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CRITICAL ANALYSIS OF ENGLISH-LATVIAN LEXICOGRAPHIC TRADITION

ANGĻU-LATVIEŠU LEKSIKOGRĀFISKĀS TRADĪCIJAS KRITISKA ANALĪZE

Doctoral Thesis

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Introduction

The English-Latvian lexicographic tradition started in 1924 with the publication of the first general English-Latvian dictionary (ELD) compiled by Dravnieks. It was followed by nearly thirty dictionaries¹ of various sizes and structural complexity (excluding the repeated editions) up to 2007, when the latest general ELD was published.

At the present moment English-Latvian lexicography is ruled by a stable and wellestablished tradition, determining the features of the dictionaries' mega-, macro- and microstructure. However, this is also the reason for a certain stagnation resulting in an inability or unwillingness to apply the latest developments in contemporary lexicographic practice. Even though the volume of the lexicographic material is ample, the dictionaries are often compiled using obsolete methods and outdated lexicographic evidence.

When describing the present-day bilingual dictionaries Atkins ([1996] 2002) claims that some of the more innovative dictionaries may introduce some new types of information but what concerns giving pronunciations, usage notes, translation equivalents, illustrative examples, idioms, etc., they are very traditional. She comes to the conclusion that "the dictionary of the present is at heart little different from the dictionary of the past" (Atkins [1996] 2002, 1). This description can obviously be applied to ELDs which can be viewed as traditional in many of the above mentioned microstructural aspects. ELDs have not been affected by such typical feature of modern lexicography as the use of corpus evidence that could have a positive impact on all structural levels of these dictionaries.

The general ELDs analysed in this study have been selected according to the following criteria: a bilingual dictionary of two national languages (English and Latvian) where the lexical items of the source language are supplied with translation equivalents in the target language; with a general macrostructure and microstructure; the entry words are alphabetically arranged; it is available in printed form.

This description of a bilingual dictionary allows excluding specialized dictionaries, explanatory bilingual dictionaries, dictionaries with headword arrangement other than alphabetical and electronic dictionaries. Thus, if not indicated otherwise, exactly this kind of bilingual dictionary is meant by English-Latvian bilingual dictionaries as the representatives of the lexicographic tradition.

¹ It is difficult to specify the exact number of ELDs forming the tradition since the continuity of some lines of dictionaries is not always precisely indicated by the publishers. In such cases the dictionaries are treated as separate publications until their similarity with the seemingly identical publications is proven.

The **aim** of the thesis is to study the development of the English-Latvian lexicographic tradition considering the various extra-linguistic factors which have influenced it, to single out the typical features of ELDs traced throughout the tradition at the levels of their mega-, macro- and microstructure, to pinpoint the problematic aspects of English-Latvian lexicography and to offer theoretically grounded solutions for improving the quality of future ELDs.

In order to reach the aim of the study, the following research tasks have been set:

- to perform a review of the existing research in the field of bilingual lexicography focusing on: a) the types of bilingual dictionaries, their functions and users' needs, b) the primary and secondary sources of evidence in bilingual lexicography with a special focus on the use of corpus evidence in contemporary lexicography, c) the major structural levels of bilingual dictionaries;
- to select the general ELDs and collect samples of lexicographic material for the analysis;
- 3) to divide the lexicographic tradition into periods (initially determined by extralinguistic factors) and define its stages of development; provide a general description of each period based on a set of criteria focusing on the authorship, publishing details, repeated editions, etc. of the ELDs, and perform a critical analysis of the characteristic features of each period;
- to develop a set of criteria (based on the review of metalexicographic literature) for the detailed analysis of ELDs on mega-, macro- and microstructural levels and to analyse the selected lexicographic material according to this set;
- 5) to develop guidelines for a model of a general ELD which would correspond to the latest developments in contemporary bilingual lexicography according to the structure of dictionaries and sources of evidence.

Research hypothesis. Under the influence of various extra-linguistic factors the English-Latvian lexicographic tradition has developed unevenly, which reveals on all three structural levels of dictionaries, and at the beginning of the 21st century it only partly corresponds to the contemporary lexicographic practice. By employing contemporary approaches to dictionary compiling it is possible to develop guidelines for a dictionary model which would approximate this tradition to the contemporary lexicographic practice.

Theoretical framework. The thesis comprises research on the types, functions and users' needs of bilingual dictionaries (Ščerba (1940), Zgusta (1971), Al-Kasimi (1977), Cop (1991), Kromann et al. (1991), Berkov (1996), Honselaar (2003), Marello ([1989] 2003), Yong and Peng (2007), Atkins and Rundell (2008), Svensén (2009)); primary and

secondary sources of lexicographic evidence in bilingual lexicography with a focus on monolingual and bilingual corpus evidence in bilingual dictionaries (Hanks (1990; 2002; 2004), Biber et al. (1998), Landau (2001), Kilgarriff and Tugwell (2002), Meyer (2002), Stubbs (2002), Teubert (2002), Čermák (2003), Sinclair (2004), Teubert and Čermáková (2004), Atkins and Rundell (2008), Fillmore (2008), Héja (2010)); structural levels of bilingual dictionaries, their components and lexicographic solutions applied when building the dictionary on various structural levels (Atkins (1985; [1996] 2002; [1992/1993] 2008), Nielsen (1990; [1999] 2003), Bergenholtz and Tarp (1995), Bejoint (2000), Hartmann (2001), Hausmann and Wiegand ([1989] 2003), Gouws and Prinsloo (2005), Adamska-Sałaciak (2006; 2010)), Latvian monolingual and multilingual lexicography (Endzelīns ([1910] 1974), Zemzare (1961), Roze (1982), Veisbergs (2000; 2011)).

Since the present study deals with two aspects of dictionary research, namely, dictionary history and structure, it was necessary to select appropriate approaches for the survey of the historical development of ELDs. Three approaches to the study of dictionary history have been applied in the historical survey of the ELDs: cultural-historical approach which concentrates on the link between the lexicographic practice of a certain period and its overall cultural background which determines the formation of the lexicographic tradition; genre-specific historical approach which deals with the development of a specific type of dictionary over a certain period of time; and genealogical approach which focuses on the succession and mutual relations of dictionaries within a lexicographic tradition (Hartmann 2001, 40–44). The present study applies a combination of these three approaches to the study of dictionary history with a detailed analysis of the main structural levels of ELDs, thus performing a comprehensive analysis of the lexicographic tradition.

Empirical research methods. In the general framework of the critical analysis of the English-Latvian lexicographic tradition, the following methods have been applied in various parts of the empirical research: descriptive diachronic, comparative, contrastive and structural analysis. It should be stressed that several methods have been combined at all stages of the present study. Descriptive diachronic and comparative analysis have been applied in order to perform the general review of the tradition, describe, analyse and compare the four periods of the tradition and the typical features of the ELDs compiled in these periods. Structural analysis of the analysis of the ELDs on the three structural levels throughout the four periods of the tradition and the comparison of the typical mega-, macro- and microstructural features of ELDs in each of the periods.

Topicality of the research. The topicality of this study is determined by the fact that during the last two decades, more precisely, since 1987 when the first English explanatory dictionary fully based on corpus evidence (*Collins COBUILD English Language Dictionary*) was published, considerable changes related to the choice of lexicographic evidence have affected the field of lexicography. Gradually in such lexicographic traditions as for instance, British and French, the application of corpus evidence has become a must rather than a preferable option (Landau (2001, 193), Hanks (2004, 88), Atkins and Rundell (2008, 96) and many others). However, this source of lexicographic evidence is not yet applied in the English-Latvian lexicographic tradition. On this background the English-Latvian lexicographic traditional and even somewhat stagnant. Thus, there is an urgent need for a detailed analytical inventory of the ELDs in order to detect the strong points and weaknesses of their typical structural features and to offer some feasible solutions for improving the quality of the future ELDs.

So far the English-Latvian lexicographic tradition has been studied only fragmentarily by concentrating on separate dictionaries, their structural levels or even on particular elements of some structural level. For instance, Grīnblats (1966) in his study deals with the illustrative material in bilingual dictionaries, especially the two editions (1957; 1966) of the ELD published by "Liesma"; in six publications on themes related to the English-Latvian lexicography Raškevičs (1993) discusses: selection of headwords and their polysemy, translation equivalents, illustrative material, dictionary labels, cross-references and outside matter components; Gulane (1973) focuses on the scope and treatment of make collocations in most general ELDs published between 1924 and 1966 (though limited to a single microstructural component, the study comprises a wide scope of ELDs); a review comprising a detailed analysis of the three structural levels and contents of the ELD published by "Jāņa sēta" (1995) is performed by Veisbergs (1996; 1997). Another noteworthy study (Bojāte 1968) focuses on the microstructure of bilingual dictionaries compiled at the publishing house "Liesma" in the 1950s and 1960s. The author presents a detailed account of the microstructural features of ten bilingual dictionaries and comes to the conclusion that their entry structure varies in details, but the approach is highly uniform. Unfortunately, none of the editions of the ELD published by "Liesma" (1957 and 1966) is discussed in the study, though the analysis of the entry structures of other bilingual dictionaries reveals obvious microstructural similarities between these dictionaries and the ELD.

Novelty of the research. A comprehensive diachronic review of the whole English-Latvian lexicographic tradition with a special focus on the analysis of the dictionaries on all structural levels has not been performed so far. This study reveals the structural peculiarities of ELDs, indicates the problematic aspects and proposes some theoretically grounded solutions for improving the quality of dictionaries.

Theoretical and practical significance of the thesis. The theoretical significance: the thesis contains substantial research on various aspects of theoretical and practical lexicography with a special focus on bilingual lexicography. The theoretical framework developed in the study can be applied for the improvement of the courses "Lexicography" and "English Lexicology and Stylistics" read at the Faculty of Humanities, the University of Latvia. It can also be applied for further studies of bilingual lexicographic traditions, including the Latvian-English lexicographic tradition. The **practical significance** of the present study rests in the fact that it reveals the problematic aspects of the mega-, macro- and microstructure of contemporary ELDs, and the suggestions offered as a result of the present study can be applied in designing and compiling the future general English-Latvian dictionaries.

Approbation of the research. The doctoral thesis has been discussed and approved at the meeting of the University of Latvia, Faculty of Humanities, Department of English Studies. The results of the research have been reported from 2004 to 2012 at sixteen conferences in Latvia and abroad, and reflected in ten papers published in conference proceedings of international conferences. The results of the research have been used in updating the contents of the courses related to the research subject which are read by the author of the present study at the Faculty of Humanities, the University of Latvia – "Lexicography" and "English Lexicology and Stylistics". The results of the research have also been applied while supervising students' term, bachelor and master papers.

Outline of the thesis. The study is structured in compliance with the aim of the research and consists of six chapters, conclusions, bibliography and appendices.

Chapter 1 "*Types of Bilingual Dictionaries, Their Functions and Users' Needs*" contains three subchapters. The first one reviews dictionary typologies focusing on bilingual dictionaries. The second subchapter describes the functions of bilingual dictionaries in the context of dictionary users and their needs, the active vs. passive types of bilingual dictionaries and the distinctive features of both functional types of dictionaries. The third subchapter presents the structure of analysis for detecting the intended function(s) of general ELDs.

Chapter 2 "*Primary and Secondary Sources of Evidence in Bilingual Lexicography*" consists of two major subchapters with multiple further subdivisions. The first subchapter deals with the main source of lexicographic evidence in the pre-corpus era – citation files,

discussing their advantages and disadvantages as well as juxtaposing them to text corpora. The second subchapter gives a comprehensive account of the major types of corpora used in bilingual lexicography – monolingual reference corpora and parallel corpora. The final part of the second subchapter concentrates on the use of corpus evidence in bilingual lexicography as well as the corpus analysis software and the role of pre-dictionary databases in practical lexicography.

Chapter 3 "*Structural Levels of Bilingual Dictionaries*" consists of three subchapters dealing with the three major structural levels of dictionaries – megastructure, macrostructure and microstructure. The further subdivisions of these subchapters concentrate on significant issues related to each structural level, for instance, the building of headword list, the form and presentation of the headwords, the treatment of polysemy vs. homonymy are discussed in the subchapter on macrostructure of bilingual dictionaries. The other subchapters have a similar structure but differ in contents. Another distinctive feature of this chapter is that each subchapter winds up with a framework for the analysis of the respective structural level of ELDs.

Chapter 4 "*Development of Latvian Bilingual and Multilingual Lexicography*" is divided in two subchapters – the first one describes the development of Latvian bilingual lexicography before the publication of the first English-Latvian dictionary, while the second presents a detailed description of the development of the English-Latvian lexicographic tradition. The lexicographic tradition is divided into periods of development which are initially determined by extra-linguistic factors. A general description (based on a set of criteria focusing on the authorship, publishing details, repeated editions, etc.) of the ELDs published during each period is provided.

The second subchapter of the fourth chapter, the fifth and the sixth chapter comprise the empirical part of the study.

Chapter 5 "*Analysis of Structural Levels of English-Latvian Dictionaries*" comprises three subchapters, each devoted to structural analysis of ELDs on one of the major structural levels. The ELDs are divided into the previously established periods and the analysis is performed according to the framework suggested in the third chapter. The main tasks of the analysis are to identify, classify and describe the mega-, macro- and microstructural components of ELDs published at various periods of the tradition, analyse the findings and draw conclusions on the general tendencies in the development of the ELDs on all three structural levels.

Chapter 6 "Guidelines for a Model of General Bilingual ELD Corresponding to the Latest Developments in Contemporary Bilingual Lexicography" proposes guidelines for a model of a general ELD which corresponds to the latest developments in contemporary lexicographic practice according to the structure of dictionaries and sources of evidence. While developing the guidelines of the dictionary model, the typical structural features of

ELDs that do not contradict the latest developments in contemporary bilingual lexicography have been integrated in it.

The thesis has six appendices which contain the list of information types in bilingual dictionaries described in literature (Appendix 1), the data collected for the general description of ELDs (Appendix 2), the entry **branch** in all the ELDs discussed in the present study (Appendix 3), the data collected for the mega-, macro- and microstructural analysis of ELDs (Appendices 4, 5 and 6).

The Bibliography is divided into two parts – the list of literature and the dictionaries forming the English-Latvian lexicographic tradition. The dictionaries are as far as possible arranged according to the names of the compilers. The repeated editions of dictionaries are presented separately only when the author(s), the editor(s) or the publisher(s) have changed.

CHAPTER 1 Types of Bilingual Dictionaries, Their Functions and Users' Needs

Dictionaries can be classified according to various criteria, however, a standard generally accepted dictionary typology has not been created as yet (Landau 2001, 7). Most linguists dealing with the issue of dictionary typologies, sooner or later come to the conclusion that "dictionaries come in more varieties than can ever be classified in a simple taxonomy" (Bejoint 2000, 37). One of the explanations for this situation could be that there are too many types and subtypes of dictionaries to be presented in a clear taxonomy. It should also be taken into consideration that new (sub)types of dictionaries emerge which cannot be easily integrated in the existing classifications (ibid.).

One of the key questions for a linguist working out a typology of dictionaries is "whether to derive categories from the observation of existing dictionaries or to create categories in theory and then see how existing dictionaries fit into them" (Bejoint 2000, 32). The first approach would lead to a classification while the second to a typology. Both strategies have been chosen by the numerous linguists who have attempted to establish dictionary typologies or systems for classification of dictionaries - Ščerba (1940), Malkiel (1967), Sebeok (1962), Zgusta (1971), Al-Kasimi (1977), Geeraerts (1984), Hausmann (1989), Bejoint (2000), Landau (2001), Hartmann (2001), Swanepoel (2003), Yong and Peng (2007), Svensén (2009), to mention only some of them.

According to Swanpoel (2003, 45), the main task of typologies has been to provide the potential dictionary users with a classification of dictionaries "based on a set of distinctive features", which normally includes a review of different types and subtypes of these dictionaries, indicates their distinctive features, as well as helps to distinguish among the various dictionaries in each (sub)type.

In order to single out the types of bilingual dictionaries, a review of dictionary typologies focusing on bilingual dictionaries will be carried out in the first subchapter of the present Chapter. The typologies developed by such scholars as Ščerba (1940), Zgusta (1971), Al-Kasimi (1977), Yong and Peng (2007) have been chosen for closer analysis. Ščerba (1940) and Zgusta (1971) can be viewed as the trendsetters in the field, offering comprehensive typologies of bilingual dictionaries in the framework of the whole range of dictionary types, while Al-Kasimi (1977) and Yong and Peng (2007) offer typologies which focus specifically on bilingual dictionaries.

Most of the later studies are largely based on their predecessors and often are not highly innovative. However, some scholars (e.g. Cop (1991), Kromann et al. (1984; 1991), Mikkelsen (1992), Mugdan (1992), Berkov (1996), Jarošová (2000), Hanney (2003, 147), Honselaar (2003), Marello (2003), Deuter (2004), Adamska-Sałaciak (2006), Atkins and Rundell (2008), Svensén (2009)) have made a contribution to further research on the types of bilingual dictionaries. Such issues as the users' needs and linguistic activities they perform, which determine dictionary functions and the types of bilingual dictionaries, will be discussed in the second subchapter of the present chapter. It should be noted, though, that a certain overlapping between the two subchapters is inescapable since the types of bilingual dictionaries and the factors which determine the emergence of these types are tightly related.

It should also be noted that even though this discussion focuses primarily on the types and peculiarities of general bilingual dictionaries, some other types like, for instance, bilingualized or semi-bilingual dictionaries will be touched upon in the discussion.

The goal of the present subchapter is to single out the types of bilingual dictionaries encountered in metalexicographic literature in order to determine the types of bilingual dictionaries relevant for the study of the English-Latvian dictionaries.

1.1 Dictionary Typologies Focusing on Bilingual Dictionaries

1.1.1 Ščerba's Typology

The review should be started by examining Ščerba's dictionary typology presented in his study "Towards a General Theory of Lexicography" ([1940] 2003) which is often viewed as the first serious attempt to establish a dictionary typology based on structural characteristics of dictionary types (Adamska-Sałaciak 2006, 27; Al-Kasimi 1977, 12). In his typology Ščerba ([1940] 2003) covers a wide range of dictionaries, suggesting six pairs of binary oppositions. In this study the English translations of the original Russian terms used by Ščerba are mostly based on Farina's translation of the article (Farina 1995, reprinted in Hartmann (ed.) 2003), while Adamska-Sałaciak (2006, 27) chooses to substitute Farina's 'defining' by 'explanatory' and 'translating' by 'translation(al)', but Al-Kasimi (1977, 12) prefers 'normative' instead of Farina's 'academic',' reference' instead of 'informative'. Notwithstanding these insignificant terminological differences, the following distinctions between the types of dictionaries were proposed by Ščerba (the original Russian terms (Ščerba [1940] 1977, 188–198) are provided in brackets):

- academic vs. informative [словарь академического типа словарь-справочник],
- encyclopaedic vs. general [энциклопедический общий],

- concordance vs. ordinary (defining or translating) [thesaurus обычный (толковый или переводный)],
- ordinary (defining or translating) vs. ideological [обычный (толковый или переводный) идеологический],
- defining vs. translating [толковый переводный],
- non-historical vs. historical [неисторический исторический].

Although the distinction *explanatory vs. translating* is obviously the most relevant one of Ščerba's oppositions for the context of bilingual lexicography, Adamska-Sałaciak (2006, 28) points out that two more of his oppositions (*concordance vs. ordinary* and *ordinary vs. ideological*) are also typologically relevant. The review will start with these distinctions and wind up with the discussion of *explanatory vs. translating* dictionaries.

The binary opposition between *concordance vs. ordinary* dictionary is characterized by Ščerba ([1940] 2003, 24–25) as "the dictionary that provides all the 'linguistic material' for each word, to a certain extent leaving it to the reader to draw meanings from it" vs. "the dictionary that somehow – through explanation or translation – tries to give all the meanings for each word, bringing in examples only to illustrate its definitions". This description leaves no doubt that bilingual dictionaries belong to the latter type, while the former is usually associated with dictionaries of dead languages where all the words are supplied with quotations that can be found in a limited scope of texts – here Ščerba mentions *Thesaurus linguae latinae* compiled by five German academies (ibid.).

The second distinction related to bilingual lexicography is between *ordinary* (explanatory or translating dictionary) vs. ideological dictionary. Ščerba ([1940] 2003, 31) argues that an ordinary dictionary "can be organized by the phonetic forms of words (an ordinary dictionary), by placing them either in alphabetical order (an alphabetic dictionary) or in nests (a dictionary with nested entries)", while an ideological dictionary is organized by meanings or "concepts expressed by the phonetic form of the words". Ščerba also specifies that "it would be more exact to say that an ordinary dictionary is a list of 'phonetic words' and their meanings and an ideological dictionary is a list of words-as-concepts and their synonyms" (ibid.). This distinction does not pose any particular difficulties since bilingual dictionaries obviously belong to the category of ordinary dictionaries, their macrostructure is arranged in alphabetic order which in some dictionaries can be violated by the nesting of headwords.

Ščerba's third distinction between general *defining vs. translating* dictionaries is obviously the most relevant one for bilingual lexicography. Having pointed out that the principal mistake of bilingual dictionaries "is assuming that the concept systems of any given pair of languages are adequate" (ibid. 38), Ščerba draws the conclusion that

"ordinary translating dictionaries do not give the real meaning of foreign words, but only help one to guess at their sense in context" (ibid. 40) which can often lead the user to wrong assumptions. For this reason his suggestion is to start using explanatory dictionaries of the second language as soon as possible thus leaving faulty translating dictionaries only for the initial levels of language acquisition. He also suggests some ways of improving bilingual dictionaries, for instance, by "adding various notes and examples" or if an equivalent is lacking, by listing "several quasi-synonyms" (ibid.).

Much more radical is his suggestion to create an explanatory L2-L1 (second languagefirst language) dictionary where the lexical item is supplied by an L1 definition and which includes translation equivalents only when they could contribute to "a full understanding of the foreign word's true nature" (ibid. 41). He views this type of dictionary (first suggested by Ščerba already in 1936 in the Preface of his Russian-French Dictionary) as an 'ideal' one because it would supposedly give the users the most accurate picture of the foreign language which due to "the incommensurability of the lexical systems of different languages" (Adamska-Sałaciak 2006, 29) cannot be achieved with the help of (often faulty) translation equivalents. Ščerba did not compile such a dictionary but he suggested that it could be done by, for instance, translating the definitions of the French *Larousse* into Russian, thus creating a new type of "French defining dictionary in Russian" for the Russian readership. He admits, however, that this type of dictionary would obviously require from users a rather high degree of competence in the respective foreign language (Ščerba [1940] 2003, 41).

Adamska-Sałaciak's (2006, 34–35) search for bilingual dictionaries of this kind revealed that, according to Mugdan (1992) and Mikkelsen (1992), there is only one explanatory bilingual dictionary – *Russisch-deutches Wörterbuch* (edited by Bielfeldt, 1958). Burkhanov (1999, 245) holds that L1 definitions are more frequently found in special purpose (e.g. slang or synonymic dictionaries) rather than general bilingual dictionaries. Adamska-Sałaciak also observes that dictionaries which are built on the basis of a monolingual L2 dictionary framework can result either in bona fide bilingual dictionaries or (if the definitions are retained and translation equivalents added) in the so-called bilingualized or semi-bilingual dictionaries. In the latter case "the dictionary preserves the structure of entries inherited from the monolingual source" which, according to Adamska-Sałaciak, "Ščerba would have approved of" (2006, 35). It should be noted that in bilingualized dictionaries (e.g. the "Password" series) the definitions and examples are mostly not translated, only the headword.

Adamska-Sałaciak (ibid.) mentions a more recent development in the lexicographic practice which also approximates to Ščerba's intended bilingual explanatory dictionary, perhaps, even closer. These are the so-called bridge dictionaries which have developed from the COBUILD project and are based on the frame of a monolingual learner's dictionary. The definitions in these dictionaries are provided in L2 and translated in L1, but the headword and all the phrases that contain it as well as examples remain untranslated and are placed in the right position in the L1 definition, plus a translation equivalent is given for each sense. Skoumalová (2007, 84) provides a sample of an English-Czech dictionary entry:

bridge /bridʒ/, bridges. 1 COUNT N A **bridge** is a structure built over a river, road, or railway so that people or vehicles can cross from one side to the other. **Bridge** je konstrukce postavená přes řeku, silnici nebo železnici, aby lidé nebo vozy mohli přejíždět z jedné strany na druhou. ***** most. . . . *the little bridge over the stream*. 2 COUNT N Something that is a **bridge** between two groups or things makes it easier for the differences between them to be overcome. ***** Co je **bridge** mezi dvěma skupinami nebo věcmi, usnadňuje překonávání rozdí u mezi nimi. ***** most. *We need to build a bridge between East and West*. (...)

Although the hybrid types of dictionaries which approximate to the explanatory bilingual dictionary suggested by Ščerba are an interesting research field, they are beyond the framework of this discussion.

Ščerba ([1940] 2003, 42) rounds up his discussion of the types of general bilingual dictionaries by claiming that for any pair of languages there is a need for four dictionaries, namely:

- two L2-L1 explanatory dictionaries for each speech community where the explanations are provided in L1 (admitting that L1 translations could be added, if necessary),
- two L1-L2 translation dictionaries for each speech community (which are still indispensable for the purpose of translation into L2 for less proficient users).

Ščerba's suggestion that two L2-L1 (even though he means a bilingual explanatory dictionary) and two L1-L2 bilingual dictionaries are necessary, reveals that he takes into account various needs of the potential dictionary users. It should be added that although in his typology Ščerba apparently touches upon the issue of the active-passive dichotomy, he does not employ these terms and does not explicitly discuss dictionaries meant for "understanding the meanings of L2 items (passive) as opposed to producing texts in L2 (active)" (Adamska-Sałaciak 2006, 30).

1.1.2 Zgusta's Typology

A typology focused on general bilingual dictionaries is presented by Zgusta in his "Manual of Lexicography" (1971) where he concentrates on the issue of the "native language" vs. "foreign language" in a bilingual dictionary. He claims that the dictionary meant for the native speakers of a language should not contain "covert facts" about this language and culture which are obvious to the native speakers and therefore unnecessary. In this context he speaks of the pair of bilingual dictionaries A-B and B-A which can be intended for the speakers of either language A or B, but definitely not for both groups simultaneously because their needs differ significantly (Zgusta 1971, 299). As the most relevant 'dimension' of his typology of the bilingual dictionaries Zgusta (ibid. 299–300) mentions "the lexicographer's intention to compile the dictionary either as an aid to the comprehension of texts in the source language or of the description of the source language, or as an aid to the generation of texts in the target language"².

In order to illustrate these three possible "intentions" of a bilingual dictionary Zgusta (ibid. 300–301) discusses sample entries of the Ossetic-English (O-E), English-Ossetic (E-O) language pair. The following is a short account of his argument:

- In the O-E dictionary where English is the native language of the user and the dictionary is compiled only for the comprehension of Ossetic texts, nothing more than equivalents are required (čyzg³ girl; daughter); however, if the dictionary is meant for "describing Ossetic", typical contexts have to be provided and the multiple meaning of the word disambiguated (čyzg (1) "With sixteen years, she was prettiest *čyzg* of the village", [Eng.] girl, ...).
- 2. If the O-E dictionary is compiled to meet the needs of native Ossetic speakers in order to generate English texts, the English equivalent would need a gloss to instruct the Ossetic user about the difference between the two meanings and their usage, the glosses should be given in Ossetic.
- Accordingly, if the E-O dictionary is compiled for the native speakers of Ossetic to comprehend English texts, it is claimed that there is no need to disambiguate the Ossetic polysemy because it would probably be done by the English texts. Thus, in a reduced form the entry would look approximately like this: daughter – čyzg; girl –

² In contemporary metalexicographic literature the term 'function' is normally used instead of Zgusta's 'intention'.

³ Here and henceforth the headwords are presented in bold, all the other sample items (e.g. secondary headwords, TL equivalents, illustrative examples, etc.) in italics. When full or abridged entries are quoted, the original typographic presentation is preserved as far as possible.

 $\check{c}yzg$. However, if the dictionary intends to describe the source language closer, it should provide either an illustrative example for each of the senses (e.g. **daughter** (daughters are similar to their fathers) $\check{c}yzg$) or an explanatory gloss in Ossetic (e.g. **daughter** – $\check{c}yzg$ (one's own female child)).

