1 above), Meißner's model is

[1] My translation from the original German language text, T. Balla Ágnes.

based on the assumption that learners rely on previously acquired knowledge of other languages (called bridge languages by Meißner 2004:52), and are engaged in a process of constant hypothesis-building, the result of which is the spontaneous (or hypothetical) grammar constructed by the learner. At the first encounter with an unknown language, the learner 'does not only recognise the meaningful lexical material, but also further regularities which can be defined as intralingual regarding the target language, interlingual regarding the previously known foreign languages, and then again intralingual within the foreign languages[2]' (pp. 41-42). This means that the learner constructs language hypotheses known to him or her from different languages in order to create a new cognitive entity (p. 42). As learners construct their spontaneous grammar, they accumulate both declarative and procedural knowledge regarding the new language.

In order to create the interlingual connections, transfer takes place between the languages involved, both from the L1 as well as the typologically related languages. Meißner (2004:43) claims that the learners' ability to utilise transfer can significantly be increased through instruction. Such instruction should be designed in a way that it organises the spontaneous grammar, makes the learners sensitive to the intra- and interlanguage transfer bases both in the source language and in the target language, initiates comparing and contrasting the languages and enhance language awareness and learning awareness (Meißner p. 44).

In order for Meißner's model to work, three preconditions need to be met. First, there should be an etymological relationship between the languages; second, the learner has to be proficient in the bridge language(s); and third, the learner needs instruction on how to utilise previously learnt languages (Meißner 2004, Jessner 2008). Meißner (2004:43) mentions the example that an L1 German speaker will rely on his/her L2 Spanish (rather than his/her L1) when learning L3 Portuguese.

2.3.3 Hufeisen's Factor Model

Hufeisen (1998, 2005) proposes that compared to the processes of the acquisition of the L1, new factors are added to the existing ones in the course of language learning. In her Factor Model, Hufeisen (1998, 2005, see Table 2 below) lists all the factors that she considers to play a role in the language learning process. The neurophysiological factors provide the necessary basis for language learning, making the learner capable of production and

[2] My translation from the original German language text, T. Balla Ágnes.

reception. The learner external factors include the socio-cultural and socio-economic surroundings, as well as culture-specific learning traditions and the input that the learner is faced with. The affective factors are, for instance, motivation, anxiety, the acceptance of the newly learnt language, individual life experience and perceiving the typological relatedness of the languages. The cognitive factors include factors such as language awareness, linguistic and metalinguistic awareness, learning awareness, knowledge of one's own learner type, as well as the ability to employ learning strategies and techniques and linguistic factors corresponding to the learner's L1(s) (Hufeisen 1998, 2005, Jessner 2008). Hufeisen's model becomes complete by accentuating the presence of further factors called 'foreign language specific factors' which include the individual learning experiences and strategies, previous interlanguages and the interlanguage of the target language. The existence of these factors explains the differences between second and third language learners and highlights that 'the influencing factors when learning an L3 are not merely more complex, but there is also a qualitative difference compared to L2 learning, firstly because of the existence of another foreign language and secondly because of the specific foreign language learning experiences and strategies that differ from the general life- and learning experiences and learning strategies'[3] (Hufeisen 1998:171).

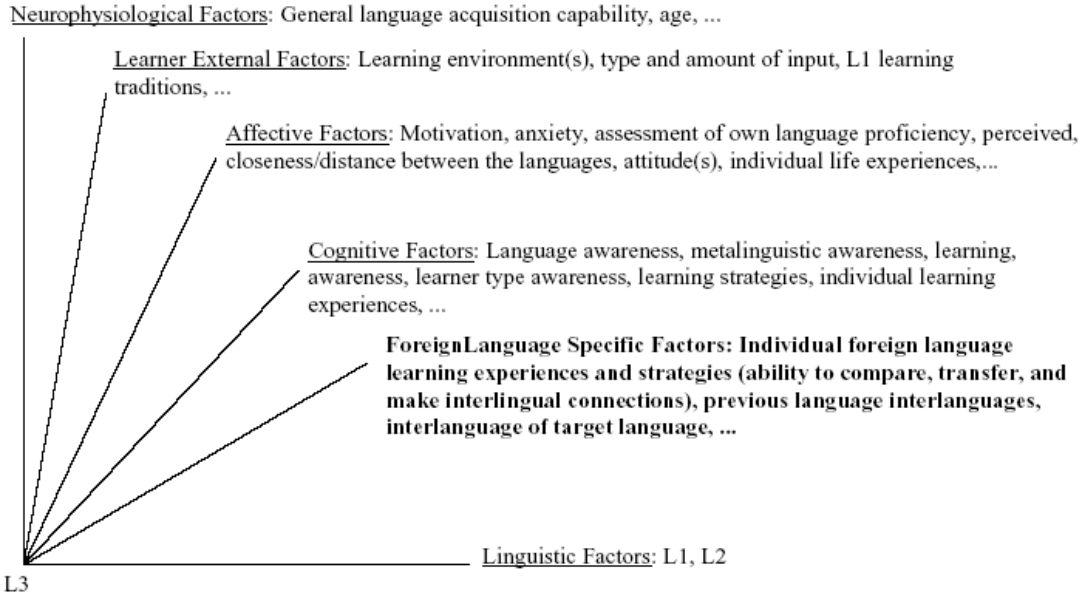

Table 2. Hufeisen's factor model (source: Hufeisen 2005)

[3] My translation from the original German language text, T. Balla Ágnes.

2.3.4 Comparison of the educational models

As we have seen, the educational models presented above have several points in common, and they allow us to draw some conclusions which I consider to be relevant from the point of view of Hungarian L1 learners.

Both Groseva (1998) and Meißner (2004) base their models on research with participants whose L1 is typologically distant from both their L2s and L3s, whereas the L2s and L3s are typologically close to each other. In Groseva's research the languages involved are L1 Bulgarian, L2 English and L3 German, in Meißner's the languages are L1 German, L2 Spanish and L2 Portuguese. (Hufeisen 1998 and 2005 do not specify the language combinations.) Groseva (1998) and Meißner (2004) both emphasise the role of the second language: Groseva argues that the L2 emerges as a basis for learning additional languages (1998:22), similarly to Meißner, who also considers the L2 to be the base language. It follows that a typologically closer L2 plays a more important role in the acquisition of a third language than does the mother tongue. Because of the unique linguistic and historical situation of the Hungarian language and the most typical choices that L1 Hungarian learners make when choosing foreign languages, it is safe to say that in the majority of the cases L1 Hungarian learners learn language combinations that are typologically closer to each other than to their mother tongue.

A seeming difference between Groseva's and Meißner's models is that Groseva (1998) does not argue that it is the task of L3 teachers to instruct the learners on the similarities and differences on the languages. She does emphasise, however, that, as opposed to the L1, the L2 is learnt 'consciously'. In my view, this point coincides with Ringbom's (2006:37) idea about the typical lack of declarative knowledge in one's L1 (cf. 2.2.1.3) and refers to the fact that the L2 is taught in an instructed environment, where the rules of the target language as well as the lexical items are explained and made clear by a language teacher and course books. Based on the instruction they receive, the learners collect their own learning experiences and create their own learning strategies and, by doing so, they automatically lay the foundations for learning further languages. Meißner (2004) goes a step further when arguing for the necessity of instruction regarding the comparison of the languages. The research reported on in the present dissertation was designed with the aim to investigate the extent to which both Groseva (1998) and Meißner (2004) may be right: language learners are able to draw their own conclusions about their L2s and L3s and their learning processes, and if these self-invented observations and conclusions are complemented by well-directed instruction, the results of the learners will improve.

Although Meißner (2004) considers it important for L3 learners to be proficient in the second language in order for it to serve as a bridge language, however, as I have shown in 2.2.2.1 on source language proficiency, researchers do not hold a unified position on the role of L2 proficiency in L3 learning. Research presented in this current dissertation will speak directly to this issue.

The arguments presented above about the similarities of Groseva's (1998) and Meißner's (2004) models are condensed into a general summary by Hufeisen (1998, 2005). In her model, the category of 'foreign language specific factors' include 'the individual learning experiences and strategies, previous interlanguages and the interlanguage of the target language' (Hufeisen 2005:38, see 2.3.3 above).

The three models presented above provide the field of TLA with vital insights as regards third and additional language learning and teaching particularly in an educational context. In my view, in our present-day world it appears unavoidable for monolingual speakers to engage in the learning of more than one foreign language. In Hungary it is compulsory in most secondary schools to learn two foreign languages. It is in the interest of language learners to learn as effectively as possible, and if language teachers had the opportunity to familiarise themselves with the models presented above in training programmes with a special multilingual focus, they could do more to accelerate the students' learning process. In a study carried out in 2006 (Tápainé Balla 2007) I found that English language teachers teaching learners who also learn other foreign languages fail to provide a comparative instruction for three different reasons: either they 'do not wish to present their learners with non-English language items as a model for the learners' or want to avoid the danger that their learners 'might mix the different languages' (p. 15) or simply are not familiar with the other language that their learners learn. Even teachers who are familiar with their learners' other language and are willing to make comparisons between the languages admitted that they very rarely make such comparisons. These findings lead me to conclude that the three educational TLA models should probably be included in the syllabi of Hungarian language teacher training as well.

2.4 Methodology of the field

In sections 2.1, 2.2 and 2.3 above I have provided an overview of the theoretical background of TLA research by addressing issues related to terminology, listing a variety of factors affecting the processes of third or additional language acquisition and presenting some of the most important models related to multilingualism.

Before going on to summarising the main empirical findings of the field (2.5), I need to mention one of the major challenges that researchers conducting research in the field of TLA have to face, namely, that of the question of appropriate research designs. As we have seen above, the nature of TLA is multifaceted and therefore conducting L3 research is a very complex issue because of the variety of factors and circumstances specified above in detail. Moreover, the field itself is relatively recent, therefore there are no 'conventional' or 'time-tested' research methods that have crystallized as 'recommended' for the purposes of such research. There are, however, clearly described criteria which determine under what circumstances and with what research instruments and subjects it would be ideal to conduct research in order to obtain optimal results.

The present section is devoted to discussing the methodological considerations that underlie L3 research (2.4.1). After providing a systematic overview of empirical TLA studies, the issues related to the methodology of the field will be revisited in subsection 2.5.5 by summarising research methods that proved successful in the past and the same time working towards a justification of the data collection methods applied in the present paper.

2.4.1 Methodological considerations

Lindemann (1998) is one of the first researchers ever to address the issue of third language acquisition research design and has up to date provided the most detailed set of criteria for carrying out research in TLA. In a field which is so new and so fast moving, Lindemann's 1998 article may seem to be out of date, however, her work is extremely important, since she has not only called researchers' attention to the difficulties of choosing an appropriate research design but has provided a set of criteria to consider when designing TLA research. Furthermore, as we will see in the various subsections of 2.5, a great deal of the research conducted in the field has been designed with regard to Lindemann's considerations. It is noteworthy to mention that a careful look at the sources in the reference lists of most of the articles reviewed below do not mention Lindemann's work. The reason for this can partly be that Lindemann wrote her article on the proposed research designs in German and therefore it may not have been accessible for everyone in the L3 research community. What is important, however, that even without being familiar with the ideas proposed by her, many researchers might have arrived at similar conclusions.

Lindemann (1998:161-162) claims that trying to adopt conventional SLA research methodologies to L3 research may not always prove successful. One such example is that of error analysis, a technique of importance at an earlier stage of SLA research. As I have also

explained in 2.2.1.1, while error analysis used to occupy an important position in language acquisition research and may result in successful L3 research designs, it has its limitations. Namely, error analysis, by definition, is preoccupied with the visible/audible deviations from the target language norm and, therefore, does not account for language production situations in which the learner could have produced alternative forms but has not (p. 162). Nevertheless, there are some research results that were based on error analysis, for example, Kırkıcı (2007) analysed 174 L1 Turkish, L2 English and L3 German university student subjects' 282 authentic exam papers for three different types of lexical cross-linguistic influence.

Collecting introspective data is one possible way of getting closer to the actual thinking process in the learners' minds. With the method of interviewing learners in a way that they are asked to verbalise their thoughts, an insight into the individual learners' cognitive processes may be gained. Lindemann (1998:162-163) warns that this method, too, has its limitations. While this method has its limitations, think-aloud protocols in TLA research have been successfully applied by e.g. Gabryś-Barker (2006), Jessner (1999, 2003) and Tápainé Balla (2009b).

In order to avoid the unreliability that may result from the above mentioned methods, Lindemann (1998:163-164) lists the requirements that L3 research designs should meet as follows: L3 research requires specific research methodology to account for the specificity of the multilingual situation. An important basis for the research is that the three languages in question should be compared and contrasted. It is one of the aims of L3 research to study the relationship between the subjects' L1, L2 and L3, therefore it is important to clarify the differences between the L1, L2 and L3. Almost a decade later, De Angelis (2007:12) provides a minutely detailed set of requirements regarding what information needs to be recorded by the researchers about their multilingual subjects and their languages. According to De Angelis (p. 12), this information should include the age and sequence of acquisition of each non-native language as well as the exposure to native and non-native environments and the proficiency level, productive and receptive skills for each language, and how these were measured. The manner of acquisition (formal/instructed acquisition versus natural acquisition) is also important. In the case of languages learnt in a formal setting, it is necessary to record the amount of formal instruction in each non-native language (years and hours per week). Further important factors are the context in which each language is or was used (for example at home, at school, with peers and so on) and the number of languages known to the speaker. In all the empirical research to be reviewed in section 2.5, several, if not all of these factors were considered when recording the linguistic biography of the

subjects. In my view the researcher needs to be informed about this background information in order to arrive at generalizable conclusions.

As regards the data collection methods, Lindemann (1998:164-165) suggests that L3 research must go beyond error analysis and she proposes two types of research designs:

1) In order to be able to measure learner production, she proposes longitudinal studies with linguistically homogeneous learner groups. One example Lindemann proposes is 3–5 weeks of classroom instruction dealing with a specific target language item which is videotaped and the written texts produced by the learners collected. Additionally introspective interviews can be made. Such lesson documentation seems to be satisfactory because all input and output factors can be studied. According to Lindemann, this type of research is time-consuming and labour-intensive, nonetheless it promises valid results.
2) In order to be able to measure learner reception, Lindemann proposes a study in which listening and reading comprehension skills of L3 learners are assessed. It can be particularly interesting to assess such skills prior to instruction in the L3, that is, she suggests studies where potential learners of a language are tested on how much they can comprehend in a language not yet known by them, based on the knowledge of other languages they are already familiar with.

In the various different sections of 2.5 we will see that most research carried out in the field has relied on Lindemann's pre-proposed ideas to this day.

2.5 Empirical studies in educational contexts

As we could see in the previous sections, the field of third and additional language acquisition is a highly complex area to research due to the versatility of subfields, approaches and language combinations. This complexity presents the researchers with the difficulty that appropriate research methods and data collection instruments are challenging to find.

In order to illustrate the complexity of third and additional language acquisition research, I have summarized some of the most significant research reports from the past two decades in Table 3, which is located at the end of this chapter, on pp. 60-65. The list is by no means complete, but it aims at integrating the empirical studies that have been and will be reviewed in the present literature review both in order to help the reader keep track of the great variety of different studies and, at the same time, to depict the intricacies of the field. In the individual columns of Table 3, I have included the author/s and the year of publication, the area within linguistics to which the research is constrained, the number of subjects

participating in the research and their language combinations, and, finally, the way the data was collected. As can be seen, the studies are difficult to compare because of the large variety of the language combinations, the age and number of the participants involved, and the different research questions asked and answered.

Having reviewed the multitude of factors that potentially play a role in third or additional language acquisition (2.2) as well as the different models that attempt to explain the underlying processes (2.3), we can conclude that third language learners approach language learning with a significant amount of previous knowledge. However, the extent to which the individual learner is able to utilise this knowledge while learning an L3 strongly depends on the individuals themselves. In section 2.5.1 I will present the results of studies describing the differences between an L2 and an L3 learner (2.5.1.1), and, through describing research with the participation of novice language learners in a particular L3 (or Lx), I will show that even prior to starting the acquisition of a language beyond the L2, L3 learners are already in the possession of knowledge, skills and strategies that they did not use to possess when learning their L2s (2.5.1.2). It seems that it is the area of lexis where the results of a comparative method are visible at early stages of language learning, and the approach associated with it is instruction via cognates, therefore section 2.5.2 is designed to present research carried out in the field. In 2.5.3 I will illustrate with further examples how L3 learning and L3 learners themselves differ from L2 learning and L2 learners, respectively, and in section 2.5.4 I will sum up the research results that point in the direction that the existing abilities typical for the L3 learners can be improved by systematic instruction. In order to be able to draw conclusions as regards an ideal research design, in 2.5.5 research methodologies and data collection instruments will be reviewed. Section 2.5 will be closed with a summary (2.5.6) that paves the way to presenting the actual research conducted among L1 Hungarian participants learning L2 English and L3 German in the following chapters of the dissertation.

2.5.1 Utilising previously acquired knowledge in L3 instructional contexts

The present section is devoted to summarising research results that have so far aimed at language instruction, more specifically, how to make the instruction of a language beyond the second one more effective. In 2.5.1.1 I will summarise the most important differences between L2 and L3 (or Lx) learners. One particular aspect seems to be especially emphatic among the differences, namely, the way L3 learners are able to exploit previous knowledge mostly because of the larger amount of information available to them compared to their L2-

learning counterparts. I will provide a brief review of empirical studies confirming this idea in section 2.5.1.2.

2.5.1.1 The differences between an L2 and an L3 learner

There is general agreement among L3 researchers that the processes underlying the learning of an L2 are significantly different from those underlying the learning of a further language. This idea was described in general terms in Hufeisen's (1998 and 2005) model as 'foreign language specific factors' that encompass 'the individual learning experiences and strategies, previous interlanguages and the interlanguage of the target language of the L3 learner' (Hufeisen 2005:38, see also 2.3.3).

In many contexts the differences between an L2 and L3 learner are more subtle. In a school environment it is typical to start learning a foreign language at a certain age and then begin learning a further one (or further ones) some years later. The number of languages instructed and the languages themselves, the ages of learners at the time of the introduction of the individual languages and the time devoted to teaching them may vary from country to country and from school-system to school-system, nevertheless the summary of the characteristics of learning an L3 by Agafonova (1997) based on her research in a Russian setting is applicable to several other European settings as well. Agafonova (1997:6-7) explains, first of all, that L3 learners are older than the ones in L2 instruction, which may prove both advantageous or disadvantageous from the perspective of language learning (p. 6). This results in their intellectual and cognitive abilities as well as needs being more developed and refined and, additionally, they have at this age different interests and different motivation both towards the learning of an L3 and towards new topics, contents and situations (pp. 6-7). Concordantly with Hufeisen's (1998 and 2005) foreign language specific factors, Agafonova, too, emphasises that by the time the learners start learning an L3, they already have knowledge, knowledge-structures, skills, communication and language learning habits, strategic skills, and learning techniques on the basis of their experiences with L2 learning. They have more previous knowledge, are more familiar with the (political, cultural, and scientific) aspects of European culture, with grammatical phenomena (grammatical-terminological knowledge, structure samples, and exercise types), and with dictionaries (p. 7). Also in accordance with Hufeisen's model, Agafonova states that learners, especially at the beginning, attempt to bring everything that they know of their L2 into the L3 instruction, which may result in both positive and negative CLI (p. 7). The arguments presented above all shed light on why it might be a simpler task for the learner to learn an L3 after an L2.

However, Agafonova argues, in some cases L3 learning can be more challenging, because there is a more limited time period available for learning an L3 compared to that of an L2, whereas the learning goals and instruction methods are often identical. It may also be the case that the atmosphere is unfavourable in the sense that the learners (while learning their L2) may have lost their curiosity towards a new foreign language and culture. Furthermore, the conditions of L3 learning are different from those of L2 learning, e.g. specific motivation and the lack of specific learning materials (p. 7). An additional challenge may be presented if German is the L3 (e.g. after English as an L2) because the German language has a reputation that it is 'more difficult than English' due to the noun declension and verb conjugation system and the sentence structure (p. 7).

Although there clearly is a potential for L2s and L2 learning processes to exert a negative influence on the L3 and its learning, TLA research has concentrated to a greater extent on the positive effects.

A longitudinal study investigating the psycholinguistic aspect of L3 learning revealed that third-language learners are 'autonomous', in that they attempt to seize control of the learning process. Rivers's (1996) subjects with Russian L2s were enrolled in Georgian, Kazakh and Kyrgyz language courses and were found to be more effective language learners than those without an L2. L3 learners were able to make 'self-assessment' and were found to be aware of their strengths and weaknesses and to make judgements about their learning styles and learning strategy preferences when they were invited to make comments on their own perceptions in the course of the data collection. Third language learners are also found to be 'confident' and 'self-directed' (Rivers 1996:7). In short, Rivers argues, third language learners are more effective and, thus, also more economical to teach, since less classroom instruction time is sufficient to reach the same results than in the case of second language learners.

In section 2.5.1.2 I will provide an overview of several empirical studies that were devoted to analysing the factors that facilitate the learning of an L3 at the early stages and therefore support that the differences between the L2 and L3 learners listed above indeed exist.

2.5.1.2 Initial stages of L3 learning

In the course of TLA research some studies have been directed towards the processes operating in the language learner at the initial stages of language learning.

Lindemann (2000) conducted a longitudinal study in which she investigated the role of L2 English and L1 Norwegian in Norwegian participants' comprehension of L3 German texts. The 40 high school learners and university students were allocated into groups of five based on their levels of knowledge in L3 German. The subjects were confronted with unfamiliar (three times written, three times oral) texts six times throughout an academic year, whereby their comprehension was checked and a think-aloud protocol was recorded. The analysis of the comprehension of oral texts revealed that participants, already at a beginner level, relied both on their L1 Norwegian and L2 English as source languages (Lindemann 2000:7-8).

Gibson and Hufeisen (2003) studied learners aged 20-34 in order to find out how successfully they could solve a task in which they were asked to translate a text from L3 (or Lx) Swedish, a language not familiar to them, and whether they are aware of any strategies regarding the transfer of elements on any linguistic level. The participants had various linguistic biographies. The results of two groups were compared: (1) 10 learners of English having studied English for an average of 13 years (EFL learners), aged 20-34; and (2) 26 learners of German having studied German for an average of 4 years (GFL learners), aged 19-55 took part in the experiment. The majority of the EFL learners had a German L1 or had previous knowledge in German as an L2, L3 or L4 and six of them knew 3 languages beyond their mother tongues. The GFL learners had different L1 backgrounds (having arrived from various European and Middle Eastern countries), studied German as their L2, L3 and L4 and 24 of them also knew English and 14 of them were familiar with three foreign languages.

The task included a translation exercise from Swedish into the language that the participants were studying at the time of the data collection, and a questionnaire that contained questions about the translation process. Gibson and Hufeisen (2003) analysed both the objective results of the actual translation task and the responses given by the subjects in connection with how their L1 and additional languages and the context of the text influenced their performance. The results reveal that not only did the learners rely on the languages previously known to them, but it seemed that the more languages the learners were familiar with, the more successfully they could exploit these languages. Also, the authors found that learners who knew more than one foreign language were 'more skilled at making use of their metalinguistic knowledge, that is, of how languages work and are constructed' (Gibson and Hufeisen 2003:102). Gibson and Hufeisen concluded that 'learners could be trained in the use of or to further develop transfer and inferencing strategies' (ibid.).

A study similar to Gibson and Hufeisen's was carried out by Singleton and Little (2005). Singleton and Little's (2005) subjects were altogether 20 university students with L1

English. Altogether 13 had German knowledge and 7 had no knowledge of any Germanic languages other than English. Similarly to Gibson and Hufeisen's study, in this experiment, too, learners were presented with a text in a language previously unknown to them. A short Dutch text was made acoustically and visually accessible for the subjects who had to answer comprehension questions based on the text. Both the correctness of the answers and the subjects' own perceptions of the task were assessed. The subjects with German knowledge achieved higher scores in the comprehension task and found the task easier than the subjects without the knowledge of Germanic languages. The results show that the knowledge of typologically related languages facilitate the comprehension of a further language and that the greater the typological closeness between the language already known by the learners, the greater the extent of comprehension (Singleton and Little 2005:106).

Within the context of English and German as the learners' L2 and L3, I conducted a study with the participation of L1 Hungarian high school learners (Tápainé Balla 2008a and 2008b). Similarly to the above mentioned three studies I also addressed the issue of what type of previous knowledge (linguistic and/or other) learners utilise when they are faced with the task of having to understand a language unknown to them. I also compared the results of L1 Hungarian learners with L2 German (N=8) trying to understand unknown L3 English with the results obtained from L1 Hungarian learners with L2 English (N=16) trying to understand unknown L3 German. The subjects did not know any other foreign languages at the time of the data collection.

The collection of the data took place in two steps whereby I applied a translation task accompanied by a record of the learners' own perception of the task. In the L2 German group the learners were asked to translate a text from unknown L3 English into L1 Hungarian. The learners worked together as a group and were asked to think aloud. A digital recording was made of the translation process. The L2 English group had to translate the German version of the same text into Hungarian. They, too, worked in groups and carried out the translation task together. Both groups were successful as regards task fulfilment, however, to different degrees. While the L2 German group could successfully translate the English text, the L2 English group could only partially translate the German version of it. This indicates that although knowledge in a previous language does play an important role in the comprehension of a further language, the knowledge of German seems to facilitate the understanding of an English text to a greater extent than vice versa (Tápainé Balla 2008b).

In a different combination of the languages involved, Rast (2010) also found that the knowledge of previously leant language that is typologically related to the target language has

a facilitative effect on L3 comprehension. She examined 15 L1 French subjects learning Polish. The subjects all had L2 English plus 3 learners each had L3 Russian and German respectively, and 5 learners had three different Romance languages as L3s. Thus, for 11 subjects Polish was an L4, while it was an L3 for 4 subjects. The subjects were beginners in Polish and were instructed for 15 weeks. Rast's 2010 study is concerned with the results obtained during the first 6 weeks. The subjects were asked to complete grammatical judgement tasks and were tested on oral and written sentence comprehension. The results reveal that even after such short time of instruction the three learners who had a Russian Lx – even if at low proficiency – performed better than their non-Russian speaking counterparts. This result reinforces the conclusions of the above studies in that cross-linguistic influence is indeed an important factor in L3 learning.

An even greater typological similarity than the ones in the examples mentioned in the previous parts of the present section is the centre of Hedquist's (2005) study. He carried out a study in which his Dutch and Scandinavian subjects participated in a rapid training of 10 lessons learning about rules of correspondences between the two languages on the lexical, morphological and grammatical level (Hedquist 2005:20). After three days of instruction Dutch participants were able to comprehend newspaper articles in Swedish and vice versa, and both Dutch and Swedish subjects were able to 'speak their own mother tongue in conversation with one another and therefore understand the other language without personally speaking it' (p. 27). It is interesting to note, however, that in spite of the seeming success of the intercomprehension method, the participants later resorted to their original language of communication, namely, English, because they felt that there was a risk of misunderstanding (p. 28). Nonetheless, the idea of mutual intercomprehension between certain language combinations has certainly taken root, see e.g. Thije and Zeevaert's (2007) edited volume on receptive multilingualism encompassing studies based on different language combinations.

There are two major implications that can be deduced as conclusions from the investigations summarised above. First, we have seen that language learners, even complete beginners, rely on all available previous knowledge, and second, metalinguistic awareness is increased by the number of languages known by the learner. This seems to be a process that language learners are naturally involved in, at least to some extent. The present investigation addresses this observation claiming that these natural processes can be facilitated and, thus, the learning process accelerated and made more economical if language instructors (of an L2, L3 or Lx), building on this spontaneously occurring phenomenon, provide their learners with comparative knowledge on the languages involved. L2 teachers could provide a basis for the

learning of further languages by laying the foundations of a multilingual approach and teachers of L3 and Lx could ideally make their learners see how they can best exploit the languages that they have already encountered.

Languages that are typologically related have varying numbers of cognate words that lend themselves to comparisons. Although some cognate pairs are more salient than others, learners could easily be instructed to recognise such similarities and differences. Subsection 2.5.2 below is devoted to reporting on studies on the role of cognates in the language instruction.

2.5.2 The role of instruction in L3 acquisition – cognate studies

As I have shown in subsection 2.5.1, learners of an L3 carry the potential of proceeding faster with the learning of the target language. In this section I will present arguments in favour of implementing special L3 (and possibly Lx) teaching materials and methodologies in order to facilitate and accelerate the processes that are present in the L3 learners. I will devote this section to describing research in which cross-linguistic similarities between languages were utilised in order to maximise learning. The studies summarised here concentrate on the area of lexis and are concerned with how cognates can be utilised for the benefit of language learners.

In the studies that I will present below, the authors concentrate on utilising the typological relationship between the languages known by the learners and the new language to be learnt on a lexical level. It must be noted that in some studies, especially in the earlier ones, the authors rely on the learners' mother tongue and the target language, while no mention is made of L3s. Nevertheless I consider these studies to be important contributions to TLA research, since they focus on the central idea of cross-linguistic similarities, and, therefore, this section would not be complete without them.

Some of the first studies to address the issue of cognates are by Granger (1993), Lengeling (1995), Garrison (1990) and Dolinskaya (1993) in the relation of two languages, while Sikogukira's (1993, see also above in 2.2.2.2) research was directed at a combination of three languages.

Granger (1993) recognises the potential facilitating effect of French-English cognates in language teaching and proposes a 'cognate approach' to vocabulary learning. She argues that although there are 'deceptive cognates', their proportion to 'good' cognates is 950 to 11,000. Therefore the cognate approach could be useful in the early stages of language learning and especially in reading comprehension (Granger 1993:50).

Granger furthermore claims that 'systematic regularities between cognate languages should be pointed out to learners' (1993:50 and, quoting Banta (1981), she asserts that 'the recognition of cognates cannot be taken for granted', sometimes learners fail to recognise even very obvious cognates (p. 50).

Lengeling (1995) explains, using English and Spanish as examples, that there is a tendency that foreign language instructors underestimate the importance of cognates. The reason for this is that teachers believe that cognates are so similar in the source and target languages that no explanation is needed (Lengeling 1995:2). However, cognates, especially false cognates, may cause problems, and, therefore, they need to be treated with special care (p. 4). The piece of advice given by Lengeling (1995:5) is that teachers should call their learners' attention to false friends from the beginning and special tasks should be designed to develop learners' knowledge of cognate words.

Garrison (1990:509) reports that L1 English learners of Spanish can easily recognise cognate words. This ability to recognise cognates can be further developed into the ability to produce the non-native equivalent of the cognate pair. 'Teachers can enhance the subconscious absorption process […] by making students consciously aware of cognate patterns and how these patterns can help them learn new vocabulary' (p. 509). It is important for students to understand that there are thousands of English-Spanish cognates, and if a learner knows some of them, he or she can become able to induce others (p. 510).

The cognate approach in teaching English to Russian L1 learners is reported also by Dolinskaya (1993). Her idea to teach English with the help of cognate words was rooted in the recognition that whereas teachers of English recognise the existence of English-Russian cognates, they generally teach these words together with their meanings, even in the case of very transparent cognates, instead of trying to make their learners 'hear' or 'see' such words. At the same time, concordantly with Granger's observation, while language learners are aware of the existence of cognates, they generally fail to 'recognise' them, and, thus, they look them up in the dictionary whenever they come across what they conceive to be an unknown word (Dolinskaya 1993:4). Dolinskaya and her colleagues compiled a list including 4,000 cognate words that are potentially 'recognizable' for Russian learners of English and for English learners of Russian with the intention to facilitate cognate recognition and accelerate the learning process (p. 4).

What the four articles above have in common is that learners are able to recognise cross-linguistic similarities on the lexical level to a certain extent, however, systematic instruction is needed in order to fully exploit the facilitating potential of cognates.

Realising the fact that most of the EFL materials come from Britain and the USA, and, therefore, they are created 'for language learners in general rather than for learners of a single first language background in particular' (Frankenberg-Garcia 2000:65), Frankenberg-Garcia (2000) designed special translation materials for L1 Portuguese learners learning English as an L2 in which she predicted the potential problem areas. She argues that the learners' L1 is an important background that needs to be exploited for the sake of successful language learning (p. 65), and, thus, a translation corpus is only meaningful if it is designed in a way that it addresses the cross-linguistic issues (p. 66).

In section 2.2.2.2 on the role of target language proficiency, I have already described Sikogukira's (1993) study on L1 Kirundi learners' lexical transfer from L2 French into L3 English. What needs to be noted at this point is that learners seem to have a different attitude towards the use of cognates at different levels of source language proficiency. While beginners are more pre-occupied with formal similarities, more advanced students are capable of making associations within the target language, suggesting that as learners become more advanced in the target language they 'gradually move away from the source language and possibly start "thinking" in the target language' (Sikogukira 1993:125).

The most detailed study, and from the perspective of the present dissertation a most inspiring piece of research on pinpointing the large potential inherent in the cognate approach in language teaching, is by Caplan-Carbin (2006). Caplan-Carbin's subjects were 21 L1 English adults who have enrolled in university introductory German courses and who had no previous experience with German. The subjects were asked to fill in two tests. In the pre-test the subjects were presented with a list of 173 German words 'that are historical origins of the modern English cognate counterparts' and they were asked to give the English equivalents (Caplan-Carbin 2006:8). Afterwards the students were given a 'letter relationship key' which delineated the 'current orthographic relationship between some German and English phonemes' and a short description of the 'shared history of the two languages' (p. 9). After allowing the students to study both sheets, the students were administered the post-test, in which they had the same task as in the pre-test with the exception that in the post-test the subjects were informed about the number of the changes or shifts that are necessary to derive the English word from the German one.

Caplan-Carbin found that the subjects' performance on the post-test compared to the pre-test improved in specific ways. First of all, the number of attempted answers increased by 18% (from 1,050 to 1,240). Second, there was a 37% rise in the average number of correct answers (from 37.39 to 51.42). Out of the average number of answers attempted correctness

improved from 79% to 91%. Out of the total number of answers attempted correctness improved from 22% to 30%. Caplan-Carbin herself evaluated the above percentages as 'a small change in the test scores', nevertheless she noted that this information can be 'of considerable pedagogical value' (p. 11). In my opinion Caplan-Carbin underestimated the significance of her results. A careful look at the description of the circumstances of the data collection reveals that the words in the tests were listed on three pages, and the letter relationship key and the brief linguistic history were one page long each. She allowed her subjects to spend 20 minutes with the task, which is very little time to read through two pages of instruction and go through three pages of words. Both her results and the subjects' after-test remarks undeline this deficiency. When taking a closer look at her findings she found that there was a dramatic change in the number of attempts on the first page (from 532 to 1045), while there was a major decrease in the number of attempts on the second and third pages (from the total of 518 to 195). Unfortunately, no data is provided on the number of correct answers per page; however, it can be assumed that the proportion of the correct answers must be in some kind of a correlation with the number of the attempts. If she had compared the correct answers in the pre-test and post-test page by page, I am sure she had found a more significant amount of increase than the mere 8% difference she found in the total results. Finally, half of the 21 subjects volunteered their remarks about the technique. All but one of them found the technique useful, but 6 of them noted that they would prefer instruction from the teacher.

Caplan-Carbin's (2006) research confirms that a cognate teaching approach is beneficial from the point of view of the learning process. While her subjects were native speakers of English learning German as a foreign language, research conducted by myself among L1 Hungarian learners learning L2 English and L3 German strongly supports the idea that a cognate teaching method is also effective if neither of the two related languages is the learners' mother tongue (Tápainé Balla 2007). In my study, two groups of high school learners who had comparable levels of English and German were taught 26 previously unfamiliar cognate pairs with two different methods. The experimental group learnt the English and German equivalents in pairs, while receiving information on the systematic relationships between the cognates. The control group, in contrast, learnt the words separately from each other. One part of the teaching section was devoted to teaching the English words with conventional vocabulary teaching methods, then, in the second half of the session the German counterparts were taught, without referring back to the English equivalents. Both groups were tested on all the vocabulary items in both languages twice: first immediately after

the learning session and one week later. A comparison of the test results of the two groups revealed that the learners in the experimental group achieved higher scores after the learning session and the results, though to a lesser degree, were also higher a week later. Therefore, it can be concluded that the cognate teaching method proved more successful than the traditional method that keeps the languages apart (Tápainé Balla 2007).

The above studies support the idea that special language instruction based on comparing linguistic similarities can have an important facilitating effect on the learning of an L2, an L3 or an Lx. Although the studies reviewed above concentrate on the lexical level, it seems obvious that the instruction on the similarities of the languages can go beyond that and be expanded to grammatical issues.

2.5.3 Examples of spontaneous L2 influence on L3

The present section is devoted to further examples to support the view that the L2 (and the process of its learning) exerts a major influence on the L3. The research articles discussed in this section are rather eclectic in many respects as they involve participants with various different linguistic biographies as well as different research methods. What is common, however, in all of them is that their findings reinforce the hypothesis that L3 learners use both their L2 knowledge and the experience gained through the process of L2-learning when learning their L3.

In an innovative experiment, Ecke (2001) examined tip-of-the-tongue (TOT) states produced by subjects with L1 Spanish, L2 English and L3 German during a translation task. Ecke found that 'the degree of L1, L2 and L3 influence varies according to processing tasks and conditions' (2001:106), nonetheless, the L1 influence was weak. The weak effect, according to Ecke (ibid.), is not merely caused by the difference between the L1 and L3 structures, but, when examining cognate equivalents, it has been explored that most frequently the L2 equivalents intruded into the word choice of the subjects – that is, instead of relying on the L1 as a source, the L2 was activated.

Having studied Hungarian-German bilinguals learning L3 English, Pál (2000) also found that the knowledge of a typologically related language facilitates language learning. Citing Dewaele (1998), Wei (2003) claims that if the knowledge of an L3 speaker is incomplete or there is an insufficient amount of vocabulary available, the intended meaning may be expressed by turning to '"equivalent" or "similar" lexemes in his/her interlanguage at a certain point in third language production' (Dewaele 1998, cited in Wei 2003:64). Jessner's (1999, 2003) subjects were Italian-German bilinguals learning L3 English. While presented

with the task of writing an essay in their L3 without a dictionary, the subjects' thinking process was verbalised. After analyzing the think-aloud protocol data, Jessner concluded that L3 learners were aware of the linguistic knowledge they had available and they made conscious choices when searching for an L3 word (Jessner 2003:53).

Kırkıcı (2007) analyzed occurrences of CLI in written exam papers produced by L1 Turkish, L2 English subjects learning L3 German and found that a mere 7% of the CLI phenomena can be related to the speakers' L1, the remaining 93% were all L2 English related (Kırkıcı 2007:8).

Winters-Ohle and Seipp (2001) conducted a major questionnaire study involving 238 subjects of 19 different mother tongues, among them 77 Hungarian subjects, learning German as an Lx. The questionnaire designed for the purposes of this investigation aimed at exploring the language learners' own perceptions of the facilitating and hindering roles of their mother tongues, English, and, optionally, other languages. They found that secondary school learners of German attributed higher values to the negative effects of their English knowledge on German than to the facilitating effects (Winters-Ohle and Seipp 2001:18). They also found that if the subjects are of the opinion that 'it is easier to learn a new language if they have previously learnt another foreign language' they are more likely to attribute higher values to the facilitating factors (p. 40). Winters-Ohle and Seipp's study is based on the subjects' own perceptions of their learning processes, and although the values are not contrasted against any kind of objective measurement of proficiency or learning progress, it still remains a valuable contribution to the field of TLA.

2.5.4 Need for instruction

In the examples above in 2.5.3, the data revealed that the subjects spontaneously rely on their L2 during L3 production. In what follows, in stark contrast, I will list examples in which the subjects did not use their L2 spontaneously; therefore, I claim, with the authors reviewed below, that language instructors have a vital role in realising and making their learners recognise the differences between L2- and L3-learning and, thus, facilitating the learning process of a language beyond the second one.