4. And finally, if the E-O dictionary is meant for English speakers in order to generate texts in Ossetic, Zgusta suggests a minimal treatment (daughter – čyzg; girl – čyzg), claiming that to provide some additional information on Ossetic polysemy is not necessary since if the Ossetic word has some other senses, they are beyond the scope of the given entry.

Accordingly, the following set of bilingual dictionaries is proposed for each pair of languages (ibid. 300–301):

- two L2-L1 dictionaries for each speech community (or four if comprehension and description purposes are treated separately, however Zgusta admits that it usually does not happen): if the dictionary is compiled for comprehension purposes, only translation equivalents are required, but if the dictionary is meant for the description of the source language - typical contexts and sense disambiguation is necessary;
- two L1-L2 dictionaries for production purposes: if the entry word is polysemous, its various meanings have to be disambiguated; besides glosses have to be provided in L1.

The approach discussed in the third sample (often a combination of the 'reduced' pure comprehension approach and the more extended one where a closer description of the source language is presented, would be the closest to the one encountered in ELDs (English-Latvian dictionaries) and as such should be noted for further reference.

This account of the types of bilingual dictionaries proposed by Zgusta shows that, in his view, at least four kinds of bilingual dictionaries are necessary for a language pair in order to cater for various needs of the native speakers of the respective languages. However, having provided some more examples of the existent Greek-English, English-Czech and Czech-English dictionaries, Zgusta acknowledges that dictionaries meant for comprehension only are compiled very seldom and can be easily combined with the ones aimed at description because these tasks can be viewed as interdependent (ibid. 303–304). This leaves the bilingual dictionaries aimed at production purposes as a separate group – incompatible with the ones meant for description-comprehension purposes. Accordingly, Zgusta proposes a set of four bilingual dictionaries which are compiled for the different needs of the intended users, only in his classification both types of dictionaries provide

translation equivalents (in contrast with the explanatory L2-L1 dictionary suggested by Ščerba).

Zgusta also discusses the size of bilingual dictionaries, stressing that they should not be too small because it might be "irritating", but, more importantly, the size is "not only the question of the number of entries (which is nearly always smaller than that in a comparable monolingual dictionary), but it also implies the richness of the information given in each entry" (ibid. 304) thus stressing that the size of the dictionary is related not only to its macrostructure but also its microstructure.

Apart from the above discussed types of bilingual dictionaries determined by their function (Zgusta prefers to use 'intention') and user needs, Zgusta (ibid. 304) points out another dimension – the 'purpose' of a bilingual dictionary. According to him it is "a very broad category" (ibid. 304) which partially overlaps with the dimension of 'intention'. Zgusta claims that in order to determine the 'purpose' of the intended dictionary, the lexicographer should consider the educational level of its target audience, its potential sphere of application (e.g. for literary translation, business contacts, etc.). It should be remarked that the distinction between the terms 'intention(s)' or 'function(s)' and 'purpose(s)' of bilingual dictionaries suggested by Zgusta has not been firmly established in metalexicographic discourse and some confusion in this regard can still be observed.

1.1.3. Al-Kasimi's Typology

According to Al-Kasimi (1977, 17), his classification of bilingual dictionaries is not based on the survey of the existing dictionaries but it is rather a quest for better types of bilingual dictionaries. In his typology Al-Kasimi concentrates on the differences in the source, scope and purpose of bilingual dictionaries promising to pay special attention exactly to their purpose. His interpretation of the purpose of a bilingual dictionary is based on the review of considerations put forward by such linguists as Martin (1967), Haas (1967), Iannucci (1967), Barnhart (1967), Householder (1967) and Read (1972). Al-Kasimi (ibid. 18–19) comes to the conclusion that "linguists recommend different types of bilingual dictionaries and suggest different solutions to the same problem depending on the purpose(s) of the dictionary" which is/are determined by the intended users, their needs and the intended functions of the dictionary.

He claims (ibid. 18) that his "typology is based on the purpose or purposes the lexicographer intends to fulfil". He offers seven binary oppositions to describe various types of bilingual dictionaries (ibid. 20):

1) for the speakers of the source language (SL) vs. speakers of the target language (TL),

2) of the literary language vs. the spoken language;

- 3) for production vs. for comprehension;
- 4) for the human user vs. for machine translation;
- 5) historical vs. descriptive;
- 6) lexical vs. encyclopaedic;
- 7) general vs. special.

Al-Kasimi (ibid.) remarks that often the defining features from several sets of binary oppositions can be combined when describing a bilingual dictionary.

However, not all of these distinctions are equally relevant for the present discussion of general bilingual dictionaries. Al-Kasimi (ibid.) asserts that the first four of his oppositions are related to bilingual dictionaries, while the last three to both mono- and bilingual ones. One might agree with the statement made about the last three oppositions, however, the claim that the first four pertain mostly to bilingual dictionaries is not completely true: the distinction between dictionaries of the literary language vs. the spoken language is not related to bilingual dictionaries only. Besides, this distinction, as well as the somewhat problematic distinction between dictionaries for human users and machine translation (technologies have considerably developed since the 1970s), are not relevant for the present study and as such can be discarded. Distinction number five (historical vs. descriptive), as related almost exclusively to monolingual lexicography, is also not relevant for this discussion. Distinctions number six (lexical vs. encyclopaedic) and seven (general vs. special) although equally applied to monolingual and bilingual dictionaries are of some importance since the focus of the present study is on general linguistic bilingual dictionaries. The first distinction (dictionaries for the speakers of the SL vs. speakers of the TL) which concentrates on the user groups and the third (for production vs. comprehension) focusing on the functions, appear to be the most important ones for the present study and will be discussed in more detail.

In order to clarify the difference between the dictionaries for the speakers of the SL and the speakers of the TL Al-Kasimi (ibid. 22) focuses on two issues which have to be treated differently depending on the intended user group – the headword selection and the metalanguage of the dictionary – both of them have to be adapted to the needs of the intended users.

While discussing the distinction based on the functions of bilingual dictionaries (production vs. comprehension), Al-Kasimi (ibid. 25–26) focuses on the following issues:

- the choice of the SL and TL (which will vary according to the intended function and user group);
- 2) number and contents of the entries (there should be more entries and a larger amount of senses in a dictionary for comprehension, while a dictionary for production should contain morphological and syntactic information about the TL item).

Al-Kasimi (1977, 26), referring to Gedney (1967, 230), rounds up his discussion on the functions of bilingual dictionaries with the conclusion that four general bilingual dictionaries are necessary for each language pair – one for comprehension and one for production purposes for each speech community.

This set partly resembles the types of general bilingual dictionaries already offered by Ščerba (1940) and is very close to the one suggested by Zgusta (1971). It should be noted that even though Al-Kasimi (1977, 22–23) does not deny the possibility of compiling bilingual dictionaries which could serve the needs of both speech communities, he restricts this possibility only to dictionaries of limited lexical coverage which are meant for users of lower proficiency levels.

1.1.4 Yong and Peng's Typology

Yong and Peng (2007, 67–81) in their book "Bilingual Lexicography from a Communicative Perspective" present a tentative typological analysis of bilingual dictionaries from a communicative perspective. They claim that their typology "is put forward on the basis of the triangular communicative model of lexicography" which "consists of three participants, i.e. compiler, dictionary context and user" (ibid. 68).

The first three distinctions of this communicative typology are related to 'Compiler and user aspects'. Further an attempt is made to apply Halliday's register variables: field, mode and tenor in order to "form a unified dictionary context" (ibid. 72), thus, distinctions 4-12 refer to 'Dictionary context', and accordingly (the $4^{th}-6^{th}$) to *field*, $(7^{th}-10^{th})$ to *mode*, $(11^{th}-12^{th})$ to *tenor*. The authors also remark that the type of dictionary can be determined either by a single binary opposition, or they can be combined:

1. active vs. passive bilingual dictionaries⁴ (two active (encoding) and two passive (decoding) dictionaries for each language pair);

⁴ It should be noted that Yong and Peng (ibid. 70) claim that the authors of previous typological studies have not paid due attention to this distinction. It is certainly an exaggeration due to two reasons: 1) the issue is discussed but terminology often differs (in earlier typologies we can mostly encounter the distinction between bilingual dictionaries for 'production' vs. 'comprehension' or 'producing' vs. 'decoding'), 2) there

- 2. general-purpose vs. special-purpose bilingual dictionaries;
- 3. academic vs. didactic bilingual dictionaries;
- 4. linguistic and encyclopaedic bilingual dictionaries;
- 5. bilingual dictionaries in national languages vs. regional dialects;
- 6. general reference vs. special-field/aspect bilingual dictionaries;
- 7. alphabetical, semantic vs. pictorial bilingual dictionaries
- 8. monodirectional vs. bidirectional bilingual dictionaries (a monodirectional dictionary attempts to meet only comprehension or production needs, while the bidirectional one both of them simultaneously);
- 9. bilingual dictionaries with translational equivalents vs. with bilingualized definitions;
- 10. print vs. multimedia bilingual dictionaries;
- 11. bilingual dictionaries for speakers of the SL vs. speakers of the TL;
- 12. bilingual dictionaries for reference-oriented users vs. active-learning users (a distinction similar to decoding vs. encoding, only placed in language learning context).

Although the authors stress the innovative character of the typology, some of the distinctions have already been encountered in the previous typologies, though the terminology applied may differ (e.g. active vs. passive bilingual dictionaries, linguistic and encyclopaedic bilingual dictionaries, general reference vs. special-field/aspect bilingual dictionaries).

Some of Yong and Peng's distinctions have not been encountered in the typologies discussed in this review: academic vs. didactic bilingual dictionaries; bilingual dictionaries in national languages vs. regional dialects; alphabetical, semantic vs. pictorial bilingual dictionaries; monodirectional vs. bidirectional bilingual dictionaries; bilingual dictionaries with translational equivalents vs. with bilingualized definitions; print vs. multimedia bilingual dictionaries; bilingual dictionaries for reference-oriented users vs. active-learning users. However, it should be noted that only some of the distinctions could be relevant to the intended analysis of ELDs, namely, bilingual dictionaries in national languages vs. regional dialects; monodirectional vs. bidirectional bilingual dictionaries and print vs. multimedia bilingual dictionaries.

Summary of the review

The review reveals that the authors of all the above discussed typologies of bilingual dictionaries employ typological distinctions (usually presented in the form of binary oppositions) which individually or in some reasonable combinations allow distinguishing among various types and subtypes of bilingual dictionaries. However, it should be pointed out that some of the distinctions encountered in the typologies are shared with monolingual dictionaries (or in other words, are not entirely bilingual-dictionary-specific). Namely,

are a number of scholars (e.g. Kromann et al. (1989), Mugdan (1992), Adamska-Sałaciak (2006)) who have discussed this distinction and employed the terms 'active' vs. 'passive' before Yong and Peng.

Ščerba's (1940) – ordinary vs. ideological; Al-Kasimi's (1977) – of the literary language vs. the spoken language, historical vs. descriptive, lexical vs. encyclopaedic, general vs. special, for the human user vs. for machine translation; Yong and Peng's (2007) – general-purpose vs. special-purpose, academic vs. didactic, linguistic and encyclopaedic, in national languages vs. regional dialects, general reference vs. special-field/aspect, semantic vs. pictorial, print vs. multimedia.

In the framework of the present research the typological distinctions relevant for bilingual dictionaries (BDs) will be applied (in combination with the distinctive features elicited from definitions of a bilingual dictionary) when defining the type(s) of ELDs selected for the analysis. It should be noted that only the distinctions which are relevant for distinguishing general bilingual dictionaries from other types of bilingual dictionaries will be selected for this purpose (lexical vs. encyclopaedic BD; general vs. special BD; BD in national languages vs. regional dialects, print vs. multimedia BD).

The authors of all the typologies discussed in this subchapter also pay attention to the functions and users' needs of the bilingual dictionary – which user group the concrete bilingual dictionary is compiled for and what function it is supposed to serve. Although the types of bilingual dictionaries described by Ščerba (1940), Zgusta (1971), Al-Kasimi (1977) and Yong and Peng (2007) certainly differ in detail (the explanatory bilingual dictionary offered by Ščerba differs from an ordinary L2-L1 bilingual dictionary, and Zgusta initially splits the comprehension and description functions), still they all come to the overall conclusion that four general bilingual dictionaries are necessary for each language pair in order to meet the production and comprehension needs of both speech communities. The production vs. comprehension criterion in distinguishing among the types of bilingual dictionaries is obviously the most relevant one in these typologies and as such asks for further discussion and clarification which is carried out in the following subchapter.

1.2 Functions of Bilingual Dictionaries Based on Users' Needs

The intended functions of bilingual dictionaries which are tightly related to the users and their needs have initiated further research the results of which will be reviewed in this and the following subchapters.

1.2.1 Users of Bilingual Dictionaries and Their Needs

Who are the users of bilingual dictionaries, and what are their needs? For what purposes do they use bilingual dictionaries? It is important to find answers to these questions before a

further investigation into dictionary functions. It should be noted that the discussion will focus on the users of general bilingual dictionaries.

Kromann et al. (1991, 2712) point out that bilingual dictionaries are used in various spheres of life and for various purposes which accordingly determine the scope of the user groups:

(...) bilingual dictionaries are important tools in language-learning all the way from primary school to university level. They are useful aids to travel abroad and communication in foreign languages, necessary tools in the commercial world and public administration, and indispensable for secretaries dealing with foreign-language correspondence, translators and interpreters.

This description of the purposes the bilingual dictionaries are used for, also reveals the range of their potential users: students at different levels of foreign language proficiency, people who travel abroad (for recreation or business purposes), secretaries, translators and interpreters – probably more potential users could be added to the list, however, it is more important to clarify what common needs are shared by these various groups of users. The metalexicographic literature reveals that the users of bilingual dictionaries:

- can be involved in the following types of linguistic activities: reading, writing, listening and speaking (Svensén 2009, 12);
- they need to perform translation form L2 to L1 or produce texts in L2 (Zgusta 1971, 216; Kromann et al. 1991, 2712).

It can be inferred that the potential users of bilingual dictionaries need them when involved in the four basic linguistic activities which are combined with the translation from L1 into L2 and vice versa from L2 into L1.

Svensén (ibid.) suggests that the four basic types of linguistic activities should:

(...) be grouped in pairs, differentiating between more 'passive' **RECEPTION** (reading and listening) and more 'active' **PRODUCTION** (writing and speaking). In broad terms, reception (or **DECODING**) is finding a certain content on the basis of a given form, whereas production (or **ENCODING**) is finding a certain form on the basis of a given content.

This description not only underlines the link between the activities the users are involved in and their needs, but also brings together at least some of the terms employed in metalexicographic literature when discussing the issue of dictionary functions which correspond to the users' needs, namely, reception and decoding as 'passive' activities vs. production and encoding as 'active' ones.

It should be also kept in mind that the levels of foreign language proficiency of the users, as well as their reference skills (e.g. familiarity with abbreviations, syntactic codes, etc. (pointed out by Atkins and Rundell (2008, 34)) can vary considerably. On top of this

the users of bilingual dictionaries compiled for any pair of languages will always fall in two groups which depend on their L1, asking for production of four dictionaries for each language pair.

The fact that the users of bilingual dictionaries and their needs can vary considerably might ask for a precise definition of the intended user group in the preface of a bilingual dictionary. Unfortunately, often the situation is quite different. Kromann et al. (1991, 2713), for instance, observe that the target user groups of bilingual dictionaries are often not clearly identified, which can mislead the potential users into thinking that these dictionaries are meant for everybody, however, it is not the case – they usually cater only for one group of users (the speakers of one language of the language pair, not both).

1.2.2 Functions of Bilingual Dictionaries (Active and Passive Dictionaries)

The issue of the functions of bilingual dictionaries which are determined by the needs of the target users, taking into consideration that they can represent different speech communities, was already touched upon in the review of typologies. This issue is definitely relevant for bilingual lexicography since "[d]ictionaries should be designed with a set of users in mind for their specific needs" (Householder and Saporta 1967, 279). Therefore the rest of the chapter is devoted to the discussion of various aspects of this issue.

First, the issue of functions of bilingual dictionaries should be clarified. It was already discussed (especially when dealing with Zgusta's typology), however, a short review is necessary here in order to clarify the distinction between mono- and bifunctional bilingual dictionaries.

According to their intended functions bilingual dictionaries can be divided in two categories – monofunctional and bifunctional (Kromann et al. 1991, 2713)⁵. A monofunctional bilingual dictionary for any language pair (e.g. X and Y) is compiled to meet the needs of the representatives of one speech community – X or Y, but not both. This means that for the speakers of X an X-Y dictionary would be L1-L2 (or an active dictionary for encoding needs), while Y-X would serve as L2-L1 (or a passive dictionary for decoding needs). The same set of dictionaries has to be compiled to meet the needs of the speakers of Y, only for them Y-X would be L1-L2 dictionary, while X-Y would be L2-L1. In this case four dictionaries have to be produced for a language pair. This, by all means, is the best solution in order to meet the encoding and decoding needs of both

⁵ Adamska-Sałaciak (2006, 38) mentions alternative variants for these terms: directional vs. nondirectional, monodirectional vs. unidirectional, single-market vs. dual-market.

speech communities; however, this solution is not often encountered in practical lexicography (see the subchapter 1.2.2.2).

A bifunctional dictionary would cater for the needs of both speech communities, namely, an X-Y dictionary would attempt to be L1-L2 dictionary for the speakers of X and L2-L1 dictionary for the speakers of Y and L2-L1 dictionary would attempt to be L1-L2 dictionary for the speakers of Y and L2-L1 dictionary for the speakers of X. In this case only two dictionaries are produced for a language pair (the account of dictionary functions is based on Zgusta (1971, 299), Kromann et al. (1991, 2713)). This approach has been criticized for failing to meet the expectations of both speech communities because it is impossible to do it in a single dictionary. Adamska-Sałaciak (2006, 39), for instance, has come to the following conclusion: "No matter what promotional materials say, I have yet to see a bilingual dictionary – an actual one, not a prototype consisting of a few sample entries written by a clever metalexicographer – which does not privilege one group of its intended users".

Disambiguation of terminology

Though all the authors of the typologies discussed in the first part of the present chapter assert that (at least) four bilingual dictionaries have to be compiled to meet the production and comprehension needs of the users, the terminology employed by them differs.

The authors have used quite different terms when describing the types of dictionaries, their functions and various needs of the users (often the same terms are applied to refer to all of them). A certain tendency can be observed - 'active vs. passive dictionaries' and 'encoding vs. decoding dictionaries/users' needs' are employed most often. The dichotomy 'encoding vs. decoding' appears to have the broadest scope of application: it can be applied when describing the needs of the users as well as the types of dictionaries and their functions. The terms 'active' vs. 'passive' dictionary were not employed by Ščerba (1940) who initiated the discussion of dictionary functions, but are often used in contemporary metalexicography. Though frequently used, these terms have also been criticized. Adamska-Sałaciak (2006, 31–34) conducts an insightful analysis of the various interpretations and modifications of the active-passive dichotomy in contemporary metalexicography (and also draws parallels with Ščerba's typology). She argues (ibid. 33) that dictionaries in this dichotomy are not entirely active and passive because a supposedly passive L2-L1 dictionary can also be used for productive functions (often in combination with an active L1-L2 dictionary). Still she rounds up her discussion with the conclusion that "it is not really a mistake to treat the terms *active* and *passive*, when applied to dictionaries, as synonymous with, respectively, productive and receptive" (ibid. 33-34).

Svensén (2009, 16) argues that "the 'active' translation into a foreign language also involves a 'passive' component of reception, and because the 'passive' translation into the native language also involves 'active' component of production". This leads him to the decision that a more 'neutral' terminology based on the native language (whether it is the SL or TL of the dictionary) should be employed which results into a dichotomy – L1-L2 vs. L2-L1 dictionaries. Cop (1991, 2777) refers to the additional active function of the passive dictionary as "the secondary function of a passive dictionary" because apart from its decoding function "it provides the user with information for later active use of the word he or she has looked up".

In the framework of the present study the terms 'active' and 'passive' will be applied when referring to the two types of dictionaries, while 'encoding' and 'decoding' when discussing their functions and the users' needs (except for the cases when the author quoted employs a different term).

1.2.2.1 Metalanguage and Information Types in Active vs. Passive Dictionaries

The authors of the contemporary studies on bilingual dictionaries rarely propose some new types of dictionaries (Yong and Peng's (2007) study serves as a counter example), but rather concentrate on the distinctive structural features of their two basic functional types viz. active vs. passive which should, but not always are adapted to the needs of the two speech communities for each language pair.

Cop (1991, 2776–2777), Marello (2003, 336–337) and Honselaar (2003, 324) discuss the presentation of metalinguistic vs. linguistic information in the active and passive dictionaries. It is stressed that metalinguistic information (e.g. abbreviations, labels, glosses) should be given in L1 of the intended user, while linguistic information (e.g. equivalents) should appear in the TL of the dictionary (in the active dictionary it is L2 while in the passive – L1 of the user). Deuter (2004, 245) justly points out that if an attempt is made to meet the needs of both speech communities, whichever language is used as metalanguage (probably only one is chosen), it will be the "wrong" one for the other user group.

Kromann et al. (1991, 2720), Hanney (2003, 147), Adamska-Sałaciak (2006, 31) stress that in an active dictionary the information is provided primarily on the foreign equivalents since they will be used to produce a text in L2, while in a passive dictionary the information is provided primarily on the headwords. Grammatical information in both types of dictionaries has to be provided only for L2 part since, if provided for L1, it will appear to be superfluous for the users.

Kromann et al. (1991, 2720ff.), Honselaar (2003, 323-324) and Hannay (2003, 146-148) concentrate on the impact the active-passive dichotomy has on various parts of bilingual dictionary entries. According to Kromann et al. (1991, 2720), it determines the linguistic comments – on equivalence, semantics, style, grammar and phonetic features, as well as non-linguistic comments - the division of lexical units in subject fields, encyclopaedic and culture-specific information. Hannay (2003, 146-148) provides a more detailed account of what kind of information the entries of active and passive dictionaries should contain. The entry of an active encoding dictionary should provide abundant information about translation equivalents: meaning discrimination for polysemous entry words (it can be achieved by grammatical information, meaning discrimination notes, semantic paraphrases, field labels); information which helps to choose the right translation option (connotational information, style and other usage labels); examples illustrating the use of the headword. The entry of a passive or decoding dictionary, on the other hand, concentrates on the L2 headword: its phonetic description (usually indicated with the help of the International Phonetic Alphabet (IPA)), semantic, grammatical and stylistic features. It can be achieved by providing style, field, regional, etc. labels, grammatical labels, culture-specific and encyclopaedic information. Apart from this, it is suggested that regional varieties, alternative forms, old-fashioned forms, marked grammatical forms (plurals, past tenses and participles) should be provided because they might be encountered in a foreign language text.

The information types mentioned in this subchapter will be applied in order to determine the intended function(s) and type(s) of the ELDs selected for the analysis.

1.2.2.2. Number of Bilingual Dictionaries per Language Pair – in Theory and Practice Even though it seems to be self-evident that because of the various needs of the potential user groups four general bilingual dictionaries should be compiled for each language pair, several authors (Kromann et al. (1991), Piotrowski (1994), Hannay (2003), Marello (2003), Deuter (2004), Varantola (2004), Adamska-Sałaciak (2006), Atkins and Rundell (2008)) point out that it is still not standard practice and in actual fact only two of the four bilingual dictionaries are compiled and attempts are made to combine their functions to various degrees. According to Adamska-Sałaciak (2006, 38), although publishers often claim that a certain dictionary meets the needs of both speech communities, it is simply not possible "even at the cost of greatly increased volume and substantial redundancy of information" (ibid.). The mere fact that the preface is provided in two languages should not be viewed as an indication to bidirectionality of the dictionary because only a closer analysis of the

microstructural helps to detect the type of the dictionary and its intended function (Marello 2003, 336). Deuter (2004, 245) acknowledges that it is not a good solution that the potential users are misinformed, but also mentions the possible reasons for it: commercial restrictions or simply insufficient attention to the users' needs.

Jacobsen et al. (1991, 2788) resentfully conclude that the attempts to produce bidirectional dictionaries are "typical of the small linguistic community, where it is a hard fact of life that no one is going to produce four bilingual dictionaries for one language pair." It is also added that the publishers of the large linguistic communities are not interested in compiling active dictionaries for the speakers of smaller linguistic communities. Varantola (2004, 320), also claims that a set of four bilingual dictionaries for a pair of languages like English-Finnish is not financially viable and suggests including numerous translated illustrative examples and providing the potential users with a broader scope of contextual translations in order to approximate the bilingual dictionary to the status of bidirectionality. It is difficult to judge about the effectiveness of such approach but at least it is a step in the direction of catering for the needs of both user groups.

Sadly enough, in the examples provided by Jakobsen et al. and Varantola, Danish and Finnish with full confidence can be replaced with Latvian which beyond any doubt also belongs to the group of small languages for which publishers would be reluctant to produce active dictionaries targeted at English users.

Berkov (1996, 548–550), on the contrary, comes up with the idea that consistent implementation of the active-passive dichotomy is neither possible, nor practical for large bilingual dictionaries. He argues that a passive bilingual dictionary in its pure form is just a translation tool, but a user often wishes to acquire some additional knowledge of the foreign language, which is usually absent in this kind of dictionary. He holds that completely active or passive dictionaries should be compiled only for beginners, while large advanced bilingual dictionaries must be bidirectional (trying to meet the needs of both speech communities). It should be noted that Berkov's argument might have been more convincing if supported by concrete entry samples illustrating the point he makes.

Atkins and Rundell (2008, 41–43) with some well-chosen examples (taken or based on entries from existent dictionaries) illustrate the distinction between an active and passive bilingual dictionary from a practicing lexicographer's vantage point. They start by providing a sample entry of a bilingual dictionary targeted at the users of one language group (Finns in this case) asserting that "[t]he simplest bilingual dictionary to write is a decoding dictionary for one language group, i.e. one destined for speakers of a single language (the TL) who want to translate into their own language" (ibid. 41).

disturb /.../ tr 1 a) häiritä (I hope I'm not ~ing you); b) sekoittaa, järkyttää (the balance) 2 panna sekaisin, sotkea; siirrellä (he found that the papers on his desk had been ~ed); muuttaa, muutella; koskea jhk (do not ~ the screws). [...] ~ed a 1 levoton 2 sielullisesti häiriintynyt; ~ ward rauhattomien potilaiden osasto.

Figure 1.1 English-Finnish General Dictionary (1998) quoted by Atkins and Rundell (2008, 41)

The usefulness of this entry for an English (and non-Finnish) speaker is tested by providing a simple translation task (you have to choose an appropriate Finnish equivalent for translation of the word *disturb* in several sentences taken from British National Corpus (BNC)) to be performed with the help of this entry. It soon emerges that the Englishspeaking user of this dictionary can operate only with those Finnish equivalents which are supplemented with illustrative examples, incidentally, often more than one equivalent is provided, which also might potentially cause misunderstanding and misinterpretation.

The following entry sample presents a type of bilingual dictionary which "is an encoding dictionary for one language group, i.e. speakers of the SL who translate into or express themselves in a foreign language" (ibid. 41). The entry of this active English-French dictionary proves to be handy when selecting the necessary French equivalents for a similar translation task.

hopefully /'hoopfoli/ ADV [] (= optimistically) [say, look at] avec espoir • ... she asked ~ ... demanda-t-elle pleine d'espoir. [2] (* = one hopes) avec un peu de chance • ~ we'll be able to find a solution avec un peu de chance, nous retrouverons une solution • ~ it won't rain on espère qu'il ne va pas pleuvoir • (yes) ~ ! je l'espère !, j'espère bien ! • ~ not! j'espère que non !

Figure 1.2 Collins-Robert French Dictionary (2006) quoted by Atkins and Rundell (2008, 42)

However, Atkins and Rundell (ibid. 42) note that the *Collins-Robert French Dictionary* (2006) is sold in both markets – to the English and the French community, which postulates that it can be used both as an active (encoding) dictionary by English-speaking users and as passive (decoding) by French-speaking users. In the following entry sample (variant A) Atkins and Rundell have shaded the parts of the *Collins-Robert French Dictionary* entry which are viewed as unnecessary for the French users. The result is a considerably reduced version of the entry (B): everything apart from pronunciation and equivalents has been crossed out. The authors conclude that the two versions of this bilingual entry "are proof of how much the users' skills can influence the essential information in the entry" (ibid. 43). This comparison clearly demonstrates the superabundance of redundant information in a dictionary which pretends to be two in one (targeted at both speech communities).

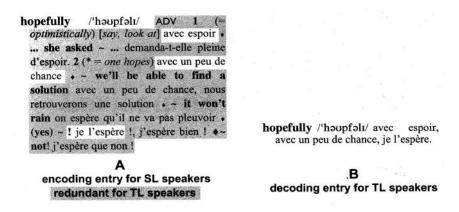


Figure 1.3 Encoding and decoding variants of *Collins-Robert French Dictionary* (2006) entry quoted by Atkins and Rundell (2008, 43)

Apart from revealing the unnecessary abundance of information if the two functions are artificially combined in a single dictionary, this sample also shows that a truly decoding dictionary asks for a very limited entry structure with a narrow range of information types. It also reminds of Berkov's (1996, 548–550) arguments against purely passive bilingual dictionaries compiled for users with a higher level of proficiency in L2 which, according to him, resemble a pure translation tool which "deprives the user of a lot of useful

knowledge" (ibid. 550).

The distinctive features of active vs. passive dictionaries identified in this review of studies performed by various linguists will be applied when detecting the type(s) of general English-Latvian dictionaries selected for the analysis in the present study.

1.3 Structure of Analysis for Detecting the Intended Function(s) of General ELDs

Since the review of literature demonstrates that the active-passive dichotomy is revealed primarily in the microstructure of the dictionaries, in order to define the type(s) of general purpose English-Latvian dictionaries analysed in the framework of the present study, apart from a brief review of their front matter(s), it was decided to focus mostly on the microstructural analysis of these dictionaries.

It should be remarked that although ELDs demonstrate some macro- and megastructural differences, their microstructure is structured similarly (with an exception of the earliest representatives of the tradition). This factor already seems to indicate the possible absence of typological difference between the dictionaries.

The analysis aimed at detecting the type(s) of general ELDs is structured in the following way: firstly, the front matters of the ELDs are analysed in order to spot some direct or indirect indications to the type(s) of the dictionaries; secondly, some entry samples of the ELDs are scrutinized in order to determine the type(s) of these dictionaries according to their microstructural features. The following questions have been posed:

- 1) which language is used for metalinguistic information?
- 2) is information provided primarily on the equivalents or the entry words?
- 3) which information types the entries include?

CHAPTER 2 Primary and Secondary Sources of Evidence in Bilingual Lexicography

The quality and reliability of a dictionary largely depends on its sources or the lexicographic evidence it is based on (Atkins and Rundell 2008, 46). There are two basic types of dictionary sources – primary (original linguistic material) and secondary (derivative material). Primary sources can be citation files, corpora and fieldwork, introspection, while other dictionaries, encyclopaedias and grammars serve as secondary sources (Wiegand and Kučera 1981, 100ff. in Wiegand 1983, 13; Hartmann and James [1998] 2001, 128; Čermák 2003, 18–19; Svensén 2009, 39ff.).

Although usually a particular type of information is selected as the basic source, it is possible that it proves to be insufficient, which results in a combination of sources (Hanks 1990, 32; Hartmann and James [1998] 2001, 128; Čermák 2003, 18; Jackson 2002, 28–29). Introspection, defined by Atkins and Rundell (2008, 46–47) as "the process in which you give an account of a word and its meaning by consulting your own mental lexicon", is an important and frequently applied source in practical lexicography; however, it is stressed (Sinclair 1985, 3; Hanks 1990, 31–32; Ooi 1998, 47–48; Atkins and Rundell 2008, 46–47; Atkins 2008, 271) that in lexicography judgements cannot be based purely and primarily on introspection because in comparison with other authentic data (e.g. from corpora, citation files) it does not give access to how the language is really used by the linguistic community. Another reason why dictionary based on introspection only would be unreliable lies in the fact that "one individual's store of linguistic knowledge is inevitably incomplete and idiosyncratic" (Atkins and Rundell 2008, 47).

While previously introspection was usually combined with the use of citation files, now it is mostly applied in combination with corpus data; as Fillmore puts it, the collection of corpus data is a task of utmost importance, but "the intervention and suffering of a native-speaker analyst" (Fillmore 2008, 122) is equally relevant, thus emphasizing the role of lexicographer in dictionary compiling.

Another source of evidence is informant-testing, namely, when other native speakers are questioned to gather information on language use (Zgusta 1971, 235–238; Hanks 1990, 33; Atkins and Rundell 2008, 47). However, nowadays, due to availability of corpus data reflecting the language use by the speech community, it is "of limited value for mainstream lexicography" (Atkins and Rundell 2008, 47).

In his discussion of data collection in bilingual lexicography Zgusta (1971, 307–308) mentions a reliable monolingual dictionary (possibly similar in purpose and the coverage of the SL of the intended bilingual dictionary) as the basic source of a bilingual dictionary, which then has to be supplemented with information from other monolingual dictionaries. If they have been compiled at least some years earlier, it is suggested to study the most recent texts to check whether some new words or senses have not appeared since the publication of the source dictionaries. Qualitative literary translations, lexicographer's introspection and information gathered from informants are also mentioned as supplementary sources of evidence. This shows that traditionally bilingual lexicography heavily relies on secondary sources. Even though the sources of lexicographic data mentioned by Zgusta in 1971 are still applied in bilingual lexicography, it should be noted that in the past forty years both lexicographic evidence and data collection methods in monolingual and bilingual lexicography have undergone significant changes.

Thus, the rest of the present chapter is devoted to the discussion of primary sources of lexicographic evidence: citation files and text corpora, and to their application in bilingual lexicography.

2.1 Citation Files, Their Advantages and Disadvantages

Since citation files (previously) and corpora (currently) are viewed as the most relevant primary sources in lexicography (Atkins and Rundell 2008, Landau 2001, Čermák 2003, et al.), first it will be clarified what citation files are like, how they differ from electronic text corpora, and their advantages and disadvantages will be described.

According to Landau (2001, 190) "[a] *citation file* is a selection of potential lexical units in the context of actual usage, drawn from a variety of written sources and often some spoken sources", they can also serve as an illustrative material in a dictionary. Citation files comprise citations or citation slips which are hand-gathered by individual readers which can be participants of a Reading Programme, as in the case of *Oxford English Dictionary* (OED) (Čermák 2003, 18).

It is important to note that a citation file comprises items selected by individual readers. Even though the criteria for the selection of lexical items or their meanings are normally clearly defined (e.g. established senses of standard forms, new words and phrases with the lexical item, foreign words and phrases, etc.) and depend on the purpose of the particular citation file (Landau 2001, 192–197), there is a potential danger that the citations selected using this data collection method can be "largely limited to examples that somebody happened to notice" (Fillmore 2008, 108), thus introducing "an element of selectivity and

so inevitably distortion" (Church and Hanks [1990] 2008, 290). Indeed, it is deeply rooted in human nature to pay attention to rare and unusual words and their usage, rather than to the familiar and usual ones (Hanks 1990, 35; Kilgarriff et al. [2004] 2008).

As an important difference between citation files and text corpora Landau (2001, 192) points it out that the compilers of a corpus select texts or fairly large fragments of texts, while in the case of citations these are separate lexical items, and continues by claiming that

citation files are likely to give extraordinary importance to unusual items, because they have been noticed by the collector, whereas corpora give useful information about high-frequency words as well as low-frequency words, and the quality of evidence does not depend on the fortuitousness of selection, but chiefly on the size of the corpus and the tools available for using it (ibid. 193).

Hanks (1990, 35–36) describes the advantages of computers over humans in the process of collecting information on 'familiar items':

Computers do not get bored; they notice only what they are told to notice; and they notice *every* occurrence of the word or usage pattern in the corpus that they have been told to notice, no matter how many there may be.

Citations, according to Summers (1993, 183), offer "insights into the *breadth* of the language" or in other words, they provide numerous meanings (of polysemous words), many of which being very rare. The corpus, on the other hand, being based on a large amount of data, proves to be much more effective in giving evidence about the norms and typical patterns of the language, and thus provides insights into its *depth*. Summers summarises the distinction between the two sources of lexicographic evidence as follows: "Citations provide information on the unusual words in the language; the corpus is much more effective in giving evidence about the norms of the language." (ibid.).

These arguments obviously reveal the superiority of corpora as lexicographic evidence over citation files which were used for this purpose a long time before electronic corpora appeared in lexicography as the major source of evidence.

It should be noted that before the emergence of electronic text corpora "the existence of an ongoing citation file [was] what distinguished reputable general dictionaries from purely derivative works" (Landau 2001, 193). For instance, Johnson's *Dictionary of the English Language* (1755) and *Oxford English Dictionary* (1889–1928) were based on huge citation files (*OED* citation file comprised more than 5 million citation slips). While Johnson used citations from literature mostly as illustrative material, the OED compilers used them more extensively, namely, studying the use of the lexical items as well as illustrating their usage with examples (McEnery and Wilson 2004, 106). According to

Atkins and Rundell (2008, 48) citation files were the primary source of language data in lexicography till the 1980s when the corpus era started.

The discussion of advantages and disadvantages of citation files as a source of evidence in lexicography is based on the research by the following scholars: Summers (1993, 183–186), Landau (2001, 190ff.), Jackson (2002, 166), Čermák (2003, 18–19), Atkins and Rundell (2008, 51–53), Svensén (2009, 41–42).

The most relevant advantages of citations:

- citations help to spot new words (also compounds and multiword units which are more difficult to trace in corpora) and new meanings of the existent ones;
- citations help in gathering terminology pertaining to a certain subject field, a dialect, etc.;
- citation extraction helps to train lexicographers in spotting new usages.

Disadvantages of citations:

- the collection of a citation file takes a lot of time and effort;
- the choice of citations can be subjective and reflect the biases of the collectors;
- citation files are based mostly on written sources (speech is seldom presented), besides the choice is determined by the availability of the material;
- citations are mostly excerpted from the material written by educated authors and, therefore, reflect only educated writing;
- the lexical item is presented in a limited (often to one sentence) context;
- although the tasks set for the readers may differ, there is a strong tendency to look for specific or unusual usage instead of the typical.

The list of disadvantages of citations is longer, which explains the success story of the application of text corpora in the field of lexicography. However, citations are still applied as a source in lexicography, only nowadays they are used as a supplementary material to corpus data, mostly to provide information on neologisms, current slang, new scientific terms, namely, lexical items or their meanings which have entered the language comparatively recently and might not yet be traced in corpus because language is constantly changing (Landau 2001, 190–191).

2.2 Text Corpora

A general definition of the contemporary electronic text corpus by Sinclair (2004a, 16) describes its most relevant features:

A corpus is a collection of pieces of language text in electronic form, selected according to external criteria to represent, as far as possible, a language or language variety as a source of data for linguistic research.

It should be noted that an electronic text corpus is a vast amount of texts which needs the support of sophisticated computational systems providing corpus query tools to elicit data from this collection (the most relevant corpus tools are discussed below in this chapter).

Describing the advantages of using corpora Stubbs (2002, 221) notes that only "[c]orpus methods can organize huge masses of data, and make visible patterns which [previously] were only, if at all, dimly suspected", and continues that only thanks to corpus evidence we have now access to "facts about language use which no amount of introspection or manual analysis could discover" (ibid.) in pre-corpus times.

At present various types of corpora are used. Teubert and Čermáková (2005, 117–125) give a comprehensive though not exhaustive summary of the most relevant types of text corpora:

- *Reference* (or general) corpora are large corpora which contain the standard vocabulary of a language and represent contemporary discourse of this language; a national language reference corpus these days typically contains several hundred million words; these corpora can be used for various language studies, lexicography among them;
- *Special* (or specialized) corpora are usually smaller corpora compiled to study a specific phenomenon of language, a certain subject field, etc.;
- *Opportunistic* (or cannibalistic) corpora do not claim to be representative of language as reference corpora do, often these are large collections of special corpora which are regularly supplied with new special corpora;
- Monitor corpora concentrate on language change and therefore are regularly updated with information on meaning changes of words or larger units of meaning, occurrence of new words, etc., retaining the original structure;
- *Parallel* (or translation) corpora contain the original text and its translation(s) in one or several languages. They reveal the difference between the language used in the original text and the translation. They serve as a tool in translation studies and compiling of bilingual dictionaries. Parallel corpora can be aligned (usually on sentence level) to ensure the correspondence of the text in both languages;

• More and more often *the Internet* which is larger than any other corpus but without a concrete structure, is also consulted as a corpus, however, such search results cannot be equalled to the ones yielded by a well structured corpus.

Various corpora can be applied in lexicography; however, their choice will depend on the type of dictionary to be compiled. Only the types of corpora applied in the process of compiling general bilingual dictionaries will be discussed further in this chapter. From the above listed these are the reference (or general) corpora and parallel (primarily translation) corpora.

2.2.1 Types of Corpora Applied in Bilingual Lexicography

This subchapter will focus on two types of corpora applied in bilingual lexicography, namely, large monolingual reference corpora and bilingual parallel corpora. Special attention will be paid to the relevant criteria of reference corpora: size, representativeness and balance. These criteria can also be applied to parallel corpora; however, to a much lesser extent, since due to their application in bilingual lexicography (selection and verification of translation equivalents), the size and structural features of parallel corpora play a less relevant role. Therefore the subtypes and availability of parallel corpora, being relevant issues related to this type of corpus, will be discussed in more detail.

2.2.1.1 Monolingual Reference Corpora

Lexicography (both monolingual and bilingual) can make use of reference corpora providing linguistic data specifically for lexicographic purposes, or multi-purpose corpora which, apart from application in lexicography, have been compiled for various other purposes, e.g. vocabulary studies, studies of language varieties, grammatical studies, genre studies, etc. Such well known reference corpora as the British National Corpus and the Bank of English Corpus, used in various lexicographic projects, are in fact multi-purpose corpora (Meyer 2004, 15 and 36).

Atkins and Rundell (2008) stress that for lexicographic purposes "the most useful kind of corpus is one that combines very large volumes of data with diversity in a number of broad categories (like mode, medium, and domain)" (Atkins and Rundell 2008, 95). However, they admit that an ideal corpus for lexicographic purposes does not exist and point out some of the inescapable truths about text corpora in general and lexicographic corpora in particular (ibid. 54–57):

• even a large corpus will always be only a sample "of all of communicative events of the language under investigation" (ibid. 55);

- corpus should not contain only high quality texts by the best authors but present various levels of usage, only then it can be viewed as "a genuine and *inclusive* snapshot of a language" (ibid. 56);
- corpus contents will always be a result of a compromise between what is desired and what is realistic due to various (financial, temporal, etc.) constraints.

Some more important factors to be taken into account when evaluating corpora and their applicability in lexicography are pointed out by Leech (1991, 10–19) and other scholars:

- apart from containing large amounts of text, to be representative of a language or its variety corpora have to be "carefully designed as systematic collections of samples" (ibid. 10);
- corpora of written texts are always more easily accessible than the ones of oral texts which have to be recorded and transcribed in order to be included in corpus (Chafe et al. (1991) and Summers (1993, 201–205) provide insightful accounts of collection and processing of oral data for inclusion in a corpus);
- the texts collected in a corpus present raw material which has to be further analysed since only annotated corpora can be successfully used for lexicographic purposes (e.g. part of speech tagging is an essential linguistic annotation of corpus data);
- the issue of copyright can cause problems of availability of corpora containing recent texts Sinclair (1991, 15, quoted in Atkins and Rundell 2008, 82) even claims that "the labour of keeping a large corpus in good legal health is enormous" since permissions from the copyright owners of all the texts included in the corpus have to be obtained.

Hanks (2000, 9) warns the potential users of large general corpora that they should not be perceived "as homogeneous wholes, but rather as sets of overlapping subcorpora" since the language proves to be highly domain-specific.

It should also be taken into consideration that corpus evidence, according to Summers, "can only be regarded as reliable, [...], if the corpus it derives from can itself be regarded as sufficiently large and sufficiently well constituted" (Summers 1993, 186). This requires a further clarification of the notion of a large well-constructed corpus in lexicographic context.

2.2.1.1.1 Corpus Size

The issue of size pertains to both types of corpora applied in general bilingual lexicography, however, it concerns more the reference corpora which attempt to provide possibly complete information on a certain language and serve as the main resource in

lexicography. Teubert and Čermáková (2004, 123–124) point out that parallel corpora have traditionally been of much smaller size (mostly not above 5 million words from each language) than the large reference corpora, which is partly due to technical difficulties of the alignment of the SL and TL texts.

It should be noted that the technical restraints limiting the size of corpora from the time when the first electronic corpora were compiled in the 1960s and the following decades, have practically been eliminated. Nowadays the size of reference corpora is considerably larger and continues to grow. While in the 1960s to compile the one million Brown Corpus was a daunting task, in the 2000s the Oxford English Corpus has already reached one billion words (Atkins and Rundell 2008, 57–58). Only large corpora provide reliable evidence, since a small corpus cannot give a complete picture of the vocabulary items and their various meanings. However, frequently occurring grammatical phenomena can be successfully studied also with the help of smaller corpora (Biber et al. 1998, 30; Meyer 2002, 14–15). Sinclair (2004, 189) argues convincingly in favour of large corpora:

The main virtue of being large in a corpus is that the underlying regularities have a better chance of showing through the superficial variations, and there's a lot of variation in the surface realization of linguistic units in a corpus. If similar events are repeated with variation, then the more often they are repeated, the more you are able to see the regularity, the repeated element of the event, rather than the individuality that accompanies every use of every word in a text.

Sinclair also observes that only large corpora prove to be useful for the collection of evidence on word combinations (collocations and phraseology), since many of them are used comparatively rarely and might not appear in smaller corpora (ibid. 189–190).

Scholars have come to the overall conclusion that small corpora can be useful in the analysis of frequently used words, while only large corpora provide sufficient information on the use of less frequent words and their separate senses (Biber 1993, 250ff.; Hanks 2002, 157; Meyer 2002, 39–40; Atkins and Rundell 2008, 61). This phenomenon establishes a link with Zipf's observation (based on the analysis of word frequency counts in several languages performed in the 1930s) that "a few words occur with very high frequency while many words occur but rarely" (Zipf (1935, 40) quoted in Atkins and Rundell 2008, 59). This observation allowed him to formulate "Zipf's law" which postulates that the relative frequency of a word-form in a certain corpus of texts is in a reverse proportion to its position in the rank order (Halliday 1991, 31; Kilgarriff 1996, 2; Atkins and Rundell 2008, 59). When tested on the word frequencies found in the 100-million-word British National Corpus, Zipf's law helps to reveal the deficiency of data for analysis of less frequent words and word combinations (Atkins and Rundell 2008, 59–60).

Nowadays the size of reference corpora used in compiling large general monolingual and bilingual dictionaries amounts to hundreds of millions of words and more (e.g. British National Corpus (100 million words which is already viewed as relatively small), Bank of English Corpus (more than 500 million words), Oxford English Corpus (over one billion words), which obviously asks for more sophisticated corpus query tools which are constantly developed, for instance, Corpus Query Systems (discussed in subchapter 2.2.2.1.2). These and other large reference corpora of the English language could provide the necessary data for compiling of ELDs⁶.

Size is obviously only one of the criteria of corpus quality. Leech (1991, 10), for instance, holds that it is naïve to pay too much attention to size, since representativeness, balance of written and spoken language are also to be taken into consideration.

2.2.1.1.2 Corpus Representativeness and Balance

Representativeness is obviously another important aspect to be taken into account when selecting or making a corpus to be applied in dictionary compiling. McEnery et al. (2006, 15) point out that a general corpus "should cover, proportionally, as many text types as possible so that the corpus is maximally representative of the language variety it is supposed to represent". It also has to be large and include both spoken and written texts. The collection of data, therefore, starts by working out a classification of texts functioning in the speech community. According to Landau (2001, 331), representativeness of a corpus can be attempted by paying attention to:

- 1) the text categories and genres selected for the corpus,
- 2) the size and number or samples,
- 3) the time period covered.

Atkins and Rundell (2008, 66), on the other hand, hold that a truly representative corpus of a living language is an 'illusion' because firstly, it is nearly impossible to give a precise definition of the population this corpus is representative of (roughly it is the whole speech community of the given language); secondly, with a poorly defined population it is not possible to select the right text-types to be included in the corpus. Meyer (2004, 41) argues that it is not an easy task to select the scope and proportions of the genres to be presented in a reference corpus. It is noted that the proportion of oral speech in language is so high that an attempt to make the corpus completely proportional (presenting the texts produced

⁶ On this background the corpus scene in Latvia is still at an early stage of development – the balanced corpus of the Latvian language contains around 3.5 million words, there is also a 100-million-word web corpus (available at < http://www.korpuss.lv/>). According to Andronova and Andronovs (2011, 43), the idea to compile a large representative corpus of the Latvian language has temporarily subsided.

by an individual) would lead to a situation when the corpus "might contain roughly 90% conversation and 3% letters and notes, with the remaining 7% divided among registers such as press reportage, popular magazines, academic prose, fiction, lectures, news broadcasts, and unpublished writings" (Biber (1993, 247) quoted in Meyer 2004, 41). Obviously, such a corpus would not serve as a good source of evidence for a monolingual or bilingual general purpose dictionary.

Summers (2005, 1) holds that the demographic part of a spoken corpus (or the spoken section of a general corpus) could be possibly its most representative part since it is structured "to mirror statistically the demographics of the target group, be it in the US or Britain, in terms of age, gender, region, and educational or social background" (ibid.).

Svensen (2009, 64) argues that it is not reasonable to speak about a corpus as representative in the purely statistical sense; however, relative representativeness is attainable in reference corpora. This is normally a result of a compromise described (by Atkins and Rundell (2008, 66), McEnery et al. (2006, 16)) as a 'balanced corpus'. Such a corpus "seeks to reflect the diversity of the target language, by including texts which collectively cover the full repertoire of ways in which people use language" (Atkins and Rundell (2008, 66). Leech (2002, 5) describes balance as a "difficult notion" and suggests to define it as "the subsamples or the subcorpora of different language varieties [which] must in some sense be proportionate to their *importance* in the language". However, he adds that to define 'importance' is particularly difficult.

Instead of an attempted proportionality, a balanced corpus is based on a set of criteria for the selection of text categories and particular text-types within these categories, but this approach is not completely scientific because it "involves too many subjective decisions" (Atkins and Rundell 2008, 66); besides, according to McEnery et al. (2006, 16), "corpus balance relies heavily on intuition and best estimates".

It can be concluded that the most appropriate corpus to provide evidence for general monolingual and bilingual dictionaries would be a reasonably representative and balanced large reference corpus. However, it should be noted that even large and well-constructed corpora (unless these are monitor corpora which are constantly updated) with time become obsolete and therefore less useful for lexicographic purposes.

2.2.1.2 Translation and Comparable Parallel Corpora

Parallel corpora are collections of aligned SL and TL texts, or according to Teubert (2002, 204) "repositories of translation units and their equivalents in the target language" which

can be applied for the selection and verification of translation equivalents in bilingual lexicography.

The necessity for this type of corpora in contemporary bilingual lexicography is well described by Teubert (2002, 204):

But even where bilingual dictionaries record the evidence encountered in monolingual corpora, they still have to rely on the lexicographers' bilingual competence to determine the translation equivalent of any semantic conglomerate [multiword unit]. This equivalent will, under normal circumstances, not be wrong. But it will not necessarily reflect the translation practice of the community (...).

It should be noted that Teubert points to the monolingual corpora as the primary source of data for bilingual lexicography, which can be supplied with the data collected from parallel corpora in translation stage, as well as the fact that parallel corpora present valuable information on the translation of multiword units.

Two types of bilingual parallel corpora can be used in bilingual lexicography (Teubert 1996, 245–249; Alsina and DeCesaris 2002, 216; Stig 2007, 5ff.; Atkins and Rundell 2008, 476–479):

- translation corpus in which the ratio of original texts to translations is 50:50; the fact that the SL and TL texts have to be matched restricts the availability of the texts; besides there is a danger that the translated texts might not present typical language use of the TL; sentences of the SL and TL texts can be aligned on sentence level thus making it possible to spot the translation equivalents applied in the translated texts, it is the possibility to align the texts that makes this type of parallel corpus applicable in bilingual lexicography.
- *comparable corpus* comprises two separate corpora possibly matched in structure, genre, time of publications included, etc.; e.g. the corpora containing political manifestoes of the British Labour party (in English) and the German Socialists (in German) (compiled by Laffling in 1991); in this type of corpus all the texts in both languages are original, however, since the texts cannot be aligned and each part of the corpus has to be searched separately, it is difficult to use it when compiling a bilingual dictionary.

It should be noted that although Stig (2007, 10) argues for combining both types of corpora to attain more valuable and 'safe' results, Atkins and Rundell (2008, 479) as experienced lexicographers point out that such analysis is too time-consuming and therefore highly unlikely to be applied in commercial lexicography. This leads to the conclusion that the application of a translation corpus in bilingual lexicography is more feasible: the use of comparable corpus is not excluded, but is much less likely. Thus, the

following discussion will focus only on translation corpora and their application in bilingual lexicography.

Atkins and Rundell point out the problems related to the availability of parallel corpora, namely, they might not be available for all language pairs (Atkins and Rundell 2008, 473). One of the ways to tackle the problem, suggested by Kilgariff and Grefenstette (2008 [2003], 91) and Resnic and Smith (2003), is building parallel corpora from web pages which are available in both languages. This approach (though not free of pitfalls and difficulties) is viewed as feasible in the cases of language pairs where at least one of the languages is comparatively rare, which makes the compiling of a parallel corpus unlikely.

EU documents translated in the languages of the member states are also viewed as a rich source of parallel texts. Teubert (2002, 203) reports on the compilation of a French-German Parallel Corpus at the *Institut für Deutsche Sprache* in Manheim. This is a 30-million-word part of speech tagged sentence-level-aligned parallel corpus comprising the European Commission's documents and records of the European Parliament's proceedings. Such a parallel corpus cannot be viewed as representative or balanced and is restricted to a concrete domain (EU documents and oral discourse), It is also often difficult to detect which of the texts is the original and which a translation. However, it can serve as a starting point in selecting and verifying at least some translation equivalents to be included in a general bilingual dictionary.

Héja (2010, 2801) reports on the difficulties faced while compiling Hungarian-Slovenian and Hungarian-Lithuanian parallel corpora, stressing the shortage of parallel texts which even led to the collection of translations from the third language. Notably, international collaboration had an immense role to play in gathering the necessary resources in this project.

Mihailov and Tommola (2007, 60–62) describe the structure and process of compiling Russian-Finnish parallel corpus based on the Russian classical literature and containing approximately 4.5 million words. The researchers doubt the "symmetry" of such a corpus since only the Russian part of it, containing original texts, more or less represents the standard Russian language, while the Finnish part contains translations which might be distorted by the TL. It is concluded that "the corpus will be "asymmetrical", centred on the Russian language" (ibid. 61). No claims are made about representativeness or balance of the corpus, however, its application in compiling of bilingual dictionaries is envisaged.

The 'alternative' methods of assembling parallel corpora deserve serious attention in the context of the present study since the English-Latvian language pair definitely belongs to the group of language pairs for which a parallel corpus might be viewed as financially

unfeasible. However, since the method of translation equivalent selection from a parallel corpus definitely has a potential in bilingual lexicography and sooner or later might be applied in compiling English-Latvian dictionaries, there will be a need for an adequate parallel corpus.

2.2.2 Use of Corpus Evidence in Bilingual Lexicography

Teubert (2002, 204) provides a short but insightful description of the situation in bilingual lexicography before the beginning of corpus era:

Bilingual lexicographers have always been aware of the fact that texts are often translated in units larger than the single word. For a long time they have aimed to include compounds, multi-word units, significant collocations, set phrases and idioms. But until the arrival of corpora it was left to the lexicographers' skills to sift the evidence and to decide what to enter in the dictionary. Usually they relied on monolingual dictionaries and on their own observations. The results were often arbitrary or even idiosyncratic.

What significant changes corpus evidence has introduced in bilingual lexicography and how it can improve the quality of bilingual dictionaries, will be discussed in the following subchapter which starts with an overall review of the role of corpora in lexicography, then turns to the use of monolingual reference corpora in bilingual (and also monolingual) lexicography and rounds up with an insight into the application of parallel corpus data in bilingual lexicography.

Already in 1985 Sinclair observed that "[t]he quality of evidence about the language which can be provided by concordances is quite superior to any other method" and predicted that "once lexicography takes full advantage of this evidence, it will be impossible to go back to a reliance on pre-computational techniques" (Sinclair 1985, 7, quoted in Krishnamurthy 2008, 239). It cannot be denied that this prediction made in mid-1980s has proved to be more than accurate. Hanks (1990, 40) makes another observation that "[n]atural languages are full of unpredictable facts [...], which a corpus may help us to tease out", thus stressing the possibility to recover with the help of text corpus previously concealed and unnoticed facts.