Gabryś-Barker (2006) examined L1 Portuguese, L2 English learners learning L3 German. One group of subjects had the task of translating a text from L1 Portuguese into L3 German, while the other group had to translate from L2 English into L3 German. The translation task was accompanied by a think-aloud protocol. Gabryś-Barker (2006) found that students translating from L1 into L3 tended not to use their L2, while students translating

from L2 into L3 were prompted by the task to do so. Thus, Gabryś-Barker concluded that the L1 text 'limited the explicit language activation', that is, the subjects could either find the lexical solution automatically or if they could not, they activated their linguistic knowledge neither in their L1, nor in their L2 (2006:161).

Ó Laoire and Singleton (2009) conducted two studies examining the role of prior language knowledge in L3 learning. In the first study they examined whether there is a difference between the French L3 learning of L1 speakers of English with an Irish L2 versus balanced bilingual English-Irish learners. Ó Laoire and Singleton (2009:99) found that with regard to vocabulary, there was hardly any influence from Irish, but the learners seem to have recognised the typological closeness of English and French, and therefore they relied on English as a source. In this respect there was no difference between the L1 English, L2 Irish versus the bilingual English-Irish subjects, therefore, it is safe to say that the role of psychotypology can be detected here.

In the second study reported on in the same article, Ó Laoire and Singleton explored the L3 German learning of L1 English, L2 Irish learners. The results revealed that L1 English, L2 Irish learners of German were more successful at learning the German word order (which is similar to the Irish) than their non-Irish speaking counterparts were. However, the subjects did not perform well in the case of morphological modifications in prepositional phrases in L3 German in spite of similar structures in Irish. Ó Laoire and Singleton (p. 99) concluded that the reason for the failure might have been that the similarities between Irish and German in this respect 'are not obvious enough to learners to trigger psychotypologically based facilitation in this instance.' Although the authors do not point at the potential role of instruction in this respect in this article, an earlier study by Ó Laoire (2005) reported about a brainstorming session in which L1 English, L2 Irish and L3 French/German/Spanish learners were asked about the experience of learning Irish compared to their L3 learning. An important outcome of that study was that 'metalinguistic awareness is not readily present' in learners (2005:51), and therefore a 'particular language awareness approach is needed' in the instruction (p. 53).

A much more overt plea for a systematic instruction on the similarities and differences of the languages known by the language learner is articulated by several authors. Based on interviews she conducted with learners with L1 German, L2 English, L3 French and L4 Spanish, Kallenbach (1998) claims that it is a 'waste of resources' (1998:56) not to incorporate – consciously and systematically – previously acquired knowledge into the learning processes of further languages.

In an experimental longitudinal study Brooks-Lewis (2009) has indeed applied a teaching method in which she built her language teaching methodology on what the learners already had available. Although she only worked within the context of two languages, namely, the comparison and contrast of L1 Spanish and L2 English, her research results are still remarkable from the perspective of TLA research. With the method of using both English and Spanish in the classroom she taught a 30-lesson English course for Spanish L1 adult learners and analysed the feedback she received. The comparative method was beneficial because the comparison with the L1 did not only draw learners' attention to the linguistic similarities and differences but it also helped to raise awareness (Brooks-Lewis 2009:229).

Continuing the line of specially designed teaching materials, Köberle's (1998) much earlier study should be cited at this point. Realizing the lack of Czech course books available in Germany in which the grammatical categories and the interactive exercises are comparatively described, Köberle (1998) designed her own teaching material to teach L4 Czech to L1 German learners with L2 English and a variety of L3s (including French/Spanish, Ancient Greek, Latin, etc.). The positive outcomes of the two-year long longitudinal experiment were numerous, e.g. the learners could use their prior knowledge without any fear, each student could actively participate from the beginning, there were 85-90% correct answers in the discussions. Moreover, the learners were motivated and understood why linguistic theory was important to them. Their learning of an L4 had a positive revising and reactivating effect on their L2 and L3s (Köberle 1998:107-108). Obviously, the implementation of such teaching methods can be problematic, since, according to Köberle (p. 108), it is necessary for learners to have a good command of L2 and/or L3. Since the method is to some degree language specific, it can only be applied in homogeneous groups, and also the teacher should also be familiar with all the languages involved.

Oebel (2007) argues for teaching L3 German with the help of L2 English as a bridge language for L1 Japanese university students. In his words, 'it is advisable for local German teachers to use English, a language which, as opposed to German, has the reputation of being learner friendly, as a learning aid when teaching German'[4] (Oebel 2007:2). Furthermore, Oebel (2007) draws attention to the utilisation of positive transfer and that the learners' language awareness should be raised throughout the learning process. Oebel concludes that the aims of L3 instruction are at least partially identical with the aims of mother tongue instruction and to a greater extent with learner experiences in the L2 lessons. Ideally, L2

[4] My translation from the original German language text, T. Balla Ágnes.

instruction should be constructed in a way that the learning and teaching of the L2 anticipates the prospective learning of an L3, in a way that strategies are taught and language awareness is raised (p. 16). Oebel's suggestions refer to an L2 English-L3 German scenario, therefore, he warns that not everyone might want to learn German after English, that there may be learners and teachers of German who do not speak English, that not everyone has solely positive experiences about learning English, and, finally, that once systematic instruction is designed, not only lexical similarities should be considered (pp. 17-18).

Volgger (2010) analysed subjective learner theories of multilingual learners with L1/L2/(L3) German /Turkish /(Kurdish) learning L4/L5 English/French. Her findings support the views presented above with the additional claim that it is not only the languages learnt in an instructional setting that should be integrated into the learning process of a new language, but also languages leant as a result of a migratory background. Volgger (2010:189) remarks that it would be important to make the learners aware that even if they only have an imperfect knowledge of a language, it could still be useful in the learning process of an additional language.

Kacjan (2010) examined the written production of L1 Slovenian learners with L2 English in L3 German. Kacjan analysed the individual interferences in the texts produced by the participants and found that it is necessary to take the interferences into consideration during the language instruction at school in order to support this awareness of the learning process and the knowledge (Kacjan 2010:72-73). Kacjan observes that transfer provides the learners with learning opportunities, but only if they are integrated sensibly and efficiently in the learning process (p. 100). German language teachers are advised to make an attempt at designing their language instruction in a way that it adheres to the principles of multilingualism and third language teaching methodology (p. 101).

Last but not least, I will provide a brief overview of Boócz-Barna's (2006, 2007, 2009 and 2010) work with Hungarian L1, English L2 subjects. Boócz-Barna's original scope of interest was teaching German as a second language, however, during the years of research she conducted, realising that German is becoming more and more a third language rather than a second, her focus shifted to this area. In her view, 'a specific aim of L3 teaching is to transfer previously acquired knowledge and strategies into L3 learning'[5] (Boócz-Barna 2010:176). Boócz-Barna (2010) recognises that L2 English has an especially vital role in the learning process of L3 German in the case of L1 Hungarian learners, whose mother tongue is not

[5] My translation from the original German language text, T. Balla Ágnes.

related to the target language. However, since the L2 and L3 are genetically related, it is necessary to build on prior L2 knowledge and competences in a more intensive manner (Boócz-Barna p. 177). When they start learning their L3, learners are not only in the possession of linguistic knowledge, but they also have working language learning strategies and techniques that they developed while learning an L2 (p. 177, see also Ringbom 2007, Tápainé Balla 2008a, 2008b, etc.).

Boócz-Barna (2010) observed that L3 learners of German may find the desired German equivalent with the help of an English word. This can happen either with the teacher's help or without it, as the learners' individual productions. She has also found that sometimes the German words are learnt together with their English equivalents. On the other hand, Boócz-Barna (2010) observed the occurrence of negative transfer in the German language lessons. The teacher may or may not be aware of the fact that the cause of the mistake was transfer from English, therefore there is no contrastive explanation of the problem. Boócz-Barna argues that false friends are especially important in problematising and making a comparison between the two languages. All in all, Boócz-Barna's conclusion (p. 183) is that in an optimal case the teacher can help the L3 learning process by providing a linguistic guide. Unfortunately, however, most teachers miss the chance of raising consciousness, whereas it would have a positive, reinforcing effect on the acquisition of both languages. Lesson observations have proved that whenever a negative transfer error occurred, the learner was able to self-correct if s/he received guidance from the teacher. The lack of recognising, exploring and making conscious of negative transfer may lead to mistaken conclusions. If the teacher fails to identify the cause of the German language mistake as a transfer phenomenon from English and fails to call the learner's attention to it, the learner's performance can easily be misjudged.

Boócz-Barna's conclusions are based on lesson observations conducted in L3 German classes. Her insights are valuable since they are rooted in the observations of processes going on in classrooms where the learners' L1 is Hungarian, their L2 is English and they are engaged in learning German as an L3. Thus, Boócz-Barna's work contributes to the so far quite limited research on the L3 learning processes of learners with a Hungarian mother tongue. Her results coincide with the major findings of TLA research conducted internationally and with those of my small-scale studies (e.g. Tápainé Balla 2007, 2008a, 2008b and 2009b).

As I have illustrated in the above summary, previous research with the involvement of subjects with differing linguistic biographies prove that there is reason to believe that there

are language learners who are able to recognise and make use of linguistic similarities on their own when learning an L3. However, there are other learners for whom this recognition does not happen or remains incomplete. The findings reviewed above support the idea expressed several times before in this dissertation: these learners can be helped by systematic instruction and specifically designed learning materials. Such systematic instruction should be based on information provided to learners on the typological similarities and differences of the languages and on raising the metalinguistic awareness of the language learners. Even if language learners only possess partial knowledge of a previously learnt foreign language, they should be both encouraged to exploit the possibilities provided by such knowledge and learning experience and instructed on how they can best utilise these resources.

2.5.5. Methodological considerations revisited: A summary of the methodologies in TLA research

As described in 2.4 and as we have seen throughout Section 2.5 above, TLA researchers are faced with challenges when trying to find suitable research methods and data collection instruments. In the present subsection I will revisit the problem of finding suitable research tools and list the most relevant data collection instruments evaluating their advantages and limitations as well as the feasibility of the research with the aim of justifying the choices for data collection for the purposes of the present dissertation.

2.5.5.1 Longitudinal studies

There have been some longitudinal studies conducted in accordance with Lindemann's (1998, cf. above) suggestions. Some of the research studies reviewed in 2.5.1.1, 2.5.1.2 and 2.5.4 were both longitudinal and involved a certain amount of time spent in specific instruction.

Lindemann (2000) herself applied the method suggested by herself in her study on the role of L1 Norwegian participants' L2 English and L1 Norwegian in the comprehension of L3 German. While becoming more and more proficient in the target language, the participants were presented with unfamiliar texts six times throughout an academic year. The data obtained that way both included the results of the comprehension tests and the information from the think-aloud protocols. Lindemann selected her subjects carefully with the aim of having homogeneous groups as research subjects. This, however, resulted in a limited number of participants: five per group.

Köberle's (1998) longitudinal study is perhaps the closest to Lindemann's original ideas. She both designed her own L4 Czech teaching material in a way that it enabled a comparative view of languages throughout the course and taught the subjects for a period of two years assessing all the test results and responses form the participants. Although Köberle's method was assessed as very positive, its implementation may be problematic if the learners' prior language knowledge is not advanced enough in order to be exploited, if the groups are heterogeneous, or if the language teacher is unfamiliar with the languages involved. Köberle had altogether seven subjects in the experiment, and although their L1s and L2s could be controlled, even they had heterogeneous backgrounds as far as their L3s are concerned.

Although there was no specially designed teaching material, but rather the learners were investigated for their own self-invented language learning patterns, behaviours and strategies, Rivers's (1996, cf. subsection 2.4.1.1) longitudinal study should be listed here as one that escorted language learners for almost a whole year of instruction. The data collection methods applied by Rivers throughout this period included classroom observation, questionnaires (for learners and teachers), group discussions (for learners and teachers), and test results.

Brooks-Lewis's (2009) 30-lesson English course for Spanish L1 adult learners was designed specifically with a contrastive view, however, the interviews conducted with the language learners were recorded at one point in time, therefore, the different stages of the process cannot be compared. Also, Brooks-Lewis's (2009) experiment involved the combination of two languages only.

As we can see from the above, longitudinal studies provide the researcher with the opportunity to work together with selected groups of language learners and obtain data while closely inspecting the learning processes. A major limitation of longitudinal data collection is that if the researcher aims at maintaining the homogeneity of the groups as regards their linguistic biographies, the number of the research participants is necessarily limited. One special exception is a major longitudinal study carried out with the participation of 90 Basque-Spanish bilingual children learning an L3 by Cenoz (1997, 2001 and 2005). Since, however, the participants were elementary school age children in different age groups in the same school, the language choices of the participants were controlled. In the examples mentioned above, the research participants were teenagers or young adults, but in spite of the differences in the participants' ages, the research design examples are comparable.

2.5.5.2 Introspective methods

Interviews have been applied for a variety of different purposes by several researchers. For example, in her longitudinal study mentioned in 3.2.1, Kallenbach (1998) made interviews with her learners at regular intervals to gain insight into their views on their language learning processes. Similarly, Volgger (2010) recorded interviews with her subjects to ask them about how they viewed their multilinguality. Cedden (2007) used interviews to record the linguistic biographies of the subjects. De Angelis and Selinker (2001) and Lindquist (2009) collected speech samples from their participants which they used for further analysis in the form of interviews.

As suggested above in 2.4. 1, think-aloud protocols may bring the researcher closer to getting to know the subjects' thinking processes by asking them to verbalise their thoughts while carrying out certain tasks. Although the application of this method requires special attention, TLA researchers have been applying this method for collecting data (Gabryś-Barker 2006, Jessner 1999, 2003 and Tápainé Balla 2009b and 2010a).

2.5.5.3 Cognate studies

As we have seen in the research results summarised in 2.5.2, language learners were taught to recognise cognates and, thus, we have seen that the method of putting cognates to language instructions' use proved to be beneficial. L3 learners may to some extent be able to recognise similarities and differences between words that are in a typological relation with each other. A cognate teaching method at the level of words and a comparative method as regards teaching certain grammatical points will certainly help language learners find the similarities between the vocabularies of the languages, and, thus, it may prove useful during L3 learning, as suggested by Granger (1993), Lengeling (1995), Garrison (1990), Dolinskaya (1993), Sikogukira (1993), Caplan-Carbin (2006) and Tápainé Balla (2007).

2.5.5.4 Translation tasks

Oral and written translation tasks in different language combinations have been successful indicators of learning processes, especially in studies where a language unfamiliar to the subjects was studied, e.g. Gibson and Hufeisen (2003), Tápainé Balla 2008a and 2008b. From the perspective of comprehension, well-designed comprehension check questions (e.g. Lindemann 2000, Singleton and Little 2005, Hedquist 2005) or grammaticality judgement tests (Rast 2010) can be administered. In my view, translation tasks enable the subjects to see the relationship between the languages on a word by word, structure by structure basis.

2.5.5.5 Questionnaires

Winters-Ohle and Seipp (2001) describe the effect of any L2 or L3 on a further target language, and specify the effect of English on German based on a questionnaire study. The 238 pupils and students involved had different L1s and they were taught German as a foreign language in most cases as L3, and in all cases with English L2, and frequently with a variety of Lx-s. The questionnaires were aimed at finding out about language learners' own perceptions about how the languages they know influence the one currently being learnt. In my opinion such questionnaires can both reveal important findings on their own and supplement other data collection instruments (see also T. Balla 2010b)

2.5.5.6 Lesson observation

TLA research with the involvement of Hungarian subjects owes some preliminary results to lesson observations by Boócz-Barna (2006, 2007). Although Boócz-Barna's study aimed primarily at the German language learning habits of L1 Hungarian learners, she came to realise that some of the observed phenomena can be attributed to the learners' knowledge of L2 English. The methodology of lesson observation is an important element when designing research in a school setting and it is also a useful aid in observing the naturally occurring linguistic phenomena in the classroom (see also Dégi and T. Balla in press).

Based on the above review of the data collection instruments, I claim that although there is not one ideal way of collecting data in TLA research, a thoughtful combination of the instruments above may yield promising results. In section 4, while describing the research design planned specifically for the present research, I will refer back to the data collection instruments discussed above.

2.6 Summary

As I have shown in the above sections of my literature review, the fairly new field of TLA has already produced numerous research results. It is beginning to crystallise what the most significant differences between SLA and TLA are, what factors play a role in the process of third or additional language acquisition, and how the complexity of the process can be modelled. From a practical point of view, the most relevant findings of the field are related to how language educators can facilitate language learning for L3 (and Lx) learners by understanding the basic principles underlying TLA.

As I have mentioned at the beginning of section 2.5, TLA research results are varied in many respects, therefore Table 3 at the end of the present section is included in order to provide an overview of empirical research completed in the past twenty years.

The review of the most relevant research findings reveals that research is versatile in many respects; however, research with the involvement of L1 Hungarian subjects is scarce. This dissertation is written with the intention of connecting the results of international research to one of the typical language learning scenarios in Hungary and is aimed at answering research questions about the learning processes operating in L1 Hungarian learners learning English and German simultaneously. In the following chapter I will present the research questions addressed.

Author/s	**Area**	**Number of subjects**	**Languages involved**	**Way of data collection**
Agafonova (1997)	Comprehensive		L1 Russian L2 English L3 German	
Bannert (2005)	Phonology	30 students 30 students	L1 Swedish L2 German L1 German L2 Swedish	Speech samples collected and analysed
Boócz-Barna (2007)	Language switches	Elementary and high school learners	L1 Hungarian L2 English L3 German	Lesson observation, audio recordings
Boócz-Barna (2010)	Language switches,	high school learners	L1 Hungarian L2 English L3 German – A1 level	22 German lessons, 34 students' works
Brooks-Lewis (2009)			L1 Spanish L2 English	
Caplan-Carbin (2006)	Pre-Lx learning phase	21 university students, prior to studying L2	L1 English L2 German	pre- and post-test, presenting information on phono-orthographical relationship between English and German
Cedden (2007)	Comprehensive	24 15	L1 Turkish L2 German L3 English L1 Turkish L2 English L3 German	Interviews: linguistic biographies
Cenoz (1997, 2001)	CLI on the lexical level	90 elementary and secondary school students	L1/L2 Spanish/Basque L3 English	Picture story 'Frog, where are you?' – taped oral productions

Cenoz (2003)	CLI on the lexical level	18 primary school children	L1 Spanish L2 Basque L3 English	Children had to tell the frog-story + a story familiar to them
Cenoz (2005)	CLI and its relationship to typology and age	90 elementary and secondary school students	L1/L2 Spanish/Basque L3 English	Picture story 'Frog, where are you?' – audio and videotaped oral productions
De Angelis and Selinker (2001)	Lexical and morphological transfer	2 adults: Subject 1 Subject 2	 L1 English/French, L2 Spanish L3 Italian L1 English L2 Spanish L3 Italian	longitudinal case studies: 2 recorded interviews in Italian with an interval of 6 months tape-recorded speech daily for five weeks in Italian
Dewaele (2001)	Comprehensive	25 university students aged 18-21	L1 Dutch, L2 English, L3 French AND L2 French, l3 English	Recordings in formal/informal situations, 14 hours of speech + oral exams, 10 minutes each
Dolinskaya (1993)			For L1 English L2 Russian or vice versa	Word lists based on cognates compiled
Ecke (2001)	TOT states, lexis	24 university students 504 responses	L1 Spanish L2 English L3 German (new language)	Translation: 23 non-cognate words were taught in class, translation stimuli on slides
Frankenberg-Garcia (2000)	Comprehensive		L1 Portuguese L2 English	Translation corpus compiled
Gabryś-Barker (2006)	Lexical search		L1 Portuguese L2 English L3 German	Translation task, one group from Portuguese into German, the other from English into German, think-aloud protocols
Garrison (1990)	No specific research presented		L1 English L2 Spanish	Guessing cognates
Gibson and Hufeisen (2003)	Comprehensive	10 EFL learners, aged 20-34 26 GFL learners, aged 19-55	Majority L1 German, rest: knowledge of German, 6 listed 3 FLs, different periods of time Various L1s, German as L2, L3 or L4, 24 knew English, different periods of time	Translation from Swedish (unknown) into the language they were studying currently, then questionnaire on how participants' L1/other FLs/context influenced them negatively or positively

Granger (1993)	Phonetics Grammar	30	L1 Bulgarian L2 English L3 German	Reading of a text in L3, translation of 10 sentences from L1 into L2, written answer to an L3 question, L3 speech
Hall and Ecke (2003)	Parasitic Model, lexis	100	L1 Spanish L2 English L3 German	5-minute interviews
Hammarberg (2001)	Comprehensive	1, longitudinal case study	L1 English, L2s French, German, some Italian, German – near native competence, L3 Swedish	Recorded conversations + picture narrations, read-aloud tasks
Hammarberg and Hammarberg (2005)	Phonetics	1, longitudinal case study	L1 English, L2s French, German, some Italian, German – near native competence, L3 Swedish	
Hedquist (2005)	Comprehensive			10-lesson courses, mutual comprehension – Dutch-Swedish-Norwegian-Danish
Hoffmann, Widdicombe (1999)	Code-switching	1 4.5-year-old boy	French/English/Italian trilingual	Audio recordings
Jessner (2003)	Language awareness	14 university students	L1/L2 Italian/German L3 English	Thinking-aloud protocols recorded while writing an essay without using a dictionary
Kacjan (2010)	Comprehensive	40+20	L1 Slovenian L2 English L3 German or L1 Slovenian L2 German L3 English	Texts written by learners
Kallenbach (1998)	Comprehensive	17	L1 German L2 English L3 French L4 Spanish	interviews
Kırkıcı (2007)	Different CLI types	282 written exams of 174 students	L1 Turkish L2 English L3 German	
Köberle (1998)	Comprehensive	7, Longitudinal, 2 years	L1 German L2 English L3 French/Spanish, Old Greek, Latin, etc, heterogeneous) L4 Czech	Specially designed teaching methodology

Lengeling (1995)	Cognates	No specific research presented		
Lindemann (2000)	Reception of texts	40 in different groups High school students University students	L1 Norwegian L2 English L3 German	listening and reading , thoughts discussed, discussion recorded discussion
Lindquist (2009)	CLI, proficiency Lexis	30 in 3 groups based on L3 proficiency, 1) beginners: university students, 2) high school 3) university students +6 case studies partly different L1s and L2s	L1 Swedish L2 English (+all the beginners: also German) L3 French L1/L2 Swedish L1 English Beginners in L3	15-minute long interviews (hobby, family, future plans) Monthly interviews: interviews, retelling of a cartoon, film and a picture
Meißner (2004)	Grammar Lexis CLI		L1 German L2 Spanish L3 Portugal	
Muñoz (2000)	Influence of age on foreign language acquisition	284 10ys old 286 12 ys old 296 17ys old	L1/L2 Catalan/Spanish L3 English	Dictation and cloze tests
Ó Laoire (2005)	Language awareness	75, aged 17-21	L1 English L2 Irish L3 French/German/Spanish	Brainstorming about the experience of learning Irish, Ss were asked to compare whether L3 learning was similar to learning L3 Irish
Oebel (2007)	Comprehensive	No specific research presented	L1 Japanese L2 English L3 German	
Pál (2000)	Cognates Lexis Phonology	69 Hungarian 16 German MonHu 23 BilHu 23 MonGe 16 BilGe 23	L1/L2 Hungarian/German L3 English	Lexical decision task Word translation Reading Reaction time analysis
Pavlenko and Jarvis (2002)	Lexis	22 young adults	L1 Russian L2 English	4 three-min. long silent films as a uniform non-verbal prompt, half of the interviewees interviewed in English, the other half in Russian – 44 narratives

Rast (2010)	Comprehensive	15	L1 French (though some bilingual) L2 English + some other languages (3 Russian, 3 German, 5 Romance Lx Polish)	'learners': 6 weeks of teaching, once a week 6 'First exposure': the language task was their only exposure Tests: grammatical judgement tasks, oral and written sentence comprehension sentence comprehension
Ringbom (2001)	Lexis	577 Finish language school students 577 Swedish language school students in Finland	L1 Finish L2 Swedish L3 English	63 L1 words had to be translated into L3 English
Rivers (1996)	Comprehensive	Longitudinal, 16	Expert language learners L2 Russian L3 Georgian 3, Kazakh 8 and Kyrgyz 5	Course for 37 weeks, 25 hours a week 16 lesson observations 35 focus groups
Sikogukira (1993)	Lexis	126	L1 Kirundi L2 French L3 English	
Singleton and Little (2005)	Perceived distance, typology	13 with German knowledge 7 without German knowledge	L1 English L2 French or German unknown L3 Dutch	Text spoken/written in a language that the subjects do not know – comprehension was assessed
Tápainé Balla (2007)	Lexis	Treatment group: 7 Control group: 6	L1 Hungarian L2 German L3 English	Cognate teaching method
Tápainé Balla (2008a, 2008b)	Comprehensive	8 secondary school learners	L1 Hungarian L2 German L3 English	Translation from an unknown language, think-aloud protocols
		16 secondary school learners	L1 Hungarian L2 English L3 German	
Tápainé Balla (2009a)	Lexis	30 secondary school learners	L1 Hungarian L2 German L3 English AND L1 Hungarian L2 English L3 German	Error analysis in written translation tasks
Tápainé Balla (2010a)	Comprehensive	2 secondary school learners	L1 Hungarian L2 German L3 English	Oral translation task and think-aloud protocol

Tápainé Balla (2011)	Comprehensive	25 secondary school learners In two different age-groups	L1 Hungarian L2 English L3 German	Questionnaire on learners' own perceptions of their L3 learning
Tremblay (2006)	Lexical inventions Language shifts	13, aged 19-25 in 3 groups based on their L2 proficiency	L1 English L2 French L3 German at similar levels, no other language	Picture story in German, taped, instructions in English
Volgger (2010)	Comprehensive	7	L1/L2/L3 German / Turkish /(Kurdish) L4/L5 English/French	interviews
Wei (2003)	Lexis	2 S1: L1 Chinese L2Japanese L3 English	S2: L1 Chinese L2 English L3English	Oral production
Winters-Ohle and Seipp (2001)	Comprehensive	161 university students 77 Hungarian secondary school learners	18 different L1s L2 English L3 German (Lx-es) L1 Hungarian L2 English L3 German	questionnaire

Table 3. Summary of empirical TLA research

3 Research questions and hypotheses

In the previous chapter I have reviewed a vast amount of literature on the results that the international TLA research community has accumulated in the past 10 to 15 years. As we have seen, research has been conducted in a variety of subfields with the involvement of a variety of participants as regards their linguistic backgrounds. One of the major subfields where TLA research may clearly make important contributions is foreign language learning and instruction. Although, while there is an increasing amount of research directed at the educational aspects of TLA internationally, we could see that learners with Hungarian as mother tongue have hardly been subject to such investigations.

Consequently, I argue that that there is a need for carrying out third language acquisition research in Hungary, with the participation of L1 Hungarians in order to find out whether the results of international TLA research apply to L1 Hungarian subjects learning two foreign languages. As English and German are the most frequently chosen foreign languages, research should be concluded with learners learning these two languages in order for the findings to be applicable to a large population of language learners. Since Hungarian is a language in the Finno-Ugric (Uralic) language family, and both English and German belong to the Germanic branch of Indo-European languages, we can conclude that the typological distance between the learners' mother tongue (Hungarian) and these foreign languages is greater than the typological distance between the learnt foreign languages themselves, therefore the cross-linguistic influence between English and German needs to be utilised for learning both languages more effectively. And, since in Hungary it is the secondary school age population who is typically involved in learning two languages simultaneously, it is among secondary school subjects where meaningful research can be conducted, cf. 4.1 below.

Based on the reviewed literature (2.5, 2.5.4 in particular) it has emerged that the language learning processes of learners learning their third or additional language can be facilitated and accelerated if their previously learned knowledge is taken into consideration. Therefore, it seems clear that longitudinal research in this field is likely to bring well-founded results for TLA in Hungary. Research that involved language instruction with a comparative view, most frequently involving special attention to cognates, seems to contribute to an effective and, thus, more economical way of language learning. It is obvious that there are certain requirements that need to be met (e.g. the language teacher should be familiar with the languages involved), therefore the implementation of such teaching methods can only happen

in situations where the circumstances are appropriate. At the same time, the success of the method may also have relevant implications for language teacher training.

Taking the above mentioned conclusions into account, I have designed my research with the participation of L1 Hungarian, L2 English and L3 German subjects. In general, the broad research question I have proposed is how Hungarian language learners' knowledge of L2 English can serve as a point of reference when learning L3 German. More specifically, I have aimed at finding out whether some aspects of the learning processes can be enhanced when learners are instructed in such a way that their attention is called to the differences and similarities between the two languages being learnt.

In order to answer the general research question, the following specific sub-questions are addressed in this dissertation:

a) Can L2 English lexical items serve as a point of reference when learning L3 German vocabulary? In other words, will language learners, after systematic instruction, score better on vocabulary tests administered on the material taught than the control group?
b) Can learners of L3 German make predictions about unknown L3 German language items based on their comparative knowledge of English and German? In other words, will systematic instruction result in raised foreign language awareness? Will language learners score better at vocabulary tests administered on novel items?
c) Do learners rely on their L2 English when learning L3 German? Will they start relying on it or increasingly use it as a result of systematic instruction?
d) What is the learners' own perception of the effects of their L1 and L2 on their 3rd language learning? Do language learners rely more on their L1 Hungarian, at which they are more proficient, or their L2 English, which is typologically closer to their L3 German? Will their perception change as the result of the instruction?
e) Does the length of time spent on learning languages (both L2s and L3s) as well as proficiency level have an impact on the foreign language awareness and the language learning strategies of learners? That is, is there a difference regarding sub-questions a), b), c) and d) between more versus less experienced learners?

Research questions (a) and (b) will be answered based on the analysis of vocabulary test results. I have hypothesized that the treatment groups would have higher scores on the vocabulary tests on the items systematically taught than the control groups, where all items have been taught using traditional methods. Furthermore, I have hypothesized that the

treatment group would be able to make more accurate predictions regarding novel items based on their systematic knowledge on the differences and similarities of the two languages.

Research question (c) will be answered by counting the instances of evidence when the subjects used English while trying to arrive at solutions in vocabulary tests and translation tasks as well as on the basis of a content analysis of interviews with learners in the treatment and in the control groups. I have hypothesized that the instructed groups would rely more on their L2 English than their non-instructed counterparts would.

The answer for research question (d) will be answered by a questionnaire on the learners' own perceptions of the effect of their L1 and L2. Although Winters-Ohle and Seipp (2001) found that secondary school learners tended to perceive more negative than positive effects, many of the research results presented in the literature review, including my own earlier studies, have shown exactly the opposite. I have hypothesized that the learners would be conscious of some basic similarities and differences between English and German, and therefore they will find that their L2 English has a more facilitating effect than their L1 Hungarian, and this facilitating effect might be perceived to greater extents as a result of the comparative instruction. I have also hypothesised that the role of the hindering effects would be lower than those of the facilitating one and it might further decrease as the instruction proceeds.

In order to answer research question (e), I will compare the data collected in two different treatment groups (T1 and T2), who differ from each other in their language levels and the length of their language learning experience. The analysis of the test results as well as the analysis of the interviews will answer this research question. I have hypothesized that the more experienced the learners are, the more experience they have had with comparing and contrasting the languages; therefore, the learners in the more experienced treatment group would achieve higher scores on language tests than both the less experienced treatment group and the two control groups.

4 Research design

The present dissertation is based on longitudinal research carried out in the 2009/2010 academic year. The fall semester was devoted to lesson observations, consultations with language teachers at the school and getting the participants accustomed to my presence in their lessons. The actual data collection started in the spring semester, in February 2010 with (1) recording the learners' linguistic biographies in the form of a questionnaire (cf. 4.1.1 below) in order to gain a comprehensive view of the individual learners' learning profiles; and (2), administering placement tests both in English and in German in order to have a reference point about the individual differences within the groups against which further test results would be measured (cf. 4.1.2 below).

The main body of the research was based on the work with the treatment groups, who I met approximately once in a fortnight, on 10–12 occasions throughout the spring semester for 45-minute sessions in one of their German lessons. The treatment groups were instructed with the help of a teaching material designed in a way that English and German were systematically compared and contrasted, but at the same time, as regards the contents (both grammatical and lexical), it fit the curriculum followed also by the control groups.

Both the treatment and the control groups were tested on a regular basis, four times during the data collection period. The tests included (1) the lexical items taught to the treatment groups in a comparative way and to the control groups in the regular way; and (2), novel items not previously taught to any of the groups. The vocabulary tests were supplemented with translation tasks solved by selected pairs of learners twice during the data collection period; the translation was done while thinking aloud and discussing the test items and was followed up with interview questions. Apart from the language tests, the subjects' own perception of their learning processes was also assessed in the form of questionnaires three times in the treatment groups and once in the control groups.

In the following sections I will provide a detailed description of the subjects participating in the research (4.1), of the setting (4.2) and of the procedure (4.3), including a section for the description of the teaching material (4.3.1) and the research instruments (4.3.2).

4.1 Subjects

As I have established in Section 3, it is secondary school learners who frequently learn two languages simultaneously, therefore, I have chosen the following groups of secondary school learners as subjects of my research:

1. *Treatment group 1 (T1), henceforth Group T1:* 15 secondary school learners in the 9th grade with English L2 at the start of learning L3 German.
2. *Control group 1 (C1) henceforth Group C1:* 14 secondary school learners in the 9th grade with English L2 at the start of learning L3 German.
3. *Treatment group 2 (T2) henceforth Group T2:* 10 secondary school learners in the 11th grade, who have been studying L2 English and L3 German simultaneously for at least 2.5 years.
4. *Control group 2 (C2) henceforth Group C2:* 14 secondary school learners in the 11th grade, who have been studying L2 English and L3 German simultaneously for at least 2.5 years.

The four groups were selected with the following two criteria in mind: (1) As specified in section 2.4.1, longitudinal studies should optimally be conducted with learner groups who are as homogenous as possible from the point of view of their linguistic biographies in order to eliminate the effects of languages beyond the L1 and L2. Prior to selecting the school where data could be collected, I studied the possible ways in which secondary schools manage their offered language choices. I consulted teachers and administrative staff at 12 secondary schools (including secondary general schools, secondary vocational schools, and vocational schools[6]) in the region where the research was conducted, and found that none of the systems considers the complete linguistic biographies of learners. The learners who are grouped together as a language learning group may at best be homogeneous regarding their level of the actual languages taught. This means that the conditions for conducting research in completely homogeneous groups are not available, yet, at the same time, the homogeneity of a learner group is an important requirement for valid results. Therefore, when selecting the research subjects participating in the present study it was one of my primary aims to select learner groups whose linguistic backgrounds are as similar to each other's as possible. In 4.1.1 I will present the subject's detailed linguistic biographies in order to show that my subject selection satisfies the criterion of homogeneity.

[6] I apply the names of the different types of schools as translated by the Ministry of Education.

(2) As I have specified in the research questions, my aim was to compare learners participating in the special comparative instruction with those taking part in their traditionally instructed lessons as well as to compare more versus less experienced learners, therefore, I have chosen two groups of ninth-graders and two groups of eleventh-graders. In order to minimize the influence resulting from different teaching styles, it would have been ideal to select four groups who had been instructed by the same teacher in German. Unfortunately, such a combination of teachers and learning groups was not available at the school where I conducted the study. I have opted for the second most ideal scenario: Treatment groups T1 and T2 as well as Group C2 were instructed by the same German teacher, while Group C1 was taught by another teacher. Based on my observations, both German teachers were experienced teachers, their teaching methods and the materials including the course books covered in the lessons were similar. Therefore, I maintain that the teachers did not exert different influence on their groups, and, thus, the groups are comparable.

4.1.1 Linguistic biographies of the subjects

In spite of the careful selection of the learner groups, there was slight variation as regards the linguistic biographies of the learners. In the present subsection I introduce the linguistic biographies of the participants in the four selected groups. Tables 5–8 illustrate the individual variation regarding the number of years spent learning English and German as well as other foreign languages (if any). For the sake of clarity, I will refer to English as their L2, German as their L3 and any additional languages as Lx throughout the dissertation, regardless of the chronological order in which the languages were learnt and the proficiency levels achieved in them.

The questionnaire (see in Appendix 1.1) designed for recording the linguistic biographical data was prepared for previous research conducted a year earlier in the same school (c.f. T. Balla 2010c) in such a way that it included questions on the linguistic biography of the subjects as suggested by De Angelis (2007:12). Therefore the participants were asked about what their mother tongue was and what foreign languages they were learning or learnt in the past, starting at what age (and at what age it was suspended) and under what circumstances. Furthermore, in English and German the level of the language groups within the schools was recorded as well as the course books used in the language classes with an indication of the section studied at the time of the data collection. In the second part of the questionnaire the subjects were asked to provide some biographical data and were asked questions in connection with their language choices as a follow-up to the

previous research conducted a year earlier in the same school, reported on in T. Balla (2010c). This data is not included in the analysis of the present study.

In order to avoid any problems or misunderstandings, the participants were asked to fill in the questionnaires in my presence, so that I was available for questions and clarifications.

In the following sections I will provide an overview of the linguistic bibliographies of all the four selected groups (4.1.1.1 – 4.1.1.4) and justify my decision as regards which groups became selected as the treatment groups and which ones as the control groups.

4.1.1.1 Group T1

At the time of the data collection the members of Group T1 were studying in the 9th grade and were 14–16 years old, in the first year of their secondary studies. As Table 4 shows, all 15 of them started to learn English before German. They had been learning English for 5–9 years. With one exception they all started learning German at the secondary school, 5 months before the data was recorded. Only one of the subjects (T1/10) had studied German for a longer period (5 years), but she cannot have reached a high level of German, otherwise based on her German placement test result written at the beginning of the school year she would have been placed into one of the more advanced German groups.

As far as the additional languages are concerned, we can see that six of the learners had experience with different languages, three of them with one, and another three with two languages beyond L1 Hungarian, L2 English and L3 German. The three subjects (T1/1, T1/13 and T1/15) spent three weeks in Greece where they claimed they picked up some Greek from their host families, but they did not have any formal language instruction in it. Additionally, subject T1/13 learnt some Romanian under similar circumstances, and subject T1/1 learnt some Dutch on her own. The third subject (T1/9) who learnt two additional languages learnt French for a year with a private teacher, which she discontinued because of scheduling problems and had studied Japanese on her own for the past year. Subject T1/10 had relatives in Italy, therefore she picked up some basic expressions during her visits with them, and subject T1/7 was fluent in Hebrew as a result of spending 3 years of his childhood in Israel and still using the language at home. Apart from this subject, none of the others in Group T1 achieved significant levels of proficiency in their Lx-es. Because of the special linguistic biography of subject T1/7 the data provided by him was treated with special attention, but, as it showed no diversions from those provided by the rest of the group, his data had remained included in the analysis.