Describing the immense importance of text corpora in lexicography, Landau (2001, 193) stresses that "no modern dictionary can pretend to cover the meanings of its lexicon adequately today without the use of a corpus". During the last few decades electronic corpora have acquired an immense role in compiling of monolingual dictionaries and now, according to Hanks (2004, 88), "it is inconceivable that a major new dictionary should be planned without making some kind of use of corpus data"; it is also added that some older dictionaries, compiled before the corpus era, are often revised applying corpus evidence.

Even though the first corpus-based⁷ bilingual dictionary (*Oxford-Hachette French Dictionary*) was published in 1994, thus marking "the start of a new age of corpus-based bilingual lexicography" (Atkins 1994, xxiv), Atkins ([1996] 2002, 1–2) also had to conclude that the compilers of bilingual dictionaries are not always equally eager to apply the latest developments in lexicographic practice, including the application of corpus evidence. This is one of the reasons why bilingual lexicography tends 'to lag behind' monolingual lexicography which in this respect is developing considerably faster (Hartmann and James [1998] 2001, 15; Alsina and DeCesaris 2002, 215). It should also be noted that corpus evidence is not yet applied in compiling of English-Latvian dictionaries. So far only one corpus-based dictionary (*Latviešu valodas vēsturiskā vārdnīca*)⁸ has been compiled in Latvia applying evidence of the one-million-word *Corpus of Early Written Latvian*⁹.

Landau (2001, 305) maintains that "there is scarcely any area of dictionary work where a corpus cannot provide important evidence for the lexicographer". However, he also adds that "humans are still writing dictionaries, not corpora", thus stressing the crucial role of lexicographer in the process. Hanks (1990, 37) in this connection discusses the combination of sound evidence and lexicographer's intuition, while Roberts and Montgomery (1996, 463) claim that corpora "are a lexicographer's best friend only if they are appropriately used". Reservations of corpus lexicographers reveal the possible danger in blind reliance on corpus data.

Atkins and Rundell (2008, 96) are convinced that nowadays in practical lexicography "[t]he use of corpora can be taken as a given, and our main concerns now are with optimizing corpus-querying software in order to make it faster, more efficient at tracking down the information we need" while in 1987, nearly twenty years earlier, Sinclair inferred that "[a]s computational processing improves, the quantity and quality of the linguistic evidence will increase" (Sinclair 1987, 152). This shows that at different stages of the development of corpus lexicography the scholars have thought and still do think about further development of computer software to enhance the quality of linguistic data. Even

⁷ Tognini-Bonelli (2001) makes a finer distinction between the 'corpus-based' and the 'corpus-driven' approaches in corpus linguistics (also attributed to lexicography). According to her the contents of a corpus-based dictionary have been confirmed by corpus data, while a corpus-driven dictionary is compiled on the basis of corpus evidence (quoted in Teubert 2004, 112). However, not all the scholars apply the distinction between the terms, besides, there is a tendency to question the integrity of the apparently truly corpus-driven studies (e.g. Gries 2010, 328-330). Thus only the term 'corpus based' will be applied in the present study and in case of necessity the distinction will be pointed out.

⁸ Available at <http://www.tezaurs.lv/lvvv/>.

⁹ Available at <http://www.korpuss.lv/senie/>.

though great progress has been achieved in corpus lexicography in the past twenty years, there is still ample space for improvement.

There are two basic approaches to using corpus evidence in dictionary making: an existent dictionary can be updated with the help of corpus evidence, which improves the quality of the dictionary but possibly quite fragmentarily; another option is to start 'from scratch' and compile a dictionary truly based on corpus evidence. The second approach is viewed as more rewarding (Atkins and Rundell 2008, 97–99). However, it is not a secret that the former method is frequently applied in bilingual lexicography, e.g. Roberts and Montgomery (1996) describe the process of compiling a bilingual Canadian dictionary (English-French, French-English) where the material of existent dictionaries was collected and verified applying corpus evidence.

Reference and parallel corpora are used at different stages of compiling of a bilingual dictionary (e.g. Roberts and Montgomery 1996; Atkins and Rundell 2008) which will be discussed separately; the following subchapters focus on the role of general reference corpora and parallel corpora in compiling general bilingual dictionaries.

2.2.2.1 Monolingual Reference Corpora

It should be noted that the process of data collection from reference corpora is initially similar for both monolingual and bilingual dictionaries: for both purposes at the first stage corpus data are analysed and in some cases a monolingual source language 'pre-dictionary database' (Atkins and Rundell, 2008) is made, only after this stage the process of compiling both types of dictionaries diverges.

First a general review of the application of the source language reference corpus evidence in general bilingual lexicography (taking into account the similarities with general monolingual lexicography) will be provided, then a closer look will be taken at the recent developments in the corpus use in lexicography, namely, the building and use of pre-dictionary database.

The influence of text corpora can be traced on both – macro- and microstructural levels of bilingual (as well as monolingual) dictionaries. The most relevant ways, pointed out by various scholars, of applying evidence from a large reference corpus in compiling of bilingual dictionaries, are as follows:

• corpus records the frequency of a word or lemma (the base form of the word which represents all the word forms, e.g. the inflectional endings), which helps to determine which word should be included in the dictionary; if the frequency is very low even in a large reference corpus, most likely the word should not be included (Biber et al.

1998, 29–30; Landau 2001, 302–303); but it is important to note that even a large reference corpus cannot prove the non-existence of a certain lexical item or phenomenon (Hanks, 1990, 31; Svensén 2009, 52);

- corpus registers usage restricted to a particular subject area, social, regional or other variety, thus establishing levels of usage (Roberts and Montgomery 1996, 461; Biber et al. 1998, 32–35; Atkins and Rundell 2008, 296–297);
- corpus registers the frequency of variant spellings (including the spelling patterns of compounds and capitalization) and helps to decide upon the spelling of the lemma in the dictionary (Roberts and Montgomery 1996, 460–461; Landau 2001, 303; Atkins and Rundell 2008, 180). Moon (1998, 349) pays attention to differences in spelling conventions found in the written and spoken part of the corpus and observes that spelling in the transcription of oral texts is often more normalized (apparently by the transcribers) than in the written part, which could raise doubts about the preciseness of presentation of the original pronunciation;
- corpus registers the major uses of a word in natural contexts thus establishing the range of different senses of a word. Although corpus provides relevant information on the relative frequency of the senses of polysemous words, it is the task of lexicographers to single them out and arrange in a certain order (Roberts and Montgomery 1996, 461; Biber et al. 1998, 26–28; Landau 2001, 303);
- corpus reveals the patterns of word co-occurrence, thus presenting information on collocations and phraseology, as well as on the relative frequency of word co-occurrence patterns. Various collocation tools are used in practical lexicography (e.g. concordances, collocation searches and statistics (Cambridge collocation tools discussed by Walter and Harley 2002, 852)). The collocational behaviour of words also contributes to the investigation of word senses (Biber et al. 1998, 35–43; Rundell [1998] 2008, 227; Landau 2001, 309; Svensen 2009, 54). It should be added that in the context of bilingual lexicography collocation can be defined as "a phrase that cannot be translated using the default translations offered for its components" (Teubert 2004, 90–91). This definition differs from the notion of collocation in the monolingual context, which means that the selection of collocations to be included in the two types of dictionaries might vary, though frequency of occurrence in a corpus is a relevant criterion in both cases (ibid.);
- corpus provides information on grammatical patterns (e.g. countability of nouns, noun and verb constructions, transitivity-related verb patterns, etc.) in which a

certain lexical item is found (Atkins and Rundell 2008, 330ff.; Atkins et al. 1996, 346–352; Roberts and Montgomery 1996, 462; Landau 2001, 304);

corpus offers numerous genuine illustrative examples of usage; however, it has been acknowledged by practicing corpus lexicographers (Landau 2001, 306–308; Atkins, Rundell 2008, 457–458; et al.) that a corpus often does not provide sentences which could serve as perfect dictionary examples. Therefore sample sentences are usually "adapted" to suit lexicographic purposes – they are often shortened, decontextualised, etc. in order to produce natural examples of typical usage.

This list of the ways in which reference corpus evidence can be applied in monolingual and bilingual dictionaries reveals that it affects both the list of headwords and the contents of entries, i.e. both the macro- and microstructure of the dictionary.

However, reference corpus data affect only the SL part of a bilingual dictionary, having only secondary effect on the TL equivalents. In other words, the lexical items, their senses and illustrative material are selected taking into account the SL reference corpus evidence, while the selection of the most appropriate TL equivalents is a separate stage in the compiling of a bilingual dictionary where parallel corpora can play an important role. Parallel corpora will be discussed later in the chapter, but the following subchapter focuses on a comparatively new development in corpus lexicography: the building of a monolingual pre-dictionary database and its application in dictionary compiling.

2.2.2.1.1 Pre-dictionary Database

Contemporary metalexicographic literature abounds in descriptions of databases applied in lexicography. However, the term 'database' can be used in different meanings:

- citation files prepared for use in dictionary compiling (Svensén 2009, 42);
- the dictionary text used as the main source for compiling another dictionary (ibid. 61);
- a "structured database system that will be used to create and store the dictionary text" (Landau 2001, 344);
- can be identified with a linguistic corpus (Varantola 2003);
- can mean a dictionary database of somewhat unclear origin ("there are scant records of how the data was compiled and what went into it" (Varantola 2004, 319)) first applied in compiling a set of electronic bilingual dictionaries and reused for compiling a set of print bilingual dictionaries (Varantola 2004);
- a lexicographic 'pre-dictionary' database which is a "structured collection of linguistic data assembled during the [corpus] analysis stage in lexicography" (Atkins

and Rundell 2008, 100), with the purpose to "store selected facts about the word in a systematic way, so that by scanning them you can quickly and efficiently get a fix on the headword and extract the information you need for the final dictionary entry" (ibid.). Van der Vliet (2007) provides a detailed discussion of a lexical database for the Dutch language *Referentie Bestand Nederlands* (RBN) compiled on the basis of Dutch corpora and designed to serve as the basic source primarily for compiling bilingual dictionaries. However, it is also remarked that "RBN contains much more information in a much richer and more flexible structure than is needed for bilingual lexicographic projects" (ibid. 240), which makes it a "flexible and multi-purpose lexical database" (ibid.) and broadens its scope of application.

This list shows the polysemous nature of the term 'database'. Only the latter interpretation of the term 'database' in lexicographic context, proposed by Atkins and Rundell (2008) and van der Vliet (2007), being the most up-to-date and suitable for application in compiling of bilingual dictionaries, will be discussed in more detail.

Atkins and Rundell (2008, 97ff.) give a comprehensive review of the stages of compiling a monolingual or bilingual corpus-based dictionary where corpus evidence is applied from the very beginning. The process starts by the analysis of the corpus (a large monolingual reference corpus) with the goal of building a lexicographic 'pre-dictionary' database. The analysis stage is common for monolingual and bilingual dictionaries.

It is pointed out that in modern corpus lexicography the process of compiling a corpusbased dictionary is 'twofold' (analysis of the corpus data and synthesis stage where the dictionary is compiled) in case of a monolingual dictionary and 'threefold' (analysis, transfer or translation stage and synthesis stage) in case of a bilingual one. The process which was first applied when compiling the *Oxford-Hachette English-French, French-English Dictionary* (1994) and later used in other projects is described by the authors as "the most economical way of compiling, from corpus evidence, a dictionary which gives a true reflection of the language it describes" (Atkins and Rundell 2008, 98).

Atkins and Rundell stress the importance of a pre-dictionary database, especially in the process of compiling bilingual dictionary entries by emphasizing that it is "impossible to supply adequate target language equivalents without knowing a great deal more about the contexts in which the headword is found than can eventually be included in the actual entry" (ibid. 99–100). It should be noted that parallel corpora are also applied for the selection of translation equivalents during the transfer or translation stage of bilingual dictionary compiling.

Atkins and Rundell (2008, 100) single out the most relevant advantages of a predictionary database which:

- ensures that important details are not forgotten;
- contains a thorough description of the headword in a corpus;
- provides systematically organized material and helps to select the most relevant information on the headword;
- makes the editing process faster and more effective;
- can be used in several dictionary projects (e.g. first for compiling a monolingual, then also a bilingual dictionary).

Each database entry reminds of a dictionary entry; however, it contains more information which is also more detailed than the one later incorporated in dictionary entries. Atkins and Rundell (ibid. 100–101) provide a provisional list of database contents:

- numerous authentic corpus examples, later often adapted for dictionary needs;
- the meaning of the lexical item divided into senses and subsenses (the division can be much more detailed than later in dictionary entries);
- encoded grammatical information;
- relevant collocates (the words "which co-occur with one another with a frequency greater than chance" and "stand in a grammatical relationship to the headword" (ibid. 369)).

A well-prepared database ensures an efficient division of labour: the database editors analyse the corpus data, while the dictionary editors deal with entry building. The scholars believe that it is "better for the database editors to have no knowledge of what kind of dictionary it will be used for – this stops them from making premature decisions about what is worth keeping and what isn't" (ibid. 101) because only then they can provide an objective overview of the language in question. The task of dictionary editors is to select the necessary information for the dictionary keeping in mind its target audience.

The second stage in compiling a bilingual corpus-based dictionary is the transfer stage the purpose of which is to "build up a body of target language (TL) equivalents of the headword in as many contexts as possible, so that when the entry editors come to extract the final entry they have all their options assembled for them in one place" (ibid. 102).

The result of this stage is a partially translated database – translators provide one or two translation equivalents for each lexical unit or sense of the headword, then they provide the translation of the headword in the corpus examples (not the whole sentence, only enough to establish equivalence) (ibid. 102).

The last stage is synthesis or the building of the entry (again common for monolingual and bilingual dictionaries). As the most challenging and relevant tasks of this stage Atkins and Rundell (2008, 102) mention decisions related to dictionary senses and, in the case of a bilingual dictionary, keeping in mind the target audience: SL, TL users or both if the dictionary intends to cater for the needs of both groups.

2.2.2.1.2 Corpus Analysis Software

The above discussed corpus analysis resulting in a pre-dictionary database applicable in compiling of a monolingual or bilingual dictionary is attainable with the help of two types of computer programs (Atkins and Rundell 2008, 103):

- a Corpus Query System (CQS) for analysis of corpus data,
- a Dictionary Writing System (DWS) for compiling of the dictionary.

The Corpus Query System as an essential tool for acquiring and analysing corpus data deserves to be discussed closer.

If a large reference corpus presents the necessary data for compiling a dictionary, then according to Atkins and Rundell (2008, 111) "a powerful and well-designed CQS allows you to retrieve relevant information efficiently and view it in a variety of ways". A well-designed CQS not only speeds up the corpus search, but also makes the process of corpus query more effective and gives quick access to corpus information. All this allows compiling better and more up-to-date dictionaries in comparatively shorter time (ibid.).

Keyword in context (KWIC) concordances containing the node word in numerous contexts offered by the corpus (which can be left- or right-sorted to display the typical collocational patterns on the left or right hand of the word) have been used as the primary tool in corpus lexicography since the COBUILD project in the 1970s–80s (Church and Hanks [1990] 2008, 290; Kilgarriff et al. [2004] 2008, 297; Atkins and Rundell 2008, 105). But as corpora were getting larger, it was no longer possible to cope with an abundant amount of data, since "[w]here there are fifty instances for a word, the lexicographer can read them all. Where there are five hundred, they could, but the project timetable will rapidly start to slip. Where there are five thousand, it is no longer feasible" (Kilgarriff and Tugwell 2002, 126). This situation has triggered the development of various CQSs, for instance, WordSmith, MonoConc, Manatee, Sketch Engine, etc. Their task is to enhance the analysis of corpus evidence and provide a handy summary of corpus data to be applied in dictionary compiling (Kilgarriff and Tugwell 2002, 126–127; Kilgarriff et al. [2004] 2008, 298).

If Church and Hanks ([1990] 2008) suggested the first statistical tools for selecting the most salient collocates of a certain word in a corpus, the present-day CQSs present more developed methods of lexical statistics. Sketch Engine is a contemporary CQS which works on a part of speech tagged corpus, for instance, BNC. Apart from other CQS functions (e.g. searching for phrases, collocates, grammatical patterns, searching only in spoken or written texts, etc.), it offers also 'Word Sketch' – a lexical profile which is an approximately page-long statistical summary containing detailed information on how a word co-occurs with other words. 'Word Sketch' provides the lexicographer with the word's collocates for various grammatical relations identified with the help of grammar codes (e.g. object of, subject of, modifier, modifies, etc.), as well as information not only on simple frequency of a certain collocation but also on the statistical significance of the particular word combination. It also provides immediate access to the original corpus contexts (Kilgarriff and Tugwell 2002, 127–134; Atkins and Rundell 2008, 109–110; Kilgarriff et al. [2004] 2008, 299–302).

To sum up, Corpus Query Systems are indispensable to lexicographers working with large corpora, and lexical profiles provide a useful summary of the word's grammatical and lexical relations; however, if necessary, an additional analysis of certain relevant details can be performed.

The following subchapter deals with the application of parallel corpora data in bilingual lexicography.

2.2.2.2 Bilingual Parallel Corpora

These corpora do offer a much larger number of translation equivalents in their natural contexts than can be found in the bilingual dictionaries of a certain language (Teubert and Čermáková 2005, 123). Dickens and Salkie (1996, 553) even refer to the comparatively small selection of translation equivalents found in bilingual dictionaries as "basic translation equivalence", while to the broader range of the contextual equivalents as "rich translation equivalence" (ibid.), thus stressing the relevance of the equivalence options offered by (often even modestly sized) parallel corpora. It is also of interest that studies of parallel corpora (even small ones) often reveal that the established and expected prototypical equivalents are used less often than could be expected (e.g. Váradi and Kiss 2007), which underlines the necessity to collect alternative translation equivalents found in natural contexts for bilingual dictionaries.

Still, there are several other sources of translation equivalents for bilingual dictionaries. Atkins and Rundell (2008, 473) suggest that one of the options is to start the transfer or translation stage of compiling a bilingual dictionary by consulting a monolingual TL corpus because "[i]t offers a way of finding translations, or checking those you are doubtful about, and of correcting those that are simply wrong" (ibid.). As an example of wrong translations which can be revealed by comparing the word or phrase in the SL and its possible translations in the TL corpus, Atkins and Rundell (ibid. 475) give an example of false friends (e.g. *beyond measure* and its literal translation in French *outre mesure* turn out to be false friends). Roberts and Montgomery (1996, 462–463) mention other bilingual dictionaries, term banks and translations of the source language texts as the initial (and largely traditional) sources of translation equivalents in bilingual dictionaries.

Even though already in 1994 Hartmann (1994, 292) claimed that "[f]or the field of bilingual lexicography, the idea of collecting and comparing 'parallel texts' seems particularly promising", thus predicting it a bright future, the compilers (more likely the publishers) of bilingual dictionaries have not been too enthusiastic about this resource.

Atkins and Rundell (2008, 477), for instance, refer to the EURALEX discussion in 2007 where the question about the application of parallel corpora for bilingual dictionaries did not yield any positive answers. From this the scholars infer that parallel corpora are still not, at least systematically, applied in bilingual lexicography, though they might be valuable at the translation stage. Having observed that even the largest and most advanced English-Norwegian dictionaries often present a limited scope of translation equivalents, Stig (2007, 308) concludes that even though a bilingual dictionary cannot include all the range of translation equivalents found in parallel corpora, it can be linked in electronic form to a parallel corpus, thus giving an option for further search of equivalents. Héja (2010, 2798) also discusses the reluctance to apply parallel corpus data in bilingual lexicography, admitting, however, that insufficient evidence does not permit to draw overall conclusions.

Since parallel corpora have not yet been applied in many bilingual dictionary projects, some reports on parallel corpora analysis, containing suggestions on their application in bilingual lexicography, will be discussed. The discussion will round up with the list of 'pros' and 'cons' of applying parallel corpus data in bilingual lexicography singled out by Atkins and Rundell (2008).

Héja (2010, 2802–2805) describes the compiling of Hungarian-Slovenian and Hungarian-Lithuanian "core dictionaries" (or bilingual lexical databases based on parallel corpora) of the possible translation candidates to be eventually applied in compiling of bilingual dictionaries. The compilers of the databases relied on three parameters – "the *translational probability*, the *source language lemma frequency* and the *target language*

lemma frequency" (ibid. 2802) to validate the selection of translation candidates. It is believed that approximately 65% of the translation candidates stored in the bilingual databases could be correct and potentially applicable as translation equivalents in the bilingual dictionaries of the respective language pairs. However, it should be noted that the estimated number of the translation candidates in this project is still quite modest (3230 translation equivalent candidates for the Hungarian-Slovenian language pair and 2616 for the Hungarian-Lithuanian language pair), which is currently only a small part of the translation equivalents included in a medium-sized general bilingual dictionary. These numbers reveal the need for a further development of the databases which Héja (2010, 2803) sees in "the augmentation of parallel corpora and the refinement of parameters".

Heid (1996, 584–585), having compared a set of verbal equivalents in several languages, comes to the conclusion that the analysis of parallel corpora reveals not only translation equivalents for bilingual dictionaries, but also the absence of equivalence.

Apart from providing translation equivalents, a bilingual corpus can also be used for determining the most frequently used spelling variant of an equivalent with several spelling variants (Roberts and Montgomery 1996, 463).

Atkins ([2002] 2008, 259) suggests that because of time restrictions in dictionarywriting which often might not allow a proper analysis of the parallel corpus, the data from parallel corpora could be offered to the dictionary user as an additional source of equivalents.

Atkins and Rundell (2008, 477–478) provide a list of the overall "pros and cons" of applying parallel corpora in bilingual lexicography:

Pros:

- they provide easy access to the possible translation equivalents;
- they offer numerous contextual translations occurring in their natural contexts. Cons:
- parallel corpora offer a large number of possible translation equivalents all of which seem to be relevant;
- the process of evaluating all the translation equivalent candidates is too long;
- the entries are too detailed and bulky to appear in printed form.

This list reveals that even though the benefits of applying parallel corpora in bilingual lexicography are obvious, still there are more cons than pros, especially, the fact that the process is time-consuming and is therefore unlikely to be practiced in commercial lexicography.

CHAPTER 3 Structural Levels of Bilingual Dictionaries

When describing the structure of general linguistic dictionaries Hausmann and Wiegand ([1989] 2003, 210) stress that "[b]ecause the language is very complex and made up of many very different parts and elements, the dictionary cannot but have complex structures and many different elements, too". In order to present this wide scope of information in a user-friendly way dictionaries have to be built according to strict structural principles and organized at various structural levels. The concept of the overall dictionary structure can be defined as "the order of, and relationships between, the components of the dictionary" (Svensén 2009, 77). Hartmann (2001, 58) holds that the list is the most handy instrument for structuring any kind of information. According to him, "the list metaphor" lies at the basis of the overall dictionary structure of the information provided by the dictionary and makes it easily accessible to the potential users. Since the ELDs analysed in this study are printed alphabetically arranged general bilingual dictionaries, the list is undeniably an important ordering device for various structural levels of this kind of dictionaries.

Metalexicographic literature lists three basic structural levels of a dictionary: megastructure, macrostructure and microstructure. The megastructure containing the central entry word list as well as the front, middle and back matter or the outside matter of the dictionary, comprises the overall structure of a dictionary (Hartmann 2001, 61; Hartman and James 2001, 93; Svensén 2009, 379). The macrostructure of the dictionary is the complete ordered set of its entry words, which, according to Rey-Debove (1971, 21, cited in Bejoint 2000, 11), is "used for vertical scanning when the user is looking for a particular piece of information". Rey-Debove stresses the peculiarities of look-up process, while Atkins ([1992/1993] 2008, 39) describes the macrostructure of the dictionary metaphorically as "the walls, roof, windows, plumbing, and drains, indeed all that holds and shapes the linguistic information" adding that "[i]t has traditionally lacked the glamour of the living inhabitants", while the "[t]he living, changing, challenging, bewildering meanings and uses of the microstructure capture the linguistic limelight". This colourful description underlines that more attention is normally paid to the entry structure of the dictionary, which is understandable since it has a more complicated and diverse structure as compared to the apparently more transparent headword list. The microstructure refers to the contents and layout of each entry of the dictionary, or, according to Rey-Debove (1971, 21, cited in Bejoint 2000, 11), presents the information to be scanned horizontally.

It should be noted that while Hartmann and James ([1998] 2001), Hartmann (2001), Svensén (2009) discuss all three basic structural levels of a dictionary, other metalexicographers, for instance, Nielsen (1990), Bejoint (2000), Landau (2001), Jackson (2002), Atkins and Rundell (2008), distinguish only between two basic structural levels of the dictionary: macrostructure and microstructure, without employing a specific term to refer to the overall structure including also the front, middle and back matter information; however, these parts of the dictionary can be referred to as the outside matter (e.g. Cop 1989, 761; Hartmann and James (1998), Svensén (2009)). Hausmann and Wiegand ([1989] 2003, 210–215), for example, discuss the overall structure of the dictionary under the title "The textual book structure", but also note (ibid. 208) that if the dictionary contains additional wordlists which could be integrated in the central wordlist, these outside matter elements form part of the macrostructure of this dictionary. Nielsen (1990, 51-52) holds that macrostructure apart from the headword list comprises also the front and the back matter of the dictionary. Thus, the division of dictionary structure into the three basic structural levels (or at least the terminology employed for the overall dictionary structure) is not unanimously accepted by lexicographic community.

Even though the structural levels of a dictionary are tightly related, for the sake of clear distinction among the various parts of dictionary structure, the division of dictionary structure into mega-, macro- and microstructural level will be adopted for the purpose of this study to ensure a coherent structuring of the intended analysis of ELDs.

It should be stressed that metalexicographic literature focuses mostly on the structural levels of monolingual dictionaries, while bilingual ones traditionally earn less attention. However, much of what pertains to general monolingual lexicography applies also to general bilingual one, which will be taken into account in the following discussion of the structural levels of a dictionary. Specific structural peculiarities of general bilingual dictionaries will be underscored.

Apart from the three basic structural levels, metalexicographic literature singles out some other structural components of a dictionary. However, the scholars dealing with this issue do not always distinguish the same set of subsidiary structural levels and employ the same terminology. The most frequently discussed additional dictionary structures are presented in the table below (if the terms employed differ, they are provided in brackets):

	Hausmann and Wiegand ([1989] 2003)	Nielsen ([1999] 2003)	Hartmann (2001)	Gouws and Prinsloo (2005)	Svensen (2009)
cross-reference structure		+	+	+	+
(mediostructure)					
access structure (search path)	+	+	+	+	+
addressing structure	+			+	+
distribution structure		+	+		+

The intended analysis concentrates on the mega-, macro- and microstructural peculiarities of ELDs, however, it should not be ignored that these subsidiary structural levels are related to and affect the basic structural levels. Therefore a brief summary based on the research by Bergenholtz and Tarp (1995), Wiegand (1996), Hausmann and Wiegand ([1989] 2003), Nielsen ([1999] 2003), Hartmann (2001), Gouws and Prinsloo (2005), Svensén (2009) on these structural components will be provided.

Mediostructure is a cross-referencing system which leads the users from one place of the dictionary to another in order to find the necessary additional information (from the cross-reference item (position, point) to the cross-reference address). Nielsen ([1999] 2003, 272) observes that "in contrast to the macrostructure and the microstructure, the mediostructure should not be regarded as an order structure proper, but rather as a network structure connecting data in different places", thus highlighting the difference between the types of dictionary structures. It is also stressed that mediostructure does not establish structural links throughout the whole dictionary but operates only between a concrete cross-reference item and its address (ibid. 273). Wiegand (1996, 15 cited in Hartmann 2001, 66) describes the following types of cross-references: leading from entry to entry, from entries to different parts of the outside matter and even outside the dictionary. Svensén (2009, 388-389) presents a typology of cross-references determined by their position and direction (entry-internal cross-reference vs. entry-external cross-reference, component-internal cross-reference vs. component-external cross-reference, dictionaryinternal cross-reference vs. dictionary-external cross-reference. Svensén (ibid. 389) explains that "cross-reference structure cuts across microstructure as well as macrostructure and megastructure: entry-internal cross-references refer to microstructure, entry-external cross-references to macrostructure and the component-external crossreferences to megastructure" thus emphasizing the direct link of these three types of crossreferences with the major structural levels of a dictionary.