Student ID	L2English/years	L3German/years	Lx	Lx/years
T1/1	5	0.5	Dutch,	3-4 months
			Greek	3 weeks
T1/2	7	0.5		
T1/3	7	0.5		
T1/4	7	0.5		
T1/5	9	0.5		
T1/6	8	0.5		
T1/7	9	0.5	Hebrew	3 years
T1/8	9	0.5		
T1/9	7	0.5	French	1 year
			Japanese	1 year
T1/10	7	5	Italian	no data
T1/11	9	0.5		
T1/12	6	0.5		
T1/13	5	0.5	Romanian,	2-3 weeks
			Greek	3 weeks
T1/14	7	0.5		
T1/15	5	0.5	Greek	3 weeks

Table 4. Linguistic biographies of Group T1

4.1.1.2 Group T2

The members of Group T2 studied in the 11th grade and were 16–17 years old when the data was recorded, in the third year of their secondary studies. As Table 5 shows, nine of them started to learn English before German and they had been learning English for 5–12 years. With two exceptions they all started learning German at the secondary school, 2.5 years before the data was recorded. The only subject who learnt German before English was subject T2/10, having learnt English for three years (that is, she only started learning English at the secondary school) and German for five years. One of the subjects was familiar with two languages: subject T2/9 learnt Slovak for two years in her primary school years and had been learning Chinese for two months. Subject T2/3 learnt French for 3 years until the end of his primary school studies, and subject T2/10 had also been learning Chinese for two months. In the case of this group we can also conclude that the subjects are as homogeneous as possible, none of the data needed to be discarded.

Student ID	L2English/years	L3German/years	Lx	Lx/years
T2/1	5	2.5		
T2/2	12	2.5		
T2/3	9	2.5	French	3 years
T2/4	8	2.5		
T2/5	7	2.5		
T2/6	8	5		
T2/7	8	2.5		
T2/8	8	2.5		
T2/9	8	2.5	Slovak, Chinese	2 years 2 months
T2/10	2.5	5	Chinese	2 months

Table 5. Linguistic biographies of Group T2

4.1.1.3 Group C1

The subjects in Group C1 are comparable to those in Group T1: they, too, were in the 9th grade and were 14–16 years old in the first year of their secondary studies. As Table 6 shows, 10 out of the 14 subjects learnt English as a first foreign language for 6–9 years. Subject C1/3 started learning German a year before English, subject C1/11 learnt Slovak, and two subjects, C1/1 and C1/10, learnt Italian before English. Of the 14

Student ID	L2English/years	L3German/years	Lx	Lx/years
C1/1	7	0.5	Italian	9 years
C1/2	9	2.5		
C1/3	6	7		
C1/4	7	0.5		
C1/5	7	0.5		
C1/6	7	0.5		
C1/7	7	0.5		
C1/8	6	0.5	Chinese	2 months
C1/9	6	0.5		
C1/10	7	0.5	Italian	9 years
C1/11	6	0.5	Slovakian	8 years
C1/12	9	0.5	Chinese Spanish	2 months, 3 weeks
C1/13	7	0.5	French	4 years
C1/14	9	0.5		

Table 6. Linguistic biographies of Group C1

subjects one had some experience with two additional languages, and further 5 with one. Subjects C1/1 and C1/10 had been learning Italian and subject C1/11 Slovak for 9 years. Subject C1/12 spent three weeks in Peru and Mexico as an exchange student at the age of 12

studying Spanish in formal instruction there, and she had been learning Chinese for two months. One subject had a four-year learning experience in French, but he gave up learning it in exchange for German when he came to study at the secondary school. Subject C1/8 had been enrolled to a Chinese course for two months.

4.1.1.4 Group C2

The subjects in Group C2 are comparable to those in Treatment group T/2: they, too, studied in the 11th grade, were 16–17 years old and in the third year of their secondary studies when the data was recorded. As Table 7 reveals, with two exceptions, English was their first foreign language having studied it for 7–15 years. For the remaining two subjects (C2/12 and C2/14) German was the first foreign language which they had been studying for 10 years. Similarly to Subject T2/10 in Group T2 they were tested on their prior German knowledge when they started their secondary school studies, and based on their results they were entered into a beginner group, instead of a more advanced one.

Three participants (C2/10, C2/11 and C2/13) used to learn French until the age of 12

Student ID	L2English/years	L3German/years	Lx	Lx/years
C2/1	8	2.5		
C2/2	8	2.5		
C2/3	7	2.5		
C2/4	8	2.5	Italian	5 years
C2/5	8	2.5	Polish	1 years
C2/6	8	2.5		
C2/7	8	2.5		
C2/8	8	2.5		
C2/9	8	2.5		
C2/10	15	2.5	French	2 years
C2/11	11	2.5	French	2 years
C2/12	2.5	10		
C2/13	9	2.5	French	2 years
C2/14	8	10		

Table 7. Linguistic biographies of Group C2

which they gave up when they switched schools in the 7th year of their studies. Subject C2/4 had been learning Italian for 5 years and subject C2/5 had been studying Polish for the past year.

4.1.1.5 Group comparability

Considering the above detailed description of the linguistic biographies of the subjects, I have drawn the conclusion that the four selected groups are comparable in terms of their past experience with foreign language learning, as will be explained below.

As we have seen, the subjects in Groups T1 and C1 display similar patterns as regards the number of years spent learning English and German. The three subjects (T1/10, C1/2 and C1/3) with a longer history of learning German than the others were placed into the beginner German language groups based on their German placement tests administered by the school, since, as the results of the placement test in German written for the purposes of the present research also show, their German proficiency is at the same level as the others' in their groups. As regards the potential influencing role of a further foreign language, one subject (T1/7) in Group T1 and three subjects (C1/1, C1/10 and C1/11) in Group C1 seem to have significant experience in learning languages beyond English and German. Because of this experience these subjects were not the ones selected for the think-aloud translation tasks and the interviews. The questionnaire and vocabulary test data provided by them was analysed with special care, and since they did not diverge from the data provided by the rest of the groups, I included them in the analysis of the group results.

In the more proficient groups, one subject in Group T2 (T2/10) and two subjects (C2/12 and C2/14) in Group C2 had learnt German for longer than English, but, just as I have explained in the case of the less proficient subjects, they, too had been tested on their prior German knowledge before they started their secondary school studies, and, based on their results, they were put into the groups that counted as beginner at that time. In the more proficient groups no subjects deserved special attention due to their background in further languages.

As the information presented in Tables 4–7 reveals, the subjects with more experience with different languages are distributed relatively equally between the groups, thus, the groups can be considered to have minimal differences in this respect, too.

4.1.2 Placement test results

In order to have a view of the subjects' proficiency levels in L2 English and L3 German and to make sure that groups were roughly equivalent, placement tests in both languages were administered.

As regards the results of the German placement tests, the participants in the ninth grade wrote an A1/A2 level placement test (Appendix 2.1), while the participants in the eleventh grade wrote an A2/B1 level test. The A1/A2 level placement test was taken without any changes as offered by the book series *Lagune* on the website of the Publishing House Hueber specialising in publishing books on German as a foreign language, and the A2/B1 level test was borrowed unchanged from the same website (Appendix 2.2). Because of the use of two different placement tests, only the results of the treatment versus the control groups within the same year can be compared. As we can see in Table 8, the mean percentages are somewhat lower in both treatment groups than in the control groups, at similar rates of standard deviation. This result contributed to the decision about which groups should be selected as the treatment groups and which ones would serve as controls, and the 2-3 month long period spent with observation in the fall semester of the 2009/2010 academic year underpin these results. The justification for selecting the somewhat lower-achieving groups to be the treatment groups was supported by their teachers as well. They suggested that the comparative method would serve for the learners as a new experience which might lead to a more effective development of their German, and at the same time, I maintain that the success of the method could be more realistically measured if the weaker groups participated in the experiment.

German	**Mean**	**SD**
T1	60.5	5.8
C1	64.1	6.5
T2	54.2	9.0
C2	61.9	9.1

Table 8. Results of the German placement test at the beginning of the data collection

Although the present research has the learners' learning processes in L3 German as its focus, it was important to have an overview of the subjects' proficiency levels in English. The participants in all four groups wrote the same placement test in English, therefore, the results do not only provide information about the differences between the treatment and in the control groups within the same year of study, but we can compare the ninth-graders' results against the eleventh-graders'. The placement test is based on the one produced by Swan and

Walter (1997) and is adapted for the purposes of the present study (cf. Appendix 2.3). The placement test contained 65 multiple choice items on grammar and vocabulary. The percentages achieved by the individual learners were recorded, and Table 9 summarizes the means and the standard deviations in the four groups.

As we can see, there is a 9.5% difference in English between Group T1 and Group C1, with Group T1 scoring higher, at similar standard deviation values, and there is an 8.4% difference between Group T2 and Group C2, in a reverse order with a small difference in the standard deviation values. Since the learners within the same German language groups are regrouped into several different English language groups, it is not surprising that we find high standard deviation in the groups.

English	**Mean**	**SD**
T1	60.6	14.8
C1	51.1	14.5
T2	65.8	10.3
C2	74.2	8.7

Table 9. Results of the English placement test at the beginning of the data collection

I must, however, stress that the secondary school where the data collection took place is one of the best secondary schools of the city and is among the best ones nationally; therefore, it has a student population of high-achieving, motivated and eager learners. Special curricula in some classes attract learners from the wide surroundings of the city, and there is a class specialized in Mathematics where the most talented young mathematicians of the region study from the 7th grade onwards, who have the reputation of being outstanding students. It must be noted that there are five special math learners in Group C1 and eleven in Group C2, compared to none in Treatment groups T1 and T2.

4.2 Setting

The school where the data collection took place had been selected based on several considerations with respect to the language combinations offered since one of the key elements of the data collection is that the groups of subjects should be as homogeneous as possible. In subsection 4.2.1 I will justify why the selected school seems to be an ideal place for the data collection, and in subsection 4.2.2 I will provide reasons why it is the combination of English and German as L2s and L3s that is a logical choice in Hungary.

4.2.1 The selected secondary school

I found that optimal data can be collected at this particular secondary school because of the following reasons. The school has large student numbers: approximately 200 students study in 7 parallel classes in each year, and, therefore, the learners are grouped into several language groups. It is a school regulation that all students learn English as an L2 and there is a choice of German, French, Italian, Spanish and Russian offered as L3s. The usual L3 scenario is that elementary-level groups start in the 9th grade in French, Italian and Spanish (students do not seem to favour Russian), and there are several German classes (there were three in the academic year in which the data collection took place) starting at different levels based on the results of the students' placement tests.

Consequently, at this school the learners attend English and German language in groups according to their level in the individual languages. As the collection of the data took place in the German language classes, the groups I have selected for the purposes of the present research have a very similar knowledge of German, but as they are instructed in different groups in L2 English, they are at a variety of different levels as far as their English proficiency is concerned. This means that the subjects participating in the research have L1 Hungarian (and no additional mother tongues), L2 English (at different levels), L3 German (at the same level within the group). The additional languages are listed in 4.1.1, which refers to the subjects' linguistic biographies.

I received permission from the school to visit German classes on a regular basis and to collect the data necessary for this research. The only requirement that the director of the school, in agreement with the German teachers involved, asked me to meet was to design my research material in a way that it fit into the learners' curriculum and no extra workload from the part of the learners was requested. This coincided with my intentions, namely, to see the results of the comparative method under realistic and life-like circumstances.

4.2.2 The selected language combination

The EU recommendation quoted in 2.1.1 applies to Hungary, a member state of the European Union. The Hungarian education system has adapted the view that 'at least two Community languages' (White Paper on Education and Training, Teaching and Learning, 1995:47, cf. 2.1.1) need to be taught in addition to the mother tongue, and the section describing the teaching of living foreign languages of the Hungarian National Core Curriculum is in line with the recommendations of the Council of Europe. It is compulsory for learners to learn a living foreign language from the fourth year of public education until the

end of the compulsory school attendance. In the elementary schools learners must learn at least one foreign language apart from their mother tongue. It is compulsory for them to acquire 'applicable language knowledge' in two languages in secondary general schools and in those secondary vocational schools where the 'conditions thereof are available'. In theory, there is a free choice of languages in public education, but in fact the availability of the languages taught depends on the local possibilities. According to the data published in the Statistical Yearbook of Education 2009/2010, English and German are by far the two most frequently learnt languages both in the elementary and in the secondary education. In order to illustrate the significance of these two languages in the public education, I have made a summary of the data in Table 10.

	English	**German**	**Other** (including French, Russian, Italian, Spanish, Latin and minority languages)	**Total (languages)**	**Total (number of students)**
Primary schools	**354,059**	**144,719**	**5,961**	**504,739**	**775,741**
Secondary schools (total)	**374,923**	**238,298**	**66,424**	**679,645**	**648,604**
Vocational schools	50,579	50,767	1,383	102,498	135,268
Secondary general schools	173,075	111,804	58,285	343,164	239,992
Secondary Vocational schools	151,269	75,727	6,756	233,752	273,344

Table 10. Languages studied in the primary and different types of secondary public educational institutions in Hungary in the school year 2009/2010, the total number of pupils/students and the number of pupils/students learning these languages. Students are counted in each language they study.

As we can see, of a total number of elementary school children about half a million study foreign languages. Of them, approximately 70% study English, less than 29% study German, and only about 1% learn another language. In secondary education, that is, in vocational schools, secondary general schools and secondary vocational schools altogether about 55% of the learners study English, about 35% study German and less than 9% study another foreign language. As the students are counted in each language they study, this statistical chart does not inform us about how many students study more than one foreign language and in what combination. As we can see, however, the proportion of English and German exceeds by far that of the other languages, therefore, it is reasonable to assume that

whenever more than one foreign language is studied, the most frequent combination is English and German. At the same time, it is interesting to note that neither the Curriculum Framework nor the National Core Curriculum contain any orientation regarding the place of foreign language teaching in relation to the other subjects (Petneki 2002), meaning that the curricula taught in the language classrooms are neither connected to any other non-language school subjects, nor to the instruction of another language.

As we can see from the figures presented above, the combination of English and German is the most frequent one, therefore, it deserves special attention both from the perspective of TLA research and – should the idea of language instruction with a monolingual bias ever be considered by policy makers – from the perspective of curriculum design.

4.3 Procedure

As mentioned in the introductory paragraph of the present chapter, the research was conducted in the 2009/2010 academic year. The four-month data collection period in the spring semester (February through May, 2010) was preceded by a preparatory phase in the fall semester (September through December). During the preparatory phase I observed lessons and consulted language teachers at the school with the purpose of selecting the most suitable subjects based on the criteria specified above (4.1). The consultations with the instructors served the purpose of gaining insight into the learners' linguistic biographies and their attitudes towards language learning. The observed lessons served as the basis for selecting learner groups at both proficiency levels whose level of German was comparable and, at the same time, were instructed based on similar methodological considerations and with the help of the same course books. Furthermore, because of my frequent presence, the subjects had the opportunity to get used to my presence in their lessons. The lesson observations continued in the spring semester, too, with the aim of monitoring the learning pace of all the groups. In order not to influence the subjects in their learning habits, they were told that I was a teacher of English and German and a researcher who was interested in their language learning processes.

At the start of the spring semester, in February, 2010, all subjects were asked to fill in a questionnaire on their linguistic biographies (4.1.1) and placement tests (4.1.2) both in English and in German. The information on the linguistic biographies and the proficiency levels of the subjects was analysed in order to ascertain that the subjects within the individual groups are similar and that the groups are comparable. The placement tests were

readministered at the end of the data collection period in order to see whether and to what extent the learners' general proficiency levels increased in four months (cf. section 5.1).

As the next research phase, the special treatment sessions started with Treatment groups T1 and T2, whom I met on 10–12 occasions throughout the spring semester for a 45-minute session in one of their German lessons approximately once in a fortnight. The learners in each group had three German lessons a week, meaning that I met the treatment groups for the special sessions approximately every sixth lesson. I instructed them with the help of a teaching material designed in a way that English and German were constantly compared and contrasted, but at the same time, as regards the contents (both grammatical and lexical), it fit the curriculum followed also by the control groups. The most important consideration was not to teach any material that was not taught to the control groups, but on the contrary, to teach the same material content-wise but with a different approach. This was a crucial issue to consider in order to obtain valid results. The rest of the lessons, as well as the lessons taught to the control groups, were taught by the groups' regular teachers and remained unaffected from the point of view of the special method. The teaching material is described in more detail in subsection 4.3.1.

Apart from monitoring the learners' developing German knowledge, it was also important to have a clear picture of the learners' knowledge of English, since the recognition of the similarities and differences can only be expected to take place if the learners are familiar with the English counterparts. Since the experiment was carried out in the German lessons, the German knowledge of the learners within the same group was similar, however, their levels of English were varied since they were in several different level groups using a variety of different course books in their English lessons (cf. 4.1.2 for the placement test results). Since, however, the majority of the subjects were more advanced in English than in German, no problems occurred in this respect: even the least advanced learners of L2 English were familiar with the vocabulary and grammar structures presented to them in the L3 German classes.

The subjects' own perception of their learning processes was assessed with the help of questionnaires. Using Winters-Ohle and Seipp's (2001) questionnaire as a basis, but modifying it in a way that the questions did not only refer to the effects of L1 Hungarian and L2 English but also to the potential additional languages known by the subjects, I asked the subjects to report on their own views in connection with influence from other languages (see 4.3.2.1 below). In the treatment groups the questionnaire was filled in three times (at the beginning, in the middle and at the end of the data collection period), while in the control

groups it was only filled in once, at the end, otherwise the questionnaire itself might have provided the members of the control groups with hints regarding the real purpose of my research, thus possibly distorting the results. The rationale behind having the control groups fill in the questionnaires was to have a retrospective insight on the comparability of the groups. In case the subjects in the control groups are to produce answers that are similar to the answers produced by the members of the treatment group at the beginning of the experiment and I could conclude that the two groups are comparable in terms of the results of the questionnaire data and the differences are attributable to the treatment sessions. The results of the Likert-scale type of questionnaire will be compared across the different groups as well as within the treatment groups in order to trace the changes in the learning strategies of the subjects as a result of the instruction.

Another way of gaining insight into the subjects' own perceptions of their language learning processes were semi-structured interviews with selected pairs of subjects (see 4.3.2.2 below). Two pairs of subjects from both treatment groups were interviewed twice during the data collection period, and group interviews were recorded in both treatment groups at the end of the data collection period. Control group subjects were also prompted to answer questions similar to those asked from the treatment group subjects, however, these questions needed to be guised as mere questions asked out of curiosity at the end of the think-aloud translation task (see below).

All four groups were tested regularly both on items that had been taught to the groups as well as on novel items not taught to any of the groups, with the help of Vocabulary Knowledge Scale (henceforth VKS) tests. As we will see in 5.5, the analysis of the test results on the items taught in different ways to the treatment and the control groups reveals whether the method of systematic instruction will in fact prove more successful than the traditional, non-comparative way of teaching. The analysis of the test results on the novel items shows whether the instructed groups are developing and using (more and/or more effective) strategies to predict the meaning of language items that they have never encountered. The tests used to assess the learners' knowledge on the taught, and novel items are described in 4.3.2.3.

The VKS tests were supplemented by translation tasks which were designed in order to find out whether the subjects were able to make predictions about novel language items. Translation tasks containing German words and structures the meaning of which the learners had to decode based on their English knowledge served as further proofs of being able to recognise and understand words and expressions previously not taught to them. In addition to

the regular tests, selected pairs of learners were asked twice during the data collection period (once in the middle and once towards the end) to solve such translation tasks together, thinking aloud and discussing the test items. The conversations of the students were recorded and analysed to reveal awareness and strategy development. The translation tasks are described in detail in 4.3.2.4.

4.3.1. Teaching Material

The special teaching material for the treatment groups was designed and developed on a lesson-by-lesson basis, always considering the material taught in the German classes of all four groups. The course books applied were *Studio d A1* for the ninth-grade groups and *Studio D A2* for the eleventh-grade groups. During the data collection period the younger groups covered Chapters 4 (People and houses) and 5 (Appointments and daily routine), while the older groups covered Chapters 3 (Travel and mobility) and 4 (Leisure time).

The lessons were held by myself and were based on the comparative approach towards teaching the treatment groups English and German lexical and grammatical items, focusing the learners' attention to phonetic and phonological contrasts, cognates and structural similarities and differences.

All the lessons followed the same routine. As a warm-up activity, learners were asked to produce cognate pairs based on what they have already learnt or as a guessing activity. Following this, the lesson usually continued with work on the learners' vocabulary and/or grammar, always integrating the material of the course book's reading and listening comprehension tasks, communicative exercises and grammar practice with a comparative focus. The lessons were rounded up by revision and, occasionally, brief discussions on the method.

The learners received additional comparative material in the form of handouts which they could use both in the treatment lessons and at home for further study. These handouts contained special multilingual tasks and discussion points that serve the purposes of awareness raising and strategy building. The tasks typically involved trying to identify cognate pairs (e.g. Appendix 3.1 and 3.2), translation from German into English (e.g. Appendix 3.3), or from Hungarian to both languages (e.g. Appendix 3.4), reading comprehension tasks (e.g. Appendix 3.5) and grammar explanations and tasks (e.g. Appendix 3.6).

As mentioned above, the material was based on what the learners had learnt anyway, therefore, the amount of lexical and grammatical material covered by both the control and the treatment groups was the same, and, thus, the difference lay in the method of instruction.

4.3.2 Data collection instruments

As I have pointed out above, the subjects were engaged in a series of treatment sessions and were regularly assessed with the help of tests, translation tasks and interviews. In the subsections below I will describe the different instruments applied for collecting the data (4.3.2.1 – 4.3.2.4).

4.3.2.1 Questionnaire

The questionnaire assessing the facilitating and the hindering roles of the languages involved is based on Winters-Ohle and Seipp's (2001). I altered the questionnaire in a way that the questions were allocated in two major groups and were directed at whether the learners perceived the L1 Hungarian and L2 English (and, if relevant, an Lx) as a factor that helped them with their L3 German studies, or, on the contrary, L1 Hungarian and L2 English (and, if relevant, an Lx) caused difficulties when learning L3 German. The questions aimed specifically at the following aspects of language learning: understanding a new word, learning a new word, learning grammatical rules, spelling and pronunciation. In order to indicate frequency, the subjects could opt for 1 = (almost) never, 2 = rarely, 3 = sometimes, 4 = often and 5 = (almost) always (see Appendix 1.2). The answers provided by the subjects in the questionnaires were counted as scores for the individual questions and were transformed into a numerical scale for the purposes of the analysis. Both the means achieved on the individual items by the individual subjects and the group means achieved by the four different groups in all ten aspects provide valuable insights into the learning processes of the subjects.

4.3.2.2 Semi-structured interviews

The interviews conducted with the selected pairs of the treatment groups were structured around questions such as the following: Do you think your knowledge of English helps you learn German better? Or does your knowledge of English hinder you in any respect? As a result of the treatment sessions have you experienced a change with regard to the previous questions? Have you ever experienced that German had an effect on your English?

As explained above, the same questions were asked from the members of the control group, except for the one referring to the treatment sessions, but in a different context.

4.3.2.3 Vocabulary tests

As regards testing, in agreement with Paribakht and Wesche (1993, cited in Waring 2000), I claim that vocabulary knowledge is a continuum rather than a 'precise comprehension, which is operationalized as the ability to translate the lexical items into the L1, the ability to find the right definition in a multiple-choice task, or the ability to give a target language paraphrase' (Henriksen 1996:7, cited in Waring 2000). Therefore, I used Paribakht and Wesche's Vocabulary Knowledge Scale (1993, in Waring 2000) when testing the learners both on taught and on novel vocabulary items (Appendix 1.3). De Angelis and Selinker (2001:48) applied a testing method similar to this for data collection with the difference that they asked the subjects orally, while in my research I applied a written test.

All the VKS tests were constructed in a way that they contained known (that is, taught) and novel items as well as words that have an English cognate counterpart and ones that do not.

4.3.2.4 Think-aloud translation tasks

The texts for the think-aloud tasks (cf. Section 5.3 and Appendix 1.4) were selected from the website of the Eurocom project, from a page devoted to texts based on the intercomprehension of German and English which contain a multitude of cognates and borrowed expressions. This page contains original English texts and their German translations, as well as special reading comprehension tests and material on grammar and vocabulary related to each text. From among a variety of texts on different topics, two texts were selected for the purpose of the think-aloud tasks.

When selecting the texts, the following criteria were considered. The texts should contain such vocabulary and grammar items that a general understanding is possible even in the less advanced groups, while at the same time they contain novel items even for the advanced groups. Also, the texts should not be limited to a very specialized field of interest but should possibly be interesting for many of the subjects (cf. section 5.4).

The translation tasks were carried out within the framework of think-aloud sessions during which selected pairs of learners were asked to carry out the task discussing their thoughts aloud in order to gain insight into their thinking processes. The method of using think-aloud protocols was pioneered by Ericsson and Simon (1984) and has since been applied in SLA research in order to gain information on how learners approach problem-solving tasks (Gass and Mackey 2007). The idea of involving pairs rather than individual

subjects in this task was first introduced by House (1988). Think-aloud protocols carried out in pairs seem to evoke the natural context of dialogues, therefore, the subjects were expected to take part in them as if they were problem-solving conversations. At the same time, as I have concluded following a study based on think-aloud data conducted by myself (T. Balla 2010a), if the think-aloud task is carried out in pairs, there is less risk for the subject to be influenced by the researcher as regards their verbalisation processes in the preparatory phase.

4.4 Piloting

In the years preceding the collection of data for the present study, the majority of the data collection instruments described above was piloted in different studies I conducted among L1 Hungarian and L2/L3 English/German subjects.

The small-scale study with Hungarian L1, German L2 and English L3 high school learners in 2006 (Tápainé Balla 2007, cf. 2.2.2.1, 2.3.4, 2.4.2) was a miniature version of the present study in a sense that the cognate teaching method was tried and the subjects were tested on the items taught to them. The method of teaching English-German cognates proved to be highly successful in the treatment group. The treatment group was taught a cognate list containing 26 cognate pairs and some rules that helped them understand the relationship between the cognates, while the control group was taught the very same words, but in a way that the words were not organised into cognate pairs. The instruction took about 35 minutes in the case of both groups. Then the groups were tested immediately after the experiment and a week later. The results show that both in the short and in the long run the treatment group achieved higher scores as a result of the treatment. The results of this study have shown that a method based on a special, comparative instruction may result in a more successful acquisition of L3 elements.

In further studies (Tápainé Balla 2008a, 2008b – cf. 2.2.2.1, 2.4.1.2 and 2.4.4 – 2009a and 2010b) I experimented with both translation tasks with different language combinations and think-aloud protocols. I have found that recording the subjects' thoughts while carrying out a translation task is a challenging venture, but with careful guidance the subjects can be taught to verbalise their thoughts (Tápainé Balla 2009). Think-aloud translation tasks carried out in groups proved to be informative even without prior coaching, since the subjects prompted each other (e.g. Tápainé Balla 2008a and 2008b), which is why I have decided to ask the subjects to carry out this task in pairs.

The Vocabulary Knowledge Scale test was first applied in the course of this study as a pre-test, but since the subjects immediately understood the task and carried it out according to

the instructions, its results are considered to be valid and are analysed in subsection 5.5 accordingly.

Having presented the relevant information on the methodology of the research, in the following chapters I will present the data obtained via the different data collection instruments and provide an analysis and a discussion of the results.

5. Data analysis and results

As specified in the various sections of the previous chapter on the research design, five kinds of data have been collected in order to address the research questions (c.f. Chapter 3). The data was coded and analysed using Microsoft Excel 2003. In what follows I will present the results in a way that I analyse the data obtained via the individual data collection instruments in distinct sections. Previously, when describing the subjects' linguistic biographies in 4.1, I have given an overview of the general levels of proficiency that the participants were at both in L2 English and in L3 German. In section 5.1 I will illustrate whether and to what extent the proficiency levels in both languages in all four groups changed during the four months of the treatment. Section 5.2 is devoted to analysing L3 learners' own perceptions of how their L2 English and L1 Hungarian influence their L3 German learning processes based on data obtained from questionnaires. In 5.3 I will further explain the results presented in 5.2 via individual and group interviews recorded at various stages of the data collection with Groups T1 and T2 as well as with four individual learners in each group. While the results in 5.2 and 5.3 reflect the learners' own perceptions about the roles of the different languages in the learning processes of the other languages, 5.4 and 5.5 are again devoted to objective data on the language development of the learners in all four groups. To this end, in 5.4 the think-aloud protocols will be analysed, and in 5.5 the data gained from the Vocabulary Knowledge Scale Tests will be presented.

5.1 Change in the general proficiency levels

Since my general research question aims at answering whether certain aspects of the Hungarian language learners' L3 learning processes can be enhanced when learners are instructed in such a way that their attention is drawn to the differences and similarities between the two languages being learnt, an overview at the global development of the subjects over the four months of the data collection period may shed light on whether any of the groups developed to a greater extent than the others. Thus, the same placement tests were readministered in May 2010 in order to have an overview of the changes in the subjects' general proficiency levels by the end of the data collection period.

As I have shown in 4.1.1, the initial English and German proficiency levels of both treatment and control groups were assessed with the following results. The English proficiency levels of all groups were above 50%, Group C1 having the lowest, Group C2

having the highest scores, with Group T1 and Group T2 in between, and the standard deviation ranging from 8.7 to 14.8 (cf. Table 8 in 4.1.2).

For reasons specified in 4.1.2, the results of the German placement tests are more homogeneous: there is a 3.6% difference between Group C1 and Group T1, and a 7.7% difference Group C2 and Group T2, with more balanced standard deviation values than in the case of English (cf. Table 9 in 4.1.2).

My expectation was to see an increase in the results of all four groups in both languages between the two end points of the data collection period as a general effect of instruction. Comparing the means of the individual groups across the two testing times reinforces this expectation, however, only to a very slight extent. Table 10 below illustrates the gain scores achieved by all four groups in both languages after four months of instruction. As we can see in Table 10, the ninth-graders, that is, Group T1 and Group C1, made greater progress than the eleventh-graders, that is, Group T2 and Group C2. While Group T1 scored higher by 3.38% in the English and by 6.5% in the German placement tests, and, quite similarly, Group C1 scored higher by 4.62% in the English and 4.82% in the German placement tests, the difference between the English placement tests results is a mere 0.46% in Group T2 and 0.22% in Group C2, and the difference between the German placement test results is 0.54% per cent in Group T2 and 2.51% in Group C2.

Paired sample T-tests used to calculate whether the differences of the placement tests results at the beginning at the end of the treatment period reveal a statistically significant difference. The results indicate that the differences of the German placement test results in February and in May are significant at the 0.05 level in the cases of Group T1, and both control groups, but not in the case of Group T2, while the differences of the English placement test results are only significant in one case at the 0.05 level, in both control groups, but not in the case of the treatment groups.

The placement test results overall indicate that that the younger and less advanced learners achieved greater development than their older and more advanced counterparts as regards the mean results of the groups.

Gain scores	German Placement Test	p	English Placement Test	*p*
T1	6.50*	0.001*	3.38	0.121
C1	4.82*	0.001*	4.62*	0.012*
T2	0.54	0.819	0.46	0.766
C2	2.51*	0.001*	0.22*	0.001*

Table 10. Gain scores of the English and German placement tests during the data collection period. Results that are statistically significant at $p \leq .05$ are marked with an asterisk (*).

An inspection of the placement test results from the point of view of the individual subjects reveals that the individual development of the learners does not coincide with the groups' tendencies in all cases. Table 11 shows the number of subjects in each group with positive, negative and zero gain scores in the German and English placement tests. (The differences on an individual basis across the different groups are presented in Appendix 4.)

Groups	German+	German -	German 0
T1 (N=15)	11	3	1
C1 (N=14)	11	1	2
T2 (N=10)	5	4	1
C2 (N=15)	10	4	1

Table 11. The number of subjects per group with positive, negative and zero gain scores in the German placement tests

In sum, it can be concluded that about half of the ninth-graders in both groups and only a small proportion of the eleventh-graders adhered to the expected pattern of general development, while the other halves of the younger groups and the majority of the older groups presented a variety of individual development routes. This also means that the treatment sessions themselves made no difference in terms of a general development of the subjects' language proficiency in the two languages.

5.2 Strategies questionnaires

In general, the ultimate research question I proposed was how Hungarian language learners' knowledge of L2 English can serve as a point of reference when learning L3 German and whether certain aspects of their learning process can be enhanced when learners are instructed in a special comparative way. Among the more detailed subquestions related to the above general question, question (d) referred to the learners' own perception of the effects of their L1 and L2 on the learning process of their L3. The core of the investigation with respect to this question was to find out whether language learners rely more on their L1 Hungarian, at which they are more proficient, or their L2 English, which is typologically closer to their L3 German, and whether their perception will change as the result of the instruction. Since this data gives an overview of the general question, it will be presented and analysed before all other data. As all the other subquestions, this one was also explored from the point of view of two age groups being at two different levels of proficiency.

As described in Section 4 concerning the research design, the answer to research question (d) will be provided by data from a questionnaire on the learners' own perceptions of the effect of their L1 and L2. Although Winters-Ohle and Seipp (2001) found that secondary school learners tended to perceive more negative than positive effects, many of the research results presented in the literature review, including my own earlier studies, proved exactly the opposite. I, thus, hypothesized that the learners will be conscious of some basic similarities and differences between English and German, and, therefore, they will find that their L2 English has a more facilitating effect than their L1 Hungarian, and this facilitating effect might be perceived to a greater extent as a result of the comparative instruction. I also hypothesised that the role of the hindering effects will be lower than that of the facilitating one, and it might further decrease as the instruction proceeds.

As described in 4.3, during the data collection period the treatment groups were asked three times about their own perceptions of the effects of their L1 Hungarian and L2 English on their L3 learning process: at the beginning, in the middle, and at the end of the data collection period. The same questionnaire was filled in by the members of both control groups at the end of the data collection period.

As described in detail in 4.3, the questionnaire contains information on the learners' own perceptions on the roles of their L1 Hungarian and L2 English while learning L3 German (cf. Appendix 1.2). The answers to the questions on understanding a new word, learning a new word, learning grammatical rules, spelling and pronunciation were expressed by the subjects in terms of a numerical scale, frequency was indicated as 1 = (almost) never, 2 =

rarely, 3 = sometimes, 4 = often and 5 = (almost) always. In order to answer research question (d), the group means achieved by the treatment groups in all ten aspects across the three data recordings as well as a comparison with the control groups need to be calculated.

In subsection 5.2.1 the results of the younger and less advanced treatment group (T1) will be presented, while in 5.2.2 the results of the older and more advanced group (T2) will be discussed. Finally, the difference in the results of the two treatment groups, T1 and T2 will be contrasted in 5.2.3.

5.2.1 Results of Group T1

I have summarised the results achieved by Group T1 in the individual categories in Tables 12 and 13. In the first line of Table 12 information is presented on the facilitating role of English and Hungarian on learning German as perceived by the subjects in Group T1 prior to the treatment sessions in February 2010. In the second and third lines of Table 12 we can see how the values have changed by the middle of April 2010, that is, by the middle of the data collection period, after the subjects have participated in five comparative sessions, and by the end of May 2010, after the data collection period ended. In Table 13 we can see the values reflecting the perceived hindering role of English and Hungarian on learning German across the same three periods of time that is February, April and May 2010. Tests of statistical significance were carried out at $p \leq .05$ in order to see whether there was a significant change between the initial February results compared to the final results in May.

In the next subsections I will present in detail the data obtained from the questionnaires of Group T1 on the subjects' own perceptions of their learning process as regards the role of the L2 English and L1 Hungarian in learning their L3 German. I will show how the results have changed in the course of the data collection period (5.2.1.1), and finally, I will contrast the results with those provided by the members of Group C1 (5.2.1.2).

5.2.1.1 The roles of L2 English and L1 Hungarian when learning L3 German, for Group T1

Table 12 reveals that at the time of the first assessment (and prior to starting the teaching sessions), in February 2010, the members of Group T1 on average found that, on a scale of 1 to 5, English helped them to a greater extent than Hungarian in four out of the five aspects, that is, when trying to understand new German words, when trying to learn new German words, when learning spelling and pronunciation, but that, however, Hungarian had a greater facilitating role when leaning grammar rules than English. On the whole, by the end of the treatment period, there was a statistically significant increase in T1 subjects' perception of

the facilitating role of English, whereas there is a non-significant extent of decrease in T1 subjects' perception of the facilitating role of Hungarian.

Analysing the results in detail, if we consider the values associated with the facilitating role of English, we can find that it is in connection with vocabulary – both as regards understanding and learning – that the learners have reported the highest values. Compared to the means on the facilitating role of English when understanding and learning German vocabulary, the subjects in Group T1 perceived the helping role of English to lesser degrees in the case of grammar, spelling and pronunciation. Similarly, looking at the values associated with the facilitating role of Hungarian, we can see that here, too, the mean scores connected to understanding and learning German words are the highest.

At the same time, as Table 13 shows, the subjects also perceived difficulties that they attributed to the effect of the English language. Similarly to the facilitating factors, the values are the highest in the case of trying to understand new German words, and when trying to learn new German words. As regards grammar, spelling and pronunciation, the values are lower. If we compare the scores on the helping and the hindering aspects, we can find that understanding and learning new lexical items is rather helped than hindered by L2 English, grammar seems to be quite neutral (with results close to 2.50 in both cases) while English spelling and pronunciation seem to present more problems than assistance. If we compare the means in both aspects, we find that the T1 group members perceived the facilitating effect of English when trying to understand and learn new German vocabulary and the hindering effect in the field of grammar, spelling and vocabulary. The total means of the helping and hindering factors seem to be in balance.

As regards the hindering effects of L1 Hungarian, Table 13 shows that the February results are much lower than those on the hindering effects of English in the same time period.
The questionnaire was readministered for the second time at the middle of the data collection period, in the middle of April 2010. By then the members of Group T1 had participated in five comparative sessions designed with the intention of instructing the subjects on the similarities and differences in English and German. A comparison of the February and the April lines of Tables 12 and 13 reveals that changes in the subjects' perceptions about the role of English in their learning German have started to operate. There is a conspicuous increase in the T1 group means in all aspects, both regarding the helping and the hindering factors. The total means scores assessing the helping role of English increased by 0.45 points, while the totals means of the hindering role increased by 0.35 points (Tables 12 and 13).

T1	when trying to understand a new German word		when trying to learn a new German word		when learning grammar rules		with German spelling		with German pronunciation		MEAN	
	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	**English helps**	**Hungarian helps**
February	3.47	3.00	3.20	3.14	2.43	2.64	2.29	2.07	2.00	1.86	**2.68**	**2.54**
April	3.80	3.20	3.53	3.33	3.27	3.07	2.53	2.40	2.53	2.40	**3.13**	**2.88**
May	3.67	2.67	3.47	2.87	3.13	2.33	2.40	2.07	2.40	2.00	**3.01**	**2.39**
p (Febr. – May)											**0.038***	**0.932**

Table 12. The facilitating effect of L1 Hungarian and L2 English while learning L3 German (Group T1). Results that are statistically significant at $p \leq .05$ are marked with an asterisk (*).

T1	when trying to understand a new German word		when trying to learn a new German word		when learning grammar rules		with German spelling		with German pronunciation		MEAN	
	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	**English causes difficulty**	**Hungarian causes difficulty**
February	2.57	1.86	2.29	1.43	**2.53**	2.15	3.14	2.15	2.79	1.92	**2.66**	**1.90**
April	2.87	2.40	3.00	2.40	**2.60**	2.27	3.47	2.27	3.13	2.40	**3.01**	**2.35**
May	2.47	1.93	2.60	1.80	**2.73**	1.93	3.20	1.73	3.27	2.00	**2.85**	**1.88**
p (Febr. – May)											**0.484**	**0.531**

Table 13. The hindering effect of L1Hungarian and L2 English while learning L3 German (Group T1). The results are statistically not significant at $p \leq .05$.

Although the purpose of the comparative lessons primarily was to facilitate L3 language learning with the help of the L2, it seems that the conscious comparison and contrasting of the two languages resulted in a raised awareness in the relationship between the two languages, with the result that not only the facilitating role increased, but also the difficulties, although the latter did only to a lesser extent.

By the time the questionnaire was administered for the third time, at the end of May 2010, all the treatment sessions were over. As regards the facilitating nature of English, the results show a remarkable tendency, namely, that after a major increase at the time of the second data collection, the values decreased somewhat to reach higher levels than the initial February results. As the mean column of Table 12 shows, the total mean started out at 2.68, shot as high as 3.13, and finally settled at 3.01. In my opinion, the increase between the first and the second data collection sessions can be explained by the initial interest of the subjects in the new method and the heightened levels of awareness in the new method's wake. The fact that no linear increase can be pointed out may be attributable to the method losing its 'novelty' in the eyes of the subjects and becoming a regular and routine-like way of approaching language. However, it needs to be emphasised that all five of the values describing the helping function of L2 English when learning L3 German are higher at the end of the experiment and the difference between the February and the May results. With the help of paired sample T-tests I calculated whether the differences between the February and the April results reveal a significant difference concerning mean scores. The alpha decision level was set at $p \leq .05$. The results indicate that the differences between the February and April results are significant at the 0.05 level in the case of Group T1. Comparing the February results with the ones in May – despite the drop in the scores – they still remained significant at the 0.05 level.

As we have seen above, the L2 English seems to play a more important role in L3 learners' German than their Hungarian mother tongue, and this role seems to have gained even more significance by the end of the treatment period. As the data reveals, however, there have also been changes in the learners' perception of the role of their L1 Hungarian during their German studies. It needs to be emphasised that the treatment sessions did not include any material on the comparison and contrast of Hungarian and German (nor Hungarian and English). If we compare the February results in Tables 12 and 13, as presented above, we can see that even initially, prior to the treatment sessions, the learners themselves assigned a higher facilitating role to their L2 English than to their L1 Hungarian. The values are higher in four categories (understanding and learning new words, spelling and grammar) and lower

only in the category of learning grammar. The patterns of the values obtained at the second and third data collection are the same, as in the case of the facilitating factor of English when learning German, that is, they are significantly higher at the second time and fall back at the third time. It is interesting to note, however, that the values in the case of the facilitating effect of Hungarian all drop under or to the same level as the February values (except for the case of pronunciation). If we compare the May results with the February scores, we can see that by the end of the treatment period the facilitating effect of Hungarian was perceived at lower rates than that of English.

Regarding four of the factors associated with L1 Hungarian causing difficulties when learning L3 German, the same phenomenon can be observed as with the facilitating factors: after the increase in April, they fall back to results higher than originally in three cases (learning new German words, spelling and pronunciation) and fall below the original score in one case (understanding new German words), while there is a more linear increase in the perception of difficulties when learning German grammar. A possible reason for this pattern of the results will be discussed later, when T1 and T2 are compared (cf. 5.2.3).

The results on the role of L1 Hungarian can be explained by the fact that even though Hungarian is the learners' mother tongue, and, therefore, their Hungarian proficiency is at a native level, because of the typological distance of Hungarian from both English and German, it causes less (positive or negative) cross-linguistic influence in the learners' minds. Therefore, I argue that research question (d) with respect to Group T1 can be answered in a way that typological closeness seems to be the decisive factor for them when attempting to find facilitating factors when learning L3 German; thus, this part of the hypothesis is verified. The instruction results in an increased awareness of the facilitating role of English; however, at the same time, the perception of the hindering effects of English also increases. The English-German instruction seems to have caused a change in the awareness of the role of Hungarian, too. As regards both the facilitating and the hindering factors, the role of Hungarian decreased by the end of the data collection period.

5.2.1.2 Comparison of Groups T1 and C1

In order to make sure that Group T1 and Group C1 are comparable as regards their performance assessed in the various data collection sessions with the means of the data collection instruments specified in 4.3, the questionnaires on the strategies were filled in by the members of Group C1 after all the other data had been obtained from them. The reason why they were not required to provide this kind of data at the beginning was the intention to

eliminate the reactivity effect, since the questionnaire contained questions that might have provoked the subjects to think differently in terms of the roles of the different languages than they would have on their own.

As we can see in Tables 14 and 15, the results on the facilitating and hindering role of L2 English when learning L3 German run parallel with the values of Group T1 presented in the first lines (that is, the initial, February values) of Tables 12 and 13. The fact that all values (except for the one among the hindering factors) are lower to different degrees than those provided by the members of Group T1 in February can be explained by the fact that the C1 subjects did not know anything about the real purposes of the data collection. They were merely informed that I was interested in their language learning processes and, therefore, I visited them regularly to observe their lessons and to test them occasionally. Since these values indicate that throughout the data collection period, despite the tests, think-aloud tasks and my continuous presence, data could be recorded without the subjects' suspecting my 'real' aims. I claim that the analysis of the differences between Group T1 and Group C1 yield valid results.

Similarly to the values indicating the effect of L2 English on L3 German, the subjects in Group C1 also presented lower results than the ones by Group T1 in February as regards the facilitating effects of their L1 Hungarian in the learning process of their L3 German. Three of the values (understanding and learning new words as well as learning grammar) were lower than those of Group T1 while two values (spelling and pronunciation) were slightly higher among the factors causing difficulties than the ones provided by T1 subjects in February. The results indicate that the learners in Group C1 relied on their mother tongue to lesser degrees than T1 members prior to the treatment sessions.

5.2.2 Results of Group T2

In 5.2.1 above I have presented the results of the perceptions of the members in Group T1 on the roles of mother tongue Hungarian and L2 English. The present subsection is devoted to describing the processes that the older and more advanced learners in Group T2 perceive. Similarly to the above, data collected at three different stages of the data collection period will be presented and the differences (or the lack of differences) will be explained (5.2.2.1). Once again, the role of L2 English and L1 Hungarian in learning L3 German will be addressed, the results will be contrasted with those obtained from Group C2 (5.2.2.2), and finally in 5.2.3 a comparison will be made between Treatment groups T1 and T2.

C1	when trying to understand a new German word		when trying to learn a new German word		when learning grammar rules		with German spelling		with German pronunciation		MEAN	
	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	**English helps**	**Hungarian helps**
May	3.21	2.64	2.57	2.93	2.14	1.93	1.71	1.79	1.86	2.29	**2.30**	**2.31**

Table 14. The facilitating effect of L1 Hungarian and L2 English while learning L3 German (Group C1).

C1	when trying to understand a new German word		when trying to learn a new German word		when learning grammar rules		with German spelling		with German pronunciation		MEAN	
	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	**English causes difficulty**	**Hungarian causes difficulty**
May	2.43	2.07	2.50	1.86	2.07	2.57	2.86	2.14	2.71	1.79	**2.51**	**2.09**

Table 15. The hindering effect of L1 Hungarian and L2 English while learning L3 German (Group C1)

5.2.2.1 The roles of L2 English and L1 Hungarian when learning L3 German, for Group T2

Tables 16 and 17 represent the mean scores of Group T2 in the individual categories associated with the facilitating and hindering roles of L1 Hungarian and L2 English across the three testing periods. As we can see, in two categories (understanding and learning new German words) the scores slightly decreased by April and reached the original levels again in May. There is a linear increase as regards the values in grammar, and an increase and a decrease to levels above the original values in spelling and pronunciation. None of the values are significant at the 0.05 level. This finding is confirmed by the interviews with the selected T2 group members and the T2 group interview (c.f. 5.3), in which the subjects repeatedly express that they had the impression that the comparative instruction did not provide them with much new information at the lexical level, but they found several undiscovered similarities at the grammatical-structural level.

As far as the difficulties caused by English are concerned, we can see that as the result of the treatment sessions, the subjects perceived more difficulties by the end of the treatment period than initially in four categories (understanding new words, learning grammar, spelling and pronunciation), the only decrease occurred in the category of 'learning new words'. Again, the results are not significant at the 0.05 level.

As regards the facilitating effect of L1 Hungarian when learning L3 German in Group T2, as we can see in Tables 16 and 17, there is only a minor decrease between the February and the May results. The results indicate that in the case of four factors (understanding and learning new words, learning grammar and spelling) the values are lower than those describing the facilitating effect of L2 English. In the case of pronunciation, subjects in Group T2 perceived initially that their L1 Hungarian helps more when pronouncing German words than their L2 English. These values equalized by the end of the data collection period and, therefore, the difference is not significant statistically.

At the same time, the values describing the hindering effects of Hungarian changed in different directions from February to May. With a minor decrease in April, the values for L1 Hungarian causing difficulties when understanding new L3 German words remained unchanged. L1 Hungarian's hindering effect decreased by April, but increased again by May in learning new German words and in pronunciation, while the values increased linearly in spelling. There is, however, an obvious decreasing tendency of Hungarian's hindering effect on learning German grammar.

T2	when trying to understand a new German word		when trying to learn a new German word		when learning grammar rules		with German spelling		with German pronunciation		MEAN	
	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	**English helps**	**Hungarian helps**
February	3.40	2.40	3.20	2.70	2.30	2.00	1.80	1.60	1.40	2.00	**2.42**	**2.14**
April	3.20	2.60	3.10	2.40	2.90	2.50	2.50	2.40	2.30	2.50	**2.80**	**2.48**
May	3.40	2.40	3.20	2.30	3.10	2.20	2.00	1.70	1.70	1.70	**2.68**	**2.06**
p (Febr. – May)											**0.081**	**0.661**

Table16. The facilitating effect of L1Hungarian and L2 English while learning L3 German (Group T2). The results are not statistically significant at $p \leq .05$.

T2	when trying to understand a new German word		when trying to learn a new German word		when learning grammar rules		with German spelling		with German pronunciation		MEAN	
	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	**English causes difficulty**	**Hungarian causes difficulty**
February	2.50	2.10	3.20	1.90	2.33	3.50	3.10	1.80	2.50	2.50	**2.73**	**2.36**
April	2.80	2.00	2.80	1.70	2.80	2.60	3.50	2.10	3.20	2.10	**3.02**	**2.10**
May	2.60	2.10	3.00	2.00	3.20	2.70	3.20	2.60	3.20	2.30	**3.04**	**2.34**
p (Febr. – May)											**0.403**	**0.951**

Table 17. The hindering effect of L1Hungarian and L2 English while learning L3 German (Group T2). The results are not statistically significant at $p \leq .05$.

If we compare the values representing the hindering effect of L1 Hungarian with those describing the hindering effects of L2 English on learning L3 German, we can find that the values are higher as regards the hindering role of English in the case of all factors in all three stages of the data collection, with only two exceptions. The February values for the hindering effect of English versus Hungarian on the German pronunciation are the same, however, while the hindering role of Hungarian decreased, the hindering role of English increased by the end of the data collection period. The other exception is the factor of the hindering effects in learning the German grammar rules. Prior to the treatment period, the learners in Group T2 perceived higher values as regards the hindering role of their L1 Hungarian in learning L3 German than that of their L2 English. The results indicate that values regarding the hindering role of Hungarian decreased by the end of the data collection period, while those regarding the hindering role of English increased.

Based on the above, I claim that research question (d) with respect to Group T2 can be answered in the same way as in the case of Group T1, namely, that typological closeness seems to play a more important role when attempting to find facilitating factors when learning L3 German. It is interesting to note that the comparative instruction seems to have had no effect on T2 subjects on the lexical level; the general increase was brought by the increase of the remaining three factors with a special emphasis on grammar. Just as in the case of the younger treatment group, the instruction results in an increased awareness of the facilitating role of English in general and, at the same time, the role of the hindering effects of English also increases. As regards both the facilitating and the hindering factors, the role of Hungarian decreased slightly by the end of the data collection period.

5.2.2.2 Comparison of Groups T2 and C2

The same way as in Group C1, the questionnaire on the facilitating and the hindering effects of the L1 and the L2 was administered at the end of the data collection period, in May with the participation of the members of Group C2. The values of the facilitating role of English in Group C2 participants' German learning processes are presented in Table 18. The data reveals that the values achieved by Group C2 in May are higher than those of Group T2 in February in all five aspects. This means that Group C2 perceived the facilitating role of English to a greater extent than their counterparts in the treatment group, prior to the treatment period; the results achieved by Group T2 were 0.26 points lower (cf. Table 16). As we have seen in 5.2.2.1, Group T2's results on the facilitating role of L2

C2	when trying to understand a new German word		when trying to learn a new German word		when learning grammar rules		with German spelling		with German pronunciation		MEAN	
	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	English helps	Hungarian helps	**English helps**	**Hungarian helps**
May	3.57	2.29	3.29	2.79	2.50	1.79	1.93	1.71	2.14	2.14	**2.69**	**2.14**

Table 18. The facilitating effect of L1Hungarian and L2 English while learning L3 German (Treatment group C2)

C2	when trying to understand a new German word		when trying to learn a new German word		when learning grammar rules		with German spelling		with German pronunciation		MEAN	
	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	English causes difficulty	Hungarian causes difficulty	**English causes difficulty**	**Hungarian causes difficulty**
May	1.93	1.57	2.21	1.64	2.50	1.86	2.86	1.64	2.43	1.86	**2.39**	**1.71**

Table 19. The hindering effect of L1 Hungarian and L2 English while learning L3 German (Treatment group C2)

English when trying to understand and learn new German words remained unchanged by the end of the data collection period, there was an increase in the values regarding learning grammar, spelling and pronunciation. In fact, as the results of the treatment sessions show, Group T2's total means increased to an extent that they remained only 0.01 points below that of Group C2. In two factors, grammar and spelling, the scores of Group T2 exceeded those of Group C2.

These results confirm the expectation of the German language teacher of Group T2 that the comparative method might have a positive effect on their German language development (see 4.1.2).

While perceiving higher values than Group T2 initially, Group C2 had lower values regarding the hindering effects of English when learning German, as indicated in Table 19. Also, C2 group participants perceive that the facilitating role of English is higher than the hindering one.

Interestingly, the total means regarding the facilitating effect of L1 Hungarian on learning L3 German coincide in the case of the February results of Group T2 and the May results (reflecting the same status as the initial results of Group T2) of Control group C2. The values achieved by Group C2 on the facilitating role of L1 Hungarian are presented in Table 18, the values on the hindering role of the L1 in Table 19.

As regards the hindering role of L1 Hungarian on learning L3 German, the members of Group C2 reached lower values in all five aspects than Group T2, similarly to the results on the hindering role of L2 English. It seems that the members of Group C2, without ever having received special instruction, are capable of utilizing the advantages resulting from the knowledge other than the L3 German target language and at the same time they experience the negative effects to lesser degrees.

5.2.3 Discussion: comparison of T1 and T2

In order to find out about differences between L3 learners as regards their age and/or proficiency level and, thus, answer the relevant part of research question (e), Treatment groups T1 and T2's members own perceptions about the effects of their L1 Hungarian and L2 English need to be compared. In subsections 5.2.1 and 5.2.2 I have shown how the values describing the perception of the individual factors in the L3 German learning changed throughout the treatment period in the treatment groups. In the subsection 5.2.3.1 I will show, by presenting the gain scores achieved by Treatment groups T1 and T2, what the differences

of the facilitating role that L1 Hungarian and L2 English are in the language learning processes of Group T1 and Group T2. In 5.2.3.2, in contrast, I will present the differences of the hindering effects caused by L1 Hungarian and L2 English.

5.2.3.1 A comparison of the facilitating factors

A comparison of the values recorded at the time of the initial, February data collection in Treatment groups T1 (Table 12) and T2 (Table 16), we can see that three of the factors (the facilitating effect of L2 English when trying to understand and learn new L3 German words and learning L3 German grammar rules) are evaluated similarly by the two groups, with 0.07, 0 and 0.13 points differences, respectively, the values of Group T1 being slightly higher. In the case of the remaining two factors (the facilitating effect of L2 English on L3 German spelling and pronunciation) the difference between the two treatment groups was greater: in both cases Group T1 achieved higher values with 0.49 and 0.60 points, respectively. This indicates that at the beginning of the data collection period, the younger and less advanced learners of Group T1 attributed a larger facilitating role to their L2 English than their older and more advanced counterparts in Group T2.

Similarly, the members of Group T1 (Table 12) scored higher when evaluating the facilitating role of their L1 Hungarian mother tongue than subjects in Group T2 (Table 16) in all aspects. The values are 0.60 and 0.44 points higher in the case of the facilitating effect of L1 Hungarian when trying to understand an learn L3 German words, 0.64 higher in the case of learning grammar, 0.44 higher in spelling and 0.14 higher in pronunciation. The results are significant at the 0.05 level.

In my view, a possible explanation for the differences between Group T1 and T2 is that the majority of the members of Group T1 started learning German a few months before the data collection began. Learning German was a new and interesting experience for them, their motivation was clearly visible in the observed lessons. Because of their lower proficiency level in German they are used to making continuous efforts to make discoveries in the new language, and, while doing so, they rely on their knowledge of other languages familiar to them. The above results indicate that while they activate their knowledge of L1 Hungarian and L2 English, they are often successful.

In subsections 5.2.1 and 5.2.2 I have described in detail how the values of both groups changed throughout the data collection period. I consider the April results to be indicators of the processes that started to take place in the subjects' minds. Since, however, they show a

general tendency of being higher than both the February and May results, they are of minor importance in the long run.

More important is the data collected at the end of the treatment period, in May. If we look at the May rows of Tables 12 and 16, we find that Group T1's values increased in all five aspects, while Group T2's values increased in three of the aspects and settled on their original values in two other aspects. The differences of the initial February and the final May values are summarised as gain scores in Tables 20 (the facilitating effect of L2 English) and 21 (the facilitating effect of L1 Hungarian). The figures are marked positive (+) in the tables if there was an increase in the values, marked negative (–) if there was a decrease, and marked zero (0) if there was no change in the given period.

As we can see, the values of Group T1 increased to a significant extent, while those of Group T2 remained unchanged in the case of the facilitating effect of L2 English on understanding and learning new words in German and on the German pronunciation. In the case of grammar and spelling, the values of Group T2 rose to a greater extent, however, the increase did not reach a statistically significant level. This suggests that during the treatment period the subjects in Group T2 did not perceive development as regards their judgment on how their knowledge of English helps them when encountering and learning new German words. Possibly, by the third year of their German studies they have had plenty of experience with German and, therefore, they are accustomed to a certain amount and way in which they benefit from their English vocabulary knowledge. The values in spelling and in pronunciation, however, did increase in the case of both treatment groups, indicating that a conscious comparison of e.g. the sound-letter correspondences in both languages has proved to be advantageous for the learners.

English helps…: difference between the February and May values							
T1-T2	… when trying to understand a new German word	… when trying to learn a new German word	… when learning grammar rules	… with German spelling	… with German pronunciation	**MEAN**	p
T1	+0.20	+0.47	+0.70	+0.11	+0.40	**+0.33**	0.038*
T2	0	0	+0.80	+0.20	+0.30	**+0.26**	0.081

Table 20. Differences in the initial and final values of the facilitating effect of L2 English while learning L3 German (Treatment groups T1 and T2). The results that are statistically significant at $p \leq .05$ are marked with an asterisk (*).

The values indicating the increase in the perception of the facilitating factor of L2 English grammar rose highest in the case of both treatment groups as a result of the treatment sessions. The reason for this might be the fact that while the word-to-word correspondences can in many cases be considered salient, overseeing similarities in the grammatical structures may require more practice and insight into how the languages are structured (cf. interviews in the next section).

As it follows from the above, Ringbom's claim (1986:160) that higher source language proficiency increases the likelihood of the perception of cross-linguistic similarity is countered by the data presented in Tables 12 and 16. On the contrary, it was the less proficient treatment group who perceived the facilitating effect of L2 English to a greater extent both at the beginning and at the end of the treatment period.

It is interesting to note that while there was an increase in the perception of the facilitating effect of the L2 English over the treatment period, the facilitating effect of Hungarian has slightly decreased in both treatment groups overall (Table 21). In the case of Group T1 three, in the case of Group T2 two of the values decreased, while one remained the same in both groups, and there was an increase in one factor in the results of Group T1 and in two in the results of Group T2. It seems that as the treatment sessions' primary aim was to compare L2 English and L3 German, the role of the mother tongue somewhat withdrew by the end of the treatment period.

Hungarian helps…: difference between the February and May values							
T1-T2	… when trying to understand a new German word	… when trying to learn a new German word	… when learning grammar rules	… with German spelling	… with German pronunciation	**MEAN**	p
T1	–0.33	–0.27	–0.31	0	+0.14	**–0.15**	0.932
T2	0	–0.40	+0.20	+0.10	–0.30	**–0.08**	0.661

Table 21. Differences in the initial and final values of the facilitating effect of L1 Hungarian while learning L3 German (Groups T1 and T2). The results are not statistically significant at $p \leq .05$.

5.2.3.2 Comparison of the hindering factors

A comparison of the February values describing the hindering effects of L2 English while learning L3 German in Tables 13 and 17 reveal the differences between the two treatment groups prior to starting the treatment sessions. Except for one value (learning a new German word), the values of Group T1 are somewhat higher than those of Group T2 (by 0.07, 0.2, 0.04 and 0.29), indicating that Group T1 experienced negative cross-linguistic influence to slightly greater degrees than Group T2 prior to the data collection. The greatest difference in the values, 0.91 points are in a reverse direction, that is, in the case of learning new words in German, Group T2 experienced greater difficulties than Group T1.

By the end of the data collection period in May, there was an increase in four of the values in both groups to varying degrees and a decrease in one factor in each group. This means that the treatment sessions did not only contribute to the subjects' discovery of the facilitating effect of L2 English when learning L3 German, but, as a negative outcome, the perceived negative cross-linguistic influence also increased. If we compare the total means in Tables 12 and 13, we can see that the extent of increase in the facilitating factors exceeds the hindering ones in the case of Group T1, but the hindering factors are slightly higher in the results of Group T2 (see Tables 16 and 17). This latter result is due to the fact that the perceived hindering effect of the English grammar while learning German grammar rules is particularly high. This is an interesting and contradictory finding, since, as we have seen, the perceived facilitating role of the English grammar is similarly high.

English causes difficulty…: difference between the February and May values							
T1-T2	… when trying to understand a new German word	… when trying to learn a new German word	… when learning grammar rules	… with German spelling	… with German pronunciation	**MEAN**	p
T1	–0.10	+0.31	+0.20	+0.06	+0.48	**+0.19**	0.484
T2	+0.10	–0.20	+0.87	+0.10	+0.70	**+0.31**	0.403

Table 22. Differences in the initial and final values of the hindering effect of L2 English while learning L3 German (Treatment groups T1 and T2). The results are not statistically significant at $p \leq .05$.

Hungarian causes difficulty…difference between the February and May values							
T1-T2	… when trying to understand a new German word	… when trying to learn a new German word	… when learning grammar rules	… with German spelling	… with German pronunciation	**MEAN**	p
T1	+0.07	+0.37	–0.22	–0.42	+0.08	**–0.02**	0.531
T2	0	+0.10	–0.80	+0.80	–0.20	**–0.02**	0.951

Table 23. Differences in the initial and final values of the hindering effect of L1 Hungarian while learning L3 German (Treatment groups T1 and T2). The results are not statistically significant at $p \leq .05$.

As regards the hindering role of L1 Hungarian, a comparison of the February values in Treatment groups T1 and T2 shows that both in February and in May, Group T1 attributed lower values to the hindering role of Hungarian (Tables 13 and 17). Comparing the initial and the final values we can find that the total means only changed to the extent of minus 0.02, however, there is considerable variation in the individual values, as indicated in Table 23.

The results contradict Winters-Ohle and Seipp's findings (2001:18) in the case of the subjects in the less proficient treatment group, T1. Winters-Ohle and Seipp claim that their subjects evaluated the hindering role of their L2 higher than its facilitating role, whereas in the present study T1 subjects perceived the facilitating and hindering role of L2 English to quite similar degrees (see Tables 12 and 13) initially, and, as the result of the instruction this has changed in a way that there was a higher increase in the perception of the facilitating role of L2 English than in its hindering role by the end of the treatment period. The present study reveals that more proficient subjects' perception of the facilitating and hindering role of L2 English coincides with Winters-Ohle and Seipp's (2001) findings both initially and at the end.

In section 5.2 I have presented an overview of the data collected at three different stages of the data collection period. I have shown how the values of the two treatment groups and two control groups varied across the facilitating versus the hindering factors regarding the role of L1 Hungarian and L2 English while learning L3 German. The most important finding is that the less experienced subjects perceived the facilitating role of English while learning German to greater extents than their more experienced counterparts in Group T2.

I have also made attempts at finding explanations for the results, however, since this data is based on the subjects' own perceptions regarding their cross-linguistic processes, the

explanations may not reach beyond the level of speculation. In the following subsections of Chapter 5 I will introduce further data in which some of the explanations presented above might be supported. In 5.3 I will present data recorded in the form of individual and group interviews, and finally in 5.4 and 5.5 I will present the results of think-aloud tasks and the vocabulary knowledge scale tests. In section 6 the results presented in the different subsections of Section 5 will be revisited and discussed in the light of the research questions.

5.3 Semi-structured interviews

In addition to the data presented in the previous section on the subjects' own perceptions of the influence of their previously known languages on the new one being learnt, semi-structured interviews were conducted with selected pairs of subjects in order to supplement the data gained from the questionnaires (see 5.2), which, at the same time, served as follow-ups to the think-aloud translation tasks that the same selected pairs were asked to perform (for the analysis of the think-aloud translation tasks, see section 5.4). As mentioned in 4.3.2.2, two types of interviews were recorded: first, selected pairs of subjects were interviewed from both treatment groups in the middle and at the end of the data collection period, and, second, group interviews were recorded in both treatment groups at the end of the data collection period. The pairs for the think-aloud task and the interviews were selected with the assistance of the groups' German teachers. My intention was to choose a pair of more successful L3 German learners (Pair-S) and a pair of weaker ones (Pair-W) in each group, while all the treatment group members were present during the group interviews. The interviews were conducted and digitally recorded by myself.

The semi-structured interviews were conducted at the same time when the think-aloud translation tasks were recorded with the same subjects who were involved in the translation exercise (see 5.4). In the case of the treatment group subjects the interview questions were asked overtly at the end of the think-aloud sessions. In order to prevent a reactivity effect and not to reveal that my primary aim was to study the role of L2 English in the subjects' learning process of L3 German, I connected my questions to specific points raised during the think-aloud sessions when interviewing the subjects in the control groups. In addition to the two group interviews, ten short interviews were conducted: the more successful T1 pair (T1 – Pair-S) and the weaker T2 pair (T2 – Pair-W) were interviewed twice, and the other two treatment group pairs (T1 – Pair-W and T2 – Pair-S) as well as each of the control group pairs once. The interviews with the pairs are between 2 and 7 minutes long, and the group interviews last for 14 (T1) and 26 (T2) minutes. The interviews were conducted in Hungarian and were translated into English by myself.

Generally the interview questions were designed to provide data for research question (c), namely, whether L3 learners rely on their L2 English when learning L3 German and whether they start relying on it or increasingly use it as a result of systematic instruction. Again, the problem was investigated from the point of view of research question (e), too, namely, whether the length of time spent on learning languages (both L2s and L3s) as well as

proficiency level have an impact on the foreign language awareness and the language learning strategies of learners.

The interview questions were aimed at whether treatment group members found the comparative method beneficial as regards their progress in German (5.3.1), and whether they have experienced any negative effects (5.3.2). Although it was initially not included as a research question, during the semester spent with the subjects the issue of the comparative method having a backward effect on the subjects' L2 learning had occasionally been raised. Therefore, this issue was addressed in the form of an interview question, and the results are presented in 5.3.3. In the case of the control group the questions were aimed at finding out about the interviewees' views on the effect of L2 English on their L3 and vice versa. The content analysis of the answers provided by the subjects is summarised in the following three subsections. The interview data will be summarised and discussed in 5.3.4.

5.3.1 Effects of L2 English on L3 German

The interviewed treatment group subjects generally agreed that the comparative method had a positive influence on their L3 German. One subject in T1 – Pair-W commented that even prior to the start of the comparative sessions she had been experimenting with learning the English and German words together, and she had noticed that whenever she had been familiar with the word in English, it had a facilitating effect on learning the German version. This is in concordance with what was voiced by the members of C1 – Pair-S, who reported that English 'sometimes helps' because there are words with similar spelling but with different pronunciation.

The comparative method, however, provided the T1 – Pair-W subject quoted above with the additional benefit that the raised consciousness resulted in her being able to recognise similarities more easily and, thus, learning the words also became easier. The other T1 – Pair-W subject added that she did not try to concentrate on similarities on the lexical level only, but, for example, on the word order:

> (1) 'egy állító mondat, mondjuk, hogyan áll össze a németben és az angolban, a kérdéseket néztem, hogy milyen kérdések vannak angolból, németből … és ezek az azonosságok igazából segítettek, mert mikor még {a német} mondatot nem tudtunk rendesen összerakni, akkor nekem már úgy nagyjából megvolt, mert ugyanúgy volt szinte a szórend.
> […how, for example, an affirmative sentence is constructed and I also observed the questions, what kind of questions there are in English and German … and these similarities indeed helped me, because even before we could properly construct a {German}

sentence, I already knew it by and large, how to do it, since the word order is almost the same.]' (T1 – Pair-W)

T1 – Pair-W subjects agreed that this method would probably have positive long-term effects, since by now they became able to 'look for these similarities consciously'.

T1 – Pair-S commented that when learning a foreign language beyond the second one 'people do not start from square one' and, therefore, with the help of English it is 'much easier to make progress'. The regularities that the subjects were taught to observe were useful and interesting, and, more importantly 'they worked in many more cases than not'. One member of T1 – Pair-S said that the comparative method was especially useful for him, because the systematic comparison made him able to keep the two foreign languages apart:

(2) 'Hasznos {a módszer}, mert így meg lehet különböztetni az egyiket a másiktól és nem annyira keverjük.
[{The method} is useful, because we can tell one [language element] from the other and therefore we won't mix the two {languages} so much.]' (T1 – Pair-S)

The same member of T1 – Pair-S also emphasised that there are many aspects in which L2 English helps learning L3 German, for example, the German *Perfekt* Tense (similar in meaning to Past Simple, but similar in form to Present Perfect) was easier to understand and the systematic patterns of sounds in the irregular past forms also resemble English.

The same idea was expressed in the group interview with Group T1: the subjects seemed to have a general agreement that the method was interesting and that they learnt a lot about how they can use their knowledge of English vocabulary to try and figure out German equivalents:

(3) 'Angol szavakat lehet csinálni a németből és fordítva.
[English words can be created from German ones and vice versa.]'
(T1 group interview)

The older, more proficient T2 subjects also evaluated the systematic instruction positively. Owing to their more advanced language levels and more extensive experience in language learning they had more specific expectations towards the treatment sessions. One of the more proficient subjects in T2 – Pair-W also said that even before the comparative sessions started he had been comparing the two languages, trying to tie the 'fundamental' German vocabulary items to the English ones. Because of his experience with comparing the languages on the lexical level, he was more interested in the comparisons related to

grammatical structures, such as, for example, the passive constructions in both languages. The other subject – in personal communication in the first weeks of the data collection period – told me that she frequently 'mixed up' the languages and, thus, feared that the comparative method might cause even more confusion. During the interview she explained that she 'used to mix up the languages earlier', but not any more. She also found the sound correspondences useful, however, she did not feel comfortable enough regarding her results:

(4) 'Az a baj, hogy nem vagyok benne mindig biztos, hogy amit kikövetkeztetek, annak van-e valami köze hozzá, vagy ez most jó-e. [The problem is that I am not always sure that whatever I conclude really has something to do with it or whether it really is correct.]' (T2 – Pair-W)

Still, she admitted to 'using' the English language knowledge in the German lessons and was surprised that so many words can be 'derived' from English and evaluated it positively that, while learning German, English is kept active:

(5) ' … mi német órán nem nagyon csinálunk ilyet, hogy veszünk egy szöveget és elkezdjük lefordítani és ez így jó. Meg az angolból is előjönnek a szavak.
[… we don't often do such a thing in a German lesson that we take a text and start translating it and it is good. Also, words from English come up].' (T2 – Pair-W)

In the group interview Group T2 subject expressed their opinion that 'the method was most helpful in the field of grammar'. Some Group T2 subjects explained that although they tried to compare the two languages and find the similarities before, they were mostly successful in the field of lexis:

(6) 'Amikor először szavakat néztünk, azt én már előtte is gondoltam, mivel {…} sokminden latin eredetű.
[When we were first looking at words, I had already known the similarities even before {…} because many are of Latin origin.]' (T2 group interview)

These learners felt that it was the field of grammar where they were provided with new information, since without the instruction they would not have been able to find the structural similarities on their own:

(7) 'A többi nyelvtanra például nem jöttem rá, például a passzív szerkezeteket nem tudtam volna megfeleltetni egymásnak.

[As regards the rest of the grammar, I couldn't find out, like for example, as regards the passive constructions, I couldn't have found the similarities by myself.]' (T2 group interview)

Some subjects would even have liked to go into deeper details:

(8) 'Szerintem nagyon hasznos volt ez az eltöltött néhány óra, én szerettem volna még jobban elmélyülni benne, de sajnos annyi időm nincs, hogy ezzel ennyit foglalkozzak.
[I think these few sessions were really useful and I would have liked to go into deeper details but unfortunately I don't have enough time to deal with this so much.]' (T2 group interview)

One Group T2 subject explained that she had been comparing English and German grammatical structures in the past, even before the treatment sessions started, but she concluded as follows:

(9) 'Jó, valamennyire lehet, {hogy hasonlít} de szerintem sokban különbözik.…
[OK, they may {resemble} to some extent, but they also differ a lot.]'
(T2 group interview)

However, she still considered the comparative method useful admitting the following:

(10) '… lehet, hogy azért könnyebb így tanulni, hogyha azt nézzük, hogy legalább így tudjuk, hogy miben különbözik, vagy miben tér el.
[… maybe it is easier to learn this way, because this way we at least know what the differences are and how they are different]'.
(T2 group interview)

Group T2 subjects, similarly to their Group T1 counterparts also explained that they feel that they have learnt a method that they consider to be useful in the future, too:

(11) 'Most már talán majd tudatosan is nézni fogom a szavakat, hátha van benne valami hasonlóság.
[I will now perhaps consciously inspect the words to see whether there is a similarity.]' (T2 group interview)

Moreover, perhaps one of the most positive outcomes of the research was expressed by a Group T2 subject who speculated that the method may not only prove beneficial for their English and German studies in the future but also in case of learning additional languages:

(12) ‘A szavak voltak a leghasznosabbak, mert azokat tényleg lehet majd később használni és nem csak németből, angolból, hanem akár ha elkezdünk egy új nyelvet, abban is mindvégig tudjuk ezt csinálni. [The words were the most useful because they can be used in the future, too. And not only in English and German, but even if we started to learn a new language we will always be able to do the same thing.]’ (T2 group interview)

5.3.2 Negative effects of L2 English on L3 German

In the interviews the subjects were also asked to reflect on any negative effects they have experienced as the result of the treatment sessions. Interestingly, and quite differently from the results presented in 5.4.1, the subjects hardly noted any unwelcome effects. As mentioned in 5.4.1 above, a subject in T2 – Pair-W was previously worried about potential negative cross-linguistic influence, however, she was positively surprised.

One subject interviewed in Group T1 (T1 – Pair-S) said that at the beginning of his German studies, he happened to ‘mix up’ the languages but this phase was soon over.

(13) ‘Nem keveredik, hanem inkább {az angol} segít {a németben}. [They do not get mixed up, but {English} helps {learning German}].’ (T1 – Pair-S)

Another Group T1 subject (T1 – Pair-S) reported that before the treatment sessions started he used to make mistakes resulting from negative cross-linguistic influence, however, as a result of the treatment sessions, ‘typically it does not happen anymore’. He added the following:

(14) ‘Jegyben is már látszik. Vagy azért, mert belejöttem a tempóba, vagy pedig ez. Ez a két lehetőség. {…} De ez nagyban segített szerintem. [one can see the result in my grades which may either be the result of my having gained impetus or this. These are the two possibilities. {…} But I think it has helped a lot.]’ (T1 – Pair-S)

A similar experience was worded by a Group T2 subject. As the treatment sessions started, she felt confused and feared that the comparative method had a negative influence on her knowledge of English:

(15) ‘Az első óra után úgy éreztem, hogy most se angolul, se németül nem tudok.

[After the first lesson I felt that I can speak neither English nor German any longer.]' (T2 group interview)

For her it took some sessions to perceive the method as facilitative regarding her language studies:

(16) 'aztán ahogy eltelt pár hónap, így egyre jobban kitisztult és akkor most már szét tudtam választani, hogy melyik melyik és akkor meg is nyugodtam, hogy tudok külön-külön gondolkozni.
[as a few months passed, it cleared up more and more and now I became able to separate the two and to know which {language item} is which. And I feel relieved that I can think in a way that I separate the two]'. (T2 group interview)

The only negative effect mentioned in both treatment groups was on the level of pronunciation. A Group T1 subject said the following:

(17) 'A kiejtésben nagyon rossz. Amúgy is nagyon rossz a kiejtésem.
[It is difficult regarding the pronunciation. I have quite poor pronunciation, anyway.]' (T1 – Pair-S)

But even this subject had positive experiences in connection with the treatment sessions in all other aspects. Another Group T1 subject in the course of the group explained that in her opinion English does not serve as a point of reference as regards the pronunciation of the German words:

(18) 'A kiejtésben nem sokat segít. Inkább még nehezíti.
[There is not much help regarding pronunciation … it makes it even more difficult]'. (T1 group interview)

5.3.3 Effects of L3 German on L2 English

To the question whether L3 German ever had any facilitating effect on L2 English, the interviewed subjects seemed to have provided very similar answers. All four subjects in Group T1 were of the opinion that their German hardly ever had any effect on their English, the reason being the big difference in their language levels in favour of English. All four T1 subjects agreed that their English proficiency exceeded their proficiency in German:

(19) ‘A német meg az angol tudásom között nagyon nagy különbség van, ezért az angolban nem tud segíteni a német még most.
[There is a big difference between my knowledge in German and English, therefore German cannot facilitate learning English, yet]’ (T1 – Pair-W)

(20) ‘Lehet, hogy ha jobban tudnánk németül, akkor az angol könnyebben menne.
[Maybe if we were better at German, it would make {learning} English easier]’ (T1 – Pair-S).

Among the younger treatment group members the only examples regarding the effect of German on the subjects’ English were related to recalling the German language version of a word in the English lesson. These do not qualify as instances of cross-linguistic influence, since the subject was well aware of the fact that the item he recalled was in German:

(20) ‘Igen, ez velem is előfordult egy párszor, hogy csak németül {jutott eszembe}, és utána angolul már következtettem belőle.
[Yes, it happened to me a couple of times that {I recalled something} in German, but then I inferred the English {version}]’ (T1 – Pair-S).

Three of the subjects in Group T2 expressed a similar opinion to the ones quoted by the members of Group T1. They agreed that while their knowledge of English had a facilitating effect on their German learning processes, German was not helpful while learning English, because of the same reason as claimed by the interviewees in Group T1:

(21) ‘Inkább angolból lehet a németet {kikövetkeztetni}, angol órán a németet azt nem nagyon tudom használni, gondolom, abból kifolyólag, hogy nyilván az angolt tíz éve tanulom, a németet meg kettő.
[It is possible {to derive} German items from English ones, but I cannot really use [my knowledge of] German in the English lesson, I guess, due to the fact that I have been learning English for ten years and German for two.]’ (T2 – Pair-W).