The access structure of a dictionary "is the structure of the indicators directing the users (along different ACCESS PATHS) to the information they are looking for in the dictionary" (Svensén 2009, 79). The access or search path can lead the user to a headword or to a concrete place inside an entry thus forming two basic kinds of access structure (after Hausmann and Wiegand [1989] 2003, 221–224; Hartmann and James [1998] 2001, 3; Hartmann 2001, 66-67; Svensén 2009, 79): the outer (external) access structure which leads to the necessary headword on the macrostructural level, e.g. with the help of structure indicators such as alphabetically arranged headwords, "running heads" (the first and/or the last word or part of the word printed at the top of the page), thumb indexes; the inner *(internal) access structure* which leads the user to the necessary part of the entry on the microstructural level with the help of structure indicators such as numbered senses, section marks indicating various sections of the entry which can vary according to the type of headword (e.g. sections of phrasal verbs, idioms). The latter, according to Hausmann and Wiegand ([1989] 2003, 223-224), form the inner rapid access structure. The inner access structure is usually explained in the guide to the dictionary use. Dictionaries with an alphabetical arrangement of headwords where the alphabetically arranged headword list is the only outer access structure and there is only one search path, are referred to as monoaccessible. Dictionaries containing indexes are polyaccessible because the user can use more than one search path (Hausmann and Wiegand 2003 [1989], 224; Hartmann and James [1998] 2001, 3).

Address is the "part of the entry (usually the HEADWORD) to which various INFORMATION CATEGORIES refer" (Hartmann and James [1998] 2001, 3). Svensén (2009, 79–80) holds that every dictionary entry element serves one of the two functions: "either it is a statement about another text element, or it is itself the object of such a statement". Svensén (ibid. 80–81) suggests describing this kind of relationship between dictionary elements with the help of text linguistics concepts *theme* and *rheme* (topic and comment). In this context the rheme (comment) corresponds to the statement and the theme (topic) to the object of the statement; it is proposed that in metalexicographic context the terms theme and rheme can be substituted by *address* and *indication*. Schematically this relationship can be shown with an example from a bilingual English-Latvian dictionary: **tree** \leftarrow koks (the rheme/indication, in this case the translation equivalent koks, is a statement about the theme/address, here the headword 'tree'). A concrete pair of elements in this relationship is described as a 'treatment unit', but this kind or relationship throughout the dictionary is called the addressing structure.

Bergenholtz and Tarp (1995, 188; cited in Hartmann 2001, 67) describe dictionary distribution structure as "the structure of the linguistic and encyclopaedic information distributed across or occurring in different places in the dictionary" thus emphasising that different kinds of information can be located in different sections of the dictionary. Tarp and Svensén (1999, 119–123; cited in Svensén 2009, 78) and Svensén (2009, 78), on the other hand, do not emphasize the distribution of linguistic vs. encyclopaedic information, but rather discuss the distribution of any kind of information among dictionary components. Hartmann (2001, 67-68) stresses that the compilers of both general and specialized dictionaries have to solve the problem of how to separate linguistic from extralinguistic (encyclopaedic) information, at the same time taking into account the needs of the users and making sure that the structural balance of the dictionary is not destroyed. One of the solutions is the introduction of 'boxed' (or survey) entries which contain extralinguistic information and are linked with the related entries with the help of crossreferences. Svensén (2009, 78) emphasises that "if a dictionary has a complicated distribution structure, this should be counterbalanced by the presence of a well-designed cross-reference structure". There are three basic locations of information included in a dictionary, which leads to different kinds of distribution structure: 1) information distribution is limited to the central headword list which is the simplest kind of distribution structure; 2) various survey entries are included and the dictionary has a more complicated distribution structure; 3) the dictionary includes outside matter components and also has a more complicated distribution structure (Tarp 1999, 119-123 cited in Svensén 2009, 78; Bergenholtz, Tarp and Wiegand 1999, 1779-1780; Gouws and Prinsloo 2005, 58; Svensén 2009, 78).

These subsidiary structural levels are tightly related to the basic structural levels of dictionaries, influence them and as such deserve due attention. None of them will form a separate section in the intended analysis of the intended study, however, such access structure components as thumb indexes and 'running heads' will be incorporated in the framework of megastructural, and typographical and non-typographical structure indicators in macrostructural analysis of ELDs.

The following subchapters deal with the basic structural levels (viz. mega-, macro- and microstructure) of a dictionary with a special focus on the typical features of these structural levels in bilingual dictionaries.

3.1 Megastructure of Bilingual Dictionaries

The megastructure of a dictionary is "the all-embracing textual framework which in addition to the central macrostructure also includes front matter, middle matter and back matter" (Hartmann 2001, 61), it also embraces their relationships, order and functions (Svensén 2009, 379).

In the following figure Hartmann (2001, 59) presents the overall structure of a dictionary (megastructure) underlining its components as well as the other two major structural levels (macro- and microstructure). The figure reveals that the outside matter of the dictionary can precede ('front matter'), interrupt ('middle matter') and follow ('back matter') the main entry list of the dictionary (macrostructure) which consists of 'n' separate entries (microstructure) which in their turn comprise two sub-structural levels ('left-core formal comment' and 'right-core semantic comment').

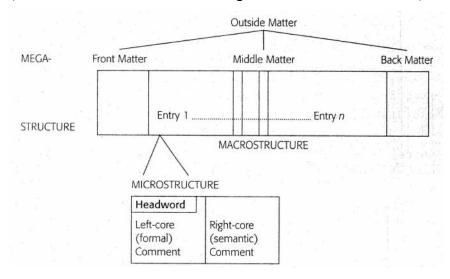


Figure 3.1 The overall structure of a dictionary featuring its mega-, macro- and microstuctural levels (Hartmann 2001, 59)

Only the outside matter components will be discussed in this subchapter because the other major structural levels (macro- and microstructure) are allotted separate subchapters. The middle matter, described by Hausmann and Wiegand ([1989] 2003, 213) as comprising "those immediate constituents of the whole dictionary text which are inserted in the (central) word list but which are not part of this word list" will not be considered in this review since it is not a typical structural segment of bilingual dictionaries.

When describing the overall structure of a dictionary as "the textual book structure" Hausmann and Wiegand ([1989] 2003, 210–214) divide it "into functional *component parts* (or functional *elements*)" (ibid. 210). Some of these functional components are texts (e.g. the preface, user's guide), others are functional parts but not texts (e.g. the title,

imprint). The authors stress that in most cases "the front matter is not as a whole a functional part of the dictionary, but rather an arbitrary set of functional text types" (ibid. 211) and, according to Cop (1989, 762), it is "heterogenic in nature, varying in importance and in kind from linguistic to encyclopedic". This means that the front matters (as well as the back matters) may contain very different components and while the central headword list is obligatory for any dictionary, most of the components of the front and back matter are not and also can navigate among the two positions, for instance, the list of abbreviations can appear in the front matter in one dictionary and in the back matter in another. The only component of the outside matter viewed as obligatory is the text which provides explanations on the use of the dictionary, namely, the user's guide (Hausmann and Wiegand 2003 [1989], 213; Gouws and Prinsloo 2005, 57; Cop 1989, 761). Hausmann and Wiegand (2003 [1989], 214) also stress the important role of the table of contents in giving access to all parts of the dictionary, thus contributing to the dictionary access structure, however, it is not viewed as an indispensable part of the dictionary megastructure. Nielsen (1990, 55), on the contrary, holds that every dictionary apart from the central headword list should contain a table of contents, a preface and a user's guide. These components should be presented as separate units thus facilitating "the user's search for relevant information in connection with the use of the dictionary and also in connection with the interpretation of the information contained in the dictionary" (ibid.).

The outside matter components can also be divided into 'integrated' and 'nonintegrated' (or 'integrated outer texts' and 'non-integrated outer texts') (Gouws and Prinsloo 2005, 59–61, based on Krammerer and Wiegand 1998). When the outside matter components contain information supplementing the information provided in the central wordlist and are directly related to the contents of the dictionary and its purpose, they are integrated (e.g. the list of abbreviations, personal names, grammatical data). The outside matter components not directly related to the contents of the dictionary central wordlist are viewed as non-integrated (e.g. lists of weights, measures, signs, symbols, etc.).

Nielsen (1990, 55–57) stresses the importance of the 'interrelationship' and 'working relationship' between the component parts of the outside matter and the content of the central headword list and adds that if there is no link between these components and the outside matter element does not contribute to the purpose of the dictionary, it probably should not be included. Gouws and Prinsloo (2005, 58) hold a different view claiming that even though most of the outside matter components are optional elements of the dictionary, they can still "play an important role to enhance the quality of the information transfer to which the dictionary is committed" (ibid.).

The scholars hold different views on the necessity to include outside matter elements with different degrees of 'integration'; however, the view that there should be an obvious link between the central headword list (the overall contents of the dictionary) and the outside matter elements, takes the upper hand.

3.1.1 Classification of Outside Matter Components

Svensén (2009, 379–386) suggests classifying outside matter components not by their physical location in the front, middle or back matter of a dictionary, but according to their function. If Gouws and Prinsloo (2005, 59–61) distinguished between two broad categories of outside matter components ('integrated outer texts' and 'non-integrated outer texts') which were determined by their link to the contents of the dictionary and its purpose, Svensén's (2009, 379–386) classification leads to three major categories and one miscellaneous category of the outside matter components which are determined by their function:

- components providing information on the language(s) (in the case of a bifunctional bilingual dictionary) being described in the dictionary;
- 2) 'metafunctional' components providing details about the dictionary and its use;
- 3) components belonging to the access structure;
- 4) components with a function different from the above mentioned.

Each of these categories of outside matter components will be discussed in more detail (based on Svensén 2009, 380–386), concentrating on those found in general bilingual dictionaries.

The outside matter components providing details about the language(s) described in the dictionary give additional information to the one found in the central headword list. Some are more directly related to the headword list if "they contain information that, in principle, could have been distributed among the entries but instead has been brought together in one place" (Svensén 2009, 380). The outside matter components containing lists of geographical names, names of nationalities, personal names, abbreviations, lists of terminology used in a certain field, usually fall in this category. Components containing linguistic information on the language being described, for instance, spelling, pronunciation, word-formation and grammar rules also fall in this category. However, it should be noted that they are less directly related to the general headword list. Although most of these components may occur either in the front or the back matter, there are no strict rules regulating their position in the outside matter, which proves that the division of outside matter components in categories determined by their function is more reasonable

than the division by their location in the structural framework of the dictionary. This category roughly corresponds to 'integrated outer texts' described by Gouws and Prinsloo (2005, 59–61).

The most relevant metafunctional outside matter components providing details about the dictionary and its use are the preface and the user's guide. The preface, according to Svensén (ibid.), should include information about the purpose, the intended user group, the organization principles and the scope of the dictionary. The user's guide (or the guide to the use of the dictionary) is often viewed as an indispensable component part of the dictionary (Hausmann and Wiegand ([1989] 2003, 213; Landau 2001, 148; Gouws and Prinsloo 2005, 57; Svensén 2009, 381). It "introduces the reader to the conventions of the dictionary layout" (Atkins and Rundell 2008, 177) and, according to Landau (2001, 149) "[t]he purpose of the guide is to describe as clearly as possible all the kinds of information included in the dictionary, show the reader how to interpret the data given". Landau (ibid.) also suggests that the purpose of user's guide is to provide answers to the following questions – "what's in it?", "what does it mean?" and "how do I find it?" and usually describe the headword, pronunciation, inflected forms, labels, cross-references and usage notes.

According to Svensén (ibid. 381), the user's guide should contain information on: the macrostructure and microstructure of the dictionary, how different information types are presented in the dictionary, the cross-reference system applied, structure indicators used (typographical and non typographical), the outside matter components functionally related to the headword list, the list of abbreviations (labels) used in the dictionary, pronunciation key (if the dictionary provides pronunciation), syntactic codes (if used in the dictionary).

These lists of desiderata reveal that the user's guide can be viewed as a cluster of several metafunctional outside matter components, namely, the component named 'the user's guide' (or 'how to use the dictionary', 'guide to the dictionary', etc.), the list of abbreviations (labels), pronunciation key and, perhaps, some more informative components. Therefore in the analysis of the user's guides of ELDs special attention should be paid to the overall contents of the metafunctional outside matter components rather than to the titles of the components which might not be sufficiently revealing.

The layout and the contents of the user's guide can vary from dictionary to dictionary, but in most cases it is placed in the front matter. Svensén (ibid. 382) emphasizes that in order to facilitate dictionary use, the user's guide should be presented in understandable language (avoiding technical jargon) since most dictionary users are not lexicographers. Nowadays they are often presented using different colours and eye-catching schemes. This mode of presentation makes them more understandable and attractive to the user, besides they are made as compact and informative as possible. The User's guides in several recent editions of English monolingual learner's dictionaries (e.g. *Longman Dictionary of Contemporary English* (Summers (ed.) 2003), *Oxford Advanced Learner's Dictionary* (Wehmeier (ed.) 2000)) are good examples of this approach. Kirkpatrick (1989, 756) holds that this more attractive presentation of the vital information about the dictionary which might be "less satisfying linguistically and philosophically, takes significantly less time to absorb than elegant, discursive prose" (ibid.). However, the scholar also notes that dictionary users are reluctant to consult the front matter (even less the back matter). This lack of interest in the front matter is at least partly related to the popular assumption that all the dictionaries are similar in structure and no specific information on their use is necessary (ibid. 754).

The category of outside matter 'components belonging to the access structure' comprises various kinds of indexes which "offer an additional entry point to the material contained in the lemma [headword] list" (Kirkpatrick (1989, 383), thus making the dictionary polyaccessible. Indexes are more relevant in dictionaries with thematically arranged macrostructure, and are not typically found in general bilingual dictionaries. The table of contents is also viewed as an important component of the dictionary access structure (Hausmann and Wiegand [1989] 2003, 214; Nielsen 1990, 55). The first and/or the last word or part of the word printed on the top of the page or the so called 'running heads' is another outer access element which can facilitate the headword access process.

The last category of Svensén's classification is a miscellaneous group of outside matter components with a different function from the above mentioned. In most cases they appear in the back matter and include mostly encyclopaedic information, e.g. biographical names, colleges and universities, signs and symbols, a list of US presidents, etc. This set is more typical of American monolingual general purpose dictionaries which tend to include a wider scope of encyclopaedic outside matter components (Landau 2001, 149–151; Cop 1989, 163–164), while the back matter of small bilingual dictionaries targeted at travellers can contain small phrasebooks, information on currency, climate, geography, culture and even national holidays (Svensén 2009, 386). Even though the outside matter of the dictionary should be logically linked to the contents and subject matter of the dictionary, the functions of some, especially encyclopaedic outside matter components, often appear to be somewhat unclear. If so, the omission of such outside matter component is not a great loss to the dictionary (Nielsen 1990, 55–57; Svensén 2009, 386).

3.1.2 Framework of Megastructural Analysis of ELDs

The framework of the analysis of megastructural elements in ELDs is largely based on the categories of outside matter components suggested by Svensen (2009, 379-386), though the category 'components providing information on the language(s) being described' has been restructured producing two new categories - 'components providing linguistic information' and 'components providing encyclopaedic information', the outside matter components which have a different function (or an unclear function) are relegated to the category of miscellenious components. Thus, the present outline of criteria for megastructural analysis contains five basic categories (marked by capital letters A, B, C, etc.) and subcategories (marked by a letter and number combination, e.g. A.1, A.2). However, it should be noted that even though the list of concrete megastructural components and their contents (in the case of preface and user's guide) is initially based on the information provided in the literature, it will be constantly supplied with the outside matter elements encountered in the course of the description of the outside matters of ELDs subjected to the analysis in order to present the full set of components belonging to these categories. Since the literature does not mention all the components of the front and back matters of ELDs, the outside matters of some major recently published ELDs have been studied to spot the typical megastructural elements encountered in these dictionaries. Prefaces and especially user's guides as the most relevant components of the outside matter will be discussed in more detail to identify their contents and evaluate how successfully they fulfil their informative function. An initial list of relevant information types encountered in the literature will be provided to reveal if this information is included in ELD, but if some additional information is found in the course of analysis, it will be added. This means that the lists of components of functional categories selected for megastructural analysis is open-ended and will be supplied throughout the analysis. It will also be noted whether these components appear in the front matter (FM) or back matter (BM) of the dictionary to detect certain regularities concerning the position of the outside matter.

This approach has been chosen because the task of this part of the analysis is to identify, classify and describe the typical outside matter elements of ELDs, analyse the findings and draw conclusions on the general tendencies in the development of their megastructure. However, in the megastructural analysis no attempt will be made to compare the information encountered in the preface and the user's guide to the contents of the dictionary. Macro- and microstructural features of ELDs will be analysed separately. The above described megastructural analysis is composed to reveal:

- 1) the scope of the outside components included in ELDs;
- 2) the typical set of outside matter components found in ELDs;
- 3) the typical position of frequently occurring components;
- changes in the selection and arrangement of outside matter components in ELDs throughout the tradition;
- 5) the contents and elements of the most relevant outside matter components (preface and user's guide).

The following is a list of the major functional categories of outside matter elements to be described for the purpose of megastructural analysis. It is intentionally open-ended in order to reveal the full set of megastructural components:

A. 'Metafunctional' components providing details about the dictionary and its use: A.1. Preface contains information on: the purpose of the dictionary the word-stock included, the scope of vocabulary layers (temporal, register, field) included the sources of the dictionary the number of entries the target (user) group A.2. User's guide contains information on: the macrostructure the microstructure structure indicators used: typographical (e.g. typefaces, type sizes, font variants (italics, bold type, capitals), etc.) non-typographical (numerals, letters, brackets, punctuation marks, symbols, etc.) means of textual condensation (e.g. repetition symbols like "~" to avoid repetition of the headword) pronunciation in the dictionary the list of abbreviations and labels used in the dictionary the cross-reference system (its design and function) B. Components providing encyclopaedic information on the language being described: lists of geographical names nationalities personal names C. Components providing linguistic information on the language being described: alphabet pronunciation rules grammar rules lists of irregular verbs word-formation D. Miscellaneous components without a clear function (e.g. lists of weights, measures, signs, symbols, etc.). E. Components belonging to the access structure: the table of contents the running heads thumb indexes

3.2 Macrostructure of Bilingual Dictionaries

Hausmann and Wiegand ([1989] 2003, 208) give a general description of macrostructure as "the ordered set of all lemmata [headwords] of the dictionary". However, opinions differ on what exactly is understood with this term (see the introductory part of the present

chapter). In the present study macrostructure is defined as the complete list of dictionary headwords, so the analysis of the macrostructure of ELDs will focus on the main and secondary headwords of the dictionary. Secondary headwords located inside the entry refer to both the macro- and microstructure of the dictionary, so the issues related to the criteria of selection, kinds of lexical items which appear as secondary headwords and their presentation, will be discussed in the framework of macrostructural analysis, while the issues concerning the position of secondary headwords (more directly related to entry layout) – in the framework of microstructural analysis.

3.2.1 Building of the Headword List

The first step in the building of the headword list is choosing the sources of the dictionary from which the headwords will be selected (Hausmann and Wiegand [1989] 2003, 220). While previously these sources were citation files, introspection and secondary lexicographic sources, nowadays the selection of headwords is primarily based on the analysis of corpus data (though often combined with other sources, for instance, introspection and secondary lexicographic sources). When applied in the process of building the macrostructure of the dictionary, corpus data provide useful information on: the frequency of a word (or its lemmatized form) which helps to make decisions about its inclusion in the headword list; its usage in a particular subject area, social, regional or other variety; the frequency of variant spellings, as well as capitalization and the spelling patterns of compounds (for instance, Roberts and Montgomery 1996; Landau 2001; Atkins and Rundell 2008, see subchapter 2.2.2.1).

In order to build the headword list of a general bilingual dictionary various important decisions have to be made. Atkins ([1992/1993] 2008, 39) suggests dividing the editorial decisions related to the construction of the macrostructure of the dictionary into two major categories – the ones related to the headword list and the ones related to the structure of the entries (mostly the presence or absence of the secondary headwords). The latter affect both macro- and microstructure of the dictionary.

It is also pointed out by Atkins ([1992/1993] 2008, 40) that three sets of criteria have to be applied in order to select the headword list for a particular dictionary. The first set concerns the 'lexical type' of headwords (it has to be decided if the dictionary includes as headwords only single items or also multiword items), the second set of criteria is related to the 'morphological type' of headwords (it determines the inclusion or exclusion of derived forms, inflected forms, etc.) and the third set is related to the 'semantic type' of headwords, namely, the selection of encyclopaedic items, taboo words, etc. A more

detailed list of the various types of lexical items which can be selected as headwords, applying the first and the second set of criteria ('lexical type' and 'morphological type') suggested by Atkins ([1992/1993] 2008, 40), is provided by Hausmann and Wiegand ([1989] 2003, 220–221); Atkins and Rundell (2008, 163–176) and Svensén (2009, 102–104):

- single items (single words (lexical and grammatical words), derivatives, closed and hyphenated compounds, wordforms (irregular inflected forms), abbreviations, clippings, partial words (productive prefixes and suffixes), etc.);
- various kinds of multiword units (open compounds, phrases (fixed and semi-fixed), idioms, phrasal verbs).

All the members of this list are mentioned as possible options, though some are more and some less likely candidates of the headword status in a general bilingual dictionary. The inclusion or exclusion of these categories of potential headwords in the main and secondary headword list of the dictionary depends on the stance taken by the compilers of the dictionary. For instance, it has been observed by Svensén (2009, 104-105) that there is a growing tendency in bilingual lexicography, especially in L2-L1 dictionaries to include abbreviations in the central headword list. Atkins and Rundell (2008, 187) note that in contemporary dictionaries proper names are usually included in the main headword list instead of the back matter. There is an overall tendency in modern lexicography to include the selected headwords in the main headword list, thus eliminating the additional wordlists in the back matter of the dictionary which are viewed as unfriendly to the potential users (Landau 2001, 149; Atkins and Rundell 2008, 179). Bejoint (2000, 192-193) and Landau (2001, 102–103) argue that it is not advisable to include in the headword list semantically transparent derivatives and compounds since that only boosts the headword list; however, it is relevant to give headword status (and not present as run-on entries) to those derivatives and compounds which have at least one independent meaning from the base form. Atkins and Rundell (2008, 165) emphasize that because of their role in word building, productive affixes (especially prefixes) should be included in dictionaries as headwords. The scholars (ibid. 172 and 174) also hold that in bilingual dictionaries it is important to include not only the figurative but also the literal senses of phrasal verbs since they may also have an equivalent in the TL.

Multiword expressions (MWEs) which form a relevant group of headword candidates, especially for learners' and bilingual dictionaries (Atkins and Rundell 2008, 167), but are particularly problematic both from the point of view of selection and presentation, will be discussed in more detail in the subchapter on alphabetization.

The compilers of the headword list also have to pass decisions concerning the vocabulary items which do not belong to the common core vocabulary, namely, various types of specialized vocabulary (normally later marked in the dictionary with various labels). Since even large general purpose dictionaries have to be selective, it has to be decided which members of this category to include in the headword list – the final decision is determined by the type of dictionary and user profile. The following list gives an insight in the possible choice of various types of specialized vocabulary: domains (e.g. art, law), region (e.g. American, Canadian English), dialect (e.g. Yorkshire, Scots), register (e.g. formal, informal), style (e.g. literary, journalese), time (e.g. archaic, old-fashioned), slang and jargon (e.g. naval slang), attitude (e.g. pejorative, ironic), offensive terms (e.g. racist terms, swear words). Another group to be included or excluded from the headword list are proper names or encyclopaedic items (e.g. place names, personal names) (Atkins and Rundell 2008, 182–189). This list roughly corresponds to the 'semantic type' of criteria for selecting of headwords suggested by Atkins ([1992/1993] 2008, 40).

3.2.2 Form and Presentation of the Headwords

As the two major steps to be taken in order to present the selected headword list Hausmann and Wiegand ([1989] 2003, 220) point out lemmatization and alphabetization.

Lemmatization, described by Hausmann and Wiegand ([1989] 2003, 209) as "the selection of one single morphological form whose function in the macrostructure is to represent the total set of grammatical and morphological forms of the linguistic sign treated in the microstructure", is essential for building the headword list. In the European tradition nouns are normally presented in the singular masculine, nominative; the infinitive or the first person singular present indicative are chosen to lemmatize verbs; the singular masculine is selected for adjectives, but the inclusion of all the irregular forms in the entry list is highly untypical in general purpose dictionaries (Hausmann and Wiegand [1989] 2003, 209; Svensén 2009, 105), though, if the noun is always used in the plural, this form has to be provided in the headword (Svensén ibid.). Irregular inflected forms are often provided in L2-L1 and monolingual learners' dictionaries as headwords with a cross-reference to the base form (Bejoint 2000, 192; Landau 2001, 99; Svensén 2009, 105–106). However, it should be noted that the grammatical form of presentation is not an equally important issue in all languages. For instance, English, being an analytical language, is much less challenging than, for instance, such a synthetic language as Latvian.

The main headwords are not normally subjected to textual condensation, while the repeating elements of secondary headwords may be substituted, for instance, by a hyphen

or swung dash (Svensén 2009, 105–107). Syllabification (the indication of syllables of the headword) has become infrequent in the contemporary dictionaries since the word breaks nowadays are mostly inserted by word processing programs and this information is no more relevant for the users (Atkins and Rundell 2008, 191).

There are two basic types of macrostructure – alphabetical where the headwords are arranged in a spelling-based alphabetical order (though it is almost never strictly alphabetical) and thematic or systematic order where the words are arranged semantically (e.g. Bejoint 2000, 15; Hartmann 2001, 64; Svensén 2009, 369). According to Malkiel (1962, 17 quoted in Bejoint 2000, 16) "[t]he alphabetical arrangement, though strictly conventional, is so overwhelmingly dominant that the ordinary person associates with this familiar sequence the very genre of the dictionary". It is also claimed by Hausmann and Wiegand ([1989] 2003, 208) that the alphabetic ordering of headwords is "the only ordering principle which all users may be reasonably expected to master easily". Since the macrostructure of general monolingual and bilingual dictionaries in the European tradition (ELDs among them) is arranged according to the alphabetical principle, only this type of macrostructure will be discussed further.

Even though the alphabetical arrangement of headwords is gradually losing its leading position in lexicography due to the growing influence of the electronic media, for the printed medium it is still of paramount importance as an ordering device, accordingly also for the ELDs analysed in the empirical part of the present study.

The macrostructure certainly "determines under which lemma [headword] the lexicographical item is to be found" (Hausmann and Wiegand [1989] 2003, 219), but the finding of the necessary item can be hindered by the fact that the arrangement of headwords is not always strictly alphabetical. Only in 'straight-alphabetical' dictionaries the headwords can be found easily since they are arranged vertically in a strict alphabetical order.

Atkins ([1992/1993] 2008, 40) points out some relevant editorial decisions related to the alphabetical arrangement of the headwords. If the macrostructure is strictly alphabetical all the items appear as main entries, the dictionary has only flat entries, however, as soon as subentries (headed by secondary headwords) are incorporated in the main entry, the entry structure becomes tiered. Secondary headwords usually get a limited lexicographic treatment in comparison with the main headwords. It is also necessary to decide upon the criteria of the main and secondary headword status. Atkins (ibid.) suggests that the main headword criteria can be based on the following grounds: morphological (only base or also derived forms are selected as the main headwords), grammatical (the selection is based on

part of speech principle), orthographical (the headwords can be solid words, hyphenated forms, etc.). Also the following possible secondary headword criteria are specified: morphological (certain types of derivatives, e.g. nouns with the suffix *-ness*) and lexical (e.g. such lexical items as compounds, phrasal verbs, idioms are presented as secondary headwords).

If it is decided to provide tiered entries, the techniques of *niching* and *nesting* are applied. "Niching [...] is a strict-alphabetical clustering of lemmata or articles [headwords] which may or may not be semantically related" (Hausmann and Wiegand [1989] 2003, 219) – in this case although provided, for instance, at the end of the entry, the derivatives or phrasal verbs will be listed in strict alphabetical order. "Nesting [...] is a clustering or listing of lemmata or articles which stretches the rules of strict-alphabetical ordering in order to exhibit morphosemantic relations between words" (ibid.). The scholars give an example of the entry with the headword **fill** where such secondary headwords as *filler, fill in, filling station, fill in on* are nested and appear before the following main headword **fillet,** which obviously destroys the strict alphabetical order. It should be stressed that these techniques, though capable of indicating significant morphological and semantic links between lexical items, can cause lookup problems and therefore ask for usage guidance (ibid.).

In the case of niching and nesting secondary headwords can be organized according to two principles – listing where all secondary headwords are arranged in a new line, and clustering where they are arranged in succession, which helps to save space (Hausmann and Wiegand [1989] 2003, 220; Svensén 2009, 373). Svensén (2009, 90) emphasizes the space-saving function of niching and nesting in combination with clustering, especially when the first (common) element of the secondary headword is replaced by some representation symbol.

Such multiword lexical items as phrasal verbs and idioms often cause alphabeticalorder-related problems (Hausmann and Wiegand [1989] 2003, 209; Landau 2001, 107). Phrasal verbs, for instance, are described by Hausmann and Wiegand (ibid.) as 'linguistic signs', which should appear in dictionaries as the main headwords, "[h]owever, for practical reasons of location, they are traditionally treated in the microstructure" (ibid.) and accordingly are given a secondary headword status. The same treatment is normally given also to idioms. Even if the MWE is given the headword status according to its first element (or it is provided as a secondary headword in the entry of its first or the most important element), it poses certain arrangement problems – it has to be decided how to treat the space(s) between the elements. There are two options: 1) the spacing is ignored and the MWEs are treated as regular sequences of letters; 2) the MWEs are arranged according to their first element but the following elements are classified separately (Bejoint 2000, 14). Svensén (2009, 369) and Landau (2001, 107) distinguish between alphabetization according to letter-by-letter principle (MWE are treated as solid words) and word-by-word principle (spaces which precede letters are taken into account) of multiword headwords. Notwithstanding terminological differences, the approaches to alphabetization of MWEs described by the scholars largely coincide. Atkins and Rundell (2008, 191) emphasize that the letter-by-letter alphabetization is normally preferred in contemporary dictionaries.

3.2.3 Treatment of Polysemy vs. Homonymy

Another important macrostructural decision to be made concerns the lexical items with identical forms, namely, polysemous and homonymous lexical items. Atkins ([1992/1993] 2008, 39–40) identifies three approaches, namely, the headword list can be

- non-homographic (all the lexical units sharing the same form are presented in one entry),
- totally homographic (each lexical unit is presented as a separate headword which leads to multiple headwords with the same form),
- partially homographic (several headwords can have the same form, besides they can be polysemous).

The latter is singled out as the most frequently employed in contemporary lexicography.

The distinction between homonymy and polysemy, though mostly viewed as based on etymology (e.g. Landau 2001, 100), is notoriously uncertain. Zgusta (1971, 74 quoted in Landau 2001, 100) even claims that "[h]omonymy begins at the point when the speakers of a language are unable to conceive different senses as connected".

Two approaches to the presentation of polysemy vs. homonymy are taken in practical lexicography – they can be provided under one headword or several headwords of the same form (Svensén 2009, 94), though typically polysemy is presented in the microstructure while homonymy in the macrostructure of the dictionary (Landau 2001, 100; Svensén 2009, 96).

Svensén (2009, 96–101) lists the following approaches applied to distinguish between polysemy vs. homonymy:

- the historical approach (if the form of two lexemes coincides but the origin (etymology) differs, they are treated as homonyms and presented as two headwords);
- the semantic approach (lexemes of common form but 'different meaning' (which is somewhat vaguely defined) are presented as homonyms. It should be noted that this

approach is less scientific since not based on etymological principles, more likely on mere similarity and difference of meaning. Different parts of speech are treated in separate entries. This approach may result in a high number of homonymous entries);

- the morphosemantic approach (characteristic of French monolingual lexicography, it is similar to the semantic one but in this case the main headword is accompanied by secondary entries, the same derivative or compound may be listed under several main headwords);
- the formal-grammatical approach (the polysemy-homonymy distinction is based on grammatical, not semantic criteria. Semantically unrelated lexemes are presented in one entry while different parts of speech appear in separate entries. Even semantically related lexemes of the same part of speech but, for instance, having different plural forms, will be presented as homonyms).

The above discussed approaches have their plusses and minuses. The historical approach, for instance, can be successfully applied only if the potential users possess some etymological knowledge; the semantic approach results in a more developed macrostructure and much simpler microstructure which can ease the lookup process; the main headword which is accompanied by secondary headwords characteristic of the morphosemantic approach can contribute to vocabulary building; the formal-grammatical approach is highly predictable because it follows strict rules, but its main disadvantage is that it disregards semantic links. Therefore in practical lexicography they are often combined and seldom appear in pure form. It should also be taken into account that the approach to polysemy-homonymy distinction should be as far as possible adapted to the reference skills and needs of the potential dictionary users (ibid. 101–102).

Atkins and Rundell (2008, 192–193) suggest another set of criteria applied in practical lexicography to determine the use of homonymous headwords. According to the scholars, the headwords can be presented as homonyms if they have:

- the same spelling, but the meaning and etymology are different (this approach is typical of historical and scholarly dictionaries, but nowadays, considering the needs of the users (and their limited knowledge of etymology) mostly only one headword is used in this situation);
- the same spelling, but different meaning and pronunciation (differences in pronunciation in most of the cases result in separate headwords);
- the same spelling and pronunciation, but different meaning and capitalization (e.g. May and may, mostly separate headwords are provided);

- the same spelling and pronunciation, but different meaning (since the mere difference in meaning is not a clear criterion for proving homonymy, most dictionaries nowadays provide such cases under a single headword);
- the same spelling, pronunciation and meaning but different word-class (different approaches can be applied, but most contemporary monolingual learners' dictionaries (MLDs) present different parts of speech as separate headwords, relying on the user's knowledge of the part of speech distinction).

Though the approaches to the distinction between the presentation of items with identical spelling (differing in various other aspects) described by Svensén (2009) and Atkins and Rundell (2008) differ (the first one being more hypothetical while the second more practice-driven), they reveal some overall tendencies:

- different etymology is viewed as an important precondition for treating lexical items as homonymous and presenting them as separate headwords (though, due to the presumption that the users do not benefit from such distinction, this criterion is gradually losing its relevance in contemporary lexicography);
- the difference in pronunciation and capitalization can also serve as notable criteria for treating lexical items as homonymous rather than polysemous;
- a mere difference in meaning is viewed as a subjective and unreliable criterion for the distinction between the cases of homonymy vs. polysemy;
- different word-classes can often be presented as separate headwords (the main disadvantage of this approach is the loss of semantic links).

It remains to be added that Hausmann and Wiegand's observation ([1989] 2003, 221) that "[t]here are very few empirical studies on macrostructure profiles of general monolingual dictionaries and also little operational description to enable us to measure the richness of macrostructure", sadly enough, can be attributed to general bilingual dictionaries as well. This might be explained by the fact that it is a more complicated task to study the extended wordlist of a dictionary in comparison with the much more compact entry structure where even a study of comparatively small number of entries can reveal some overall microstructural peculiarities of the dictionary. Here again a parallel might be drawn with the previously quoted metaphoric description of micro- vs. macrostructure so wittily worded by Sue Atkins ([1992/1993] 2008, 39) – "[t]he living, changing, challenging, bewildering" inhabitants of the lexicographic building (its microstructure) definitely "capture the linguistic limelight" much more easily than its more fundamental but more robust "walls, roof, windows, plumbing, and drains" (its macrostructure).

3.2.4 Framework of Macrostructural Analysis of ELDs

The framework for the analysis of the macrostructural peculiarities of ELDs is based on the research conducted by Hausmann and Wiegand ([1989] 2003), Atkins ([1992/1993] 2008, Bejoint (2000), Landau (2001), Atkins and Rundell (2008) and Svensén (2009).

ELDs will be subjected to descriptive analysis in order to highlight the characteristic macrostructural features which will be traced throughout the tradition. The criteria of analysis are based on the characteristic features of macrostructure discussed in the literature review, though in the course of analysis they can be supplied by some additional features to ensure a comprehensive description of the macrostructure of the ELDs. This approach has been chosen because the task of this part of the analysis is to describe the macrostructure of ELDs, analyse the findings and draw conclusions on the general tendencies in the development of the macrostructure throughout the lexicographic tradition. Even though the micro- and macrostructural peculiarities of ELDs are analysed separately, there are areas where these structural levels overlap – in such cases it will be decided to which part of the analysis the concrete issue should be attributed in order to avoid unnecessary repetition.

The present set of criteria for macrostructural analysis contains five basic categories (marked by capital letters A, B, C, etc.) and subcategories (marked by a letter and number combination, e.g. A.1, A.2). The criteria of macrostructural analysis:

A. Types of main and secondary headwords A.1. Main headwords

single items: single words derivatives closed compounds hyphenated compounds inflected forms: irregular inflected forms of verbs irregular plurals of nouns abbreviations contracted forms partial words (productive affixes) multiword items: open compounds phrasal verbs idioms phrases (similes, proverbs, etc.) A.2. Secondary headwords single items: derivatives closed compounds hyphenated compounds multiword items: open compounds collocations phrasal verbs

idioms **B.** Textual condensation applied: to main headwords to secondary headwords C. Principle of alphabetization applied: letter-by-letter principle word-by-word principle D. Types of entries and techniques of secondary headword arrangement: flat tiered: niching listing clustering nesting listing clustering E. Criteria for presenting homonymous headwords: different meaning and etymology different meaning and pronunciation different meaning and capitalization (the same pronunciation) different wordclass

3.3 Microstructure of Bilingual Dictionaries

The general layout of the dictionary entry (or its abstract microstructure) is and must be the same throughout the dictionary. However, there are usually several subtypes of abstract microstructure in each dictionary because there are different kinds of entries requiring variations of the abstract microstructure (Hausmann and Wiegand [1989] 2003, 231 ff.; Svensén 2009, 344). A concrete microstructure, on the other hand, "is the realization of an abstract microstructure in a dictionary entry" (Svensén 2009, 344).

Hausmann and Wiegand ([1989] 2003, 225–230) present the classical conception of the microstructure worked out by Rey-Debove (1971, 151–179). According to this theory the dictionary microstructure "is the total set of linearly ordered information items following the lemma [headword]" (Hausmann and Wiegand [1989] 2003, 225). When compiling monosemous entries the lexicographer goes through the set of items once, while in polysemous ones it can be repeated several times depending on the amount of senses. If some information type is missing in a concrete entry, it is considered as "zero degree of information" (ibid.), retaining the constant microstructure while adopting it to the needs of the entry. Thus, the classical conception of microstructure proposed by Rey-Debove (1971, 151–179 in Hausmann and Wiegand [1989] 2003, 225–230) is divided in twelve information-type groups. A short description of the information types pertaining to each of the groups will be provided. It should be noted that this list is originally compiled for general monolingual lexicography and not all of the information types can be attributed to bilingual lexicography.

- "Synchronic identifying information" is targeted at the identification of the form and morphological paradigm of the headword, it refers to its spelling, pronunciation, stress pattern, part of speech, inflection;
- 2) "Diachronic identifying information" refers to etymological information;
- "Diasystematic labelling" refers to usage restrictions indicated by various kinds of usage labels (temporal, regional, register, field, frequency, attitude and connotation);
- 4) "Explanatory information" includes definition in monolingual dictionaries (and translation equivalents in bilingual), if necessary, also encyclopaedic descriptions;
- 5) "Syntagmatic information" or combinatory information refers to various constructions and collocations provided in the form of examples;
- 6) "Paradigmatic information" or associative information deals with synonyms, antonyms, homonyms, paronyms and word formation;
- "Semantic information" includes various information types which complete the information provided by the definition or equivalent, e.g. explanatory glosses and labels like *figuratively, metaphorically* which indicate the semantic changes the headword has undergone;
- 8) "Notes" usage notes are the most widespread information type of this group;
- 9) "Pictorial illustrations";
- "Ordering devices" which help to structure the entry and divide it into search areas, for instance, punctuation marks, symbols, letters which help to structure the dictionary entry.
- 11) "Cross-references" which help to find information elsewhere in the dictionary;
- 12) "Representation or repetition symbols" which substitute repeated information, the most widespread one is the swung dash.

It is pointed out by Hausmann and Wiegand ([1989] 2003, 228) that the information types in groups 1–9 pertain to language, while the last four also to the dictionary form which puts them in a different, more 'technical' subcategory. It is important to detect which of these information categories of abstract linear microstructure (originally devised for monolingual lexicography) can be attributed to the microstructure of bilingual dictionaries. A closer inspection of the twelve groups helps to identify these categories: (1) synchronic identifying information; (3) diasystematic labelling; (4) explanatory information (in bilingual lexicography it is substituted by translation equivalents); (5) syntagmatic (combinatory) information; (7) semantic information; (10) ordering devices; (11) crossreferences; (12) representation or repetition symbols. Such information-type groups as paradigmatic (associative) information, pictorial illustrations and notes are normally not encountered in general bilingual dictionaries.

It can be inferred that the classical conception of the abstract linear microstructure proposed by Rey-Debove (1971), even though originally not devised for bilingual lexicography, presents a list of the major information categories encountered in a bilingual dictionary entry, thus, serving as a model for further investigation.

Metalexicographic literature presents also several descriptions of a typical entry structure of a bilingual dictionary coined by such scholars as Haas ([1962] 1967, 45), Zgusta (1971, 326–344) and Atkins (1985, 16–21; [1996] 2002, 2–5), however, it should be noted that these descriptions are more concrete and practice-oriented if compared to Rey-Debove's conception.

Haas ([1962] 1967, 45 cited in Landau, 2001, 11) lists the following characteristic features of a bilingual dictionary entry:

- 1) the translation of each SL headword is provided;
- 2) grammatical, semantic and syntactic information is provided;
- 3) usage information is provided;
- 4) alternative spellings are indicated;
- 5) pronunciation is given.

In general lines this list corresponds to one provided by Rey-Debove (1971), though it obviously concentrates on some concrete microstructural elements of a bilingual dictionary and does not attempt to describe the whole microstructural system.

Zgusta (1971, 326–344) describes the entry structure of a bilingual dictionary as follows:

- 1) the headword in its canonical form;
- 2) grammatical information revealing the headword's paradigm;
- indication of pronunciation of the canonical form of the headword (if necessary, also of some other unpredictable forms inside the paradigm);
- equivalents in canonical form (supplemented by grammatical information and pronunciation in the case of L1-L2 dictionary);
- 5) the meaning of the headword is described with the help of partial equivalents of the TL (in the case of a polysemous headword, the same equivalent can repeat in several senses while the illustrative examples and phraseology differ, however, lumping of senses is possible if there is one common TL equivalent for several senses of the SL headword);

- 6) glosses (semantic glosses for meaning disambiguation and encyclopaedic explanations for adding some relevant encyclopaedic information) and various labels;
- illustrative examples and various types of set expressions (often presented as subentries but can also occur among examples).

It is also important to note that apart from underscoring some typical characteristic features of bilingual dictionaries, Zgusta (1971) constantly reminds of the necessity to take into account whether the dictionary is targeted at the SL or TL speakers, because it determines the focus of the dictionary (on the headword in the case of L2-L1 dictionary vs. equivalents in the L1-L2 dictionary) and accordingly also the language of the glosses and labels.

Atkins (1985, 16–21) describes a typical microstructure of monolingual and bilingual learners' dictionaries, stressing that many information types are shared by the two types of dictionaries, though there are some notable differences. The following entry structure is proposed as typical of a bilingual dictionary:

- 1) the headword and its variant spellings;
- 2) pronunciation;
- 3) indication of part(s) of speech;
- 4) morphological information potentially confusing irregular inflections;
- 5) syntactic properties of the headword;
- 6) translation equivalents of various senses of the headword;
- 7) illustration of usage (including collocations, phraseology), always translated;
- 8) indication of semantic information and selectional restrictions;
- 9) indication of usage restrictions (with the help of labels);
- 10) cross-reference(s).

Atkins (ibid. 23) stresses that the metalanguage (used for providing semantic and usage information) should be L1 of the intended user.

Whitcut (1985, 75–76) also presents a conventional entry structure which, apart form omitting the syntactic description of the headword and cross-references, but being more explicit on usage labels, largely corresponds to the one provided by Atkins (1985). Whitcut's description of the entry structure also refers to both monolingual and bilingual entries.

The description of the organization of a typical bilingual dictionary entry presented by Atkins ([1996] 2002, 2–5) deserves special attention. The scholar not only lists the relevant information types ("data types"), but also underlines their mode of expression (SL, TL or a code), information content (what information they carry), the function of each information

type and the kind of user who benefits from the concrete information type (encoding or decoding SL or TL speaker). The description of two information types will suffice to illustrate the method applied by Atkins (ibid. 4):

information	mode of	information content	function of the	the kind of target
type	expression		information type	user
phonetic	IPA code is	shows the	helps to pronounce	encoding TL
transcription	used	pronunciation of the	the word correctly	speaker benefits
		headword		from this
				information
register label	a code is used	the SL or TL item in this sense is used in	helps both SL and TL users to translate; TL	encoding SL speaker
		informal, formal, etc.	user to comprehend;	decoding TL
		register	SL user to identify the	speaker
		register	right sense of the	speaker
			headword	

This description of a bilingual dictionary entry covers the microstructural program encountered in a bidirectional (Lx-Ly, Ly-Lx), bifunctional (active and passive) dictionary (ibid. 25), namely, the whole set of structural and functional variants of a general bilingual dictionary.

Since the task of this chapter is to get acquainted with a typical bilingual entry structure as presented by various scholars, no attempt will be made to present the whole scope of the information-type content, functions and the potential users encountered in the entries of all types of bilingual dictionaries as described by Atkins ([1996] 2002, 4–5), rather a comprehensive summary of a typical entry structure proposed by the scholar will be presented. According to Atkins (ibid. 4) a bilingual dictionary entry is structured in the following way:

- 1) the forms of the headword and secondary headword(s);
- 2) phonetic transcription by IPA;
- grammatical description of the headword (by grammar labels indicating its part of speech, gender, etc.);
- various usage labels (domain/ diatechnical (Science, Art, etc.), stylistic (poetic, business, etc.), register (formal, informal, etc.), regional/ diatopic (BrE, AmE, etc.), diachronic (archaic, old-fashioned, etc.), evaluative (derogatory, appreciative));
- 5) sense number(s);
- 6) grammatical (syntactic) complementation of the headword;
- 7) TL equivalent(s) or a TL gloss (if an explanatory equivalent is necessary);
- 8) SL examples and their translation in the TL ("typical example" illustrating typical usage of the SL item, "problematic example" demanding a specific equivalent, "idiomatic example" which contains a multiword expression or an example

containing a MWE the meaning of which is figurative and demands a specific translation);

- sense indicator (synonym, paraphrase or some other means of indicating the right sense of the headword);
- 10) collocators (typical subjects or objects of the SL (headword) or TL (equivalent) verbs, nouns modified by SL or TL adjectives);
- 11) cross-reference to another entry or a concrete sense.

Atkins ([1996] 2002, 4–5) provides a more detailed description of a bilingual entry components, listing several information types of the bilingual entry not specified by other scholars, namely, the forms not only of the headword but also secondary headwords; various types of examples (which she calls typical, problematic and idiomatic); gives a detailed account of various types of labels (domain, stylistic, register, regional, diachronic and evaluative); sense indicators and collocators.

The summary reveals that most scholars discussing the entry structure in general or particularly a bilingual entry, have listed the following basic information types: the headword, phonetic transcription, grammatical description of the headword, usage labels, TL equivalent(s), examples translated in the TL, sense (semantic) indicators, collocators and cross-references. The bilingual entry information types discussed in these studies are summed up in a table (see Appendix 1).

It could be added that if all the linguists mention the headword as the initial component of a bilingual entry, only some add that it is given in its canonical form and variant spellings (if existent) are also provided. Secondary headwords as possible elements of a bilingual entry are mentioned only by one author (Atkins [1996] 2002) and multiword expressions (MWEs) as potential secondary headwords also only once (Zgusta 1971). Possibly, these information types have been omitted from the suggested lists of entry elements because have been viewed as self-evident and not specifically characteristic of a bilingual entry. The scholars are unanimous about the phonetic transcription as an essential part of a bilingual entry. Grammatical description of the headword is discussed by all the authors, while the finer division into various kinds of grammatical description (grammar labels, especially for indicating the part(s) of speech of the headword, inflections and syntactic information) is pointed out by several but not all of them.

All the authors point out the TL equivalents as a relevant element of a bilingual entry (apart from Rey-Debove (1971) and Whitcut (1985) who discuss a typical entry structure but not particularly a bilingual one). Almost all the scholars note the presence of usage examples and the fact that they are translated in the TL, but only one author (Atkins [1996]

2002) gives a more detailed account of various kinds of examples encountered in bilingual entries (though it is important to note that the 'idiomatic example' according to Atkins ([1996] 2002, 5) can be either a MWE or an example which contains such an expression – strictly speaking, only the latter case qualifies as an example since the former more likely qualifies for a secondary headword which itself needs exemplification). Usage labels are mentioned by all the scholars, however, the list of most widespread types is provided by two of them (Rey-Debove 1971 and Atkins [1996] 2002). Sense or semantic indicators (pointing to the right sense of a polysemous headword) are noted as a relevant part of a bilingual entry by nearly all the scholars, while collocators (providing information on the typical collocates of the headword or the TL equivalent) are mentioned less frequently.

The rest of the information types (encyclopaedic glosses, sense numbers, crossreferences and repetition symbols) are listed less often. It should be noted that all these information types fall into two categories – the ones providing information on the headword ('encyclopaedic glosses' and cross-references) and the ones which belong to a more technical category (sense numbers and repetition symbols and some others not mentioned in the current lists of entry elements). Though relevant for the organization of the entry, the elements of the latter group are not specifically related to the entry structure of a bilingual dictionary and as such have not been viewed as relevant by the authors of the lists. The most relevant information types revealed by the summary will be included in the list of criteria for microstructural analysis.

The following subchapters are devoted to a detailed discussion of two information types which play an important role in a bilingual entry, namely, equivalents and illustrative examples.

3.3.1 TL Equivalents in Bilingual Dictionaries

In the context of bilingual lexicography Zgusta (1971, 312) has defined an equivalent as "a lexical unit of the target language which has the same lexical meaning as the respective lexical unit of the source language". It should be noted that Zgusta employs the term *lexical unit* (LU) as synonymous to the headword since it is claimed that it can be divided into senses. Although simple and transparent, this definition does not completely satisfy the needs of modern bilingual lexicography because in contemporary practical bilingual lexicography equivalence is normally perceived as "a relation between the individual meanings of the lemmatized word and the equivalents" (Kromann et al. 1991, 2717). Atkins and Rundell (2008, 468), employing the term *lexical unit* in the meaning of one sense of the headword, explain that in a bilingual dictionary "[t]ranslations of SL

headwords are offered within an LU, that is, they are translations of the headword in a single sense" which leads them to the conclusion that equivalence in bilingual lexicography refers exclusively to the lexical unit, not to the headword as such.

Hartmann and James in their Dictionary of Lexicography define equivalence as

[t]he relationship between words or phrases, from two or more languages, which share the same MEANING. Because of the problem of ANISOMORPHISM, equivalence is 'partial' or 'relative' rather than 'full' or 'exact' for most contexts. Compilers of bilingual dictionaries often struggle to find and codify such translation EQUIVALENTS, taking into account the directionality of the operation. (Hartmann and James [1998] 2001, 51)

Though this definition deals with such relevant equivalence-related problem as anisomorphism of languages which inevitably leads to the somewhat imprecise nature of most equivalents in bilingual dictionaries and underscores the difficulties faced by bilingual lexicographers, it starts by the claim that equivalence is "the relationship between words or phrases (...) which share the same MEANING" (the definition of an equivalent in this dictionary starts similarly: "A word or phrase in one language which corresponds in MEANING to a word or phrase in another language (...)" (ibid.)). Adamska-Sałaciak (2010, 389) describes this perception of equivalence as "naïve", pointing out that it is not reasonable to deal with 'words' and 'phrases' but rather their separate senses. She also refers to Wiegand (2005) who views equivalence in lexicographic context as a union of lexico-semantic and lexico-pragmatic equivalence at the level of word senses. However, there might be a potential danger in concentrating entirely on separate senses of the word. For instance, Adamska-Sałaciak (2010, 289-390), having studied research conducted by such scholars as Wierzbicka (1992/1993), Kilgarriff (1997), Hanks (2000), Nida (2000), Rivelis (2007), et al., who stress that words have meaning potential rather than the clearcut senses provided by dictionary entries, comes to the conclusion that paying too much attention to separate senses of the lexical item we can lose sight of its overall semantic content.

Equivalence is also viewed as a relevant concept in translation theory (for instance Kenny 1998, 77), still it appears to be a controversial issue because the approaches to it can vary considerably. While some scholars stress its paramount importance, others perceive it as a term used merely for the sake of convenience. According to Pym (2007, 272) the term equivalence implying that "a source text and a translation can share the same value (equivalence) on some level" and there are various kinds of equivalence within the paradigm, flourished in the Western translation theories in the 1960s–70s. Pym (ibid. 278) distinguishes between two kinds of equivalence: natural equivalence (which can be found

in language and is bidirectional, namely, it can go either way and can stand the backtranslation test) and directional equivalence which has to be created by the translator, it goes only in one direction and as such cannot stand the test of back-translation. The scholar explains that

[t]he naturalistic theories were basically analysing languages, battling within the paradigm of structuralist linguistics. Directional theories, on the other hand, were working very much at the level of creative use, in keeping with attempts to analyse *parole* rather than *langue*. (ibid. 284)

Adamska-Sałaciak (2010, 399–403) observes that in the 1980s–90s the concept of equivalence was much criticized by the scholars who concentrated on natural equivalence. The fact that this perfect equivalence could not always be found even led to a complete rejection of the concept. Snell-Hornby (1988, 22 cited in Adamska-Sałaciak 2010, 399), being one of equivalence critics, claims that the term equivalence

apart from being imprecise and ill-defined (even after a heated debate of over twenty years) presents an illusion of symmetry between languages which hardly exists beyond the level of vague approximations and which distorts the basic problems of translation.

Adamska-Sałaciak (2010, 399), from the position of a bilingual lexicographer, holds a different opinion and infers that such a complete denial of the notion of equivalence in the context of bilingual lexicography would "amount to throwing the baby out with the bathwater" (ibid.) thus stressing the paramount importance of equivalence in this discipline. Pym (2007, 290), for instance, describes the notion of equivalence in translation studies in the following way – "[e]quivalence is always "presumed" equivalence" or "a belief structure that has to be analysed as such" thus, not denying the concept of equivalence but underscoring its relative nature.

Atkins ([1992/1993] 2008, 44–45) reveals the relevant difference between the issue of equivalence in translation studies and bilingual lexicography and the reasons why the equivalents offered by bilingual dictionaries are often far from perfect:

Many scholars criticize equivalents in bilingual dictionaries from the point of view of text translation. There is considerable difference between the context-sensitive equivalence sought by the translator and the context-free equivalence that must be offered in a bilingual dictionary entry. [...] When space cannot be spared for detailed metalinguistic indications, the lexicographers must choose a safe, general translation in preference to one that may be perfect in some contexts but perhaps erroneous in others.

Adamska-Sałaciak (2006, 101), referring to Wiegand (2005, 17) also comes to the conclusion that neither translation nor contrastive studies can provide any notions of equivalence directly applicable in lexicography, though the scholar also admits (Adamska-

Sałaciak 2010, 400) that most types of equivalents in bilingual dictionaries are created by the lexicographers rather than found in the language, which obviously allows to draw parallels with the distinction between 'natural' vs. 'directional' equivalence made in translation studies.

For purely practical reasons, Adamska-Sałaciak offers a more extended working definition of an equivalent in bilingual lexicography: "an equivalent in a bilingual dictionary is any TL expression whose function is to convey the meaning(s) of the lemma [headword]" (2006, 101). Adamska-Sałaciak also suggests expanding the notion of equivalence from lexical to lexical-structural-pragmatic because "a word or phrase in the target language can sometimes act as both a semantic and a functional equivalent of a given SL item" (ibid. 100). This definition of equivalence appears to be more appropriate for bilingual lexicography since it implies various types of equivalents (discussed in the following section) and therefore will be adopted for the present study.

In an ideal variant a bilingual dictionary would always offer lexical units of the TL which perfectly fit into the context and result in "a smooth translation" (Zgusta [1987] 2006, 236). It is not a secret that the users of bilingual dictionaries often expect such perfect equivalence. But because of anisomorphism or mismatch between a pair of languages due to their semantic, grammatical and cultural differences, a complete equivalence in bilingual dictionaries is often not possible (Zgusta 1971, 294). Therefore different methods are applied in bilingual lexicography in order to cope with partial equivalence or even to overcome a complete lack of equivalence.