There was only one subject among the treatment group interviewees (T2 – Pair S) who – in spite of having learnt English for eight years and German for two – claimed that her proficiency level of German is higher than that of her English. In her case, her L3 German had a facilitative effect on L2 English. In one of the treatment sessions the tense system of English and German were compared which she later found useful in the English lessons:

(22) ‘Azt a lapot, amit írtunk {az összehasonlító órán}, azt angolórán is a múltkor, amikor a melyik igeidőt is vettük? amikor a past perfect-et és a past perfect continuous-t vettük, meg a present perfectet és ott a használatánál is, meg, … leginkább a használatánál, meg hogy mikor, abban nagyon sokat segített, meg úgy hasonlítottam a némethez és a lap alapján sokkal jobban meg tudtam érteni.
[I could use the sheet we wrote {in the comparative lesson} when we were learning the tenses in the English lesson … which were the ones? when we were taught the past perfect, the past perfect continuous and the present perfect, it helped me a lot, mostly with the usage and when to [use it], because I compared these to German and I could understand them much better based on this sheet]’. (T2 – Pair S)

Contradicting the above, C2 – Pair-S reported that even though their level of English is much higher than that of German, their L3 German has a negative effect on their English, most specifically in the field of spelling. As examples they mentioned the spelling of the cognates *Schule* vs. *school* and *Gast* vs. *guest* in the cases of which the more recently acquired German form had the effect that they became confused as regards the correct spelling in English.

Altogether the interviews reveal that learners of English and German have the impression that the language they know better has a facilitating effect on the one that they are less proficient at. Based on their linguistic biographies, seven of the interviewed subjects had learnt English for considerably longer than German, and only one learner had learnt German for longer than English (however, she claimed to know English better than German, and her placement test results seem to underpin her own perception). According to the interviews, the subjects all believe that whereas there is a definite facilitating effect of their L2 English on the learning process of their L3 German, the opposite, that is, that there is a potential facilitating effect of their L3 German influencing their learning of their L2 English, is non-existent. Contrary to this, as we have seen, the only subject who claims to be at a higher level in German than in English reported that her more proficient L3 German has a positive effect on her L2 English, as a result of the comparison of the languages. The only effect of L3 German on L2 English that any of the subjects reported was a negative one, namely, the confusion in the spelling of some cognates.

5.3.4 Discussion

As an answer to research question (c) on whether L3 learners rely on their L2 English when learning L3 German, the interviews conducted with the subjects in both the treatment and in the control groups reveal that L3 learners of German make endeavours to compare their L2 English to the new language, however, without help in the form of a comparative instruction, these attempts mostly remain on the level of vocabulary and simple structures. These results are in concordance with Tápainé Balla (2007).

The second part of research question (c) on whether systematic instruction changes these attempts, the answer seems to be that, as the result of the treatment sessions, the subjects have become more conscious of less salient lexical similarities, and, especially in the more proficient treatment groups, of the grammatical structures. This consciousness had many positive effects and some negative ones on L3 German, and did not seem to exert much reverse influence on L2 English.

We have seen that some subjects have reported that even prior to the treatment sessions they had been experimenting with comparing the newly acquired German lexical items and, to lesser degrees, basic grammatical structures to the ones that they had been familiar with in English. Therefore, the answer to research question (c) seems to be that multilingual learners do employ some multilingual strategies from as early as the start of learning their L3, however, these strategies are limited to some very salient cognates and borrowed expressions as well as some basic grammatical structures. From the responses provided by the interviewed treatment group members it can be concluded the comparative sessions served as a basis for further developing these strategies, since the subjects' attention was drawn to notice less salient correspondences on the level of lexis and in the complexity of the grammatical system. Ideally, these strategies will not only play a role in the subjects' English and German studies but can also serve as points of reference in the acquisition of additional languages as well. In this respect the above results reinforce Meißner's views (2004), namely that the learners need instruction to be able to utilise languages learnt previously. However, Meißner (2004) also claims that in order for interlingual connections to be discovered, the L3 learner needs to be proficient in the L2 serving as the source language. The questionnaire data presented in 5.2 and the above interview data, however, reveals that there is no need for a high-level proficiency in the source language; the only prerequisite for the cross-linguistic influence to be evaluated as a facilitation seems to be that the learner

should be familiar with the lexical and grammatical items in their L2 in order to be able to draw on the cross-linguistic influence during L3 learning.

The relevant part of research question (e) on the differences between the more versus the less proficient groups can be answered as follows. It seems that there is an age, or rather, proficiency related difference between Group T1 and Group T2. Although some Group T2 subjects reported that they found new aspects as regards the comparison of the lexical items, it seems that by the time the treatment sessions started, their two-and-a-half-year-long experience with learning two languages simultaneously resulted in a higher level of consciousness of the lexical similarities than in the case of the Group T1 subjects. As regards the similarities of the grammatical structures, Group T2 had an overwhelming interest, as opposed to Group T1 who seemed to be equally interested in similarities in vocabulary and grammar.

5.4 Think-aloud translation tasks

As explained in detail in Chapter 4 on the research design, on two occasions selected pairs of subjects were asked to perform translation tasks, during which their thinking process was verbalised and digitally recorded. The aim of this task was to seek answers for research questions (a) and (b), namely whether L2 English lexical items serve as a point of reference when learning L3 German vocabulary and whether language learners, after systematic instruction, score better on vocabulary tests administered on the material taught than the control group. Furthermore, whether learners of L3 German can make predictions about unknown L3 German language items based on their comparative knowledge of English and German and whether language learners will score better at vocabulary tests administered on novel items were investigated.

The original research questions (a) and (b) contain reference to the utilisation of L2 English grammatical knowledge as a point of reference when learning L3 German grammatical structures, however, contrary to the original expectations, this task proved unsuccessful at revealing the processes operating at the grammatical level and, thus, the analysis below will focus on the lexical level only.

As specified in the description of the research instruments (4.3.2.4), the texts for the think-aloud tasks (Tables 24 and 26 below) were selected from the website of the Eurocom project. The texts contained intentionally selected cognates and borrowed expressions in order to enable the learners to use their knowledge on the comparison of the two languages if they so wished. Special attention was paid that the texts should be comprehensible even for the less advanced subjects, but at the same time they should contain items that are novel even for the more advanced subjects.

In Tápainé Balla (2008a and 2008b) I have concluded that, when trying to understand a text containing unknown words, learners rely on different kinds of previously acquired knowledge, such as knowledge of the world (that is, what the subjects know about the topic of the text), L2 knowledge (English in the present research), L1 Hungarian knowledge (primarily the knowledge and recognition of lexical elements) and context. When selecting the texts for the purposes of the present study, ideally, it should have been controlled how much advance information the subjects previously have on the selected topic in order to rule out the role of the knowledge of the world, but on the other hand, the process of controlling itself may have familiarised subjects with the topics, thus distorting the results, and this way previous knowledge was not controlled for.

During the think-aloud tasks the German versions available on the website were used as the basis for translating into Hungarian. The subjects, working in pairs, were required to translate the texts from German into Hungarian, as best as they could, orally, verbalizing their thoughts during the translation process. This way it could be observed what strategies learners had towards unknown, novel expressions and whether and to what extent they relied on their L1 and L2.

From each group the same two learner pairs took part in the think-aloud task as in the interviews analysed in the previous section, a pair of more successful L3 German learners (pair-S) and a pair of weaker ones (pair-W) from each group. Two think-aloud tests were administered at two different times of the data collection period in each group, one at around the middle of April and the other one at the end of May. The same two texts were used with all the selected pairs: the text on Lance Armstrong (Table 24) in April and the text on Canada (Table 26) in May. The think-aloud tasks were administered in pairs and were digitally recorded.

The task the pairs were given was to provide an oral translation of the German text into Hungarian. The voice recordings of the translation sessions were then coded in a way that all the content words in the texts for translation were listed, and it was marked in the case of each word or expression and in the case of each subject pair (1) whether they attempted to provide a Hungarian translation, (2) whether they had been successful at translating that particular word or expression, that is, whether they managed to arrive at a correct Hungarian equivalent, and (3) whether they had connected the particular word or expression to any L2 English items. The different solutions that were verbalised during the thinking process were noted and, if relevant, are included in the analysis below.

5.4.1 Text 1: Lance Armstrong

As mentioned above, the text selected for the first round of think-aloud sessions was the German version of a short introduction to Lance Armstrong, the cyclist, who won the Tour the France seven times and who is also famous for having recovered from cancer and continuing his sports career afterwards. As it turned out, none of the subjects were closely familiar with Armstrong's story, although at least one member of each pair recalled having heard something about him. Therefore it can be claimed that the data is not influenced by some subjects having an extraordinary amount of background information on the topic and, thus, it is beyond the knowledge in L3 German, primarily the knowledge of the L1 and the L2 and the

context that the subjects relied on while translating. While doing the translation task, there were no time constraints, the subjects were given as much time as they needed and took from between 9 and 22 minutes. No help was provided by the researcher, the reactions were limited to agreement when the subjects seemed to have settled on the correct translation, and orienting questions if the subjects seemed to be on the wrong track and unable to continue the task as a result. There were only a few instances when the meaning of a word or expression was provided by the researcher: in these cases the subjects would have been unable to carry on with the translation and were documented as failures to provide the proper Hungarian equivalent by the subjects. Dates and geographical names were excluded from the analysis.

Lance Armstrong	**Lance Armstrong**
Lance Armstrong (geboren am 18. September 1971 in Texas) ist ein amerikanischer Straßenrennen Radfahrer, der im Juli 2005 in den Ruhestand getreten ist.	Lance Armstrong (born September 18, 1971 in Texas) is an American professional road racing cyclist who retired in July 2005.
Er ist am meisten bekannt für seinen Rekord, die Tour de France sieben konsekutive Male zu gewinnen, von 1999 bis 2005, und dafür, sich vom Krebs erholt zu haben, bevor er seine erste Tour 1999 gewann.	He is most famous for winning the Tour de France a record seven consecutive times, from 1999 to 2005, and for having recovered from cancer before winning his first Tour in 1999.
Sein Erfolg resultierte darin, dass manche Menschen dieses Event die „Tour de Lance“ nennen.	His success resulted in some people calling the event the “Tour de Lance”.
Er begann seine Karriere als Triathlet, realisierte aber schnell dass „es nur um das Fahrrad geht“.	He began his career as a triathlete but quickly realized that “it's all about the bike”.
Ein Jahr nachdem er 1992 professionell wurde, hatte er seinen ersten großen Sieg bei den Straßen-Weltmeisterschaften in Oslo, Norwegen.	One year after turning professional in 1992, he had his first major victory at the World Road Championships in Oslo, Norway.
2002 ernannte das Sports Illustrated Magazine Armstrong zu ihrem Sportler des Jahres. Er erhielt außerdem zahlreiche andere Athletik-Auszeichnungen.	In 2002, Sports Illustrated magazine named Armstrong their Sportsman of the Year. He has also received numerous other athletic awards.

Table 24. Text selected for the first round of think-aloud sessions: Lance Armstrong. The subjects were provided with the German version.

Altogether, the translation of forty-three words and expressions were examined. The text selected for the first round of the think-aloud tasks is presented in Table 24, with the English translation on the right side of the table. The words and expressions under investigation are underlined both in the German and in the English versions. The majority of the analysed words and expressions are cognates, while there are some non-cognates and an accidental homograph pair (*Male* 'times' – *male*), which models the example of false friends. One word (*gewinnen/gewann* – '*win/won'*), was counted twice, because it appeared in two different forms.

As mentioned in the introduction to the present section, the words of the text were coded in a way that each word was labelled based on three criteria, the first two of them being whether the subjects attempted to provide a Hungarian translation and whether they had been successful at translating that particular word or expression correctly into Hungarian.

In the case of words and expressions – both cognates and non-cognates – for which subjects provided a correct translation, the data does not always reveal how the subjects arrived at the appropriate solution. These cognates may have been familiar to the subjects from their German studies, they may have proved to be salient enough to be recognised or, simply, the context may have been the key. For example, *gewinnen/gewann* 'win/won' was not taught to the ninth-grade subjects at the time of the administration of the test, nonetheless all four pairs of Group T1 and Group C1 managed to find the Hungarian equivalent and only Pair-W in Group T1 commented that the German form was similar to the English one.

Of the cognate words the following ones were all translated correctly without any comment in all groups: *geboren* 'born', *amerikanischer* 'American', *Rekord* 'record', *sieben* 'seven', *begann* 'began', *Karriere* 'career', *Jahr* 'year', *Magazine* 'magazine', *wurde* 'turned/became/would be'). Furthermore, there were four non-cognate words that were properly translated by all pairs: *schnell* 'fast/quickly', *nachdem* 'after that', *erste/n/* 'first', *große/n/* 'big/great'.

In sum, as we have seen, thirteen words (nine cognates and four non-cognates) out of the examined forty-three presented no challenge for any of the pairs and at the same time, because of the lack of comments by any of the pairs, they do not contribute to the understanding of the thinking process and were therefore disregarded in the course of the analysis. The remaining thirty-one words or expressions seemed obvious for some of the pairs but were challenging for others. Whenever a pair of subjects did not know what the meaning of a word or expression was, they joined their efforts in an attempt to figure out the meaning. As suggested by Tápainé Balla (2008a and 2008b), the most frequently used

techniques were trying to discover elements of L1 Hungarian, and, more frequently, L2 English words as well as using the text's inner logic to make out the meaning. A further technique observed in the present study (but not in the 2008 one, since in that experiment the subjects were not familiar with the L3 at the time of the data collection) was that the subjects used their L3 German knowledge to determine the meaning of certain words and expressions. As mentioned above, the 'knowledge of the world' factor was not significant in the case of the present text.

Bearing the general research question posed in Chapter 3 in mind, how Hungarian language learners' knowledge of L2 English can serve as a point of reference when learning L3 German, I examined the attempted translations provided by the subject pairs and as the third step of the coding, I noted whether or not there was any evidence that the subjects had used L2 English in any way during the translation task. Whether or not the attempts resulted in a correct translation, the thinking process is revealing as regards the question whether the learning process could be made more effective for learners participating in the comparative instruction. Thus, in the analysis all the words are included that were to any extent disputed by any of the pairs. In the case of each such item it is marked whether the solution is correct and whether the subjects had used English while thinking aloud. The complete list of the analysed words can be found in Appendix 1.5.1. As can be seen in Table 25 below, the total number of the analysed items in the text on Armstrong is 31. The first row of Table 25 contains information in percentages on how many of the translation attempts were successful by each pair. If we compare the pairs in each group, we can find that the more successful pairs (Pair S-s) achieved higher percentages in three cases (T1 – Pair-S, T2 – Pair-S and C1 – Pair-S), while in the case of the pairs Group C2 there was a reverse order, although with a minor difference between the two groups. The second row of Table 25 shows the proportion of the successful attempts compared to the total number of items in percentages. Here, the same pattern is repeated: the same three Pair – S-s achieved higher results than their weaker group-mates, while there was a reverse order in Group C2, again with only a minor difference between the two groups.

As regards the proportion of attempts involving English per successful attempts, we can see the tendency that the weaker pairs in both treatment groups use English more frequently than their successful counterparts within the same subject groups. In fact, the weaker Group T1 pair outperformed all the other groups with respect to their reliance on their L2 English. It is remarkable that the C1 non-instructed pairs

Armstrong (31 items)	T1 – Pair-S	T1 – Pair-W	T2 – Pair-S	T2 – Pair-W	C1 – Pair-S	C1 – Pair-W	C2 – Pair-S	C2 – Pair-W
Proportion of attempted translations	92.6	59.3	96.8	83.3	87.5	78.6	80.0	86.2
Proportion of successful attempts per total number of items	80.6	51.6	96.8	80.6	67.7	35.5	77.4	80.6
Proportion of attempts involving English per successful attempts	12.0	56.3	6.7	16.0	4.8	0.0	16.7	8.0
Proportion of attempts involving English per total number of items	9.7	29.0	6.5	12.9	3.2	0.0	12.9	6.5

Table 25. Proportions of translated items and attempts involving English across the 8 pairs of subjects in the text on Armstrong

hardly used any English, while the proportions of using English were similar in the case of the rest of the groups, Group T1, the successful pair of T2 and both C2 pairs likewise.
The last row of Table 25 reveals the proportion of attempts involving English compared to the total number of items. This row is particularly important, because these figures reveal about how much English was ultimately used while translating a German text into Hungarian. As we can see, T1 – Pair-W, that is, the weaker pair of Group T1 produced by far the highest percentage of attempts involving English. Their result is more than twice as high as their more proficient counterparts', T2 – Pair-W's, and the more successful pair of the more proficient control group, C2 – Pair-S.

The mean scores will be presented and discussed together with the scores achieved by the subjects in the second round of the think-aloud tasks (section 5.4.2) in section 5.4.3.

5.4.2 Text 2: Canada

The text selected for the second round of think-aloud sessions was on the attractions of Canada from a potential tourist's point of view. Just as in the case of the first text, the subjects are claimed to have primarily applied their L1, L2 and L3 knowledge and relied on the context. The data was collected in the same way, under the same circumstances and with the participation of the same pairs of subjects as in the first round at the end of the data collection period, at the end of May. The recordings of the think-aloud tasks are 8.44 to 16.12 minutes long.

The text is presented in Table 26, with the examined 61 words and expressions underlined and the English translation of the text on the right. The majority of the expressions are cognates and borrowings, while there are some non-cognates as well. Just as in the case of the first text, expressions that provoked no discussion between the members of the pairs and were translated properly are discarded from the analysis. Of the 61 words and expressions the following 28 seemed to fall under this category: *interessante* 'interesting', *Land* 'country', *Touristen* 'tourists', *Sommer* 'summer', *können Sie* 'can you', *unter* 'under', *warmen* 'warm', *Winter* 'winters', *garantieren* 'guarantee', *Skilaufen* 'skiing', *Bobfahrenspaß* 'bobsled fun', *Stadt* 'city', *Winterolympiade* 'Winter Olympics', *wer* 'who', *am besten* 'best', *wir* 'we', *Hotels* 'hotels', *Campingplätze* 'campgrounds', *Natur* 'nature', *Museen* 'museums', *Kultur* 'culture', *Stadt-Sightseeing* 'city sightseeing', *Tour* 'tour', *Preise* 'costs', *passen* 'fit', *für mehr Information* 'for more information', *besuchen* 'visit', *Webseite* 'webpage'. In the case of these words it is not possible to tell whether the subjects had been familiar with them or

Kanada: Von See zu scheinender (glänzender) See	**Canada: From Sea to Shining Sea**
Naturparks, interessante Metropolen, weite Felder, tiefe Ozeane und unzählbare Chancen für Abenteuer....	Natural parks, interesting metropolises, wide fields, deep oceans and innumerable chances for adventure....
Kanada, das zweitgrößte Land nach Russland, hat viele Möglichkeiten für Touristen.	Canada, the second largest country after Russia, has many possibilities for tourists.
Im Sommer können Sie unter der warmen Sonne mit einem Rucksack spazieren gehen, oder Vancouver, Toronto, oder Old Quebec entdecken.	In summer, you can walk under the warm sun with a rucksack or discover Vancouver, Toronto, or Old Quebec.
Kalte Winter garantieren wunderbares Skilaufen in den Rocky-Bergen, ein Eisfest in Montreal oder Bobfahrenspaß in Calgary, die Stadt der Winterolympiade 1988.	Cold winters guarantee wonderful skiing in the Rocky Mountains, an Ice Festival in Montreal or bobsled fun in Calgary, the city of the Winter Olympics in 1988.
Wer organisiert kanadische Urlaube am besten? Canada Tours!	Who organises Canadian vacations best? Canada Tours!
Wir finden Flüge und Hotels (oder Campingplätze) und organisieren flexible Tourpakete für Sie.	We find flights and hotels (or campgrounds), and organise flexible tour packages for you.
Ob Sie Natur, Museen und Kultur oder Stadt-Sightseeing mögen - wir haben die Tour für Sie. Alles für niedrige Preise, die Ihrem Budget passen!	Whether you like nature, museums and culture, or city sightseeing – we have the tour for you. All for low costs that fit your budget!
Für mehr Information, oder um eine Tour zu buchen, besuchen Sie unsere Webseite! www.greatcanadatours.ca	For more information, or to book a tour, visit our webpage! www.greatcanadatours.ca

Table 26. Text selected for the second round of think-aloud sessions: Canada

whether they applied some kind of a strategy when arriving at the correct translation, therefore these expressions do not lend themselves to any further analysis. A further word that needed to be discarded was *niedrige* 'low', because no unambiguous decision could be made about the correctness of the translation due to its collocation – and thus contextual translation – with *Preise* 'prices'.

Canada (28 items)	T1 – Pair S	T1 – Pair W	T2 – Pair S	T2 – Pair W	C1 – Pair S	C1 – Pair W	C2 – Pair S	C2 – Pair W
Proportion of attempted translations	85.7	77.8	100.0	92.6	81.5	69.2	100.0	85.2
Proportion of successful attempts per total number of items	85.7	75.0	100.0	89.3	78.6	64.3	85.7	82.1
Proportion of attempts involving English per successful attempts	20.8	28.6	10.7	48.0	4.5	27.8	12.5	21.7
Proportion of attempts involving English per total number of items	17.9	21.4	10.7	42.9	3.6	17.9	10.7	17.9

Table 27. Proportions of translated items and attempts involving English across the 8 pairs of subjects in the text on Canada

The rest of the expressions, 28 words altogether were coded the same way as in the case of the data obtained during the first round of the data collection sessions. Once again, I examined how many attempts were made and how many of them proved successful, and I noted whether or not there was any evidence that the subjects' using their L2 English during the translation task. The complete list of the analysed words can be found in Appendix 1.5.2. As can be seen in Table 27 above, the total number of the analysed items in the text on Canada is 28. The first row of Table 27 contains information in percentages on how many of the translation attempts were successful by each pair. As we can see, the two successful pairs (T2 – Pair S and C2 – Pair S) attempted a translation for all the items and, as the second row of the table reveals, T2 – Pair S provided 100% correct answers. In the case of this text the more successful pairs outperformed the weaker pairs in all groups. As we can see there is only a minor difference between the values in the first and the second rows of the table, which means that with a few exceptions the attempted answers were correct. In the third row we can see the proportion of attempts involving English compared to the total number of the successful attempts. As we can see, this time it was the weaker pair of Group T2 who produced the highest number of references to English, followed by the weaker pairs of Group T1 and Group C1. Viewing the proportion of attempts involving English per total number of items in the fourth row, we can see that this time it was T2 – Pair-W, that is, the weaker pair of Group T2 who produced the highest percentage of attempts involving English, followed by the weaker pair in Group T1.

5.4.3 Discussion

In 5.4.1 and 5.4.2 above I have presented and discussed the results achieved by the individual pairs in the two different texts at two distinct points of the data collection period. Although the treatment groups had attended all their treatment sessions by the time of the second round of the think-aloud sessions, and although the percentages are higher in the second analysis in general than in the case of the first one, it cannot be unambiguously maintained that the higher values can be attributed to either the treatment or the increase in the length of time spent with learning two languages simultaneously in all groups (treatment and non-treatment, likewise). Therefore, the results should be analysed jointly in order to have a more complex picture of the results.

With the aim of joining the results and enabling an analysis on a group level, I calculated the means achieved by both pairs per group on both texts. This way the results

presented in Table 28 reflect the total mean of four think-aloud translation tasks (two texts and two pairs per group).

In the light of research questions (a) and (b), on the role of L2 English lexical items when learning L3 German vocabulary and whether systematic instruction contributes to better vocabulary test results on familiar and novel items, Table 28 presents the means for each group.

TOTAL (2 texts per two pairs per group)	**T1**	**T2**	**C1**	**C2**
Proportion of attempted translations	78.8	93.2	79.2	87.8
Proportion of successful attempts per total number of items	73.2	91.7	61.5	81.5
Proportion of attempts involving English per successful attempts	29.4	20.3	9.3	14.7
Proportion of attempts involving English per total number of items	19.5	18.2	6.2	12.0

Table 28. Mean scores for the two think-aloud tasks as performed by the members of each group

The results presented in the first row of Table 28 indicate that in the case of the less proficient groups, Group T1 and Group C1 had almost an equal proportion of attempted translations, however, as the second row indicates, the correctness of the answers was 11.7% higher in Group T1. Of the successful attempts English was used three times more frequently than in Group C1, and the proportion of attempts involving English per total number of items show a similar tendency, the result of Group T1 is three times as high as that of Group C1. This means that both Group T1 and Group C1 were similarly active as regards trying to translate the individual items, but Group T1 was more successful. And, most importantly for this dissertation, their success is attributable to their attempts involving English, since – as the last two rows reveal – T1 group members were much more inclined to use their L2.

As far as the more proficient groups are concerned, here Group T2 members had somewhat more attempted translations, of which the proportion of the successful attempts was higher by approximately 10%. As regards the use of L2 English knowledge, Group T2 showed more initiative than Group C2 both in relation to the proportion of attempts involving English per successful attempts and the proportion of attempts involving English

per total number of items. Thus, similar to Group T1, the higher proficiency group shows a clear effect for instruction using the comparative method instruction.

A comparison of the results of the two treatment groups yields the following conclusions: owing to their higher level of proficiency in German, Group T2 had a higher number of attempted translations than Group T1, with the proportion of the successful attempts showing a similar pattern. As regards the proportion of the attempts related to the successful attempts, we can see that Group T1 used English in almost one third of the attempts, while Group T2 used English in approximately one quarter of the attempts. English contributed to the successful translations in an almost equal proportion, however, in the case of Group T1 this means a higher number of items overall.

These results indicate that the comparative instruction contributed to the higher results achieved by the treatment group members at both levels of proficiency. It seems also that the role of the instruction is even more significant in the case of the less proficient groups, and, as Tables 25 and 27 suggest, in the case of the weaker learners. A possible explanation for this is that less proficient learners, with less time spent learning two languages simultaneously, have less experience than their more proficient counterparts with a longer history of learning two foreign languages. The hiatus in the less proficient learners' experience can be bridged by providing information on the similarities of the two languages. As it has emerged in 5.4.2 and 5.4.3, more experienced L3 learners find out a great deal about the similarities, especially on the lexical level, on their own, and the think-aloud data presented above supports the same idea: the less experienced L3 learners are, the more their learning processes can be accelerated by the comparative instruction. The reason for higher percentages in the use of L2 English in the case of the weaker learner pairs can be that because of the lower levels of proficiency they can potentially make less use of their L3 knowledge and, hence, the context of the text, and, thus, they rely more on other sources, such as the L2.

The above results reinforce the findings of earlier studies in which researchers examined the role of cross-linguistic influence as a means of facilitation. Gibson and Hufeisen (2003), Singleton and Little (2005), Tápainé Balla (2008a and 2008b) and Rast (2010) all found that the understanding of an unknown L3 is facilitated by the knowledge of a previously known typologically related language and suggested that instruction might increase the degree of facilitation. The same was assumed by Granger (1993), Lengeling (1995), Garrison (1990) and Dolinskaya (1993) and Caplan-Carbin (2006) who employed the method of teaching cognates in order to accelerate the speed of vocabulary learning. The

results presented in the present section clearly indicate that the proponents of the comparative instruction are on the right track: the learners who have undergone the comparative treatment sessions outperformed their control group counterparts.

5.4.4 Notes on some individual items in the texts

While coding the data, I did not only note the occurrence of English, but in some interesting cases I recorded the route that led to translating the item correctly. What is remarkable is that the learners did not only use English in the case of cognates, but for non-cognates as well. This is an unexpected, nevertheless logical finding that reveals that if the L3 learners do not know an item, they cannot be sure whether it has a cognate in English or not. Furthermore, in some cases the subjects used English while trying to translate a particular item, however, although they made a mistake in identifying a potential English counterpart, they still arrived at correct solutions.

There is no way to systematically analyse the individual examples that I present below, nevertheless, they are valuable contributions to gaining an insight into the thinking processes through verbalisation. In the examples below, all the English-related versions are from treatment group subjects.

The word *Radfahrer* 'cyclist' was either familiar to the pairs or they concluded it from the context, however, T1 – Pair-W provided an interesting association path. Mistaking the German *Rad* 'wheel' for English *road* and trying to combine it with *Fahrer* 'traveller' finally led them to the correct meaning.

Another example in which a mistaken conclusion led a pair to the correct solution is *in den Ruhestand getreten ist* 'retired/went into retirement' in the case of which T1 – Pair-S associated the part *treten* 'step' with the English word 'retired'. Some of the other pairs constructed the meaning from the German elements *Ruhe* 'rest' and *Stand* 'state', also arriving at the correct conclusion. The less proficient control group pairs did not manage to come up with correct solutions, C1 – Pair-S suggesting that *Ruhestand* might be the name of a city and C1 – Pair-S providing no attempt.

Similarly interesting is the case of *Krebs* 'cancer'. Both C2 pairs and T2 – Pair-S deduced from the context that it must be some kind of a disease, T2 – Pair-W was familiar with the expression. Neither C1 pair attempted a translation, while both T1 pairs used English as the basis for constructing the meaning. T1 – Pair-W started out from the English word *creep* which led them to no solution, while T1 – Pair-S evoked the English cognate

crab, which they then related to Hungarian to get the meaning of the word since in Hungarian the same word *rák* means both 'cancer' and 'crab'.

The meaning of the word *Sieg* 'victory' was deduced from the context by all pairs but T1 – Pair-S, who came up with an English word similar in spelling, and most probably a partial cognate, *siege*, which they translated literally into Hungarian, but concluded that 'it must have a different meaning here'.

The word *erhielt* 'received' resulted in the highest number of unsuccessful attempts, two of which were based on English: T1 – Pair-W evoked the English word *inherit* and C2 – Pair-W the word *heal*. Two other attempts, *helfen* 'help' by T1 – Pair-W and *erholen* (correctly: *sich erholen* meaning 'recover') were based on German; the latter version was mistakenly identified from the second paragraph of the text, probably based on an orthographic similarity by C2 – Pair-S. C1 – Pair W provided no attempt, while the rest of the pairs used the context for meaning deduction.

The only word that was perceived by some subjects to be a false cognate was *Male* 'times'. T1 – Pair-S and, interestingly both C2 pairs identified the German word with the English homograph *male* but all discarded the wrong solution and deduced the correct one from the context. Neither C1 pair provided an attempt, while the rest of the pairs translated the expressions correctly.

Having answered research questions (a) and (b) on the role of L2 English lexical items when learning L3 German vocabulary and whether systematic instruction contributes to better vocabulary test results on familiar and novel items positively, in the last section of Chapter 5, more objective tests results will be analysed based on vocabulary knowledge scale tests written by all the subjects.

5.5 Vocabulary Knowledge Scale test results

The data to be presented in the present section – as explained in Chapter 4 on the research design – is based on results obtained from the vocabulary knowledge scale tests administered four times during the data collection period in all four groups. Each test contained 30 items and was designed in a way that it contained known (that is, taught) and novel items as well as words that have an English cognate counterpart and ones that do not. The words with non-cognate counterparts primarily served the purpose of distraction: the subjects were not supposed to recognise that the aim of the test was to find out whether they use English or not. In the case of each item the subjects were asked to make the decision, whether (1) they are not familiar with the item and think that they had never seen it before, (2) they are not familiar with the item but they think they can guess the meaning of it, (3) they are familiar with the item, know that they had seen it before but cannot recall its meaning, and (4) they are familiar with the item and know what it means. In cases (2) and (4), the subjects were asked to provide their guesses and solutions. The reason why cognates are the basis for the analysis is that it is their recognition that reveals whether English was used while trying to give the Hungarian meaning of the German items.

The four tests were proportionately distributed across the data collection period. Before the first testing session, the test was piloted with the participation of Group T1 subjects, but as no corrections needed to me made, the results were included in the analysis. All the tests were administered by me, and the subjects were free to ask any questions if they had any. It was made clear to the subjects that the test is non-conventional in the sense that – as opposed to the vocabulary tests they are used to writing – they may find words and expressions that they do not know. Also, it was emphasised that the results they achieve have no influence on their school grades. My general impression was that the learners took pleasure in this kind of test and were highly co-operative, just as they were throughout the whole semester of the data collection.

The VKS tests were originally designed both to assess the knowledge of subjects on items taught to them and on novel items. In spite of the careful preparation of the tests, however, it turned out that the data is only revealing about the novel items, due to the following reasons:

The selection of the test items was in the case of all tests preceded by thoughtful planning in the course of which judgments were made about all the selected items by the researcher in terms of whether the learners are expected to be familiar with an expression or

whether it counts as a novel item. The judgement was based on lesson observations and a thorough monitoring of the learning material studied by each group. However, the results reveal that the learners have frequently diverted from the expected patterns, for example, because items that were expected to be unknown may have been covered at some point during the instruction of that particular group, perhaps even before the lesson observations started. Furthermore, due to reasons related to the organisation of the school's everyday activities, there were some unexpected occurrences that made the rearrangement of particular lessons necessary (for example, a class was missed because the learners had to attend a medical check-up, or the majority of the group was away because they participated in competitions). Whereas circumstances like this constitute an integral and natural part of the academic year in a high school, they had a negative effect on the comparability of the results. As mentioned earlier, the school where the data collection was administered is a high-prestige one with high-achieving, motivated and hard-working learners. This circumstance carries further implications: even if a word or expression has not been explicitly 'taught' to them as part of the course material and as an item that is 'expected to be known' at tests, the majority of the learners still tended to remember it. Beyond that, many of the learners improve their own language skills by watching foreign language TV programmes, by downloading different kinds of foreign language materials (spoken or written) from the internet, or by reading in foreign languages. Many learners seem to be (or seem to have been at some point) attending private language lessons. All these factors contribute to the fact that it was not possible to control the familiar and the novel items in the test. This is especially true for the more proficient groups, since they, because of their greater experience, were exposed to these effects for a longer period of time.

Based on the above-mentioned facts, a change in the approach towards the tests was necessary, and the data was examined from the aspect of the novel items only. This approach allowed me to view the data in a way that I gain insight into the subjects' thinking process when they encounter expressions that they feel they had not encountered before. Accordingly, while analysing the data obtained from the VKS tests I concentrated on the items that the subjects themselves considered to be unfamiliar to them. I counted each item in the first two categories mentioned above in the case of the cognate words under examination, which resulted in the total number of unknown items in each group. Then, as a second step, I counted the items that the subjects considered to be 'unfamiliar and do not know the meaning' and the items considered 'unfamiliar but guessed the meaning'. The guesses were evaluated on correctness, and the successful guesses were added up to calculate the total

number of successful guesses per group. The proportion of the attempted guesses in relation to the total number of unknown items indicates how innovative the subjects were in terms of guessing. The proportion of the successful guesses compared to the total number of unknown items reveals how successful the learners were about trying to find out about the meaning of novel words. A comparison of the two proportions across the groups shows how the treatment influenced the treatment groups compared to their non-treatment counterparts as well as whether there is a difference between more experienced and proficient learners and less experienced and proficient ones. This information will provide us with answers to Research Question (b), namely, whether learners of L3 German can make predictions about unknown L3 German language items based on their comparative knowledge of English and German, and whether the systematic instruction enables the learners to score better at vocabulary tests administered on novel items and the relevant part of Research Question (e) on whether there is a difference between the less proficient and more proficient groups.

The analysis is based on 18, 16, 18 and 24 items in the case Group T1 and Group C1 and 21, 12, 13 and 24 items in Tests 1, 2, 3 and 4 respectively in the case of Group T2 and Group C2 (see Appendix 1.6). These items were selected for the purposes of the analysis, because they were all cognates and they were considered to be novel for at least some subjects. Although some items may coincide occasionally, the tests were designed taking the groups' proficiency levels into account. One exception is Test 4, in the case of which both groups wrote the same test.

As regards the number of the items that served as the basis for the analysis, Table 29 reveals how many items per group fell under the categories 'items not known by the subjects', 'items guessed correctly' and 'items guessed incorrectly'. As there are different numbers of subjects in each group, the total number of the items was divided by the number of the subjects in each of the groups to arrive at comparable results. In both treatment groups (N=15 and N=10) and Group C1 (N=14) all subjects wrote all the tests, while in Group C2 Test 1 and 4 were written by all 14 subjects, however, Test 2 was written by 13, Test 3 by 12 subjects only – this circumstance was taken into account and the calculations were made accordingly. Table 29 shows the number of the examined items out of the 76 cognate items in Group T1 and Group C1 and the 70 cognate items in Group T2 and Group C2 per person.

Analysed items per person in each group	Total number of unknown items per person	Items that provoked no guesses per person	Total number of guesses per person	Total number of correct guesses per person	Total number of incorrect guesses per person
T1	36.27	14.93	21.33	15.07	6.27
C1	44.50	27.57	16.93	11.79	5.14
T2	23.50	15.50	8.00	5.70	2.30
C2	28.89	17.17	11.74	6.45	5.07

Table 29. Figures representing the number of cognate items analysed in each group per person

The data obtained from the VKS tests is presented in Tables 30 and 31. Table 30 shows the results of the less experienced and less proficient groups, Group T1 and Group C1 across the four tests. The results of all four tests are presented as well as the total proportion of the four tests. It needs to be noted that the VKS tests were not intended as progress tests, therefore, the results do not make an analysis with respect to the length of time spent in instruction possible. Each test needs to be viewed as one unit and the results can only be compared in a way that Group T1's are contrasted with those of Group C1 in a cross-sectional way.

T1 - C1	T1- Proportion of guesses compared to the total number of unknown items	C1- Proportion of guesses compared to the total number of unknown items	p	T1 - Proportion of successful guesses compared to the total number of unknown items	C1 - Proportion of successful guesses compared to the total number of unknown items	p
Test 1	67.20	37.38		44.80	26.70	
Test 2	79.81	57.63		63.46	49.15	
Test 3	49.62	54.67		34.59	34.67	
Test 4	47.80	21.15		31.87	13.94	
TOTAL	**58.82**	**38.04**	**0.078**	**41.54**	**26.48**	**0.133**

Table 30. Proportion of attempted translations in Group T1 and Group C1 in the VKS tests. The results are statistically not significant at $p \leq .05$.

As Table 30 reveals, Group T1 is more ready to attempt to guess the meaning of an unknown item than their control group counterparts are: this is reflected in three of the tests as well as in the total mean result. At the same time, if we compare the successful guesses to the total number of unknown items, we can also see that Group T1 subjects' guesses generally result in higher proportions of correct answers than those of the control group

subjects. Although statistical testing does not reinforce significance at the $p \leq .05$ alpha decision level either in the case of the proportion of the attempted guesses or in the case of the results reflecting the successful guesses, we can observe a tendency that in the case of the younger groups the instruction had the effect that the treatment group members were more inclined to make guesses than control group subjects and their guesses proved more successful than their control group counterparts'.

T2 – C2	**T2- Proportion of guesses compared to the total number of unknown items**	**C2- Proportion of guesses compared to the total number of unknown items**	**p**	**T2 - Proportion of successful guesses compared to the total number of unknown items**	**C2 - Proportion of successful guesses compared to the total number of unknown items**	**p**
Test 1	22.11	38.97		16.84	17.65	
Test 2	50.00	62.37		29.17	27.96	
Test 3	35.38	27.50		27.69	25.00	
Test 4	44.44	30.67		33.33	20.00	
TOTAL	**34.04**	**40.63**	**0.427**	**24.26**	**22.14**	**0.184**

Tables 31. Proportion of attempted translations in Group T2 and Group C2 in the VKS tests. The results are statistically not significant at $p \leq .05$.

As far as the more proficient and more experienced groups are concerned, as Table 31 reveals, contrary to their less proficient and less experienced counterparts in Group T1, Group T2 showed less initiative as regards guessing than the subjects in Group C2. As the second two columns of the table show, however, even with their lower proportion of guessing it resulted in a higher proportion of successful guesses in the case of three tests as well as overall. Again, these results are not significant at the $p \leq .05$ alpha decision level. The difference between the results of Groups T1 and T2 was tested for statistical significance, too, and it was found that the difference was statistically significant at the $p \leq .05$ level in the case of the proportion of the total number of guesses to the total number of items ($p=0.027$*), while the difference between the two treatment groups was not significant as regards the proportion of successful guesses to the total number of unknown items ($p=0.184$).