What concerns the insertability (ability to be inserted in the text) of TL equivalents, it should be noted that perfect, insertable equivalents are often not possible because meaning is not to be found in individual lexical units (Adamska-Sałaciak 2006, 99). Hartmann (1994) and Adamska-Sałaciak (2006) have come to a common conclusion that in most cases a bilingual dictionary does not produce real equivalents but only approximations. Hartmann (1994, 293) goes even further claiming that "the coverage of lexical equivalents in the bilingual dictionary is a hit-and-miss, trial-and-error task" which is often "based on an element of chance". This situation, as observed by Adamska-Sałaciak (2006, 99), is particularly problematic for general bilingual lexicography since its basic unit of description is exactly the individual lexeme.

3.3.2 Classification of Equivalents in Bilingual Lexicography

The literature on equivalence in bilingual lexicography offers a wide scope of types of equivalents. Adamska-Sałaciak (2006, 101) observes that terminology varies considerably

and comes to the conclusion that terms vary "partly because genuinely different phenomena are being discussed, partly as a result of different authors placing emphasis on different aspects of the same phenomenon" (ibid.). Jarošová (2000, 19–20) and Adamska-Sałaciak (2006, 101–103; 2010, 392–397) present a summary of the types of equivalents in bilingual dictionaries encountered in metalexicographic literature:

- Zgusta (1971, 319) *explanatory (descriptive)* vs. *translational (insertable)* equivalents;
- Zgusta ([1987] 2006, 254) semantic vs. functional (communicative) equivalence;
- Hausmann (1989, 220) prototypical vs. textual equivalents;
- Cop (1991, 2776) prototypical vs. insertable equivalents;
- Hausmann and Werner (1991, 2745) systemic vs. translation equivalents;
- Piotrowski (1994, 134ff.) cognitive vs. translational equivalents;
- Gouws (2000, 102) semantic vs. communicative equivalence;
- Svensén (2009, 255–257) *semantic* vs. *pragmatic; explanatory* vs. *translational* equivalence.

This summary reveals that the scholars tend to present the types of equivalents in dichotomies, thus, stressing the contrast between them.

Since Zgusta has made the relevant distinctions between *explanatory (descriptive)* vs. *translational (insertable)* equivalents and *semantic* vs. *functional* equivalence, his contribution has to be discussed in more detail. The later studies on equivalence in bilingual lexicography are largely based on the previous research in the field.

Zgusta (1971, 319) explains the difference between translational (insertable) and explanatory (descriptive) equivalent in the following way:

The main distinction is that when choosing a translational, insertable equivalent, the main concern is given (within the boundary of correct possibilities) to its possibility to be used in a fluent, good translation of the whole sentences, to be inserted into contexts of the target language whereas the explanatory or descriptive equivalent is chosen in order to give more information about the lexical unit of the target language.

The scholar stresses (ibid.) that translational equivalents are established lexical units while explanatory ones, though more informative, in most cases are not. These categories are not mutually exclusive and can combine to a certain degree, namely, a translational (insertable) equivalent can possess some explanatory features.

Zgusta ([1988] 2006, 92) describes a translational equivalent as "[t]he most effective equivalent of a word in a bilingual dictionary" and adds that this type of equivalent is "the counterpart of the target language lexical unit in all respects: same denotations, same stylistic levels, same collocations, etc." (ibid.). However, the scholar is also obliged to

conclude that such equivalents cannot be often found and consequently "a good part of lexicographic theory is concerned with the problem of how to handle partial, incomplete equivalence" (ibid.). Zgusta also remarks ([1979] 2006, 233) that an explanatory equivalent is a very good solution when the TL of the dictionary is the user's L1, while a translational one is very handy since it supplies the user with a ready insertable lexical unit. While discussing semantic and functional equivalence, Zgusta (Zgusta 1984, 151, in Adamska-Sałaciak 2010, 395) reminds that "since languages differ in all imaginable respects, the translator-lexicographer must sometimes use means quite different from those used in the original in order to obtain the same results. If the different means do produce the same effect, the texts are considered functionally equivalent". Zgusta ([1988] 2006, 92) considers if it is acceptable to "indicate functionally identical expressions as equivalents even if their individual parts are not equivalents at all" and provides examples of how functional equivalence is applied in bilingual dictionaries when translating such lexical units as proverbs and idiomatic expressions. The scholar remarks that when functional equivalence is established, it is also necessary to provide the literal translation of the lexical unit and to explain its meaning. Zgusta ([1988] 2006, 93) comes to the conclusion that when functional (communicative) equivalence is applied the question is no longer about "translation in the usual sense: the functional, communicative equivalence is achieved by using two contexts in two languages as they are used in each of them in identical but non-bilingual situations" (ibid.). Adamska-Sałaciak (2010, 395) holds that functional equivalence is required when "it is impossible to provide a lexical equivalent of the headword (...) which would be both its semantic and grammatical (same-part-ofspeech) counterpart" and stresses that the object of investigation in these cases is beyond a single lexical unit.

After a close analysis of the rest of dichotomies proposed by Hausmann (1989), Cop (1991), Hausmann and Werner (1991) and Piotrowski (1994), Adamska-Sałaciak (2006, 102–103; 2010, 395–396) infers that they are co-extensive since insertable equivalence corresponds to translation(al) and textual, but prototypical to systemic and cognitive equivalence. The scholar is obliged to admit that in the second group of terms (prototypical, systemic and cognitive equivalence) the correspondence is not so obvious, even though all the terms have a similar meaning to the term semantic equivalence (as used by Zgusta). This leads her to the conclusion that the authors of the dichotomies have employed the terms with a different degree of emphasis. Adamska-Sałaciak (2010, 395) infers that "[t]he most important argument in favour of the postulated denotational identity is that all four terms are used with regard to equivalents whose main function is to convey

the meaning of the headword rather than substitute for it", besides, the equivalents belonging to this group "convey not only the denotation of a given linguistic unit, but also its relations to other elements of the language system" (ibid.). The scholar also observes that the distinction between semantic and pragmatic equivalence made by Svensén (2009) can be roughly equated to Zgusta's distinction between semantic and functional (communicative) equivalence (ibid. 396).

As a result of this analysis of equivalence in bilingual lexicography Adamska-Sałaciak (2006, 103–106; 2010, 397–399) has worked out a tentative classification of types of equivalents. This is not a generally accepted typology, but it has its strong points. Firstly, it helps to understand the dichotomies proposed by various authors dealing with the somewhat broadly understood notion of equivalence. Secondly, it provides a clearer picture of equivalence to the lexicographers compiling bilingual dictionaries or analysing the treatment of equivalence in these dictionaries. She proposes four sets of synonymous terms (equivalence categories) and names them according to the first term in each group:

- (S) semantic, cognitive, systemic, prototypical;¹⁰
- (E) explanatory, descriptive;
- (T) translation(al), insertable, textual;
- (F) functional, situational, communicative.

Category S describes equivalents which are established TL lexical items but are general and therefore can be used as translations of the headword in its prototypical sense(s) but not in more specific contexts. This type of equivalent is described as "the expected type of equivalent in a traditionally understood bilingual dictionary" (Adamska-Sałaciak 2010, 397) and the only type which can stand the test of back translation (though, not in all the cases). Accordingly, it can be described as a 'two-way' or 'non-directional' equivalence. Besides, equivalents belonging to this group are established lexical items and do not have to be created by the translator (ibid. 397–398). The terms in category E refer to descriptive paraphrases or explanations of a SL item into TL. Such equivalents would resemble definitions in explanatory dictionaries which is not a good solution for a bilingual dictionary, but a possible way out when an adequate equivalent is not available. This type of equivalent can always be created in comparison with the type S equivalent which might not be available. The equivalents of type T and F are applicable only when dealing with contextual usage of a SL item and are often difficult to set apart. Since the "type T equivalent has the same (or very similar) denotational meaning as the SL item as used on a

¹⁰ Adamska-Sałaciak names this group (C) after 'cognitive' equivalent. Since 'semantic' equivalent has been selected as the cover term of the group for the present discussion, the original (C) has been changed for (S).

particular occasion, (...) [it] produces an adequate translation when substituted for it" (Adamska-Sałaciak 2006, 104). It is not possible for a bilingual dictionary to include all the possible type T equivalents since a SL item can be used in numerous contexts which could ask for specific type T equivalents. Type F equivalence, outwardly similar to the contextual type T equivalence, is often achieved by other means than simply providing a translational equivalent of the SL item, for instance, the grammatical category of SL and TL unit may differ or an idiomatic expression with completely different wording can be employed (Adamska-Sałaciak 2006, 104–105; 2010, 398–399).

Although this classification of equivalence types is logical and of undeniable practical use in bilingual lexicography, it is obvious that the boundaries among the types of equivalence are often unclear. While describing the process of looking for TL equivalents in a bilingual dictionary Adamska-Sałaciak (2006, 106) reveals also their hierarchy and lexicographers' preferences:

the lexicographer aims at an equivalent of type C [S] and, if none can be found, settles either for a type E equivalent (a strategy preferred by older dictionaries), or for several type T equivalents accompanied by an indication of the relevant contexts (a strategy of choice in most contemporary dictionaries).

She also stresses (ibid. 116) that when a semantic equivalent cannot be found in the TL, "it is perfectly legitimate to give an equivalent of type T or F (or a few of them) right after the headword" since such a solution can be more helpful for a user. Another option is to provide an E equivalent which resembles a definition of the headword and, in comparison with a well-presented type T or F equivalent, is not insertable in the TL context. A single sample entry will suffice to illustrate the approach:

dribs [dribz]: d. and drabs *sar*. – niecīgi daudzumi; to pay back in d. and drabs – nolīdzināt parādu, atmaksājot niecīgas summas. (ELD "Jāņa sēta", 2004)

Apart from the above classification of equivalence types, one can also come across a trichotomy of equivalence degrees (e.g. Kromann et al. 1991, 2717–2718; Piotrowski 1994, 183–184; Adamska-Sałaciak 2006, 117–119; Svensén 2009, 257–261):

- 1. full (absolute, complete) equivalence;
- 2. partial equivalence;
- 3. zero equivalence.

The scholars observe that zero equivalence in bilingual lexicography is quite rare, full equivalence occurs even less often, while partial equivalence is most widespread. Svensén (2009, 258–261) holds that since full equivalence asks for a full correspondence of the meaning and usage of the SL and TL lexical item, it occurs as seldom as absolute synonyms within a single language, thus these are very rare cases, possibly, limited only to

some types of terminology. In partial equivalence the correspondence of the meaning and usage is incomplete, which asks for a compensation of the 'missing' features, mostly attained by adding a gloss to the TL equivalent.

Adamska-Sałaciak (2006, 117) infers that in comparison to the tentative typology of equivalence categories (or types of equivalents (S [C], E, T and F)) which reflect the endeavour of translators and bilingual lexicographers and are related to the TL item in a bilingual entry, the classification of equivalence degrees is related to both SL and TL item and their mutual relationship.

According to Zgusta (1971, 312) in bilingual lexicography we mostly come across partial equivalence and since "the absolute and overwhelming majority of equivalents (irrespective of which pair of languages we observe) belongs to the category of the partial ones, it would be cumbersome to repeat the adjective endlessly" (ibid.). Thus, when speaking of equivalents of a certain lexical unit "it is the partial equivalents that we mean" (ibid.).

It remains to be concluded that in bilingual lexicography we mostly have to deal with different degrees and variants of partial equivalence, thus the equivalent typology proposed by Adamska-Sałaciak proves to be more revealing about the different types of equivalents in bilingual dictionaries.

There exist various approaches to dealing with complete absence or lack of an adequate TL equivalence in bilingual lexicography. Ščerba ([1940] 2003, 37–38) mentions several methods for overcoming the lack of equivalence (when compiling an L2-L1 dictionary): borrowing, creating a calque, figurative usage of a L1 lexical item and continues that "[r]egardless of the method used, the borrowing of the most important thing – the concepts – will always take place" (ibid.). The scholar also claims that "because most standard languages of Europe arose under the influence of Latin and ever since constantly influenced one another, they are based more or less on the same system of concepts" (ibid.) which makes translation among European languages easier than between a European language and a language with a completely different cultural background, for instance, Chinese. It is added that the major mistake of bilingual dictionaries is "assuming that the concept systems of any given pair of languages are adequate" (ibid. 38).

Adamska-Sałaciak (2006, 119–120) suggests a tentative, but a more comprehensive list of possible lexicographic solutions to be applied when facing equivalence-related problems. It should be noted that the choice of the method, certainly, depends on the degree of non-equivalence:

• explain the meaning of the SL item in the TL (type E equivalent can be applied);

- give a partial equivalent and an explanatory note or gloss;
- offer two or more partial equivalents;
- offer an approximate cultural equivalent;
- provide an 'extended syntagmatic scope' of the SL item (this approach might result in type F equivalent);
- introduce an innovation (a new type C equivalent). (ibid. 120)

The scholar (ibid.) asserts that the methods (presented here in a condensed way) of dealing with non-equivalence have been arranged starting with the less challenging for the lexicographer and finishing with the most difficult cases. The method of providing an 'extended syntagmatic scope' of the SL item is applied when the unit of translation surpasses the lemma (e.g. the headword is used in an idiomatic expression) and the extension of the translation unit is absolutely necessary – then the type F equivalent is most likely to be employed. The introduction of an innovation is obviously the last resort, described as "a decision over which the lexicographer is likely to lose a lot of sleep" (ibid.), besides this approach is very seldom employed.

The review of literature on translation equivalence in bilingual dictionaries reveals that the perception of the concept of equivalence in translation studies and bilingual lexicography differs. Various types of equivalents (mostly presented in pairs of binary oppositions) can be encountered in metalexicographic literature. The tentative classification of the types of equivalents worked out by Adamska-Sałaciak (2006 and 2010) contains four major types of equivalents: semantic (cognitive), explanatory, translational and functional. The scale of equivalence degrees (full-partial-zero equivalence) is not particularly useful for bilingual lexicography since most equivalents are partial. Several approaches are applied in bilingual lexicography in order to tackle nonequivalence. The ordering of senses or equivalents in polysemous entries is another relevant issue related to the microstructure of bilingual dictionaries, though in the present review it will not be discussed in greater detailed.

3.3.3 Examples in Bilingual Entries

Already in the 16th century the compilers of bilingual dictionaries began introducing citations from literary works to illustrate the usage of the headword, which means that illustrative examples in bilingual dictionaries have a nearly 400-year-long history (Halliday 2004, 14). Describing the present day bilingual dictionaries, Atkins ([1996] 2002, 1) observes that dictionaries often introduce some minor innovations, for instance, corpus frequencies (which she calls 'the flavour of the month'), but what concerns the equivalents,

illustrative examples, idioms, pronunciations, usage notes, etc., traditional approaches are usually applied.

Having reviewed the theoretical material available on exemplification in bilingual dictionaries, Adamska-Sałaciak (2006, 155) rightly points out that although much more has been written about examples in monolingual lexicography, especially monolingual learners' dictionaries, examples serve nearly the same functions in both – mono- and bilingual dictionaries, which enables one to apply this knowledge to both types of dictionaries.

First, it should be clarified which elements of a bilingual dictionary entry are viewed as examples and what functions they serve. Several scholars have provided their definitions, stressing different aspects of illustrative examples. Jacobsen et al. (1991, 2783–2784) observe that the prefaces of bilingual dictionaries often do not give a clear picture of what is understood as an example in these dictionaries: often examples are identified with phrases and word combinations, even idioms (which should be treated as secondary headwords or sub-lemmas). As the reasons for such unclear status of examples in bilingual lexicography the scholars mention

historical dependence of bilingual dictionaries on the content and categories of monolingual dictionaries, in which there is considerably more justification for seeing sub-entries as exemplifications of the headword. In bilingual dictionaries, however, the majority of sub-entries provide one-to-one translation equivalents. They *exemplify* nothing (ibid.).

It is added that no clear distinction is made between "*examples* which truly exemplify (in the sense that one can generalize from them) and those that present instances of contexts in which the word in question can be used, but from which one cannot generalize" (ibid.). The scholars point out that examples can be multifunctional and their functions can overlap with other information categories in the entry (glosses, syntactic, stylistic, cultural information). They suggest that examples in dictionaries should not be defined according to their function but rather as a lexicographical category (related to the requirements of a dictionary entry) contrasted to lexicological categories (applied to distinguish among, e.g. idioms, collocations and free syntagmatic units). Thus a dictionary example is defined by Jacobsen et al. (ibid. 2784) as "a supplement to a translation equivalent, providing implicit information about the equivalent or headword". It is also asserted (ibid. 2787) that a clear distinction should be made between what is treated in a bilingual entry as a secondary headword (sub-lemma) and an example since put in simple terms, "sub-lemmas should be items of *langue*, and examples should be items of *parole*" (ibid.). The level of idiosyncrasy of the phrase is mentioned as the major criterion (even though the scale is gradable and

there is no concrete border drawn between idioms and free word combinations) for distinguishing between which of them should be presented as secondary headwords and which as examples.

Al-Kasimi (1977, 88 quoted in Adamska-Sałaciak 2006, 161) gives a very broad definition of example in a bilingual dictionary, namely, "any phrase or sentence that illustrates the use of the item translated", and continues (Al-Kasimi 1977, 91–92) that the basic function of illustrative examples is to show the headword in 'a live context' and help the user grasp the "grammatical and semantic rules governing the usage of the word by showing these rules in action" (ibid. 91); but their task is only to illustrate these rules, not replace them. Al-Kasimi (ibid. 92) points out another function of examples in bilingual lexicography – they have to provide the user with some useful information on the foreign culture. Atkins and Rundell (2008, 454–455) add that examples help to distinguish among senses in polysemous entries as well as can provide information on stylistic, register and regional peculiarities by putting the headword in an appropriate context.

It could be inferred that the illustration of the syntactic behaviour, lexical environment and, possibly, some cultural information, are the basic functions of dictionary examples frequently mentioned in metalexicographic literature (e.g. by Bejoint 2000, 135; Cowie 1995, 286; 1999, 63; 2002, 77ff.; Atkins and Rundell 2008, 454–455; Svensén 2009, 283– 284; et al.). This list of functions can be supplemented by some more relevant roles the examples can play in bilingual dictionaries, namely, they can indicate the senses of headwords, verify the direct translation (the translation equivalents offered), as well as complement or even replace direct translation (Atkins and Rundell 2008, 508–511).

Adamska-Sałaciak (2006, 158) defines examples in a directional (targeted at one linguistic community) bilingual dictionary as "typical, free combinations which contain the lemma (in the L2-L1 part) or the equivalent (in the L1-L2 part). The language of examples is thus always the user's L2: the source language of the dictionary in the L2-L1 section, and the target language in the L1-L2 section". Thus the scholar also indicates a notable difference between the task of examples: in a monolingual dictionary they have to exemplify the headword, while in bilingual dictionaries it can be the headword (in L2-L1 dictionary) or the equivalents (in L2-L1 dictionary). According to Adamska-Sałaciak (2006, 164) fixed, idiomatic combinations should be included in a bilingual dictionary but for different reasons. Namely, if free combinations exemplify the lemma in a bilingual dictionary entry, then "fixed expressions are themselves very much like lemmas, requiring translation equivalents (sometimes multiple ones) and frequently benefiting from

exemplification" (ibid.). Besides, it is necessary to differentiate secondary headwords from examples by typographical distinction (which is seldom done in bilingual dictionaries).

Even though metalexicographic literature offers seemingly different definitions of example, there is obviously a general agreement on several basic issues, namely, the examples should be typical free word combinations (or free syntagms) illustrating the use of the headword or the equivalent.

The question arises whether collocations, forming quite a varied group (from cases resembling fixed phrases to apparently free combinations) should be treated as subentries, independent headwords or examples. Adamska-Sałaciak (2006, 165–166) holds that the ones closer to the end of free combinations could appear as examples, however, she suggests that each case has to be considered carefully and adds that "the most important condition is that it must be translatable into L1 word for word" (ibid. 166).

Two relevant questions to be clarified in connection with dictionary examples are the types and sources of examples which are tightly related and therefore will be treated in close succession.

The distinction between two basic types of dictionary examples in metalexicographic literature was made by Palmer (1936) (quoted in Cowie 1999, 63; Cowie 2002, 77; Adamska-Sałaciak 2006, 159; et al.). Palmer distinguishes between sentence-sample examples and skeleton-type examples (Svensén (2009, 283) prefers the terms 'dead' and 'live' examples). Cowie (2002, 77) describes sentence-sample examples as "approximated to natural utterances, even where a possible quotation has had to be edited to make it easier to understand when removed from its context". Skeleton examples are described by Cowie (1998, 11; 2002, 76–78) as minimal lexical patterns (a term applied in Cowie 1995) devised by implementing simplification, abstraction and listing techniques. Simplification technique normally leads to the reduction of the grammatical subject or other essential elements, abstraction results in introduction of placeholders like 'something' and 'somebody' which which can replace various noun phrases, but listing means providing alternative variants, often typical collocates of the headword. It should be noted that if simplification is always applied in building skeleton examples, abstraction and listing is not applied consistently, which results in less abstract skeleton examples or clause examples (Cowie 1998, 11–12; 2002, 76). The types of examples initially described by Palmer are still applied in modern monolingual and bilingual dictionaries, only the placeholders (somebody, something, etc.) are normally used in constructions indicating the syntactic behaviour of the headword, for instance, dissociate yourself/sb from sb/sth (Oxford Advanced Learner's Dictionary (OALD 2000)) supplied by various types of examples, but not in the examples themselves. The following skeleton examples taken from OALD (2000), illustrate both types – a typical skeleton example with the element of listing (1) and clause examples (2):

- (1) "a firm agreement/date/decision/offer/promise"
- (2) "to cut back on spending", "the patter of rain on the roof"

Cowie (1998, 11; 1999, 63; 2002, 79) notes that skeleton examples are viewed as a relevant exemplification method in several lexicographic traditions in continental Europe (in Italy, Germany, France) as well as in English monolingual dictionaries. However, if dictionary examples are expected to present actual (or simulated if the example is invented) performance, skeleton examples do not meet these expectations (Cowie 2002, 77–78; Adamska-Sałaciak 2006, 159–160). Adamska-Sałaciak (2006, 166), presuming that a dictionary example should be translatable word for word, indicates another reason why care should be taken when applying skeleton examples in bilingual dictionaries:

Since word-for-word translatability is not determinable a priori, we cannot simply declare that non-fixed collocations can be used as examples; initially we must treat all collocations as sub-entry material, subsequently making exception only for those which happen to be interlinguistically transparent (ibid.).

It should be underscored that Adamska-Sałaciak (alongside with Jacobsen et al. 1991, 2786–2787 but in contrast to Al-Kasimi 1977, 96 and Zöfgen 1991, 2898) advocates the opinion that bilingual dictionaries should not provide translations of examples. Jacobsen et al. (1991, 2787), for instance, maintain that if a potential example asks for translation in the TL, it is probably not a free syntagm, accordingly, not a good candidate for a bilingual dictionary example. It is also added that "[t]he transparency of the translation is thus an added factor to consider when choosing between an example and a sub-entry" (ibid.).

This argumentation reveals that in bilingual dictionaries it is very important to provide as examples only free combinations which would produce completely transparent translations in the context of the given pair of languages.

However, the issue of example translation (or refraining from it) carries another relevant aspect – the intended target audience of the dictionary. Adamska-Sałaciak (2006, 167–168) reminds that the supporters of the opinion that examples should be translated claim that they should appear in the SL of the dictionary, while the backers of non-translation claim that in L1-L2 dictionaries examples would be provided in L2 since, according to Adamska-Sałaciak (ibid. 168), there is no point in "showing people how their native language is used – not in a bilingual dictionary, anyway". But the scholar still has to admit that in the dictionaries targeted at both language communities (nondirectional ones) all examples have to be translated since in such dictionaries "each entry and each part thereof [Lx-Ly and Ly-

Lx] should be designed in such a way as to assist the native speakers of both source and the target language" (ibid.). This observation seems to imply that the scholars holding opposite views on the necessity to translate dictionary examples, might (even if it is not clearly stated) talk about different types of bilingual dictionaries.

The three basic types (depending on their sources) of dictionary examples mentioned in metalexicographic literature (e.g. Rundell 1998, 334ff.; Landau 2001, 207–211; Cowie 2002, 75ff.; Atkins and Rundell 2008, 455–458; Svensén 2009, 283) are:

- 1) textual quotations,
- 2) corpus-based examples,
- 3) made-up examples.

The first two are authentic examples while the last one is invented by the authors of the dictionary. Cowie (2002, 75–77) notes that both authentic and invented examples may be subjected to different degrees of adaptation in the scale from minimal adaptation to serious simplification leading to skeleton examples. This reveals that both sentence and skeleton examples can be authentic and invented. Since textual quotations are normally used in monolingual native speakers' dictionaries but not in bilingual ones, they are irrelevant for the present discussion.

It is difficult to disagree with Adamska-Sałaciak's (2006, 169) suggestion that the users of reasonably large contemporary dictionaries "have the right to expect examples which are as real (authentic) as possible" which means that they are taken from a large representative corpus. Rundell (1998, 334) even claims that "the most visible way in which dictionaries have changed under the impact of corpus data is the arrival of the corpusderived dictionary examples". It is argued convincingly that if the rest of the information found in the dictionary has been based on corpus data and authentic examples of usage are available, there is no reason not to make use of such examples reflecting real usage (Rundell 1998, 334-335). Still, since the publication of the first fully corpus-based dictionary (COBUILD, 1987) where all the examples were extracted from corpus data, there has been an ongoing debate over the pros and cons of corpus examples (Atkins and Rundell 2008, 456). On the one hand lexicographers wish to illustrate dictionary entries with authentic examples, on the other hand these fully authentic instances of language use are not always the most revealing ones for the users (Rundell 1998, 334). This situation has raised the issue of adaptation of corpus examples. Some scholars argue against any adaptation of corpus examples, for instance, Fox (1987, 148 quoted in Svensén 2009, 284) claims that any alterations made to corpus examples "take the life out of them" and "can ruin the whole feel of an example and destroy its authenticity" (ibid). However, many scholars (Rundell 1998, 334–335; Adamska-Sałaciak's 2006, 177; Atkins and Rundell 2008, 457; Svensén 2009, 284) agree that some minor changes have to be introduced to make the authentic corpus sentences more suitable for the role of dictionary examples. Rundell (1998, 334) explains that the question is not about applying corpus examples or inventing them but rather about "the degree to which corpus material is 'processed' on its way into the examples" (ibid.). Atkins and Rundell (2008, 457–458), having stated that an unaltered corpus example is the best solution, confess that even in a large contemporary representative corpus it is not easy to find ideal dictionary examples. They clarify the process of adaptation from the point of view of experienced corpus lexicographers:

What usually happens is that we find in the corpus a central 'core' consisting of a string of perhaps four to six words which show the headword in a highly typical context. We then make adjustments to the rest of the sentence as appropriate, which may entail (*inter alia*) lopping off a long coordinate clause, changing a distracting proper name to a pronoun, or simplifying an obscure vocabulary item in a non-central part of the sentence (ibid. 457–458).

The above described process brings the scholars to the conclusion that "the notion of a simple choice between 'made-up' and 'authentic' gives a misleading picture of how lexicographers really work". Besides, according to Potter (1998, 357 quoted in Atkins and Rundell 2008, 458 (in footnote)), "the distinction between real and invented examples ... has become somewhat blurred". Commenting on the result of adaptation of authentic (and also invented) examples, Cowie (2002, 77) suggests that ideally the result should be a dictionary example "that illuminates the meaning of the headword, does so without reference to a context, and is at the same time convincingly natural" (ibid.).

Even though completely invented examples appear to be related mostly to the precorpus age, their plusses and minuses still have to be discussed in order to oppose them to the corpus-based ones. Lexicographic literature (e.g. Rundell 1998, 317; Atkins and Rundell 2008, 456; Svensén 2009, 284) lists the following positive features of invented examples: they are believed to be more 'economical' in the sense that they usually occupy less space than authentic ones, more clear, precise and serve several functions simultaneously, thus becoming good models for producing correct TL sentences. Hanks (2005, 263) points out the problems, related to the application of made-up examples, claiming that "[n]atural texts observe all sorts of conventions of normal phraseology, but made-up examples are sometimes concocted to illustrate the extremes of possible usage, however improbable" (ibid.). The scholar also warns that a lexicographer who provides such examples "risks misleading the user by holding up as a model sentences and phrases which in reality would never be uttered by a real speaker having a real communicative situation" (ibid.). Adamska-Sałaciak (2006, 185) identifies the following major problems related to invented examples: they often contain grammatical constructions which are associated with the given headword but might not be the most typical ones, they are occasionally exaggerated (trying to incorporate all the possible information about the headwords) and even funny, which might cause distrust in the more advanced users and, possibly, mislead the less advanced ones.