Although the administered tests with one exception were different for the two proficiency level groups, we can still draw some more careful conclusions as regards the differences of the more and the less experienced groups. A comparative look at the totals in Tables 30 and 31 reveals that on the whole Group T1 both had the highest proportion of guesses and the highest proportion of successful guesses. At the same time, if we compare

the proportion of the successful guesses to the proportion of the total guesses, we can find that Group T2 achieved the highest proportion: this means that 71% of their guesses were accurate, while only 54% of those of Group C2 were. It is interesting to note that the same proportion is very similar to that of Group T2 in the two less experienced groups (see Table 32), but at much lower rates of both guessing and being successful at guessing in the less experienced control group.

Groups	**Proportion of the successful guesses to the proportion of the total guesses**
T1	70.62
C1	69.62
T2	71.25
C2	54.49

Table 32. Proportion of the successful guesses to the proportion of the total guesses

All in all, the data obtained from the VKS tests indicates that it is Group T1 who endeavours to make guesses at novel items in the largest proportion of the cases with slightly more success than the subjects in Group C1. Both younger treatment groups are almost as successful at guessing as regards the proportion of the attempts compared to the successful guesses as the subjects in Group T2, who were the least ready to attempt guesses, nevertheless, whenever they did, they achieved the highest level of accuracy. As I have pointed out above, however, these results should be taken with caution, since there are many factors influencing the results analysed here. First of all, the data is based on the subjects' own judgement on whether they are familiar with certain items or not, and, second, there is great variation regarding the salience of particular cognates. Therefore it may happen that less proficient subjects find such cognates unknown and guess their meanings correctly that are more salient while these cognates are not unknown to the more proficient subjects any longer.

In my view the findings presented in this section point in a similar direction as the findings presented in previous sections. It seems that the less experienced the L3 learners are, the more they experiment with trying to find the meaning of a novel item, and the more it seems that the comparative instruction has an influence. Even if we cannot maintain with a hundred per cent certainty that the results are attributable to the effect of English, since the

examined items are all words that have a cognate counterpart in English, it can be assumed that L2 English played a role in the subjects' guessing. An examination of the incorrect guesses also supports this assumption: some of the attempted incorrect answers can be traced back to incorrect associations with English, e.g. *sauer* 'sour' was mistaken for *zápor* 'shower', *Sack* 'sack' for *zokni* 'socks', *stinken* 'stink' for *csíp* 'sting', *Wurm* 'worm' for *meleg* 'warm'.

The lower guessing rate of Group T2 subjects can be explained, just as in the case of the findings of the questionnaires in 5.2 on the more experienced treatment group subjects' own perceptions of the role of English, and the interviews and the think-aloud data, by the fact that by the time learners had been learning two foreign languages simultaneously are already in the possession of comparative knowledge as far as the lexical level is concerned, while this strategy is a new strategy for less experienced learners. As the differences between the two less experienced groups indicate, the learners need to be instructed in the similarities and the differences. The fact that the proportion of the total guesses is the highest in Group T1 is a reflection of the findings in the questionnaire data, namely, that in T1 subjects' own perceptions the facilitating effect of English has increased over the data collection period, this may explain why the subjects felt more confident to guess. Although the accuracy of their guesses is similar in proportion to their non-treatment counterparts' (because of the much higher number of elements involved), it did result in more successfully guessed items overall: 15.07 per person versus 11.79 (cf. Table 29).

The case of the more experienced groups is reverse in the sense that Group T2 guessed the least, however, their accuracy was the highest, and certainly much higher than that of Group C2.

In an attempt to answer Research Question (b) and the relevant part of (e), I can conclude that the above results indicate that the comparative instruction had a positive influence on the number of guesses attempted in the less experienced group compared to the control group as shown in Tables 30 and 31, while the more experienced treatment group has higher percentages as regards the accuracy of their guesses, as shown in Table 32.

6. General Discussion

In the five different sections of Chapter 5 I have presented and analysed data in order to shed light on the L3 learning processes of Hungarian L1 learners simultaneously learning L2 English and L3 German. The general research question proposed, namely, how Hungarian language learners' knowledge of L2 English can serve as a point of reference when learning L3 German, and, more specifically, whether the learning process can be enhanced when learners are instructed in such a way that their attention is called to the differences and similarities between the two languages being learnt was approached via five sub-questions, and the data was presented section by section on the basis of the five different data collection instruments. The collected data constitutes two major types, those based on the subjects' own perceptions of their learning processes, such as the questionnaire data presented in 5.2 and the interviews in 5.3, and those based on objective tests performed by the subjects, such as the placement tests presented in 5.1, the think-aloud translation tasks in 5.4 and the vocabulary knowledge scale data in 5.5. In the individual sections I have addressed the proposed sub-questions one by one, and now, in order to answer the general research question, the results presented before will be revisited and discussed in a way to lead to the answering of the general research question.

Drawing on the findings of international TLA research it was taken for granted that L1 Hungarian learners of an L3 are different from L1 Hungarian learners of an L2 since they are in possession of previously acquired language knowledge as well as language learning strategies, as suggested by, for example, Cenoz and Genesee (1998:16), Groseva (1998), Hufeisen (1998 and 2004) and De Angelis (2007). The collected data provides ample evidence that this, indeed, has been the case. The questionnaire data reveals that all the subjects have observed the facilitating and hindering role of their Hungarian L1 as well as that of their English L2. In the interviews the subjects have reported that they had been conscious of some similarities between English and German from the very beginning of their German studies. Furthermore, the data collected from the control group members provides further support for this.

As was pointed out in the literature review, several factors play a role in third language learning, one of the most influential being the role of the perceived similarities between the languages (Kellerman 1977, Jarvis and Pavlenko 2007). While languages may be close or distant in a linguistic sense, from the point of view of the language learner, it is the perceived similarities that count. This idea is present in Meißner's (2004) multilingual

processing model, in which he proposes that learners rely on previously acquired knowledge of other languages which serve as bridge languages in the learning process of a language beyond the L2 if the languages are typologically close to each other, and, thus, the learner is able to create the interlingual connections with the help of transfer both on the lexical and the structural level (p. 43). Furthermore, Meißner also points to the role of instruction so that the learner is helped with this process. This suggestion of Meißner's is supported by studies on the role of instruction (2.5.2) in which, rather than leaving it to the learners to draw the conclusions on the similarities between the languages known by them, instruction is provided on cognate words (Granger 1993, Lengeling 1995, Garrison 1990, Dolinskaya 1993, Caplan-Carbin 2006 and Tápainé Balla 2007).

The idea that L1 Hungarian learners should be instructed on the differences and similarities of the languages that they learn as L2s and L3s is rooted in the recognition that the languages typically learnt by Hungarian language learners are by all means closer to each other than to Hungarian. Also, instruction should not stop at the level of lexical similarities but should be extended to structural similarities. This has clearly been stated by some of the more experienced learners in the interviews: comparative instruction made them recognise structural similarities that they had been unable to detect on their own (5.3).

Since it has been the general aim of this dissertation to address the issue of comparative instruction on the languages learnt simultaneously by L1 Hungarian subjects, let us now turn our attention to more evidence as regards the positive role of instruction. It needs to be emphasised that the comparative instruction was limited to 10-12 sessions per treatment group, and even so the differences between the treatment and the control groups are convincing (see 6.1 below). Both the data on the objective tests and the data on the subjects' own perceptions of their learning process, as presented in the previous sections, allow for the conclusion that the role of the instruction may have a larger influence if it is introduced in the early stages of the L3 studies (6.2). Furthermore, the results seem to reveal differences in the case of more successful L3 learners compared to weaker ones (6.3).

6.1 The effect of comparative instruction on L3 learning

The results of the placement tests (section 5.1) administered before and after the data collection period show that each group of learners made progress from February till May, with the increase being significant in the proficiency level of Groups T1, C1 and C2, though not in that of Group T2. Obviously, the progress made by the learners over this period cannot be solely attributed to the treatment sessions, nor was it expected that as a result of such short

instruction there will be an outstanding increase in the general proficiency levels of the treatment groups. However, differences as a result of the treatment sessions were expected with respect to specific items. As regards the data collected with the objective tests, I can conclude the following.

Based on the findings related to the think-aloud translation tasks, as presented in section 5.4 in Table 28, I can maintain that the comparative instruction contributed to higher proportions of successfully translated items as well as higher proportions of the usage of English as a means to find the correct Hungarian equivalent of German expressions by the treatment group members at both levels of proficiency. The same is confirmed by the findings related to the VKS tests. As Tables 30 and 31 in section 5.5 reveal, both treatment groups were more successful at guessing the meaning of cognate expressions than their non-treatment counterparts. Here we have no overt evidence that English was used, nevertheless, because the novel items to be guessed were German expressions with cognate counterparts in English, we can logically assume that English must have played a role.

The data on the subjects' perceptions of the effect of their L2 English on their L3 German is in concordance with the above: both treatment groups reported that over the data collection period the facilitating effect of English has increased (see Table 20 in 5.2). As an unexpected and slightly unwelcome effect of the comparative instruction, there has also been an increase in the perceived hindering effects (Table 22 in 5.2), in both groups. The interview data confirms the findings of the questionnaires as regards the facilitating factors: the interviewed members of both treatment groups repeatedly confirmed that they experienced an increase in the facilitating role of English while learning German as the result of the instruction (5.3.1). At the same time, contrary to the questionnaire data, they did not perceive the hindering role of English as a result of the treatment sessions to greater extents. Instead, members from both treatment groups reported that the comparative sessions helped them keep the two languages apart rather than 'mix them up'.

So far I have concluded that all the collected data points towards the fact that the comparative instruction had a positive influence on the subjects' L3 learning. In the following sections I will detail the differences between the two treatment groups (6.2) and the ones between more successful versus weaker learners (6.3).

6.2 Differences between Treatment groups T1 and T2

As I have pointed out several times in the different sections of Chapter 5, it seems that the more experienced, more proficient and older L3 learners of Group T2 were influenced by

the comparative instruction to different degrees and, occasionally, in different ways than their less experienced, less proficient and younger counterparts in Group T1. As it turns out from the results presented in Chapter 5, the effect of instruction on Group T1 seems to be more emphatic. The objective tests show the following.

In the think-aloud tasks (5.4, Table 28) we have seen that it was the younger treatment group, Group T1 who used English the most frequently when attempting to guess the meaning of words previously not known by them and, as a result of this, guessed the highest number of items correctly. Their more experienced Group T2 counterparts used English in the case of approximately one quarter of the attempts. The VKS data shows similar results, Tables 30 and 31 in Section 5.5 show that Group T1 had both the highest proportion of guesses and the highest proportion of successful guesses.

The differences that have been revealed in the questionnaire data and the interviews further support the above findings:

As presented in Tables 12 and 16, even initially, prior to the data collection period the younger and less advanced learners of Group T1 attributed a larger facilitating role both to their L1 Hungarian and L2 English than their older and more advanced counterparts in Group T2 to statistically significant extents. By the end of the treatment period, the initial perceptions have increased in the case of both groups. However, looking at the individual influencing factors, differences between the two treatment groups can be detected. Table 20 in section 5.2 on the gain scores by the end of the treatment period shows that in three of the aspects (in the case of the facilitating effect of L2 English on understanding and learning new words in German and on the German pronunciation) the values of Group T1 increased, while those of Group T2 remained unchanged. However, in the aspects of grammar and spelling, the values of Group T2 increased more. It was the values indicating the increase in the perception of the facilitating factor of L2 English grammar that rose highest in the case of both treatment groups by the end of the treatment sessions.

As already suggested in 5.2.3.1, these findings lead me to suppose that because of the more accumulated experience of learning two languages simultaneously in the case of Treatment group 2, the subjects were already familiar with certain patterns of similarity between the two languages at the vocabulary level. Both the questionnaire data and the interviews reveal that this experience did not expand to structural levels. Group T2 members confirmed in the interviews that they could not recognise structural similarities on their own, and they admitted that it was this aspect of the comparative sessions that they felt they benefited the most from. As regards the perceived increase in the hindering role of L2

English while learning L3 German (Table 22 in 5.2.3.2), the gain scores were lower for Group T1, which may further support the assumption that the role of instruction is more important at earlier stages of the L3 studies.

These findings are particularly important when considering that the results presented in this dissertation could be put to practical use. The most important implication is that once the importance of comparative instruction has been recognised in the case of teaching foreign languages as L3s, such instruction should be introduced at as early stages as possible.

6.3 Differences between weaker and more successful learners in the treatment groups

As explained in the above sections, the comparative lessons indeed had the hypothesized effect that they raised the linguistic awareness of the treatment subjects, and this raised awareness was reflected in higher scores in the vocabulary tests as well as in the data revealing the subjects' own perceptions. Also, as it has been pointed out, instruction had a greater effect on the members of the less experienced treatment group. A further finding of the research is that less successful language learners seem to be more affected by the instruction as more successful ones. While most of the results were analysed on group levels, the data collected during the think-aloud sessions enabled me to observe this pattern, since the think-aloud translation tasks were carried out by pairs of subjects set up from higher and lower achieving learners in each group. As Tables 25 and 27 in section 5.4 suggest, both instructed weaker pairs of the treatment groups, that is T1 – Pair-W and T2 – Pair-W produced higher percentages of attempts involving English in the course of both think-aloud tasks than the more successful pairs within the same group as well as either pair in any of the control groups. Furthermore, the highest percentage of attempts involving English was also produced by the same pairs. The explanation offered in 5.4.3 already is that because of the lower levels of proficiency in L3 German, it is not their L3 knowledge but other sources, such as the L2, where they turn for help if they meet an unknown element.

6.4 Answering the general research question

Based on the findings presented and discussed in the different sections of Chapter 5 as well as in the present chapter above, it can clearly be stated that – as suggested by international TLA research – Hungarian L3 learners can also successfully rely on previously learnt languages, such as their mother tongue and their L2. As the data collected during a four-month research period reveals, comparative instruction on the similarities and differences between the languages contributed to the learning processes of treatment group

learners in a way that their awareness was raised which enabled them to improve their guessing rates and efficiency when encountering novel items both in the context of a reading passage (section 5.4) as well as individual words presented to them without any context (section 5.5). Their increased awareness is reflected in the data when containing the evaluations on their own perceptions of the learning process (5.2) as well as in the conducted interviews (5.3). Accordingly, I can verify that the learning process of the L3 can be enhanced with the help of a comparative instruction.

7. Conclusion

In the previous chapters of the present dissertation I have attempted to summarise the most relevant findings of international TLA research and then present data collected with the participation of L1 Hungarian subjects learning L2 English and L3 German. As we have seen, a multitude of factors influence L3 learning, the most common one addressed by many researchers being the issue of cross-linguistic influence (Cenoz 2001, Hall and Ecke 2003, Jarvis and Pavlenko 2007 and De Angelis 2007). As suggested by Meißner (2004), instruction is needed so that language learners can fully exploit the potentials offered by the typological similarities between the languages. This is emphatically true for speakers of Hungarian, since this language is typologically distant from the languages that constitute typical foreign language choices at schools. Therefore, the results of the present study are highly meaningful within the Hungarian context, since L3 learning processes of Hungarian learners had hardly been explored by earlier research.

The most important contribution that this dissertation has to offer to international TLA research is that Hungarian learners do not, in fact, differ from L3 learners with other linguistic backgrounds. The interview data, and the results of the questionnaires, as well as the results of the objective tests assessing lexical knowledge, and particularly those collected from the control group members clearly show, that they, too, by the time they start learning an L3, posses knowledge, knowledge-structures, communication and language learning habits, strategic skills, and learning techniques on the basis of their experiences with L2 learning as suggested by Agafonova (1997) and Hufeisen (1998 and 2005). The main question that this dissertation has aimed at answering is whether these elements already existing in the learners' minds can be developed to achieve higher results.

The results achieved by the treatment groups provide evidence that they have become more conscious of the potential use of their L2 while learning L3 German. Even if some learners had problems with mixing the languages earlier in their studies, as a result of the comparative instruction, they managed to keep the languages apart and activate L2 English only at times when certain tasks required it. This proves that the learners' metalinguistic awareness has increased during the instruction and they have become able to use English as a resource for L3 learning, thus utilising cross-linguistic influence as a problem-solving procedure, or 'strategy' as suggested by Faerch and Kasper (1986), Odlin (1989) and Arabski (2006).

The aim of the research presented above has been to show how Hungarian learners' learning processes may be enhanced with the help of comparative instruction. Five subquestions have been asked and answered based on data collected from two treatment groups and two control groups throughout the second semester of the 2009/2010 academic year. These questions have been investigated from the perspective of the learners' own perceptions as well as in a more objective way, with translation tasks and vocabulary tests.

The data obtained from the questionnaires and the interviews has provided answers related to the subjects' own perceptions of their L3 learning processes. Both treatment groups reported perceived an increase in the facilitating effect of English as a result of the treatment sessions, however, at the same time they have also perceived an increase in the hindering effect, although the latter happened to lesser extents. The interview data provides an even more optimistic picture: treatment group members in both groups reported that they became more aware of the similarities and differences of the two languages. Furthermore, the analysis of the questionnaire data reveals that the subjects relied on their L2 English rather than L1 Hungarian in their own perception. This finding supports Groseva's (1998) claim that it is the L2, which is consciously learnt and analysed, rather than the L1, that serves as the basis for further comparisons when learning an additional language.

The questionnaire data also revealed differences between the younger, less experienced treatment group members and the older, more experienced ones. The less experienced L3 learners in Group T1 perceived higher facilitating roles of both their mother tongue and L2 English than the more experienced subjects in Group T2. As the result of the comparative sessions, both groups' linguistic awareness was raised in general. It seems, however, that while the less experienced L3 learners perceived an increase in all the facilitating factors of English, the more experienced learners reported stagnating values as regards factors related to understanding and learning new vocabulary.

Similar findings were concluded on the basis of the objective tests. In the think-aloud tasks younger treatment group members relied on English the most frequently. They both had the highest number of guesses and the highest number of items compared to both the more experienced L3 members in Group T2 and to the control groups. Similarly, in the vocabulary knowledge scale tests the less experienced L3 learners in Group T1 outperformed the other groups achieving the highest proportion of guesses and the highest proportion of successful guesses. These findings are in concordance with Ringbom's (2006) findings and with those of my earlier results (Tápainé Balla 2007) as well as with those of studies on subjects with no previous L3 knowledge (Gibson and Hufeisen 2003, Singleton and Little 2005, Tápainé

Balla 2008a and 2008b, Lindquist 2009), but contradict Ringbom's (1986) earlier argument, namely, that learners who are more proficient in the source language are more likely to perceive the similarities between the source and the target language.

The above findings support the claim that, as a result of instruction, the learners who were less experienced, that is, who were at initial stages of their L3 learning, were more successful at recognising cross-linguistic similarities between English and German and were able to utilise this knowledge when discovering the meaning of novel vocabulary items, both in the learners' own perceptions and as evidenced in the think-aloud data and in the VKS results.

As we have seen L3 learners at different stages of their learning processes differ from each other in terms of consciousness, since, as pointed out earlier, more advanced and thus more experienced learners had been exposed to the simultaneous instruction of the two foreign languages for a longer period of time, they had been able to deduce a number of cross-linguistic similarities, especially on the lexical level, on their own. Another finding of the present paper is that weaker L3 learners were more likely to resort to their L2 for cross-linguistic help, which can be explained with the same analogy: the less they know in the target language, the more help they need from outside sources. This reinforces Sikogukira's (1993) findings, namely, that beginner language learners are more pre-occupied with formal similarities, while more advanced students do not need to rely on the source language to the same extents because of their more advanced levels in the target language.

7.1 Limitations

As I have pointed out above, the present research is based on five different kinds of data obtained from 14 and 10 subjects in two treatment groups and 14 and 15 subjects in the control groups. What provided great assistance during the months of data collection – namely, that the participants I worked with were all hard-working, motivated and high-achieving learners who offered all their attention and enthusiasm both in the treatment sessions and at the times of tests and interviews – may, at the same time, be conceived as a limitation of the research. The average secondary school-age population is probably different from my subjects in certain aspects. Nevertheless, it was these subjects' work that verified the hypothesis that a comparative approach to L3 teaching works.

The data was collected for the period of the second semester of an academic year and the treatment was based on 10-12 sessions, which constituted about one-sixth of the subjects' German lessons in that semester. More frequent contact with the subjects, and, thus, a more

intensive instruction could possibly have resulted in more differences between the treatment groups and the control groups. Furthermore, had the treatment sessions started at the subjects' very first encounters with L3 German, it might have resulted in an even more significant effect.

The present study aimed at exploring the whole complexity of L2 English's effect on the learning processes of the German L3, however, while it succeeded in measuring vocabulary development as well as the learners' own perceptions about different areas of the language, it failed to keep track of the progress that the subjects made in the field of grammar.

7.2 Future prospects

Based on the above, I claim that the present research can safely lead us to conclude that the earlier L3 language learners receive comparative instruction on the cross-linguistic similarities and differences between the languages they learn, the more effective their learning may become in all areas of the language. If L3 learners have access to such instruction at later stages of their studies, attention needs to be paid to the different needs more advanced learners have. Understanding how Hungarian learners approach their L2s and L3s may contribute to economising the learning process, thus making better use of the time spent on language learning at schools. In the long run these findings may result in creating special learning materials designed for comparative instruction.

Obviously, such comparative instruction presupposes language teachers who are equipped with the linguistic and methodological tools to teach in a comparative manner. Therefore, the present research does not only have implications for the language teaching curriculum at schools, but also for teacher training institutes, which may choose to adapt my findings in their applied linguistics curriculum for training language teachers.

In an even broader sense, language learners should, from the very beginning of their foreign language study, be instructed in a way that their linguistic awareness is raised. This will not only prove beneficial when learning an L3, but as one subject in the more experienced treatment group correctly realised, also when learning further languages.

The present dissertation has been written in the hope that, having provided evidence that a comparative approach to language teaching makes the learning process faster and more effective, the research results will have wider implications. I expect this research to contribute to the field of TLA by providing an insight into Hungarian language learners'

situation and also to developing special learning materials. I believe that the outcome of this research might initiate a discussion among both foreign language teachers and teacher trainers for the benefit of Hungarian language learners.

References

Agafonova, Lidia. 1997. Zur Frage des Lehrens und Lernens vom Deutschen als zweiter Fremdsprache nach dem Englischen in den neuen Schultypen in Rußland (Oberstufe). [About the question of teaching and learning German as a second foreign language after English in the new school-types in Russia (advanced level).] *Zeitschrift für Interkulturellen Fremdsprachenunterricht [Journal of Intercultural Language Learning]*, 2:3. Available at: http://www.ualberta.ca/~german/ejournal/agafon1.htm. Access: 10 March 2009.

Arabski, Janusz. 2006. Language transfer in language learning and language contact**.** In: Arabski, Janusz (Ed.): *Cross-linguistic influences in the second language lexicon*. Clevedon: Multilingual Matters. 12–22.

Aronin, Larissa and Muiris Ó Laoire. 2004. Exploring multilingualism in cultural contexts: Towards a notion of multilinguality. In: Hoffmann, Charlotte and Jehannes Ytsma (Eds.) *Trilingualism in Family, School and Community.* Clevedon: Multilingual Matters. 11-29.

Bannert, Robert. 2005. Phonological interferences in the third language learning of Swedish and German (FIST). *Proceedings of FONETIK 2005.* Goteborg: Department of Linguistics, Göteborg University. 75–79.

Banta, Frank. 1981. Teaching German vocabulary: The use of English cognates and common loan words. *Modern Language Journal 65.* 129–136.

Boócz-Barna, Katalin. 2006. Realisierungswege mehrsprachiger Entwicklung von Lernenden im Deutschunterricht anhand einiger Unterrichtsbeispiele. [Ways of realising multilingual development of learners participating in German language courses based on selected examples.] *Szabadpart 31*. Available at: http://www.kodolanyi.hu/szabadpart/31/31_kom_boocz.htm. Access: 25 June, 2011.

Boócz-Barna, Katalin. 2007. *Formen des Sprachwechsels im Unterricht des Deutschen als L2 und L3. Psycholinguistische und fremdsprachendidaktische Aspekte der Mehrsprachigkeit. [Code-switching in the German L2 and L3 lessons: Psycholinguistic and methodological aspects of multilingualism]*. Budapester Beiträge zur Germanistik, Band 53. Budapest: ELTE Germanistisches Institut.

Boócz-Barna, Katalin. 2009. Voraussetzungen effizienter Kompetenzentwicklung im Tertiärsprachenunterricht. [Prerequisites of an efficient development of competences in third language education.] In: Adamzová, Livia and Attila Péteri (Eds.): *Innovative Aspekte der DaF-Linguistik [Innovative Aspects of the GFL-linguistics]*. Budapest / Bratislava: ELTE / Wirtschaftsuniversität Bratislava. 17–27.

Boócz-Barna, Katalin. 2010. Az első idegen nyelvi transzfer vizsgálata a német mint második idegen nyelvet tanulók szókincs-elsajátításában. [Examining transfer from the first foreign language into German as a second language in language learners' vocabulary acquisition]. In: Navracsics, Judit (Ed.): *Nyelv, beszéd, írás. Pszicholingvisztikai tanulmányok I [Language, speech, writing. Studies in psycholinguistics I]*. Budapest: Tinta Kiadó, 176–184.

Brizić, Katharina. 2006. The secret life of languages: Origin-specific differences in L1/L2 acquisition by immigrant children. *International Journal of Applied Linguistics* 16.3. 339-362.

Brooks-Lewis, Kimberly Anne. 2009. Adult learners' perceptions of the incorporation of their L1 in foreign language teaching and learning. *Applied Linguistics 30:2.* 216–235.

Caplan-Carbin, Lizz. 2006. Diachronic linguistics in the classroom: Sound shifts and cognate recognition. Available at: http://webgerman.com/caplan/Portfolio/Caplan/cognates/index.html. Access: 16 March 2006.

Cedden, Gülay. 2007. Psycholinguistische Aspekte für den Folgeerwerb Deutsch (L2), dann Englisch (L3) in der Türkei. [Psycholinguistic aspects of acquiring German (L2) after English (L1) in Turkey.] *Zeitschrift für Interkulturellen Fremdsprachenunterricht [Journal of Intercultural Language Learning]* 12:3. Available at: http://zif.spz.tu-darmstadt.de/jg-12-3/beitrag/Cedden.htm. Access: 10 March 2009.

Cenoz, Jasone. 1997. The influence of bilingualism on multilingual acquisition: Some data from the Basque country. In: *I Simposio Internacional sobre o Bilingüismo: Comunidades e individuos bilingües*. University of Vigo. Vigo, 21–25 October, 1997. 278–287. Available at: http://www.multilingual-matters.net/jmmd/018/0261/jmmd0180261.pdf. Access: 10 March 2009.

Cenoz, Jasone. 2000. Research on multilingual acquisition. In: Cenoz, Jasone and Ulrike Jessner (Eds.): *English in Europe: The acquisition of a third language.* Clevedon: Multilingual Matters. 39–54.

Cenoz, Jasone. 2001. The effect of linguistic distance, L2 status and age on cross-linguistic influence in third language acquisition. In: Cenoz, Jasone, Britta Hufeisen, and Ulrike Jessner (Eds.): *Cross-linguistic influence in third language acquisition: Psycholinguistic perspectives.* Clevedon: Multilingual Matters, 8–21.

Cenoz, Jasone. 2003. The role of typology in the organisation of the multilingual lexicon. In: Jasone Cenoz, Britta Hufeisen and Ulrike Jessner (Eds.): *The multilingual lexicon.* Dordrecht: Kluwer. 103–117.

Cenoz, Jasone. 2005. Learning a third language: Cross-linguistic influence and its relationship to typology and age. In: Hufeisen, Britta and Robert J. Fouser (Eds.): *Introductory readings in L3.* Tübingen: Stauffenburg Verlag. 1–11.

Cenoz, Jasone and Fred Genesee. 1998. Psycholinguistic perspectives on multilingualism and multilingual education. In: Cenoz, Jasone and Fred Genesee (Eds.): *Beyond bilingualism: Multilingualism and multilingual education.* Clevedon: Multilingual Matters. 16–32.

Cenoz, Jasone, Britta Hufeisen and Ulrike Jessner. 2003. Why investigate the multilingual lexicon? In: Jasone Cenoz, Britta Hufeisen and Ulrike Jessner (Eds.): *The multilingual lexicon.* Dordrecht: Kluwer. 1–11.

Clyne, Michael. 2003. *Dynamics of language contact: English and immigrant languages.* Cambridge: Cambridge University Press.

Cook, Vivian. 1991. The poverty-of-the-stimulus argument and multi-competence. *Second Language Research* 7:2. 103–117.

Crystal, David. 1997. *Language death*. West Nyack, NY: Cambridge University Press.

Csapó, József. 1980. The problem of lexical interference. In: Dezső, László and Nemser, William (Eds.) *Studies in English and Hungarian contrastive linguistics*. Budapest: Akadémiai Kiadó. 375–451.

De Angelis, Gessica. 2007. *Third or additional language acquisition.* Clevedon: Multilingual Matters.

De Angelis, Gessica and Larry Selinker. 2001. Interlanguage transfer and competing linguistic systems in the multilingual mind. In: Cenoz, Jasone, Britta Hufeisen, and Ulrike Jessner (Eds.): *Cross-linguistic influence in third language acquisition: Psycholinguistic perspectives.* Clevedon: Multilingual Matters. 42–59.

De Bot, Kees. 1992. A bilingual production model: Levelt's Speaking Model adapted. *Applied Linguistics* 13. 1–24.

Dégi Zsuzsanna. 2008. Language teaching in Transylvania: A promotion of multilingualism? In: Otilia Marti Arnandiz and Maria Pilar Safont Jorda (Eds.) *Achieving multilingualism: wills and ways. Proceedings of the 1st International Conference on Multilingualism (ICOM).* Castello de la Plane: Universitat Jaume I. 279–292.

Dégi Zsuzsanna. 2011. Multilingualism in the EFL classroom: Challenge or resource? In: *Concepts and Consequences of Multilingualism in Europe 2*. Tetovo: SEE University, 271-284.

Dégi Zsuzsanna and T. Balla Ágnes. 2012. (In press) Language choice in the foreign language classroom. Proceedings of the Conference Multilingualism in Europe in Budapest 25-26 March 2011. Budapest: L'Harmattan.

Dezső László (Ed.) 1982. *Contrastive studies: Hungarian–English.* Budapest: Akadémiai Kiadó.

Dezső, László and Nemser, William (Eds.) *Studies in English and Hungarian contrastive linguistics*. Budapest: Akadémiai Kiadó.

Dewaele, Jean-Marc. 1998. Lexical inventions: French interlanguage as L2 versus L3. *Applied Linguistics 19*. 471–490.

Dewaele, Jean-Marc. 2001. Activation or inhibition? The interaction of L1, L2 and L3 on the language mode continuum. In: Cenoz, Jasone, Britta Hufeisen, and Ulrike Jessner (Eds.): *Cross-linguistic influence in third language acquisition: Psycholinguistic perspectives*. Clevedon: Multilingual Matters. 69–89.

Dewaele, Jean-Marc and Aneta Pavlenko, 2003. Productivity and lexical richness in native and non-native speech: A study of cross-cultural effects. In: Cook, Vivian (Ed.) *The effects of the second language on the first.* Clevedon: Multilingual Matters, 120–141.

Dolinskaya, Lubov. 1993. Plunging into a foreign language without a dictionary. Paper presented at the Annual Eastern Michigan University Conference on Languages and Communication for World Business and the Professions (12th, Ypsilanti, MI, March 31-April 3, 1993. Available at: ERIC, ED370396, http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/15/98/ae.pdf. Access: 10 March 2009.

Ecke, Peter. 2001. Lexical retrieval in a third language: Evidence from errors and tip-of-the-tongue states. In: Cenoz, Jasone, Britta Hufeisen, and Ulrike Jessner (Eds.): *Cross-linguistic influence in third language acquisition: Psycholinguistic perspectives*. Clevedon: Multilingual Matters, 90–115.

Edwards, Malcom and Jean-Marc Dewaele 2007. Trilingual conversations: A window into multicompetence. *International Journal of Bilingualism,* 11/2: 221–242.

Ericsson, K. Anders and Herber A. Simon. 1984. Protocol analysis: Verbal reports as data. Cambridge, MA: Bradford Books/MIT Press.

EuroCom Center. http://www.eurocomcenter.com/. Access: 3 October 2009.

Faerch, Klaus and Gabriele Kasper. 1986. Cognitive dimensions of language transfer. In: Kellerman, Eric and Michael Sharwood-Smith (Eds.): *Crosslinguistic influence in second language acquisition,* Oxford, Pergamon. 49–66.

Frankenberg-Garcia, Ana. 2000. Using a translation corpus to teach English to native speakers of Portuguese. *Op.Cit. – A Journal of Anglo-American Studies* 3. 65–78. Available at: http://www.linguateca.pt/Repositorio/Frankenberg-Garcia2000.doc. Access: 10 March 2009.

Funk Hermann, Christina Kuhn and Silke Demme. 2008. *Studio d A1. Deutsch als Fremdsprache, Kurs- und Übungsbuch [Studio d A1: German as a foreign language, Course book and practice book]*. Szeged: Cornelsen and Maxim.

Funk Hermann, Christina Kuhn and Silke Demme. 2008. *Studio d A2. Deutsch als Fremdsprache, Kurs- und Übungsbuch* [Studio d A2: German as a foreign language, Course book and practice book]. Szeged: Cornelsen and Maxim.

Gabryś-Barker, Danuta. 2006. The interaction of languages in the lexical search of multilingual language users. In: Arabski, Janusz (Ed.): *Cross-linguistic influences in the second language lexicon*. Clevedon: Multilingual Matters. 144–167.

Garrison, David. 1990. Inductive strategies for teaching Spanish-English cognates. *Hispania*, Vol. 73, No. 2 (May, 1990), 508–512. Available at: http://links.jstor.org/sici?sici=00182133(199005)73%3A2%3C508%3AISFTSC%3E2.0.CO%3B2-X Access: 10 March 2009.

Gass, Susan. M. and Larry Selinker. 2001. *Second language acquisition: An introductory course.* London: Lawrence Earlbaum.

Gass, Susan. M. and Alison Mackey. 2007. Data elicitation for second and foreign language research. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Gibson, Martha and Britta Hufeisen. 2003. Investigating the role of prior foreign language knowledge: Translating from an unknown into a known foreign language. In: Jasone Cenoz, Britta Hufeisen and Ulrike Jessner (Eds.) *The multilingual lexicon.* Dordrecht: Kluwer. 87–103.

Granger, Sylviane. 1993. Cognates: An aid or a barrier to successful L2 vocabulary development? In: *ITL Review of Applied Linguistics*, 99-100, 43–56. Also available at: http://hdl.handle.net/2078.1/75702. Access 25 June 2011.

Groseva, Maria. 1998. Dient das L2-System als ein Fremdsprachenlernmodell? [Does the L2 system serve as a foreign language learning model?] In: Hufeisen, Britta and Beate Lindemann (Eds.): *Tertiärsprachen. Theorien, Modelle, Methoden [Third languages. Theories, Models, Methods]*. Tübingen: Stauffenburg-Verlag. 21–31.

Grosjean, François. 1985. The bilingual as a competent but specific speaker-hearer. *Journal of Multilingual and Multicultural Development, 6,* 467–477.

Grosjean, François. 1998. Studying bilinguals: Methodological and conceptual issues. *Bilingualism: Language and Cognition* 1, 131–149.

Grosjean, François. 2001. The bilingual's language modes. In J. Nicol (ed.), *One mind, two languages: Bilingual language processing*. Oxford: Blackwell, 1–25.

Güler, Gülten. 2000. Deutsch als zweite Fremdsprache im schulischen Fremdsprachenunterricht in der Türkei: Perspektiven für die Didaktik und Methodik des Deutschen als zweite Fremdsprache in der Deutschlehrerausbildung. [German as the second foreign language in foreign language education at schools in Turkey: Perspectives for the methodology of teaching German as a second foreign language in the training of German teachers.] *Zeitschrift für Interkulturellen Fremdsprachenunterricht [Journal of Intercultural Language Learning]*, 5: 2. Available at: http://www.spz.tu-darmstadt.de/projekt_ejournal/jg_05_2/beitrag/gueler1.htm. Access: 25 June, 2011.

Hall, Christopher J. and Peter Ecke. 2003. Parasitism as a default mechanism in L3 vocabulary acquisition. In: Jasone Cenoz, Britta Hufeisen and Ulrike Jessner (Eds.): *The multilingual lexicon.* Dordrecht: Kluwer. 71–87.

Hall, Joan Kelly, An Cheng and Carlson T. Matthew. 2006. Reconceptualizing multicompetence as a theory of language knowledge. *Applied Linguistics,* 27(2): 220 – 240.

Hammarberg, Björn. 2001. Roles of L1 and L2 in L3 production and acquisition. In: Cenoz, Jasone, Britta Hufeisen, and Ulrike Jessner (Eds.): *Cross-linguistic influence in third language acquisition: Psycholinguistic perspectives*. Clevedon: Multilingual Matters, 21–41.

Hammarberg, Björn and Britta Hammarberg. 2005. Re-setting the basis of articulation in the acquisition of new languages: A third language case study. In: Hufeisen, Britta & Robert J. Fouser (Eds.): *Introductory readings in L3.* Tübingen: Stauffenburg Verlag. 11–19.

Hedquist, Rolf. 2005. Mutual Scandinavian-Dutch language comprehension studies of a method for rapid comprehension. In: Hufeisen, Britta and Robert J. Fouser (Eds.): *Introductory readings in L3.* Tübingen: Stauffenburg Verlag. 19–31.

Henriksen, B. 1996. *Semantisation, retention and accessibility: Key concepts in vocabulary learning*. Paper presented at the AILA Congress, Jyvaskyla, Finland August 1996.

Herdina, Philipp and Ulrike Jessner. 2000. The dynamics of third language acquisition. In: Cenoz, Jasone and Ulrike Jessner (Eds.): *English in Europe*: *The acquisition of a third language.* Clevedon: Multilingual Matters. 84–99.

Herdina, Philipp and Ulrike Jessner. 2002. *A dynamic model of multilingualism: Perspectives of change in psycholinguistics*. Clevedon: Multilingual Matters.

Hoffmann, Charlotte and Susan Widdicombe. 1999. Code-switching and language dominance in the trilingual child. In: *AILE proceedings of the EUROSLA VIII Conference, Paris 1, Special Issue: The Bilingual Person*. Paris: DEPA. Universite Paris. 51–62.

House, Julianne. 1988. Talking to Oneself or Thinking with Others? On Using Different Thinking Aloud Methods in Translation. In: *Fremdsprachen lehren und lernen. [Teaching and learning foreign languages.]* 1988/17. 84–98.

Hufeisen, Britta. 1998. L3–Stand der Forschung–Was bleibt zu tun? [L3–State of Art of Research–What is there left to do?] In: Hufeisen, Britta and Beate Lindemann (Eds.): *Tertiärsprachen. Theorien, Modelle, Methoden [Third languages. Theories, Models, Methods]*. Tübingen: Stauffenburg-Verlag. 169–185.

Hufeisen, Britta. 2004. A brief introduction to the linguistic foundations. In: Hufeisen, Britta and Gerhard Neuner (Eds.): *The plurilingualism project: Tertiary language learning – German after English.* Strasbourg: Council of Europe Publishing. 7–13.

Hufeisen, Britta. 2005. Multilingualism: Linguistic models and related issues. In: Hufeisen, Britta and Robert J. Fouser (Eds.): *Introductory readings in L3.* Tübingen: Stauffenburg Verlag. 31-46.

Hufeisen, Britta and Nicole Marx. 2007. How can DaFnE and EuroComGerm contribute to the concept of receptive multilingualism? Theoretical and practical considerations. In: Thije, Jan D. ten and Ludger Zeevaert (Eds.): *Receptive multilingualism: Linguistic analyses, language policies and didactic concepts*. (Hamburg Studies in Multilingualism). Amsterdam/Philadelphia: John Benjamins Publishing Company. 307–323.

Jarvis, Scott and Aneta Pavlenko. 2007. *Crosslinguistic influence in language and cognition.* New York: Taylor & Francis Inc.

Jessner, Ulrike. 1999. Metalinguistic awareness in multilinguals: Cognitive aspects of third language learning. *Language Awareness* 8, 3–4: 201–209. Also available at: http://www.multilingual-matters.net/la/008/0201/la0080201.pdf Access: 10 March 2009.

Jessner, Ulrike. 2003. The nature of cross-linguistic interaction in the multilingual system. In: Jasone Cenoz, Britta Hufeisen and Ulrike Jessner (Eds.): *The multilingual lexicon.* Dordrecht: Kluwer. 45–57.

Jessner, Ulrike. 2008. State-of-the-Art Article. Teaching third languages: Findings, trends, challenges. *Language Teaching 41:1*. 15–56.

Juhász, János. 1980. Ungarisch-deutsche kontrastive Forschungen in Ungarn. [Hungarian-German contrastive research in Hungary]. In: Juhász, János (Ed.): *Kontrastive Studien ungarisch-deutsch. [Contrastive studies Hungarian-German]*. Budapest: Akadémiai Kiadó.

Kacjan, Brigita. 2010. Sprachen übergreifender Transfer im DaF-Unterricht als Lernchance und Lehrverpflichtung - Bestandsaufnahme in Slowenien. [Transfer in teaching German as a foreign language as a chance for learning and a responsibility of teaching – An inventory in Slovenia. *Germano-Slavica 17*. Also available at: http://www.germano-slavica.uwaterloo.ca/index.php/Germano-Slavica/article/view/21. Access: 30th April 2011.

Kallenbach, Christiane. 1998. "Da weiß ich schon, was auf mich zukommt" L3-Spezifika aus Schülersicht ["I already know what I can expect" L3-characteristics from the learners' perspective]. In: Hufeisen, Britta and Beate Lindemann (Eds.): *Tertiärsprachen. Theorien, Modelle, Methoden [Third languages. Theories, Models, Methods]*. Tübingen: Stauffenburg-Verlag. 47–59.

Kellerman, Eric. 1977. Towards a characterization of the strategy of transfer in second language learning. *Interlanguage Studies Bulletin* 2:1, 58–146.

Kellerman, Eric. 1986. An eye for an eye: Crosslinguistic constraints on the development of the L2 lexicon. In: Kellerman, Eric and Michael Sharwood-Smith (Eds.): *Crosslinguistic influence in second language acquisition,* Oxford: Pergamon. 35-49.

Kemp, Charlotte. 2009. Defining multilingualism. In: Aronin, Larissa and Britta Hufeisen (Eds.) *The exploration of multilingualism: Development of research on L3, multilingualism and multiple language acquisition.* Amsterdam/Philadelphia: John Benjamins Publishing Company. 11–26.

Köberle, Barbara. 1998. Positive Interaktion zwischen L2, L3, L4 und ihre Applikabilität im Fremdsprachenunterricht [Positive interaction between L2, L3, L4 and their applicability in foreign language instruction]. In: Hufeisen, Britta and Beate Lindemann (Eds.): *Tertiärsprachen. Theorien, Modelle, Methoden [Third languages. Theories, Models, Methods]*. Tübingen: Stauffenburg-Verlag. 89–111.

Kırkıcı, Bilal. 2007. Meine Hobbys sind Müzik hören und Swimmen: Lexical transfer in L1 Turkish-L2 English learners of L3 German. *Zeitschrift für Interkulturellen Fremdsprachenunterricht [Journal of Intercultural Language Learning]* 12: 3. Available at: http://zif.spz.tu-darmstadt.de/jg-12-3/beitrag/Kirkici.htm. Access: 10 March 2009.

Krumm, Hans-Jürgen. 1996. Deutsch als Fremdsprache im Rahmen von Mehrsprachigkeit [German as a foreign languge within the framework of multilingualism]. In: Funk and Neuner (Eds.): *Verstehen und Verständigung in Europa [Understanding and being understood in Europe]*. Berlin: Ludicium. 206–212.

Lagune 1. Einstufungstest [Placement test]. Available at: http://www.hueber.de/sixcms/media.php/36/Lagune1_Einstufungstest.pdf, Access: 25 June 2011.

Lengeling, M. Martha. 1995. True friends and false firends. *MEXTESOL Journal 19:2, Convention Issue*. Available at: http://www.eric.ed.gov/PDFS/ED399821.pdf. Access: 25 June 2011.

Levelt, William J.M. 1989. *Speaking: From intention to articulation*. Cambridge: Cambridge University Press.

Lindemann, Beate. 1998. L2 – L3 und ihre zwischensprachliche Interaktion. Probleme und Herausforderungen in bezug auf Untersuchungsdesign. [L2 – L3 and their cross-linguistic interaction. Problems and challenges relating to research design]. In: Hufeisen, Britta and Beate Lindemann (Eds.): *Tertiärsprachen. Theorien, Modelle, Methoden [Third languages. Theories, Models, Methods]*. Tübingen: Stauffenburg-Verlag. 159–168.

Lindemann, Beate. 2000. Zum Einfluss der L1 und L2 bei der Rezeption von L3-Texten. [The influence of L1 and L2 when understanding L3 texts.] *Zeitschrift für interkulturellen Fremdsprachenunterricht [Journal of Intercultural Language Learning]* 5:1. Available at: http://zif.spz.tudarmstadt.de/jg_05_1/beitrag/lindem1.htm. Access: 10 March 2009.

Lindqvist, Christina. 2009. The use of the L1 and the L2 in French L3: Examining cross-linguistic lexemes in multilingual learners' oral production. *International Journal of Multilingualism*, 6: 3, 281–297.

Llisterri, Joaquim and Dolores Poch. 1987. Phonetic interference in bilingual's learning of a third language. In: *Proceedings of the XIth International Congress of Phonetic Sciences*. Tallinn: Academy of Sciences of the Estonian SSR. Vol. 5. 134–147.

McArthur, Tom. (Ed.) 1992. *The Oxford companion to the English language.* Oxford: Oxford University Press.

Meißner, Franz-Joseph. 2004. Transfer und Transferieren: Anleitungen zum Interkomprehensionsunterricht [Transfer and transferring: A guide in teaching intercomprehension]. In: Horst G. Klein & Dorothea Rutke (Eds.): *Neuere Forschungen zur europäischen Interkomprehension [New research for the European intercomprehension]*. Aachen: Shaker Verlag, 39–66.

Murphy, Shirin. 2003. Second language transfer during third language acquisition. In: *Working Papers in TESOL & Applied Linguistics 3: 2*. 1–21.

Muñoz, Carmen. 2000. Bilingualism and trilingualism in school students in Catalonia. In: Cenoz, Jasone and Ulrike Jessner (Eds.). *English in Europe: The acquisition of a third language.* Clevedon: Multilingual Matters. 157–178.

Neuner, Gerhard. 2004. The concept of plurilingualism and tertiary language didactics. In: Hufeisen, Britta and Gerhard Neuner (Eds.): *The plurilingualism project: Tertiary language learning – German after English.* Council of Europe Publishing. 13–35.

Neuner, Gerhard and Britta Hufeisen, et. al. 2003. *Deutsch im Kontext anderer Sprachen. Tertiärsprachendidaktik. Erprobungsfassung. [German in the context of other languages. Methodology for teaching a third language. An experimental version]*. München: Langenscheidt, Goethe-Institut.

Odlin, Terence. 1989. *Language transfer: Cross-linguistic influence in language learning.* Cambridge: Cambridge University Press.

Ó Laoire, Muiris. 2005. L3 in Ireland: A preliminary study of learners' metalinguistic awareness. In: Hufeisen, Britta and Robert J. Fouser (Eds.): *Introductory readings in L3.* Tübingen: Stauffenburg Verlag. 47–54.

Ó Laoire, Muiris and David Singleton. 2009. The role of prior knowledge in L3 learning and use: Further evidence of psychotypological dimensions. In: Aronin, Larissa and Britta Hufeisen (Eds.): *The exploration of multilingualism: Development of research on L3, multilingualism and multiple language acquisition.* Amsterdam/Philadelphia: John Benjamins Publishing Company. 103–120.

Oebel, Guido. 2007. DaF (L3) via Englisch (L2) in Japan (L1). Attraktivitätsfaktoren und Erfolgsgaranten beim Deutschlernen in Japan: Rekurrieren auf Englisch als *'Eselsbrückensprache'* mit proportional hohem Deutschtransferpotenzial, Lehrkraft als Motivator, höchstmögliche Lernerinvolvierung durch LdL (Lernen durch Lehren). [German as a foreign language (L3) via English (L2) in Japan (L1). Factors of attractiveness and guarantees for success in Japan: Relying on English as a 'learning aid' with a relatively high proportion of possible transfer, the teacher as a motivator, the highest possible learner involvement through learning through teaching.] *Zeitschrift für Interkulturellen Fremdsprachenunterricht. Didaktik und Methoden im Bereich Deutsch als Fremdsprache [Journal of Intercultural Language Learning]*, 12:1. Available at: http://zif.spz.tu-darmstadt.de/jg-12-1/docs/Oebel.pdf. Access: 25 June 2011.

Oktatás-Statisztikai Évkönyv. [Statistical Yearbook of Education.] 2010. Budapest: Compiled by the Ministry of National Resurces, Department of Administrative Coordination, Section of Statistics. Available at: http://www.nefmi.gov.hu/letolt/statisztika/okt_evkonyv_2009_2010_100907.pdf. Access: 1 February 2012.

Pál, Andrea. 2000. *The role of cross-linguistic formal similarity in Hungarian-German bilingual learners of English as a foreign language.* Potsdam: University of Potsdam PhD dissertation. Available at: urn:nbn:de:kobv:517-0000189 URL: http://opus.kobv.de/ubp/volltexte/2005/145/. Access: 10 March 2009.

Paribakht, Tahereh Sima and Marjorie Wesche. 1993. Reading comprehension and second language development in a comprehension-based ESL program. *TESL Canada Journal*. 11(1): 9–29.

Pavlenko, Aneta and Scott Jarvis. 2002. Bidirectional transfer. *Applied Linguistics 23:2.* 190–214.

Petneki, Katalin. 2002. Az idegen nyelv tanításának helyzete és fejlesztési feladatai. [The situation and developmental tasks of foreign language instruction.] *Új Pedagógiai Szemle*. 7-8: 147–160.

Rast, Rebekah. 2010. The use of prior linguistic knowledge in the early stages of L3 acquisition. *International Review of Applied Linguistics in Language Teaching*. 48:2-3: 159–183.

Ringbom, Håkan. 1986. Cross linguistic influence and the foreign language learning process. In: Sharwood Smith, Michael and Eric Kellerman (Eds.): *Cross-linguistic influence in second language acquisition.* New York: Pergamon. 150–162.

Ringbom, Håkan. 1987. *The role of the first language in foreign language learning*. Clevedon: Multilingual Matters.

Ringbom, Håkan. 2001. Lexical transfer in L3 production. In: Cenoz, Jasone, Britta Hufeisen, and Ulrike Jessner (Eds.): *Cross-linguistic influence in third language acquisition: Psycholinguistic perspectives.* Clevedon: Multilingual Matters, 59–69.

Ringbom, Håkan. 2005. L2-transfer in third language acquisition. In: Hufeisen, Britta and Robert J. Fouser (Eds.): *Introductory readings in L3.* Tübingen: Stauffenburg Verlag. 71–83.

Ringbom, Håkan. 2006. The importance of different types of similarity in transfer studies. In: Arabski, Janusz (Ed.) *Cross-linguistic influences in the second language lexicon*. Clevedon: Multilingual Matters. 36–46.

Ringbom, Håkan. 2007. *Cross-linguistic similarity in foreign language learning*. Clevedon: Multilingual Matters.

Rivers, William P. 1996. Self-directed language learning and third-language learner. Paper presented at the 30th Annual meeting of the American Council on the teaching of foreign languages. PA, Philadelphia, November 22–24. 1–15.

Sharwood Smith, Michael. 1994. *L2 learning.* London: Longman.

Sharwood Smith, Michael and Eric Kellerman. 1986. Cross-linguistic influence in second language acquisition: an introduction. In: Kellerman, Eric and Michael Sharwood-Smith (Eds.): *Crosslinguistic influence in second language acquisition,* Oxford, Pergamon. 1–9.

Sikogukira, Matutin. 1993. Influence of languages other than the L1 on a foreign language; a case of transfer from L2 to L3. *Edinburgh Working Papers in Applied Linguistics 4*. 110–132.

Singh, Rajendra and Susanne Carroll. 1979. L1, L2 and L3. *Indian Journal of Applied Linguistics 5*, 51–63.

Singleton, David and David Little. 2005. A first encounter with Dutch: Perceived language distance and language transfer as factors in comprehension. In: Hufeisen, Britta & Robert J. Fouser (Eds.): *Introductory readings in L3.* Tübingen: Stauffenburg Verlag. 101–111.

Swan, Michael and Catherine Walter. 1997. *How English Works: A Grammar Practice Book (With Answers).* Oxford: Oxford University Press.

Sweet, Henry. 1899. *The practical study of languages*. Oxford University Press, London.

Tápainé Balla Ágnes 2007. Tanuljunk két idegen nyelvet egyidejűleg! Magyar nyelvtanulók tapasztalatai két rokon nyelv, az angol és a német tanulásával. [Let's learn two foreign languages simultaneously: Hungarian learners' experience with learning two related languages, English and German]. *Nyelvinfó*, 15.2. 13–23.

Tápainé Balla Ágnes. 2008a. Mit tud, aki nem tud angolul? [What does a person know, if s/he does not know English?] *Nyelvinfó*. 16.1. 37–45.

Tápainé Balla Ágnes. 2008b. What does an L3 learner already know? In: Otilia Marti Arnandiz and Maria Pilar Safont Jorda (Eds.) *Achieving multilingualism: Wills and ways. Proceedings of the 1st International Conference on Multilingualism (ICOM).* Castello de la Plane: Universitat Jaume I. 468–478.

Tápainé Balla Ágnes. 2009a. Angolul és németül tanuló nyelvtanulók transzferjelenségei. [Transfer phenomena of learners learning English and German]. In: Zimányi Árpád (Ed.) *Proceedings of the MANYE XVIII Conference*. Eger: Eszterházy Károly Főiskola. 701–707.

Tápainé Balla Ágnes. 2009b. Harmadiknyelv elsajátítás magyar anyanyelvű nyelvtanulók szemszögéből. [Third language acquisition from the perspective of language learners with a Hungarian mother tongue.] In: Vajda Zoltán (Ed.): *Bölcsészműhely 2008*, Szeged: JATEPress. 53-65.

T. Balla Ágnes. 2010a. Hangosan gondolkodtatás mint a harmadiknyelv-tanulás kutatásánaklehetséges módszere [Thinking aloud as a potential method for researching third language acquisition]. *Proceedings of the MANYE XIX Conference*. 538-544.

T. Balla Ágnes. 2010b. A harmadiknyelv elsajátítás vizsgálati módszerei [Research methodology for studying third language acquisition]. In: Gecső, Tamás and Csilla Sárdi (Eds.) *Új módszerek az alkalmazott nyelvészeti kutatásban [New methods in the applied linguistics research]*. Budapest: Tinta Könyvkiadó. 283-288.

Tápainé Balla Ágnes. 2010c. Diákok nyelvi életrajza középiskolai tanulmányaik kezdetén [Linguistic biographies of learners at the beginning of their secondary-school studies]. In: Vajda, Zoltán (Ed.): *Bölcsészműhely 2009.* Szeged: JATEPress. 149-162.

Tápainé Balla Ágnes. 2011. A magyar anyanyelv és az angol mint első idegen nyelv hatása németet második idegen nyelvként tanuló diákok nyelvtanulási folyamataira [The influence of L1 Hungarian and L2 English on the processes of learning L3 German]. In: Gecső, Tamás, and Zoltán Kiss (Eds.): *Az alkalmazott nyelvészet integritásának kérdései [Issues of the integrity of the applied linguistics]*. Tinta Könyvkiadó: Budapest. 229-238.

Thije, Jan D. ten and Ludger Zeevaert (Eds.). 2007. *Receptive multilingualism: Linguistic analyses, language policies and didactic concepts*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Thomas, Jacquline. 1988. The role played by metalinguistic awareness in second and third language learning. *Journal of Multilingual and Multicultural Development*, *9*, 235–246.

Tremblay, Marie-Claude. 2006. Cross-linguistic influence in third language acquisition: The role of L2 proficiency and L2 exposure. CLO/OPL Ottawa, 34. 109–119. Also available at: http://aix1.uottawa.ca/~clo/Tremblay.pdf. Access: 25 June 2011.

Volgger, Marie-Luise. 2010. "Wenn man mehrere Sprachen kann, ist es leichter, eine weitere zu lernen..." Einblicke in die Mehrsprachigkeitsbewusstheit lebensweltlich mehrsprachiger FranzösischlernerInnen [”If you know more languages, it is easier to learn a further one…” Insights into the multilingual awareness of French learners in everyday multilingualism]. *Zeitschrift für Interkulturellen Fremdsprachenunterricht [Journal of Intercultural Language Learning]*, 15:2. 169–198.

Waring, Rob. 2002. Scales of vocabulary knowledge in second language vocabulary assessment. *The occasional papers of Notre Dame Seishin University.* Kiyo. 1-20.

Wei, Longxing. 2003. Activation of lemmas in the multilingual mental lexicon and transfer in third language learning. In: Jasone Cenoz, Britta Hufeisen and Ulrike Jessner (Eds.): *The multilingual lexicon.* Dordrecht: Kluwer. 57–71.

Weinreich, Uriel. 1953/1968. *Languages in contact.* The Hague: Mouton.

White Paper On Education And Training. 1995. Available at: http://ec.europa.eu/languages/documents/doc409_en.pdf, Access: 25 June 2011.

Williams, Sarah and Björn Hammarberg. 1998. Language switches in L3 production: Implications for a polyglot speaking model. *Applied Linguistics 19:3*. 295-333.

Winters-Ohle, Elmar and Bettina Seipp. 2001. *Deutsch nach Englisch. Eine Fragebogen-Untersuchung zum subjektiv wahrgenommenene Einfluss von Englisch-Kenntnissen auf das Lernen von Deutsch als (zweiter) Fremdsprache bei Schülern und Studenten [German after English: A questionnaire-research of the subjectively recognised influence of knowledge in English when learning German as a (second) foreign language in the case of pupils and students]*. Brussels, European Commission: Sokrates-Programme, LINGUA Aktion D, project number: 72 105-CP-1-HU-LINGUA-LD

Appendix 1 - Data collection instruments

A 1.1 - Questionnaire assessing the linguistic biography of the subjects (in Hungarian)

A Szegedi Tudomány Nyelvtudományi Doktori Iskolájának hallgatójaként egy tanulmányt készítek, melyben középiskolás diákok nyelvi-, nyelvtanulói hátterét szeretném bemutatni. Az alábbi kérdőív kitöltésével ebben nyújtasz segítséget; köszönöm szépen.

NEVED:_____ **OSZTÁLYOD:_____**

1. Mi az **anyanyelved**? (Ha két- vagy többnyelvű vagy, kérlek, írd le, hogy mely nyelvet beszéled családtagjaiddal illetve környezeteddel.)

Anyanyelvem: _____

További anyanyelvem/anyanyelveim: _____

_____

2. Kérlek, jelöld meg, mely **idegen nyelveket** tanultad valaha, mikor, mennyi ideig és milyen körülmények között (pl.: iskolában, nyelvtanfolyamon, külföldi tartózkodás során, családtagodtól, stb.). Kérlek, tüntess fel olyan nyelveket is, amelyeket már nem tanulsz, vagy jelenleg is tanulsz, de nem az iskolában.

Tanult nyelv/ek	Hány éves korodban kezdted tanulni?	Hol/milyen körülmények között tanultad/tanulod?	Tanulod-e még?	Ha már nem tanulod, mikor hagytad abba?	Ha már nem tanulod, miért hagytad abba?

3. Kérlek, jelöld meg, hogy megítélésed szerint 1-5 skálán **mely nyelvből milyen szintű tudással rendelkezel.** 5-össel jelöld az anyanyelve/i/det illetve az anyanyelvi szintű nyelvtudást. 0-nak számítana egy olyan nyelv, melyet egyáltalán nem ismersz; míg ha már valamennyit tudsz, akkor 1, ha kicsit többet, akkor 2 és így tovább.

Nyelv	Szint
magyar	

4. **Jelenleg, a középiskolában milyen nyelvek**et tanulsz? Kérlek, tüntesd fel, hogy milyen szintű csoportba jársz és azt is, hogy miért választottad ezeket a nyelveket.

Nyelv	Csoport szintje (Csoport száma, ha van)	Mely tankönyv melyik leckéjénél tartotok?	Választás oka

5. Elégedett vagy-e a választásoddal, és a csoportod szintjével?

Nyelv	Nyelvválasztással elégedett vagy-e? igen/nem, miért?	A csoport szintjével elégedett vagy-e? igen/nem, miért?

6. Amikor nyelvet választottál, korlátozta-e valami a döntésedet? Ha igen, mi volt az?

_____

_____

7. Másképp döntenél-e, és ha igen miképpen, ha most kellene döntened? Röviden indokold a döntésedet.

_____

_____

_____

8. Választanál-e esetleg más nyelvet/szintet, mint amit az iskola nyújtani tud? Ha igen, mi lenne az?

_____

_____

_____

9.Hol születtél?_____

10. Hol végezted általános iskolai tanulmányaidat? (település/iskola)

_____

11. Hol éltél

a) iskolás korod előtt? ___

b) alsó tagozatos korodban? _____

c) felső tagozatos korodban? _____

d) és hol élsz most? _____

12. Mi

a) édesanyád legmagasabb iskolai végzettsége: _____

b) édesapád legmagasabb iskolai végzettsége: _____

Questionnaire assessing the linguistic biography of the subjects (in English)

As a student of the Graduate School in Linguistics at the University of Szeged, I am conducting research on the linguistic- and language learning background of high-school learners. Please, fill in the questionnaire below to help my project. Thank you.

NAME:_____ **CLASS:_____**

1. What is **your mother tongue**? (If you are bi- or multilingual, please, specify which language you speak at home and in your environment.)

My mother tongue: _____

My further mother tongue/s: _____ _____

_____

2. Please, write in the table which **foreign languages** you have ever learnt, when, how long for and under what circumstances (e.g. at school, at a language course, during a stay abroad, from family members, etc.). Please, indicate any languages that you learnt before, but not any longer, or you still learn, but outside school.

Language/s learnt	At what age did you start learning it?	Where/under what circumstances do/did you learnt it?	Are you still learning it?	When did you stop learning it?	Why did you stop learning it?

3. On a scale of 1-5, please, estimate your **proficiency level**. Use 5 for your mother tongue/s or for languages that you know at a native level. 0 would be used for a language that you do not know at all, 1 for a language you know a little, 2 if you know it more, and so on.

Language	Level
Hungarian	

4. **What languages do you currently study at the high-school?** Please, indicate the level of your language group and the reason why you chose to learn these languages.

Language	Level of the group (Group number, if there is any)	Which course book are you using and which is the chapter you are at?	Reason for choice

5. Are you satisfied with your choice and the level of your groups?

Language	Are you satisfied with your choice? Why/why not?	Are you satisfied with the level of your group? Why/why not?

6. When choosing the language, was there a limiting factor? If so, what was it?

_____

_____

7. Would you make a different decision now? How and why (give a brief explanation)?

_____

_____

8. Would you choose a language/level different from what your school has to offer? If so, what would it be?

_____

_____

_____

9. Where were you born? _____

10. Which elementary school did you attend? (settlement/school)

_____

11. Where did you live

a) before you started school? _____

b) when you attended classes 1-4 of the elementary school? _____

c) when you attended classes 5-8 of the elementary school? _____

d) and where do you live now? _____

12. What is

a) your mother's highest school qualification? _____

b) your father's highest school qualification? _____

A 1.2 - Questionnaire on the subjects' own perceptions[7] (in Hungarian)

NEVED:_____ **OSZTÁLYOD:**_____

Kérlek, gondold át, milyen gyakran történnek az alábbiak, miközben németet tanulsz:

Ha egy **<u>új szót meg akarok érteni</u>**	(majdnem) soha	ritkán	néha	gyakran	(majdnem) mindig
- egy hasonló angol szó segít ebben.					
- másik idegen nyelv hasonló szava segít ebben.					
- az anyanyelvem hasonló szava segít ebben.					
Egyéb:					
Ha egy **<u>új szót meg akarok tanulni</u>**	(majdnem) soha	ritkán	néha	gyakran	(majdnem) mindig
- egy hasonló angol szó segít ebben.					
- másik idegen nyelv hasonló szava segít ebben.					
- az anyanyelvem hasonló szava segít ebben.					
Egyéb:					
Ha egy **<u>nyelvtani szabályt meg akarok tanulni</u>**	(majdnem) soha	ritkán	néha	gyakran	(majdnem) mindig
- egy hasonló angol szabály segít ebben.					
- másik idegen nyelv hasonló szabálya segít ebben.					
- az anyanyelvem hasonló szabálya segít ebben.					
Egyéb:					
A német **<u>helyesírásban</u>**	(majdnem) soha	ritkán	néha	gyakran	(majdnem) mindig
- hasonló angol szavak segítenek.					
- más idegen nyelv hasonló szavai segítenek.					
- az anyanyelvem hasonló szavai segítenek.					
Egyéb:					
A német **<u>kiejtésben</u>**	(majdnem) soha	ritkán	néha	gyakran	(majdnem) mindig
- hasonló angol szavak segítenek.					
- más idegen nyelv hasonló szavai segítenek.					
- az anyanyelvem hasonló szavai segítenek.					
Egyéb:					

[7] Adapted from Winters-Ohle and Seipp (2001)

Ha **egy új szót meg akarok <u>érteni</u>, ez nehézségekbe ütközik,** mert	(majdnem) soha	ritkán	néha	gyakran	(majdnem) mindig
- egy hasonló angol szó jut eszembe.					
- egy másik nyelv hasonló szava jut eszembe.					
- az anyanyelvem hasonló szava jut eszembe.					
Egyéb:					
Ha **egy új szót meg akarok tanulni, ez nehézségekbe ütközik,** mert	(majdnem) soha	ritkán	néha	gyakran	(majdnem) mindig
- egy hasonló angol szóra emlékszem.					
- egy másik nyelv hasonló szavára emlékszem.					
- az anyanyelvem hasonló szavára emlékszem.					
Egyéb:					
Ha **nyelvtani hibát vétek** a német nyelvben, annak az az oka, hogy	(majdnem) soha	ritkán	néha	gyakran	(majdnem) mindig
- az angol nyelvtani szabályok jutnak eszembe.					
- egy másik idegen nyelv nyelvtani szabályai jutnak eszembe.					
- anyanyelvem nyelvtani szabályai jutnak eszembe.					
Egyéb:					
Ha **helyesírási hibát vétek** a német nyelvben, annak oka, hogy	(majdnem) soha	ritkán	néha	gyakran	(majdnem) mindig
- hasonló angol szavak jutnak az eszembe.					
- más idegen nyelv hasonló szavai jutnak az eszembe.					
- az anyanyelvem hasonló szavai jutnak az eszembe.					
Egyéb:					
Ha nehézségeim támadnak a német **kiejtésben**, annak oka, hogy	(majdnem) soha	ritkán	néha	gyakran	(majdnem) mindig
- hasonló angol szavakra emlékszem.					
- egy másik nyelv hasonló szavaira emlékszem.					
- az anyanyelvem hasonló szavaira emlékszem.					
Egyéb:					

Questionnaire on the subjects' own perceptions (in English)

NAME:_____ **CLASS:_____**

Please think about how frequently you experience the following when learning German:

If I want to **understand a new word**	(almost) never	rarely	sometimes	often	(almost) always
- a similar English word helps.					
- a similar word in another language helps.					
- a similar word in my mother tongue language helps.					
Remarks:					
If I want to **learn a new word**	(almost) never	rarely	sometimes	often	(almost) always
- a similar English word helps.					
- a similar word in another language helps.					
- a similar word in my mother tongue language helps.					
Remarks:					
If I want to **learn a grammar rule**	(almost) never	rarely	sometimes	often	(almost) always
- a similar English grammar rule helps.					
- a similar rule in another language helps.					
- a similar rule in my mother tongue language helps.					
Remarks:					
In German **spelling**	(almost) never	rarely	sometimes	often	(almost) always
- similar English words help.					
- similar words in another language help.					
- similar words in my mother tongue language help.					
Remarks:					
In German **pronunciation**	(almost) never	rarely	sometimes	often	(almost) always
- similar English words help.					
- similar words in another language help.					
- similar words in my mother tongue language help.					
Remarks:					

If I want to **understand a new word, I find it difficult** because	(almost) never	rarely	sometimes	often	(almost) always
- I recall a similar word in English.					
- I recall a similar word in another language.					
- I recall a similar word in my mother tongue.					
Remarks:					
If I want to **learn a new word, I find it difficult** because	(almost) never	rarely	sometimes	often	(almost) always
- I recall a similar word in English.					
- I recall a similar word in another language.					
- I recall a similar word in my mother tongue.					
Remarks:					
If I **make a grammar mistake** in German, the reason is that	(almost) never	rarely	sometimes	often	(almost) always
- I recall grammar rules in English.					
- I recall a similar rule in another language.					
- I recall a similar rule in my mother tongue.					
Remarks:					
If I **make a spelling mistake** in German, the reason is that	(almost) never	rarely	sometimes	often	(almost) always
- I recall similar words in English.					
- I recall similar words in another language.					
- I recall similar words in my mother tongue.					
Remarks:					
If I have difficulties with the German **pronunciation**, the reason is that	(almost) never	rarely	sometimes	often	(almost) always
- I recall similar words in English.					
- I recall similar words in another language.					
- I recall similar words in my mother tongue.					
Remarks:					

A 1.3 - Vocabulary Knowledge Scale Test, Pilot (in Hungarian)

Az alábbiakban arra kérlek, hogy tölts ki egy nyelvi tesztet, ami tulajdonképpen egy rendhagyó szódolgozat. Nem csak arra vagyok kíváncsi, hogy ismersz, vagy nem ismersz egy-egy szót vagy kifejezést, hanem arra is, hogy ha nem ismered, akkor ez azért van-e, mert még nem találkoztál vele, vagy azért, mert találkoztál már ugyan vele, de elfelejtetted a jelentését. Azt is szeretném tudni, hogy ha nem ismersz egy szót, meg tudod-e tippelni, hogy vajon mit jelent.
Ez egy próba teszt, melyre nem kapsz osztályzatot, és nem jár semmilyen negatív következménnyel, ha esetleg valamit nem tudsz, vagy tévesen tippelsz.

Kérlek, válaszd ki, hogy az alábbi szavak és kifejezések mely kategóriába sorolhatóak:

1) Ezt a szót nem ismerem, soha nem láttam még, nem tudom, mit jelent.

2) Ezt a szót nem ismerem, soha nem láttam még, de meg tudom tippelni a jelentését.
Szerintem ezt jelenti: _____

3) Láttam már ezt a szót, de nem tudom, mit jelent.

4) Láttam már ezt a szót és ismerem a jelentését.
Szerintem ezt jelenti: _____

A jelentés megadásánál használhatsz magyar megfelelőt, német szinonimát vagy antonimát illetve mondatba foglalhatod a szót oly módon, hogy a jelentése egyértelműen kiderüljön.

Szavak/kifejezések	nem ismerem, nem láttam, nem tudom, mit jelent.	nem ismerem, nem láttam, de meg tudom tippelni a jelentését.	Szerintem ezt jelenti:	Láttam már ezt a szót, de nem tudom, mit jelent.	Láttam már ezt a szót és ismerem a jelentését.	Szerintem ezt jelenti:
das Haar						
das Ohr						
der Ellbogen						
das Kinn						
der Daume						
die Wade						
die Kehle						
die Suppe						
die Butter						
die Milch						
der Tee						

Szavak/kifejezések	nem ismerem, nem láttam, nem tudom, mit jelent.	nem ismerem, nem láttam, de meg tudom tippelni a jelentését.	Szerintem ezt jelenti:	Láttam már ezt a szót, de nem tudom, mit jelent.	Láttam már ezt a szót és ismerem a jelentését.	Szerintem ezt jelenti:
das Salz						
der Pfeffer						
der Sommer						
der Winter						
das Gewitter						
der Wind						
der Sturm						
Der Hagel						
der Regenschauer						
die Sonne						
die Lampe						
der Stuhl						
der Teppich						
die Wohnung						
das Regal						
der Tisch						
die Küche						
die Kammer						
der Keller						
das Sofa						
der Koch						
die Pflanze						
arm						
klein						
scheu						
interessant						
lieb						

Vocabulary Knowledge Scale Test, Pilot (in English)

Please fill in the language test below. It is actually an unconventional vocabulary test. I would not only like to know whether you know these words or expressions or not but, if you do not know them, I am also interested why you do not. I would like to know if you do not know them because you have never encountered them or because although you have met them, you forgot what they mean. I would also like to know whether you can guess the meaning of words you have not met before.
This is a pilot test which will not be graded and there are no negative consequences of not knowing something or making a mistake.

Please select which category the following words and expressions belong to:

1) I do not know this word, I have never seen it and I do not know what it means.

2) I do not know this word, I have never seen it but I can guess what it means.
My guess is: _____

3) I have seen this word before, but I do not know what it means.

4) I have seen this word before, and I am familiar with its meaning.
I think it means: _____

When you give the meaning, you can use the Hungarian equivalent, a German synonym or antonym. You can also choose to use it in a sentence in a way that its meaning becomes clear.

Words/expressions	I do not know this word, I have never seen it and I do not know what it means	I do not know this word, I have never seen it but I can guess what it means.	My guess is:	I have seen this word before, but I do not know what it means.	I have seen this word before, and I am familiar with its meaning.	I think it means:
das Haar						
das Ohr						
der Ellbogen						
das Kinn						
der Daume						
die Wade						
die Kehle						
die Suppe						
die Butter						
die Milch						
der Tee						

Words/expressions	I do not know this word, I have never seen it and I do not know what it means	I do not know this word, I have never seen it but I can guess what it means.	My guess is:	I have seen this word before, but I do not know what it means.	I have seen this word before, and I am familiar with its meaning.	I think it means:
das Salz						
der Pfeffer						
der Sommer						
der Winter						
das Gewitter						
der Wind						
der Sturm						
Der Hagel						
der Regenschauer						
die Sonne						
die Lampe						
der Stuhl						
der Teppich						
die Wohnung						
das Regal						
der Tisch						
die Küche						
die Kammer						
der Keller						
das Sofa						
der Koch						
die Pflanze						
arm						
klein						
scheu						
interessant						
lieb						

A 1.4 - Translation tasks of the think-aloud protocols[8]

1)

Lance Armstrong	**Lance Armstrong**
Lance Armstrong (geboren am 18. September 1971 in Texas) ist ein amerikanischer Straßenrennen Radfahrer, der im Juli 2005 in den Ruhestand getreten ist.	Lance Armstrong (born September 18, 1971 in Texas) is an American professional road racing cyclist who retired in July 2005.
Er ist am meisten bekannt für seinen Rekord, die Tour de France sieben konsekutive Male zu gewinnen, von 1999 bis 2005, und dafür, sich vom Krebs erholt zu haben, bevor er seine erste Tour 1999 gewann.	He is most famous for winning the Tour de France a record seven consecutive times, from 1999 to 2005, and for having recovered from cancer before winning his first Tour in 1999.
Sein Erfolg resultierte darin, dass manche Menschen dieses Event die „Tour de Lance“ nennen.	His success resulted in some people calling the event the “Tour de Lance”.
Er begann seine Karriere als Triathlet, realisierte aber schnell dass „es nur um das Fahrrad geht“.	He began his career as a triathlete but quickly realized that “it's all about the bike”.
Ein Jahr nachdem er 1992 professionell wurde, hatte er seinen ersten großen Sieg bei den Straßen-Weltmeisterschaften in Oslo, Norwegen.	One year after turning professional in 1992, he had his first major victory at the World Road Championships in Oslo, Norway.
2002 ernannte das Sports Illustrated Magazine Armstrong zu ihrem Sportler des Jahres. Er erhielt außerdem zahlreiche andere Athletik-Auszeichnungen.	In 2002, Sports Illustrated magazine named Armstrong their Sportsman of the Year. He has also received numerous other athletic awards.

[8] The texts were adapted from: http://www.eurocomcenter.com/

2)

Kanada: Von See zu scheinender (glänzender) See	**Canada: From Sea to Shining Sea**
Naturparks, interessante Metropolen, weite Felder, tiefe Ozeane und unzählbare Chancen für Abenteuer....	Natural parks, interesting metropolises, wide fields, deep oceans and innumerable chances for adventure....
Kanada, das zweitgrößte Land nach Russland, hat viele Möglichkeiten für Touristen.	Canada, the second largest country after Russia, has many possibilities for tourists.
Im Sommer können Sie unter der warmen Sonne mit einem Rucksack spazieren gehen, oder Vancouver, Toronto, oder Old Quebec entdecken.	In summer, you can walk under the warm sun with a rucksack or discover Vancouver, Toronto, or Old Quebec.
Kalte Winter garantieren wunderbares Skilaufen in den Rocky-Bergen, ein Eisfest in Montreal oder Bobfahrenspaß in Calgary, die Stadt der Winterolympiade 1988.	Cold winters guarantee wonderful skiing in the Rocky Mountains, an Ice Festival in Montreal or bobsled fun in Calgary, the city of the Winter Olympics in 1988.
Wer organisiert kanadische Urlaube am besten? Canada Tours!	Who organises Canadian vacations best? Canada Tours!
Wir finden Flüge und Hotels (oder Campingplätze) und organisieren flexible Tourpakete für Sie.	We find flights and hotels (or campgrounds), and organise flexible tour packages for you.
Ob Sie Natur, Museen und Kultur oder Stadt-Sightseeing mögen - wir haben die Tour für Sie. Alles für niedrige Preise, die Ihrem Budget passen!	Whether you like nature, museums and culture, or city sightseeing – we have the tour for you. All for low costs that fit your budget!
Für mehr Information, oder um eine Tour zu buchen, besuchen Sie unsere Webseite! www.greatcanadatours.ca	For more information, or to book a tour, visit our webpage! www.greatcanadatours.ca

A 1.5. - List of words from the texts analysed in 5.4

A 1.5.1 - Armstrong

am meisten	‘most’
andere	‘other’
Athletik	‘athletics’
außerdem	‘apart’
Auszeichnungen	‘awards’
bekannt für	‘well-known for’
bevor	‘before’
dieses Event	‘this event’
Erfolg	‘success’
erhielt	‘received’
erholt zu haben	‘to have recovered’
ernannte	‘named’
gewann	‘won’
gewinnen	‘win’
in Ruhestand getreten ist	‘retired’
konsekutive	‘consecutive’
Krebs	‘cancer’
Male	‘times’
manche Menschen	‘some people’
nennen	‘call’, ‘name’
professionell wurde	‘became professional’
Radfahrer	‘cyclist’
realisierte	‘realised’
resultierte	‘resulted’
schnell	‘fast’
Sieg	‘victory’
Sportler des Jahres	‘sportsman of the year'
(Sports Illustrated) Magazine	(Sports Illustrated) Magazine
Straßenrennen	‘street race’
Straßen-Weltmeisterschaften	’World Road Championship’
zahlreiche	‘numerous’

A 1.5.2 - Canada

Abenteuer	‘adventure’
buchen	‘book’
Budget	‘budget’
Chancen	‘chances’
Eisfest	‘ice festival’
entdecken	‘discover’
Felder	‘fields’
finden	‘find’
flexible	‘flexible’
Flüge	‘wings’
kalte	‘cold’
Metropolen	‘metropolises’
Möglichkeiten	‘possibilities’
Naturparks	‘natural parks’
organisiert	‘organises’
Ozeane	‘oceans’
Preise	‘prices’
Rocky-Bergen	‘Rocky Mountains’
Rucksack	‘rucksack’
scheinender	‘shining’
See	‘sea’
Sonne	‘sun’
spazieren gehen	‘go for a walk’
tiefe	‘deep’
Tourpakete	‘tour packages’
unzählbare	‘numerous’
weite	‘wide’
wunderbares	‘wonderful’

A 1.6 - List of cognates tested in the VKS data

A 1.6.1 - Test 1 (Group T1 and Group C1)

1.	Brust	‘breast’
2.	Daumen	‘thumb’
3.	Ellbogen	‘elbow’
4.	Industrie	‘industry’
5.	Ingenieur	‘engineer’
6.	Koch	‘cook’
7.	Pfeffer	‘pepper’
8.	planen	‘plan’
9.	Qualität	‘quality’
10.	rund	‘round’
11.	Salz	‘salt’
12.	Schnee	‘snow’
13.	Schottland	‘Scotland’
14.	Schulter	‘shoulder’
15.	Spinat	‘spinach’
16.	Sturm	‘storm’
17.	Suppe	‘soup’
18.	Wind	‘wind’

A 1.6.2 - Test 2 (Group T1 and Group C1)

1.	Bäcker	‘baker’
2.	Buch	‘book’
3.	Freund	‘friend’
4.	Frisör	‘hairdresser’
5.	Kantine	‘canteen’
6.	Kurs	‘course’
7.	lang	‘long’
8.	laut	‘loud’
9.	Mechaniker	‘mechanic’
10.	organisieren	‘organise’
11.	Plan	‘plan’
12.	Platz	‘place’
13.	Sekretärin	‘secretary’
14.	studieren	‘study’
15.	süd	‘south’
16.	Waschmaschine	‘washing-machine’

A 1.6.3 - Test 3 (Group T1 and Group C1)

1. Bluse ‘blouse’
2. Fuß ‘foot’
3. Haar ‘hair’
4. kalt ‘cold’
5. Käse ‘cheese’
6. Knie ‘knee’
7. kochen ‘cook’
8. machen ‘make’
9. Maus ‘mouse’
10. Mund ‘mouth’
11. nennen ‘name’
12. Notiz ‘note’
13. springen ‘spring’
14. Suppe ‘soup’
15. tanken ‘tank’
16. Tochter ‘daughter’
17. Tomate ‘tomato’
18. werden ‘will’

A 1.6.4 - Test 1 (Group T2 and Group C2)

1. Bischof ‘bishop’
2. Daume ‘thumb’
3. drehen ‘turn’
4. Durst ‘thirst’
5. Ellbogen ‘elbow’
6. Feder ‘feather’
7. Keller ‘cellar'
8. Kinn ‘chin’
9. Koch ‘cook’
10. lieb ‘lovely’
11. Ohr ‘ear’
12. Pfanne ‘pan’
13. Pfeffer ‘pepper’
14. Pflanze ‘plant’
15. scharf ‘sharp’
16. scheu ‘shy’
17. Schneeflocke ‘snowflake’
18. Storch ‘stork’
19. Sturm ‘storm’
20. surfen ‘surf’
21. Wind ‘wind’

A 1.6.5 - Test 2 (Group T2 and Group C2)

1. Attraktion	‘attraction’
2. Emotion	‘emotion’
3. Experte/ Expertin	‘expert’
4. Hut	‘hat’
5. Hütte	‘hut’
6. Oper	‘opera’
7. reiten	‘ride’
8. Sack	‘sack’
9. Schottisch	‘Scottish’
10. starten	‘start’
11. Studium	‘study’
12. Szenerie	‘scenery’

A 1.6.6 - Test 3 (Group T2 and Group C2)

1. Blut	‘blood’
2. Braut	‘bride’
3. Dekade	‘decade’
4. kühl	‘cool’
5. Lamm	‘lamb’
6. Lippe	‘lip’
7. Neffe	‘nephew’
8. Resultat	‘result’
9. stehlen, stahl, gestohlen	‘steal, stole, stolen’
10. stinken, stank, gestunken	‘stink, stank, stunk’
11. Studie	‘study’
12. Wunder	‘wonder’
13. Wurm	‘worm’

A 1.6.7 - Test 4 (Treatment groups T1, T2, Group C1 and C2)

1. Blut	‚blood'
2. Braut	'bride'
3. brechen, brach, gebrochen	'break, broke, broken'
4. hängen	'hang'
5. Kuchen	'biscuit', 'cookie', 'cake'
6. lichen	'laugh'
7. leicht	'light adj.'
8. Licht	'light noun'
9. Mond	'moon'
10. Nachbar	'neighbour'
11. Nacht	'night'
12. Neffe	'nephew'
13. sauer	'sour'
14. scharf	'sharp'
15. Schuh	'shoe'
16. Silber	'silver'
17. Stahl	'steel'
18. stehlen, stahl, gestohlen	'steal, stole, stolen'
19. Stein	'stone'
20. stinken, stank, gestunken	'stink, stank, stunk'
21. Tag	'day'
22. Traum	'dream'
23. Wunder	'wonder'
24. Wurm	'worm'

Appendix 2 - - Placement tests

A 2.1 - A1/A2 level German placement test[9]

Lagune 1 Einstufungstest

Aufgabenblätter

Dieser Test hilft uns, Sie in den passenden Kurs einzustufen.
Bitte beginnen Sie mit Aufgabe 1 und lösen Sie die Aufgaben, solange Sie sicher sind.
Die Aufgaben werden immer schwieriger. Wenn Sie die Lösungen nur noch erraten, sollten Sie aufhören. Zu jeder Aufgabe gibt es Lösungsvorschläge. Bitte kreuzen Sie die Ihrer Meinung nach richtige Lösung auf dem Antwortblatt an.

Welche Antwort passt?

1. Wie heißen Sie?
   a. Aus München. b. Eva Baumann. c. Bei Siemens.

2. Was sind Sie von Beruf?
   a. Meine Frau ist Ärztin. b. Maier, Anton Maier. c. Ich bin Ingenieur.

3. Woher kommen Sie?
   a. Ich wohne in Hamburg.
   b. Aus Frankreich, aus Carcassonne.
   c. Die Kinder sind nicht zu Hause.

Welches Verb passt?

4. Er _____ Franz.
   a. heißt b. heiße c. bin

5. Seine Frau ____ in München.
   a. wohne b. arbeiten c. wohnt

6. Wo _____ Sie?
   a. wohnst b. ist c. arbeiten

7. Ich ____ glücklich.
   a. heiße b. bin c. ist

Was passt?

8. Ein Mann arbeitet. ____ schreibt einen Text.
   a. Sie b. Er c. Ihn

9. Hier ist ein Kind. ____ Kind hat einen Ball. ____ spielt.
   a. Das ... Das b. Das ... Es c. Sie ... Es

Welche Antwort passt?

10. Wohnt er in Hamburg?
    a. Nein, er wohnt in Hamburg.
    b. Nein, er wohnt nicht in Hamburg.
    c. Ja, er wohnt nicht in Hamburg.

11. Ist das ein Kaffeeautomat?
    a. Nein, das ist kein Kaffeeautomat.
    b. Ja, das ist kein Kaffeeautomat.
    c. Nein, das ist ein Kaffeeautomat.

[9] The German placement tests were borrowed from: http://www.hueber.de/deutsch-als-fremdsprache/

Was passt?

12. Familie Schneider ist ____ Berlin.
a. aus b. mit c. für

13. Ist das ____ Auto, Herr Schuster? – Ja, das ist ____ Auto.
a. sein ... sein b. ihr ... mein c. Ihr ... mein

14. Sind das _____ Bücher, Julia? – Nein, das sind nicht _____ Bücher.
a. dein ... mein b. Ihre ... Ihre c. deine ... meine

15. Du _____ gut _____.
a. können ... schwimmt b. kannst ... schwimmen c. schwimmen ... können

16. Ich habe Hunger. Ich _____ etwas essen.
a. möchte b. möchtet c. willst

17. Jochen braucht _____ Fernseher und _____ Musik.
a. den ... eine b. keinen ... keine c. ein ... die

18. ____ Zeitung ist alt. ____ brauche ich nicht mehr.
a. Die ... Die b. Eine ... Es c. Die ... Es

19. Ich habe kein Handy. Hast du _____?
a. es b. das c. eins

20. Kaufst du Rosen? Nein, ich habe schon _____.
a. welche b. eine c. es

Was passt?

21. _____ Peter mit dem Zug nach Köln _____?
a. Will ... fahren b. Wollt ... fahren c. Will ... fahrt

22. Monika ist krank. Sie _____ nicht zur Schule gehen.
a. musst b. darf c. möchtet

23. Du _____ so leise.
a. sprecht b. sprichst c. spreche

24. Karin ist nicht konzentriert. Sie _____ immer alles.
a. vergesst b. vergessen c. vergisst

25. Das Fenster ist ____. Soll ich es ____machen?
a. an ... aus b. zu ... auf c. auf ... an

26. Um 6 Uhr ____ ich ____.
a. wachen ... auf b. wache ... an c. wache ... auf

27. Eva ist eine gute Freundin. Wir _____ sie schon lange. Sie _____ gut kochen.
a. kennen ... kann b. können ... kann c. kennen ... weiß

A 2.2 - A2/B1 level German placement test[10]

Beispiel: Ich ____ Peter.

sage ☐ ☐ bist
heissen ☐ ■ heisse

Kreuzen Sie die richtigen Lösungen an.
Es ist jeweils nur eine Lösung richtig!

1. Wie _____ du?

bin ☐ ☐ heissen
bist ☐ ☐ heisst

2. Mein Name _____ Sabine.

bin ☐ ☐ heisst
hat ☐ ☐ ist

3. Und _____ kommst du?

wo ☐ ☐ wohin
woher ☐ ☐ woraus

4. Ich komme _____ Zürich.

aus ☐ ☐ nach
in ☐ ☐ über

5. Das sind Karin und Rita._____ sind noch Schülerinnen.

Die ☐ ☐ Sie
Diese ☐ ☐ Und

6. **Das ist doch _____ Kühlschrank. Das ist ein Geschirrspüler.**

kein ☐ ☐ nicht
nie ☐ ☐ nichts

7. Entschuldigen Sie. Ist das hier _____ Uhr?

deine ☐ ☐ kein
Ihre ☐ ☐ seine

8. Ich trinke ein Bier. Und was _____?

du ☐ ☐ nimmst du
hast du ☐ ☐ sagst du

9. Ich _____ jetzt kein Bier.

esse ☐ ☐ mag
habe ☐ ☐ möge

10. Ich bestelle mir lieber _____ Apfelsaft.

den ☐ ☐ ein
der ☐ ☐ einen

11. Hier dürfen Sie nicht rauchen! Bitte _____!

aufhören Sie ☐ ☐ hören Sie auf
hören auf Sie ☐ ☐ Sie hören auf

12. Mama, _____ ich noch fernsehen?

darf ☐ ☐ muss
möchte ☐ ☐☐ will

13. Es ist 13.35 Uhr.
Es ist_____ .

fünf nach halb eins ☐ ☐ fünfunddreissig nach eins
fünf nach halb zwei ☐ ☐ fünfunddreissig nach zwei

14. Wo gibt es hier ein Restaurant?
Hier in der Nähe gibt es leider _____.

einer ☐ ☐ keiner
kein ☐ ☐ keins

15. Wo ist Wolfgang? –Ich glaube, _____ Küche.

auf der ☐ ☐ in der
in ☐ ☐ in die

[10] The German placement tests were borrowed from: http://www.hueber.de/deutsch-als-fremdsprache/

16. Ich habe solche Rückenschmerzen. Mein Arzt sagt, ich _____ jeden Morgen Gymnastik machen.

möchte ☐ ☐ soll
mag ☐ ☐ will

17. Und was _____ du gestern gemacht?

bist ☐ ☐ hat
hast ☐ ☐ ist

18. Ich habe Tennis _____ .

gespielt ☐ ☐ spielen
spiele ☐ ☐ spielt

19. Ist Herr Hunziker wieder zu Hause? Ja, ich habe _____ gestern gesehen.

er ☐ ☐ ihn
es ☐ ☐ sie

20. Warum _____ ihr am Mittwoch nicht gekommen?

habt ☐ ☐ seid
hattet ☐ ☐ sind

21. Wo _____ du gestern?

bist ☐ ☐ hattest
hast ☐ ☐ warst

22. Wir wohnen jetzt schon ein halbes Jahr _____ Zürich.

auf ☐ ☐ in
im ☐ ☐ zu

23. Hier kann man wirklich viel machen, zum Beispiel _____ Kino gehen.

im ☐ ☐ in dem
in der ☐ ☐ ins

24. _____ Restaurant „Hirschen“ kann man die beste Rösti essen.

Im ☐ ☐ In die
In ☐ ☐ In der

25. „Guten Tag. Kann ich _____ helfen?“ – „Ich suche einen Walkman, als Geschenk für meine Mutter.“

ihm ☐ ☐ Ihnen
ihr ☐ ☐ ihnen

26. Wie wäre es mit _____ hier? Der ist sehr gut.

dem ☐ ☐ ihm
der ☐ ☐ ihn

27. Dieses Radio ist sehr teuer, aber es funktioniert auch viel _____ als dieses hier.

am besten ☐ ☐ gut
besser ☐ ☐ mehr

Lesen Sie den Text. Welche Aussagen sind richtig? (28 – 30)

Armer Mozart!
Von Mozarts Musik leben Musiker, Agenturen, Opernhäuser, Plattenfirmen und Souvenir-produzenten. Sogar Städte machen aus seinem grossen Namen viel Geld. Salzburg zum Beispiel, wo er 1756 geboren wurde. Oder Wien, wo er bis zu seinem Tode lebte. Beide nennen sich "Mozartstadt" und locken damit Besucher aus aller Welt an. Mozart selbst hatte von all dem nichts mehr. Er ist 1791 im Alter von 35 Jahren gestorben. Zu seiner Beerdigung ist niemand gekommen- das Wetter war zu schlecht. So weiss man nicht einmal, wo er begraben wurde.

28. Viele Leute verdienen noch heute viel Geld mit Mozarts Musik.

richtig ☐ ☐ falsch

29. Nur wenige Menschen besuchen die "Mozartstädte" Salzburg und Wien.

richtig ☐ ☐ falsch

30. Mozart wurde sehr alt.

richtig ☐ ☐ falsch

31. **Jürg ist ein bisschen grösser _____ seine Zwillingsschwester.**

als ☐ ☐ so
ob ☐ ☐ wie

32. **Susannes neuer Freund sieht nicht sehr gut aus. Er hat einen _____ Bauch.**

dick ☐ ☐ dicken
dicke ☐ ☐ dicker

33. **Was soll ich heute Abend bloss anziehen? Das _____ Kleid?**

schwarz ☐ ☐ schwarzen
schwarze ☐ ☐ schwarzes

34. **Herr Müller arbeitet als Taxifahrer, _____ ihm die unregelmässige Arbeitszeit nicht gefällt.**

denn ☐ ☐ trotzdem
obwohl ☐ ☐ weil

35. **Ruedi _____ eigentlich Ingenieur werden. Aber er ist dann doch Friseur geworden.**

will ☐ ☐ wollte
wolle ☐ ☐ würde

36. **Kurt ist krank. _____ kann er heute nicht arbeiten.**

Denn ☐ ☐ Wenn
Deshalb ☐ ☐ Weil

37. **Macht doch endlich den Fernseher aus! Ihr interessiert _____ doch nicht wirklich für so eine Show, oder?**

euch ☐ ☐ ihr
Ihnen ☐ ☐ sich

38. **Unsere Kinder _____ gern viel mehr fernsehen. Aber sie dürfen nicht.**

haben ☐ ☐ wären
hätten ☐ ☐ würden

39. **Meine Nachbarin besucht jetzt eine Schauspielschule. Ich glaube, sie _____ gern ein Fernsehstar.**

hätte ☐ ☐ war
wäre ☐ ☐ sei

40. **Warum nimmst du nicht den Wagen da? Der hat einen wesentlich _____ Benzinverbrauch als dieser Wagen hier.**

niedrig ☐ ☐ niedrigeren
niedrigen ☐ ☐ niedrigsten

41. **Die Bremsen _____ bei der nächsten Autoinspektion geprüft.**

haben ☐ ☐ werden
sind ☐ ☐ wird

42. **Werden die Reifen von der Werkstatt _____?**

gewechselt ☐ ☐ wechselst
wechseln ☐ ☐ wechselt

43. **Ich habe keine Lust, nach Italien _____.**

fahren ☐ ☐ zu bleiben
bleiben ☐ ☐ zu fahren

44. **Ich sagte: "Geh endlich weg!", aber er _____ einfach nur da und sah mich an.**

stand ☐ ☐ stehe
stände ☐ ☐ steht

45. **_____ ich sieben Jahre alt war, hat mir mein Vater einen Hund geschenkt.**

Als ☐ ☐ Wenn
Da ☐ ☐ Wo

46. **In Bombay _____ nie.**

es schneit ☐ ☐ schneit er
schneit ☐ ☐ schneit es

47. Ich möchte in einem Land leben, _____ schöne Landschaften hat.

das ☐ ☐ die
dem ☐ ☐ in das

48. Ich möchte an einem See leben, _____ Wasser warm ist.

das ☐ ☐ deren
dem ☐ ☐ dessen

49. Ich werde wirklich älter. Jetzt brauche ich _____ Lesen schon eine Brille.

als ☐ ☐ zu
bei ☐ ☐ zum

50. Frau Lang überlegt, _____ sie dieses Jahr in den Urlaub fahren soll.

deshalb ☐ ☐ wenn
ob ☐ ☐ wo

51. Er ist in die Schweiz gekommen, _____ seine Kinder bessere Berufschancen haben.

damit ☐ ☐ um
dass ☐ ☐ wegen

52. _____ des Gewitters hatten wir gestern keinen Strom.

Ausser ☐ ☐ Wegen
Da ☐ ☐ Weil

53. Viele Menschen haben Angst _____ einem Krieg.

auf ☐ ☐ von
für ☐ ☐vor

54. In _____ Monat fahre ich nach Berlin.

ein ☐ ☐ einen
einem ☐ ☐ einer

55. Ich gehe jetzt in die Stadt. Ich will _____ einen neuen Mantel kaufen.

dich ☐ ☐ mich
du ☐ ☐ mir

56. Du, ich brauche den Wagen. Würdest du _____ leihen?

er mir ☐ ☐ mir
es mir ☐ ☐ ihn mir

57. Sie haben _____ beim Tanzen kennen gelernt.

- ☐ ☐ ihr
ihnen ☐ ☐ sich

Lesen Sie den Katalogtext zu einem Kriminalroman.
Welche Aussagen sind richtig? (58 – 60)

Fritz Sperling: **„Das grosse Nichts“**

Claus Weigart möchte ein berühmter Schriftsteller sein. Doch er hat ein Problem: Er hat keine Ideen. Eines Tages lernt er Peter Mann kennen. Der schreibt wunderbare Romane, will aber nichts veröffentlichen. Weigart stiehlt die Manuskripte und lässt sie unter seinem eigenen Namen erscheinen. Als Mann dahinter kommt, beginnt ein mörderisches Spiel…
Spannende Unterhaltung – ein Buch, das man nicht mehr aus der Hand legen kann.

58. Claus Weigart schreibt berühmte Romane.

richtig ☐ ☐ falsch

59. Peter Mann ist ein bekannter Schriftsteller.

richtig ☐ ☐ falsch

60. Wenn man anfängt, das Buch zu lesen, kann man nicht mehr damit aufhören.

richtig ☐ ☐ falsch

61. Die Dame hat sich ihr Gepäck von Peter ins Zimmer tragen _____.

helfen ☐ ☐ wollen
müssen ☐ ☐ lassen

62. Ist Herr Braun schon gekommen?
Ich habe ihn nicht _____ .

gekommen sehen ☐ ☐ kommen gesehen
kommen sehen ☐ ☐ gekommen gesehen

63. Ich kann das Wort nicht aussprechen, können Sie mir bitte sagen, wie es _____

☐ aussprechen werden muss
☐ aussprechen müssen wird
☐ ausgesprochen werden muss
☐ ausgesprochen werden gemusst

64. Ich freue mich, die Karten fürs Theater noch _____ !

☐ bekommen haben
☐ bekommen zu haben
☐ zu bekommen haben
☐ haben zu bekommen

65. Der _____ Tag ist für mich wichtig.

heute ☐ ☐ jetzt
heutige ☐ ☐ jetzige

66. Die Sitzung war geheim. Sie war nicht _____ .

öffentlich ☐ ☐ auf
offen ☐ ☐ voll

67. Wenn Sie ein Wort nicht verstehen, müssen Sie es im Wörterbuch _____.

zuschlagen ☐ ☐ nachschlagen
vorschlagen ☐ ☐ aufschlagen

68. Ich möchte gern ein Konto bei Ihrer Bank _____ .

machen ☐ ☐ aufmachen
geben ☐ ☐ eröffnen

69. Frau Grün vermietet ihre Zimmer nur _____ Studentinnen.

bei ☐ ☐ an
mit ☐ ☐ für

70. „Du hast dich lange nicht sehen lassen" heisst:

☐ Du bist lange nicht gekommen.
☐ Du hast nicht weit sehen können.
☐ Man konnte dich nicht beobachten.
☐ Du hattest dich versteckt.

71. „Er ist berufstätig" heisst:

☐ Er arbeitet.
☐ Er arbeitet nicht.
☐ Er hat viel Arbeit.
☐ Er hat ein Geschäft.

72. Herr Schulz wollte das Haus nicht verkaufen, aber dann musste es doch _____ .

verkauft werden ☐ ☐ verkaufen
verkauft worden ☐ ☐ verkauft haben

73. Wann ist er denn gegangen?
Nachdem er die Rechnung _____.

bezahlt ☐ ☐ bezahlte
bezahlt hat ☐ ☐ bezahlt hatte

74. „Bleiben Sie bitte bei der Sache!" heisst:

☐ Machen Sie bitte diese Sache!
☐ Gehen Sie bitte nicht weg!
☐ Wechseln Sie bitte nicht das Thema!
☐ Bleiben Sie bitte hier stehen!

A 2.3 - English placement test[11]

PLACEMENT TEST

Name: _____ **Class: _____**
English group: _____

I. Choose the correct answer. Please, use the answer sheet for your answers.

1. She is ... university teacher.

A a B an C the D one

2. Is this coat ... ?

A yours B your C the yours D of yours

3. Is Diana ... ?

A a friend of yours B a your friend C yours friend D your's friend

4. Who are ... people over there?

A that B they C these D those

5. There aren't ... for everybody.

A chairs enough
B enough chairs
C enough of chairs
D enough chairs'

6. They're ... young to get married.

A too much B too C very too D -

7. Most ... like travelling.

A of people B of the people C people D the people

8. Ann and Peter phone ... every day.

A them B themselves C themselfs D each other

9. The plural of car is cars. Which of these is correct plural?

A ladys B minuts C sandwichs D babies

10. Which of these is correct?

A happier B more happier C unhappier D beautifuller

[11] Based on Swan and Walter (1997)

11. This is ... winter for 20 years.

A the more bad B the worse C worst D the worst

12. She' s much taller ... me.

A than B as C that D so

13. He lives in the same street ... me.

A that B like C as D than

14. Her eyes ... a very light blue.

A are B have C has D -

15. ... help me?

A Can you to B Do you can C Can you D Have you

16. You ... worry about it.

A not must B don't must C must not D ought not

17. It ... again. It ... all the time here in the winter.

A 's raining, 's raining B rains, rains C rains, raining D 's raining, rains

18. I ... she ... you.

A think, likes
B am thinking, is liking
C think, is liking
D am thinking, likes

19. Who ... the window?

A open B opened C did opened D did open

20. Why ... ?

A those men are laughing
B are laughing those men
C are those men laughing
D laughing are those men

21. What ... ?

A does she wants B does she want C she wants D wants she

22. I didn't ... he was at home.

A to think B think C thinking D thought

23. ... a hole in my sock.

A It's B It is C Is D There is

24. I'll see you ... Tuesday afternoon.

A at B on C in D since

25. What time did you arrive ... the station?

A at B to C - D in

26. We're going ... the opera tomorrow night.

A at B - C in D to

27. I went out without ... money.

A some B any C no D many

28. 'Who's there?' ' ... .'

A It's me B It is I C I am D I

29. Although he felt very ...., he smiled ... .

A angrily, friendly
B angry, friendly
C angry, in a friendly way
D in an angry way, friendly

30. You look ... a teacher.

A like B as C the same like D as than

31. How many brothers and sisters ... ?

A have you got B have you C are you having D do you

32. I ... smoke.

A am B use to C used to D am using to

33. Alice ... have a baby.

A will B shall C is going to D going to

34. I knew that he ... waiting for somebody.

A is B was C would D were

35. ... Gloria last week?

A Have you seen B Did you see C Were you seeing D Would you

36. She's an old friend - I ... her ... years.

A 've known, for B know, for C 've known, since D know, since

37. We met when we ... in France.

A studied B were studying C had studied D had been studying

38. As soon as she came in I knew I ... her before.

A have seen B saw C had seen D did see

39. This picture ... by a friend of my mother's.

A is painting B is painted C was painting D was painted

40. Can you ... ?

A make me some tea
B make some tea to me
C make for me some tea
D make some tea me

41. I went to London ... clothes.

A for buy B for to buy C for buying D to buy

42. You can't live very long without ... .

A to eat B eat C eating D you eat

43. I enjoy ..., but I wouldn't like ... it all my life.

A to teach, to do B teaching, doing C to teach, doing D teaching, to do

44. Her parents don't want ... married.

A her to get B her get C that she get D that she gets

45. I'm not sure what ...

A do they want? B do they want C they want D want they

46. The policeman ... me not to park there.

A asked B said C offered D suggested

47. I ... you if you ... that again.

A hit, say B 'll hit, 'll say C hit, 'll say D 'll hit, say

48. It would be nice if we ... a bit more room.

A would have B had C have D have had

49. If you ... me, I ... in real trouble last year.

A didn't help, would have been
B hadn't helped, would have been
C hadn't helped, would be
D didn't help, would be

50. There's the man ... took your coat.

A which B what C that D -

51. He was wearing ... riding boots.

A red old Spanish leather
B old leather red Spanish
C old red Spanish leather
D Spanish red old leather

52. ... he gets, ...

A The richer, the more friends he has
B Richer, more he has friends
C Richer, more friend he has
D The richer, the more he has friends

53. That ... be Roger at the door - it's too early.

A can't B mustn't C shouldn't D needn't

54. It was crazy to drive like that. You ... killed somebody.

A may have B should have C could have D can have

55. This is the first time I ... a sports car.

A 've driven B 'm driving C drive D Drove

56. We can't use the sports hall yet because it ... .

A is still built B is still building C is still being built D has still being built

57. This is my friend Joe. I ... met, have you?

A don't think you've
B think you haven't
C am not thinking you have
D am thinking you haven't

58. Nobody phoned , did ... ?

A he B she C they D anybody

59. If you were ever in trouble, I would give you all the help you ... .

A will need B would need C need D needed

60. It's time you ... home, but I'd rather you ... here.

A go, stay B went, stayed C go, stayed D went, stay

61. I wish I ... more time.

A had B have C would have D will have

62. John Hastings, ... , has just come to live in our street.

A that I was at school with
B I was at school with
C with who I was at school
D with whom I was at school

63. She keeps tapping her fingers, ... gets on my nerves.

A which B what C that which D so

64. Can you finish the job ... Friday?

A till B until C by D to

65. There's a supermarket ... our house.

A in front of B opposing C facing D in front

Appendix 3 – Sample teaching materials and tasks

A 3.1 - Cognate-pairing exercise[12]

Találd meg a megadott német szavak angol megfelelőjét. Figyeld meg, mik a hasonlóságok és a különbségek.
(Please find the English equivalents of the German words below. Pay attention to the similarities and differences.)

Rule	English	German	Notes
engl. t → germ. s (after a vowel)		Wasser	
engl. t → germ. z		zwei	German "z" is pronounced "ts"
engl. c → germ. k		kalt	
engl. f → germ. v		voll	
engl. p → germ. f (after a vowel)		reif	
engl. p → germ. pf		Pfad	
engl. k → germ. ch (after a vowel)		brechen	
engl. ch → germ. k		Kinn	also: chest/Kiste, child/Kind
engl. gh → germ. ch (after a vowel)		Licht	
engl. d → germ. t		Bett	
engl. th → germ. d		drei	
engl. th → germ. t		Vater	
engl. v → germ. b		Silber	

[12] Based on: http://www.serve.com/shea/cognates.htm

engl. f → germ. b		Weib	
		König	
engl. x → germ. chs		Fuchs	cf k → ch, as above.
engl. y → germ. g		Garn	
engl. y → germ. ig		windig	
engl. w → germ. b		Schwalbe	
engl. w → germ. g		folgen	
engl. th → germ. d		denken	
engl. th → germ. d		dick	
		Feld	
		Fett	
engl. initial g → germ. y		gähnen	
engl. initial g → germ. y		Garn	
engl. d → germ. t		Gott	
		Grund	
engl. p → germ. f		Harfe	
engl. gh → germ. ch (after a vowel)		hoch	

A 3.2 - A collection of cognate words organized by topics (Teacher's copy)

Zahlen – Numbers	
eins	one
zwei	two
drei	three
vier	four
fünf	five
sechs	six
sieben	seven
acht	eight
neun	nine
zehn	ten
elf	eleven
zwölf	twelve
dreizehn – neunzehn	thirteen-nineteen
zwanzig – neunzig	twenty-ninety
hundert	hundred
tausend	thousand

Farben - Colours	
rot	red
grün	green
weiß	white
lila	lilac, purple
blau	blue
braun	brown
grau	grey, gray
orange	orange

Familie - Family	
die Mutter	mother
der Vater	father
der Bruder	brother
die Schwester	sister
der Sohn	son
die Tochter	daughter
der Onkel	uncle
der Cousin, die Kusine	cousin
das Baby	baby

Körperteile – Body parts	
das Haar	hair
der Arm	arm
der Ellbogen	elbow
das Knie	knee
die Nase	nose
die Lippe	lip
die Hand	hand
der Finger	finger
der Daume	thumb
das Kinn	chin
der Fuß	foot
das Ohr	ear
die Schulter	shoulder
die Brust	breast

Essen - Foods	
die Banane	banana
die Grapefruit	grapefruit
die Melone	melon
die Orange	orange
die Tomate	tomato
der Salat, (der Kopfsalat)	salad, (lettuce)
der/das Joghurt	yogurt
die Salami	salami
die Chips	(potato) chips
die Pizza	pizza
die Spaghetti	spaghetti
das Omelett	omelet(te)
die Suppe	soup
die Butter	butter
das Eis	ice-cream
die Milch	milk
der Tee	tea
das Salz	salt
der Pfeffer	pepper
das Ketchup	ketchup/catchup
das Picknick	picnic

Zu Hause, im Büro – At home, in the office	
das Papier	paper
die Toilette	toilet
das Bad(ezimmer)	bath(room)
der Balkon	balcony
das Radio	radio
der Computer	computer
das Sofa	sofa
das Telefon	telephone
die Lampe	lamp
die Waschmaschine	washing-machine
der Kalender	calendar
das Foto	photograph
der Ball	ball
die Blume	(bloom)/flower
die Pflanze	plant
die Gitarre –	guitar
die Trompete –	trumpet

Tiere - Animals	
der Schwan	swan
der Panda	panda
der Wolf	wolf
der Delphin	dolphin
die Giraffe	giraffe
der Bär	bear
der Pinguin	penguin
das Känguru	kangaroo
der Bison	bison/buffalo
das Zebra	zebra
der Wal	whale
der Tiger	tiger
der Leopard	leopard
der Elefant	elephant
das Kamel	camel
der Salamander	salamander
der Fuchs	fox
das Schwein	swine/pig
der Fisch	fish

Orte - Places	
das Haus	house
das Hotel	hotel
der Markt	market
der Park	park
der Tunnel	tunnel
die Windmühle	windmill
der Wasserfall	waterfall
der Kanal	canal, channel

Berufe - Jobs	
der Polizist	policeman
die Polizistin	policewoman
der Feuerwehrmann	fireman
der Pilot	pilot
die Stewardess	stewardess/flight attendant
der Astronaut	astronaut
der Mechaniker	mechanic
der Angler	angler/fisherman

Verkehrsmittel – Means of transport	
das Auto	(automobile), car
das Taxi	taxi
der Bus	bus
der Traktor	tractor
der Kran	crane
die Rakete	rocket
das Boot	boat
das Motorboot	motorboat
das Fischerboot	fishing boat
das Segelboot	sailboat
das Kanu	canoe
der Tanker	tanker (ship)
der Ballon	(hot air) balloon
Das Schiff	ship

Wetter - Weather	
der Sommer	summer
der Winter	winter
der Wind	wind
der Sturm	storm
der Regenschauer	shower
die Sonne	sun

A 3.3 - Written translation task from German into English

Wie heißt auf Englisch? (Please translate into English.)

Unsere Wohnung hat vier Zimmer, eine Küche, ein Bad und einen Balkon.

Hier links ist das Zimmer von Rolf.

Sein Zimmer ist groß, aber was für ein Chaos!

Rechts ist die Küche.

Unsere Küche ist wirklich schön – groß und hell.

Das Bad hat kein Fenster und ist klein und dunkel.

Unser Wohnzimmer hat nur 17qm, aber es hat einen Balkon!

Deutsch (German)	**Englisch (English)**
unsere	
Wohnung	
haben	
vier	
Zimmer	
ein	
Küche	
Bad	
und	
Balkon	

A 3.4 - Translation task from Hungarian into German and English[13]

Wie heißt auf Deutsch und Englisch? (Please translate into German and English.)

A nevem Tihamér.

Szőke, rövid hajam van és kék szemem.

Húsz éves vagyok.

Nagy családom van.

Anyukám orvos, apukám mérnök.

A húgom még általános iskolás,

kedvenc tantárgya a biológia.

A bátyám már dolgozik.

Hobbim a zenehallgatás és az olvasás.

Sportolni is szeretek:

futok, úszok és kézilabdázok.

[13] Adapted from Tápainé Balla (2009a)

A 3.5 - A reading comprehension task[14]

Lese den Text und beantworte die Fragen. (Read the text and answer the questions.)

Schottland ist nicht nur Dudelsäcke, Tartans und Haggis. In den letzten Jahren hat Schottland neue Touristen Attraktionen eingeführt, um das ganze Jahr lang Besucher aus Europa und weiter her zu unterhalten. Hier sind nur ein paar Möglichkeiten für interessierte Reisende:

Whale-watching:
See life Surveys (auf Mull) sammelt Informationen über Wale und Delfine und nimmt auch Besucher mit auf die Boote. Die Touristen helfen, für die Forschungskosten zu zahlen und die Touren sind nicht teuer. Es ist eine gute Alternative für Familien mit Kindern oder auch für Singles. Werden Sie nicht seekrank!

Aviemore:
In den 1990ern war Skifahren eine wichtige Industrie in Aviemore. Heute ist es ein ganzjähriges Ziel für Touristen mit einem großen Urlaubsgebiet - inklusive drei Hotels und einem Golfplatz. Der Cairngorm Nationalpark wurde auch eröffnet (kreiert). Hier können Besucher die Szenerie, die Natur und vielleicht ein Abenteuer genießen.

Harry Potter in Schottland: Viele Orte in Schottland tauchten in den Harry Potter Filmen auf. Nun bietet eine 5-Tages-Tour vom schottischen Fremdenverkehrsamt einen Blick hinter die Kulissen.

The Best of Scotland – Comprehension questions

1. **What can you do in Scotland according to the article?**

   ☐ listen to bagpipes ☐ go on a boat trip to watch whales
   ☐ watch theater plays ☐ visit natural parks

2. **When is it best to visit Scotland?**

   ○ in the summer ○ in the autumn
   ○ any time of the year

3. **What does Sea Life Surveys research?**

   ○ Scotland ○ parks
   ○ dolphins ○ Harry Potter

[14] Adapted from: http://www.eurocomcenter.com/

A 3.6 - Grammar explanation and practice

Szenvedő szerkezet (Passive)

ANGOL (English)		NÉMET (German)
I. Folyamatos jelen (Present Continuous)		*werden+Partizip Perfekt*
a) A travel plan	*is being*	*made.*
b) A destination	*is being*	*chosen.*
c) A hotel room	*is being*	*booked.*
d) ……..		
e) ……..		

II. Egyszerű múlt (Simple Past)

a) A travel plan	*was*	*made.*
b) A destination	*was*	*chosen.*
c) A hotel room	*was*	*booked.*
d) ……..		
e) ……..		

III. Módbeli segédigékkel (with modal auxiliaries) _____

a) A travel plan *can be* *made*.

……

b) A destination *can be* *chosen.*

……

c) A hotel room *can be* *booked*.

……..……

d) ……..……

……

e) ……

……

a) A travel plan *should be* *made*.

……

b) A destination *should be* *chosen.*

……

c) A hotel room *should be* *booked*.

……..……

d) ……..……

……

e) ……

……

Appendix 4 - Individual gain scores achieved by the subjects from February to May

T1	*English*	***German***
T1/1	- 7.69	+10.00
T1/2	+6.15	+7.50
T1/3	+24.62	0.00
T1/4	+3.08	+10.00
T1/5	+3.08	+5.00
T1/6	+7.69	+7.50
T1/7	+7.69	+12.50
T1/8	- 7.69	- 5.00
T1/9	+6.15	+10.00
T1/10	+7.69	- 2.50
T1/11	- 3.08	+15.00
T1/12	+1.54	+17.50
T1/13	+6.15	- 2.50
T1/14	- 1.54	+5.00
T1/15	- 3.08	+7.50
	+3.38	+6.50

4/A Group T1's individual gain scores in the English and German placement tests

T2	*English*	***German***
T2/1	+7.69	- 6.76
T2/2	- 3.08	+4.05
T2/3	+4.62	+6.76
T2/4	+4.62	- 9.46
T2/5	- 4.62	+4.05
T2/6	- 1.54	+8.11
T2/7	- 1.54	+10.81
T2/8	- 3.08	- 4.05
T2/9	- 4.62	0.00
T2/10	+6.15	- 8.11
Total	+0.46	+0.54

4/B Group T2's individual gain scores in the English and German placement tests

C1	*English*	***German***
C1/1	+3.08	+10.00
C1/2	+0.00	+10.00
C1/3	+6.15	+5.00
C1/4	0.00	0.00
C1/5	0.00	- 2.50
C1/6	+20.00	+2.50
C1/7	- 1.54	0.00
C1/8	+3.08	+10.00
C1/9	+10.77	+7.50
C1/10	0.00	+2.50
C1/11	0.00	+12.50
C1/12	+6.15	+5.00
C1/13	+7.69	+2.50
C1/14	+9.23	+2.50
Total	+4.62	+4.82

4/C Group C1's individual gain scores in the English and German placement tests

C2	*English*	***German***
C2/1	0.00	+1.35
C2/2	- 1.54	-1.35
C2/3	- 1.54	+4.05
C2/4	+3.08	+4.05
C2/5	- 4.62	+4.05
C2/6	+1.54	- 1.35
C2/7	- 4.62	+8.11
C2/8	+4.62	+10.81
C2/9	+4.62	+6.76
C2/10	+7.69	+1.35
C2/11	+4.62	- 1.35
C2/12	- 12.31	+4.05
C2/13	0.00	0.00
C2/14	+1.54	- 5.41
Total	+5.08	+4.33

4/D Control group C2's individual gain scores in the English and German placement tests