Notwithstanding the obvious merits (and rather few minuses) of authentic corpus examples, if compared to the more severely criticized invented ones, both types are still used in lexicography, though Rundell (1998, 334) points out the unclear boundary between the two and concludes that "the jury is still out on the relative merits of corpus-based and lexicographer-produced examples". Adamska-Sałaciak (2006, 185), on the other hand, underscores the role of lexicographers in preparing examples for inclusion in dictionaries and claims that

Poor lexicographers will probably continue to produce poor examples even if they use a corpus, although the danger is, admittedly, smaller with a corpus than without. Good lexicographers will produce good examples with or without the help of a corpus, although their task will be infinitely easier in the former case" (ibid.).

It is difficult to disagree with this observation since the use of qualitative source material does not guarantee good results if put in incompetent hands, thus it could be premature to disregard the competence of a native speaker especially if it is based on corpus data.

Jacobsen et al. (1991, 2786), Adamska-Sałaciak (2006, 174), and Atkins and Rundell (2008, 506–511) discuss the issue of providing examples in L2-L1 dictionaries (the necessity of exemplification in L1-L2 or active dictionaries is viewed as mandatory). The issue of exemplification in L2-L1 or passive dictionaries is relevant for the present study since the ELDs analysed in the present study (as shown below) belong to L2-L1 type of general bilingual dictionaries.

Jacobsen et al. (1991, 2786) hold that in active dictionaries only TL equivalents have to be exemplified (which is obvious since the SL is the mother tongue of the intended user) and there is no need to translate the examples illustrating the use of the TL equivalents since in these examples "there would be nothing particularly idiosyncratic about anything except the equivalents themselves" (ibid.). The scholars claim that examples are not obligatory in passive dictionaries, though it is also noted that the borderline between an example and a secondary headword in them is somewhat blurred.

Adamska-Sałaciak (2006, 174) voices a different opinion concerning the application of examples in passive dictionaries. According to her, a passive dictionary can be used by a comparatively advanced speaker of the TL also for productive purposes, namely, when the

user wants to find additional information on a certain L2 lexical item. The scholar also draws parallels between a bilingual passive dictionary and a MLD stressing that in both examples appear in L2 entry but in MLDs (which are also used mostly for decoding) the necessity for examples is not questioned.

However, quite often a bilingual dictionary is targeted at both user groups, which means that in such a dictionary examples are definitely necessary, but since this dictionary has to be adapted to the needs of SL and TL speakers, it obviously contains superfluous information for both user groups. In a non-directional dictionary care has to be taken primarily of the encoding user (based on Atkins and Rundell 2008, 508).

The presentation of dictionary examples seems to pose no special problems for monolingual, especially the recently published monolingual learners' dictionaries, where both full sentence and skeleton-type illustrative examples are typographically distinct from subentries. However, it is a problematic issue for some bilingual dictionaries. An entry from a recently published English-Polish dictionary (NKFD, 2003), quoted by Adamska-Sałaciak (2006, 158), leads the scholar to the conclusion that it is often difficult to tell which of the translated items have been intended as examples and which as secondary headwords, since typographically they are identical - both are given in bold type and are translated:

picture *n*. 1. obrazek; portrait; paint ~s malowac obrazy. 2. zdjecie, fotografia; take a ~ of sb/sth zrobic zdjecie (...) 3. *film* film, obraz; be in ~s pracowac w branzy filmowej; the ~s Br. przest. Kino. 4. przen. a ~of health/virtue okaz zdorowiai/cnotu; be/look a ~ zwl.Br. wygladac jak z obrazka l. jak malowanie; bring sth into the ~ wprowadzac cos (nowy element) (...)

Another example from an English-Polish dictionary (*Longman slownik wspolczesny anglielsko-polski, polsko-anlielski*" (2004) quoted in Adamska-Sałaciak 2006, 159) reveals a much clearer distinction among various elements of microstructure:

picture n **1** [C] obraz, obrazek: Where shall I hang this picture? **2** [C] obraz: You can't get a clear picture on this TV set. +of The report gives a clear picture of life in the army. **3** [C] zdjecie: She keeps a picture of her boyfriend by her bed. Leo's picture was in the paper yesterday. take a picture (=z/robic zdjecie): Do you mind if I take a picture of you? **4** [singular] sytuacija; The political picture has changed greatly (...)

Here it is obvious which elements of microstructure have been intended as illustrative examples (full sentences in italics which have not been translated) and which as secondary headwords (presented in bold, translated and exemplified). It has to be admitted that this entry reminds one of a MLD rather than of a typical bilingual entry. This appears to be a notable counterexample to the notoriously stagnant entry structure of a typical bilingual dictionary described previously by Atkins ([1996] 2002, 1).

To sum up, the review of literature on dictionary examples reveals that often it is not completely clear which elements of bilingual microstructure are intended as examples and which as secondary entries (a clear typographic distinction is offered as a solution to this problem). The illustration of the syntactic behaviour, lexical environment and cultural background are pointed out as the basic functions of dictionary examples in dictionaries. A typical feature of examples in bilingual dictionaries is that they can exemplify either the headword or the equivalent, depending on the type of the dictionary and its target user group. Examples in bilingual dictionaries should be free combinations which produce transparent translations in the context of the given pair of languages. Skeleton examples and sentence examples are singled out as two basic types, they can be corpus-based (often adapted to various degrees) or invented by the compilers, though because of adaptation the borderline between the two groups is no more distinct. Examples are viewed as necessary in active dictionaries, however, opinions differ on whether examples should be provided in passive dictionaries.

3.3.4 Types and Sections of Microstructure

Hausmann and Wiegand ([1989] 2003, 244–246) have worked out a conception of microstructure which, according to the scholars, makes it possible to distinguish among various kinds of microstructure and

allows a systematic comparison of dictionary articles [entries] and a systematic construction of article types in relation to types of lemma signs [headwords] and, above all, it makes possible the evaluation of the suitability of microstructures for defined classes of potential users (Hausmann and Wiegand [1989] 2003, 244).

According to this conception, the dictionary entry can be divided into two core structures – left core (formal) structure providing comment on form and right-core (semantic) structure providing comment on semantics of the headword. This framework has been further elaborated by Hartmann (2001, 60–61) and Svensén (2009, 345–348). According to the scholars the microstructure can be divided into two basic components or core structures:

- the 'left-core formal structure' which includes information on the form of the headword: its spelling, morphology, part of speech and pronunciation. It can be further subdivided into the 'lemma section' (including the headword itself) and 'formal section' (including the rest of the above mentioned information types);
- the 'right-core semantic structure' which can be further subdivided into the 'semantic-pragmatic section' including information on the meaning of the headword (various types of TL equivalents in the case of bilingual dictionaries), its usage (normally with the help of labels, sense indicators (specifiers), indications of

construction, various glosses) and the 'contextual section' which contains translated collocations, idioms, illustrative examples, namely, the headword in various contexts.

The two basic structures on the first level (the left-core formal structure and the right-core semantic structure) are obligatory for all entries, however, on the second level, semantic-pragmatic (e.g. if only contextual translation is provided) or contextual section (e.g. if no illustrative material has been provided) can be absent in some entries. It should also be taken into account that it is only the microstructure of a monosemous headword presenting one part of speech which corresponds to the basic entry structure of a dictionary – as soon as the headword is polysemous and presents more than one part of speech, certain parts of the entry are repeated (Svensén 2009, 345).

Even though the conception is initially worked out for the analysis of monolingual entries, it can be used for analysis of bilingual entries. The division of an entry into left-core formal structure and right-core semantic structure will be applied in order to describe the microstructure of ELDs.

According to the position of the translated collocations, idioms, phrasal verbs (or MWEs) and illustrative examples, the microstructures of bilingual dictionaries can be divided into three groups (Hausmann and Wiegand [1989] 2003, 246–249; Hausmann and Werner 1991, 2750; Svensén 2009, 353–357):

- 'integrated' microstructure the translated MWEs and examples are provided in the section of each sense of the headword. This approach is somewhat problematic since it is not always clear to which sense of the headword a particular phrase, especially idiom, is related to;
- 'unintegrated' microstructure all the translated MWEs and examples appear in a separate block at the end of the entry. This solution makes the lexicographer's life much easier, but is not so good for the user because some close semantic links can be lost. Svensén (2009, 357) holds that this is the best solution for presenting idioms;
- 'partially integrated' microstructure only the obviously related translated MWEs and examples are assigned to concrete senses of the headword, while the others appear in a separate block (or several blocks) at the end of the entry. Hausmann and Wiegand ([1989] 2003, 248) note that this type of microstructure is found in most general dictionaries of the European lexicographic traditions.

Dictionaries can also be divided into micro- and macrostructure-oriented dictionaries. In a microstructure-oriented dictionary priority is given to polysemy and all parts of speech of the headword are presented in a single entry, which results in a comparatively rich microstructure. In a macrostructure-oriented dictionary priority is given to homonymy, which results in a more developed macrostructure and less complex microstructure since each part of speech appears in a separate entry. General bilingual dictionaries, being rather traditional in structure, are usually microstructure-oriented (Svensén 2009, 364–367).

The issues of the core structures of bilingual entries, the degree of integration of microstructure, the distinction between the macrostructure and microstructure-oriented dictionaries and types of entries will be included as criteria of microstructural analysis of ELDs.

3.3.5 Framework of Microstructural Analysis of ELDs

The analysis of the entry structure of ELDs is based on the research conducted by Atkins (1985; [1996] 2002; [1992/1993]) 2008, Hausmann and Werner (1991), Hausmann and Wiegand ([1989]) 2003, Adamska-Sałaciak (2006; 2010), Atkins and Rundell (2008), Svensén (2009), et al. The microstructure of ELDs will be analysed to detect the following microstructural features in ELDs:

- the elements of the core structures of the entry (the left-core formal structure and the right-core semantic structure);
- the types of microstructure (integrated, unintegrated, and partially integrated);
- the distinction between microstructure and macrostructure-oriented dictionaries.

This framework of analysis permits to describe the entry structure of ELDs from various perspectives, to trace the changes which have taken place in the entry structure during more than 80 years of the English-Latvian lexicographic tradition. The framework of the analysis allows adding elements to the lists of the left-core formal structure and right-core semantic structure to reflect the real set of elements which to some extent has changed in the course of the tradition.

The present set of criteria for microstructural analysis contains four basic categories (marked by capital letters A, B, C, etc.) and subcategories (marked by a letter and number combination, e.g. A.1, A.2, A.2.1, etc.). The list of elements in the table is based on the previous discussion of microstructural elements, but only those elements are included which are encountered in ELDs.

A. The core structures of entry A.1. Left-core formal structure: alternative spellings of the headword principal forms of irregular verbs irregular plural forms comparative degrees of adjectives *phonetic transcription*: - IPA -other system of phonetic symbols

part of speech labels used

part of speech sections are numbered:

- Roman numbers

- Arabic numbers

A.2. Right-core semantic structure:

A.2.1 Semantic-pragmatic section:

senses of polysemous words are numbered various types of usage labels are applied to indicate usage restrictions types of equivalents used:

- semantic

- explanatory - translational

- functional

typographical distinction made for TL glosses

sense indicators (synonyms, paraphrases, etc.)

collocators (typical subjects or objects of the headword or equivalent) usage notes

A.2.2 Contextual section:

illustrative examples (translated in the TL):

- full sentence examples

- collocations, short phrases

- skeleton examples (employing implementing simplification, abstraction and listing techniques)

idioms, phrasal verbs provided in a separate section:

- the sections are indicated by some symbol

- no section indication

typographic distinction made between examples and secondary headwords

B. Position of examples and MWEs

integrated microstructure

partially integrated microstructure

unintegrated microstructure

C. General organization principle of the entry

microstructure-oriented

macrostructure-oriented

other solutions

D. Types of entries in ELDs

flat

tiered cross-reference entries

CHAPTER 4 Development of Latvian Bilingual and Multilingual Lexicography

The historical review of Latvian bilingual lexicography is divided in two parts. The first one gives a brief account of the period between the publication of the first Latvian bilingual dictionary (Mancelius 1638) and the publication of the first English-Latvian dictionary (Dravnieks 1924). The second part concentrates on English-Latvian dictionaries starting with the dictionary compiled by Dravnieks (Draviņš-Dravnieks) up to the present day. It should be remarked that only a general and less detailed review is provided of the first period since it does not correspond to the main focus of the present study but reveals the prehistory of the development of the English-Latvian lexicographic tradition.

The review is limited to the general purpose bilingual and some multilingual dictionaries, other types of dictionaries may be mentioned only in order to provide background information.

4.1 Development of Latvian Bilingual Lexicography Before the Publication of the First ELD

The first Latvian bilingual dictionary *Lettus* was published in 1638 in Riga. It was a German-Latvian dictionary compiled by Mancelius which contained around 6000 headwords. ¹¹ Its subtitle reveals that it was aimed at the German audience, particularly the clergy and landlords in order to help them in communication with Latvians. The dictionary reflected the basic everyday word stock of the dialects of the Latvian language spoken in such regions as Kurzeme, Vidzeme and Zemgale. The dictionary has two supplements – a phraseological dictionary containing 51 chapter of thematically arranged translated phraseological units and 10 conversations reflecting the life and work of Latvian peasants. Even though the author uses the Gothic script and the German orthography for both German headwords and Latvian equivalents, he has attempted to improve the earlier Latvian writing conventions based on the German orthography to achieve a more adequate representation of the Latvian language (Zemzare 1961, 11–20; Roze 1982, 52–54).

Two multilingual dictionaries were published at the latter part of the 17th century – a Polish-Latin-Latvian dictionary (1683) compiled by a Catholic priest Elger (Elgers) of

¹¹ The term 'headwords' is used here but it should be noted that the entries of these bilingual dictionaries often contain instances of nesting. The numbers are mostly approximate also because the authors of the early dictionaries very seldom indicate the number of headwords in their dictionaries.

presumably Latvian origin and a German-Latin-Polish-Latvian dictionary supposedly compiled by Dressel in 1688. Elger's dictionary was based on a Polish-Latin-Lithuanian dictionary compiled by the Lithuanian author Sirvydas in 1642. In the second part of the 17th century Eastern Latvia was still under the rule of the catholic Poland which explains the choice of languages in these multilingual dictionaries. Elger's dictionary, the larger and more noteworthy of the two multilingual dictionaries, contained approximately 14 000 headwords. The Latvian equivalents included in the dictionary represent the central dialect spoken in parts of Kurzeme, Vidzeme and Zemgale. Instead of the German orthography used for the presentation of Latvian equivalents by Mancelius, Elger applied Polish orthography with numerous modifications. Elger provided Latvian synonyms as translation equivalents (often labelled as regional) for the Polish and Latin lexical items, thus giving a better insight into the Latvian language of this period. The dictionary contains both spoken and written language, for instance, terms encountered in religious, economic, administrative texts (Zemzare 1961, 64–67; Roze 1982, 56).

At the end of the 17th century Fürecker compiled the first Latvian-German dictionary which was never published and has survived only in manuscript. In this dictionary the Latvian part of the entry was written in the Latin script while German equivalents in the Gothic script, the orthography applied is German-based but adapted to the needs of the presentation of the Latvian language. It contained approximately 4000 headwords and secondary headwords nested inside the entries, numerous illustrative examples, explanatory notes, compounds, phraseological units and etymology. Most of the vocabulary items included in the manuscript dictionary came from everyday language recorded by the author while living in Latvian environment, however, the author had also used lexical material from Mancelius' dictionary (Zemzare 1961, 73; Roze, 1982, 57–58). As a possible reason for reluctance to publish the dictionary Roze (1982, 57) mentions Fürecker's friendly attitude towards Latvians and conflicts with the follow Germans, especially priests.

Another Latvian-German dictionary which has also remained in manuscript was compiled by Langius in 1685. It contained approximately 7000 headwords partly borrowed from Mancelius' dictionary, but it was also enriched by vocabulary items characteristic of Lower Kurzeme regional dialect, recorded by the author himself. Langius' dictionary was also targeted at foreigners who wanted to master the Latvian language. The orthography, like in Mancelius' dictionary was based on the German orthography (Zemzare 1961, 84–88; Roze, 1982, 57–58). Since these dictionaries were not published, their accessability and also the impact on the development of Latvian bilingual lexicography was limited.

Describing the first Latvian bilingual dictionaries of the 17th century, and particularly the Latvian language as reflected in these reference works, Veisbergs (2000, 215) comes to the conclusion that

[i]t is difficult to pass judgement on these first lexicographic attempts, as we do not possess comparable texts of the language of the period. There is a clear influence of German, both on the lexical and grammatical levels. Trying to figure out the complexities of Latvian patterns was certainly not an easy task for the German speakers and the first compilers seemed to have done as much as one could reasonably expect.

Several bilingual dictionaries, largely based on the previous publications were compiled during the 18th century – at the beginning of the century there was compiled the introductory part of Depkin's Latvian-German dictionary which has remained in manuscript, Elvers' German-Latvian dictionary (1748), Weigel's manuscript of a German-Latvian, Latvian-German dictionary (1748) and G. F. Stender's first Latvian-German dictionary which was published in 1761 as a supplement to his Latvian Grammar. Even though quite small and largely based on Elvers' dictionary and targeted at German users, this G. F. Stender's dictionary excels as the first printed dictionary with Latvian as the source language. The orthography of the Latvian part of the dictionary is German-based but the Latin script is used for Latvian words for the first time. The dialect words included in the dictionary are put in brackets, thus marking their special status. The dictionary was supplemented with an appendix containing Latvian proverbs borrowed from previous dictionaries as well as collected by the author himself (Zemzare 1961, 124–129).

Lange's German-Latvian and Latvian-German dictionary (1772–1777) and G. F. Stender's *Lettisches Lexicon* (1789) are viewed as the most notable bilingual dictionaries produced in Latvia in the 18th century (Roze 1982, 59; Veisbergs 2000, 215). Lange's dictionary is the first published bidirectional dictionary in the history of Latvian bilingual lexicography. It focuses on the reflection of the dialect spoken in Cēsis region, but it covers also the dialects spoken in the rest of Vidzeme, Kurzeme and to some extent also Eastern Latvia and Riga. Lange's dictionary was targeted at the German audience, especially priests. The author pays due attention to the quality of equivalents. The dictionary includes vocabulary items and phraseology borrowed from the previous dictionaries and a considerable amount of linguistic material collected by the author during his journeys around Latvia as well as the vocabulary encountered in biblical literature. The German-Latvian part of the dictionary contains approximately 15 000 headwords and Latvian-German nearly 10 000, the headwords are alphabetically arranged with occasional instances of nesting, the principal forms of many Latvian verbs are provided. It should be

noted that in Lange's dictionary both SL and TL items are printed in the Gothic script (Zemzare 1961, 130–147; Roze 1982, 59–61).

G. F. Stender's Lettisches Lexicon (1789) consists of two parts – Latvian-German with approximately 7000 headwords and a considerably larger German-Latvian part which contains nearly 14 000 headwords. The dictionary consists of lexical items collected by the author himself as well as some lexical material from previously published dictionaries (Lange's (1772–1777) dictionaries and the small German-Latvian dictionary compiled by Elvers (1748)). It should be noted that the author acknowledges the lexicographic sources he has used and refers to the original when he is not familiar with some word borrowed from another dictionary. The macrostructure of G. F. Stender's dictionary largely consists of items borrowed form other lexicographic sources, the Bible, literature and his own observations of the spoken Latvian language. Noteworthy are also the author's attempts to include some terminology (mostly in the German-Latvian part) which he either translates or provides its somewhat simplified description. The Latin script is used for the Latvian text in both parts of the dictionary. G. F. Stender's dictionary, like the previous bilingual dictionaries compiled by German authors, is targeted primarily at the German audience though it has been used by Latvians as well. The main entries are arranged alphabetically, but nesting is very prominent – collocations, phraseology, derivatives appear in a separate section at the end of the entry. The principal forms of verbs are provided and the dictionary contains numerous illustrative examples. Apart from the alphabetically arranged main entry list the back matter of the dictionary contains lists of male and female first names, names of countries and nationalities (including names for various parts of Latvia), names of animals, birds, fish, plants, etc. (Zemzare 1961, 175-183; Roze 1982, 62-64). This approach (though the number of thematic groups is considerably reduced) has become a characteristic feature of Latvian bilingual lexicography including also the English-Latvian lexicographic tradition. It has been observed by Roze (ibid. 64-65) that G. F. Stender's dictionary was the richest inventory of the Latvian word stock for nearly one hundred years and was used by the Latvian authors who contributed to the development of the Latvian language in the second part of the 19th century, which underlines the importance of this bilingual dictionary.

A small Latvian-German dictionary (combined with a German course book) is compiled by G. F. Stender's son A. Stender in 1820. It contains only 3000 headwords of everyday vocabulary, and some sample conversations. Both Latvian and German texts are printed in the Gothic script and it is almost entirely based on G. F. Stender's dictionary (1789). However, this otherwise obscure reference work excels with the fact that it is the first Latvian-German dictionary compiled for the Latvian audience for the purpose of studying the German language (Zemzare 1961, 197–198).

It can be concluded that during the first nearly two hundred years the Latvian lexicography was almost entirely German-Latvian-German which is determined by the strong German influence in Latvia on both political and cultural level. Zemzare (1961, 408) and Veisbergs (2000, 215; 2011, 85) stress that during this period bilingual dictionaries were compiled almost entirely by German authors and were also targeted at German users and the later editions were largely based on their predecessors. The German authors attempted to reflect in their dictionaries the word stock pertaining to various regions and accordingly the dialects of the Latvian language which they had learned and could record, though this word stock was often modified and supplied by borrowings from the German language. In these dictionaries no attempt was made to record the most widespread variant of the Latvian language which could serve as the basis of the Standard Latvian – it was attempted only in the second part of the 19th century in the dictionaries compiled by Latvian authors and aimed at Latvian users (Zemzare 1961, 411).

The Latvian National Awakening movement which started in the middle of the 19th century contributed to significant changes in the Latvian lexicographic scene, namely, the first dictionaries were compiled by Latvian authors. Due to the growing influence of the Russian language, these dictionaries also broke the firmly established tradition (apart from some multilingual dictionaries) of the German-Latvian language pair in Latvian lexicography.

The first major Latvian trilingual dictionary produced by a Latvian author is the Russian-Latvian-German dictionary compiled and edited by a group of the so-called Young Latvians under the leadership of Valdemārs in 1872. A Russian-Swedish-Finnish dictionary published in 1851 was used as a model for this dictionary. The dictionary was initially planned as a bilingual dictionary but the editor decided to add German equivalents and explanatory notes in order to specify the meaning of the Latvian equivalents, however, the German language was dropped in the later editions (1890 and 1903). Zemzare (1961, 218) estimates its volume at 37 000 Russian headwords which was so far the largest amount in Latvian bilingual lexicography. The dictionary is targeted primarily at Latvians, but also at Russians studying the Latvian language. The Cyrillic alphabet is used for Russian, the Latin script is used for Latvian and the Gothic script for the German part of the dictionary. Considerable improvements are introduced also in the grammatical description of the headwords and TL equivalents, indicating the part of speech, the gender of nouns, syntactic properties of verbs. The dictionary reflects both spoken and written

language and is renowned for containing many Latvian neologisms, including numerous new terms (coined by Alunāns, Kronvalds or taken from the Latvian periodicals of the time) since Latvian terminology was undeveloped (Zemzare 1961, 218–281; Roze, 1982, 68–72). Valdemārs' dictionary obviously focuses on the development of Latvian word stock which is achieved by supplying the missing equivalents. Part of the borrowings included in the dictionary are supplied with explanations, for instance, *alķimija (krahpiga skunste śeltu taisiht)*, *biologija (dśihwes mahziba)*, *mitologija (teikas par deeweem)* (quoted in Baldunčiks 2005, 197).

In 1879 the reversed Latvian-Russian-German version of Valdemārs' dictionary was published in Moscow. It is based on the Latvian equivalents of the Russian-Latvian-German dictionary and contains around 13 000 headwords. The authors viewed as their task to include in this dictionary the most frequently used Latvian words encountered in both spoken and written language. This dictionary, though a smaller abridged version of its predecessor, also continues ousting Germanisms, providing grammatical description of the headwords and equivalents, introducing neologisms, coining terms and was aimed primarily at Latvian audience (Zemzare 1961, 312–319 and 410–412; Roze, 1982, 72).

Another notable Latvian-German dictionary with around 20 000 headwords is started by a Latvian Lutheran pastor and writer Neikens and completed by the German Lutheran bishop Ulmann in 1872. The dictionary is aimed at German users (the introductory matter as well as dictionary metalanguage is German). The Latin script is used for the Latvian part but the Gothic script for the German part of the entry. The Latvian orthography is adapted to the Latvian language, for instance, the doubling of consonants is dropped (however, due to technical problems, some necessary doubling is also lost), an attempt is also made to show the intonation peculiarities. The dictionary contains dialect words which have been indicated with labels (though not always consistently applied), but some of them have been taken from previous dictionaries without careful checking. Most of the entries contain illustrative examples and phraseology which, alongside with the headwords are either borrowed from the previous dictionaries or collected by the compilers (the role of Neikens is viewed as largely underestimated, his name is even not mentioned on the title page of the dictionary). This Latvian-German dictionary has contributed to the development of the Latvian language since it contains some Latvian neologisms which Ulmann received from Kronvalds shortly before the publication of the dictionary. Some of Kronvalds' neologisms were included in the dictionary (e.g. centiens, patvaļība, etc.), while others were rejected (e.g. burtnīca, dzelzceļš, sabiedrība, uzmanība, etc.), neologisms have been labelled and

occasionally also commented on by the author (Zemzare 1961, 333–338; Roze 1982, 72–75).

Some more bilingual and multilingual dictionaries are published at the end of the 19th century, for instance, a German-Latvian dictionary (1880) compiled by Neikens, Ulmann, Doebner and Brasche, a Lithuanian-Latvian-Polish-Russian dictionary compiled by Miežinis in 1868 and after numerous rejections published in 1894. Some dictionaries have remained in manuscript, for instance, a Russian-Latvian dictionary compiled in 1860s, judging by the included neologisms presumably by Alunāns (Zemzare 1961, 322–371). A small eleven-language dictionary of nautical terms compiled by Valdemārs was published in 1881. Even though it is a specialized dictionary and does not correspond to the focus of the present study, it is noteworthy as the first dictionary in the history of Latvian lexicography which contains the English language.

It can be concluded that the latter part of the 19th century is a time of considerable changes in Latvian lexicography. Firstly, Latvian authors enter the lexicographic scene, and secondly, if previously bilingual lexicography was almost entirely German-Latvian-German, in the latter part of the 19th century several Russian-Latvian-(German) dictionaries were produced thus establishing the Russian language as another major foreign language in Latvian bilingual lexicography. Valdemārs' trilingual Russian-Latvian-German dictionaries introducing the Lithuanian language in Latvian multilingual lexicography, however, most of these attempts have remained in manuscripts. There are also some notable changes in the target user group of the bilingual dictionaries. According to Zemzare (1961, 408 and 411), the dictionaries edited by Valdemārs are targeted at Latvian users while previously the German-Latvian-German dictionaries were compiled to cater primarily or entirely for the needs of German users.

Veisbergs (2000, 216) describes the Latvian lexicographic tradition (from the 16th to the 19th century) as essentially bilingual and multilingual and stresses that as a consequence of that "the term 'dictionary' for an average Latvian would be associated with a bilingual dictionary, encyclopedias coming second". He also notes that "this is typical of small nations (Czechs, Latvians, Estonians, Lithuanians, Norwegians) where the main purpose of a dictionary is seen in helping sustain contact with other cultures" (ibid.).

At the beginning of the 20th century several bilingual dictionaries were compiled by Dravnieks, the author of a dictionary of foreign words (*Svešu vārdu grāmata* published in 1886) and the unfinished first Latvian encyclopaedia (*Konversācijas vārdnīca* published between 1891 and 1898). In 1910 he published a German-Latvian dictionary, in 1913 a

Russian-Latvian dictionary, in 1923 a Latvian-Russian dictionary, in 1924 an English-Latvian dictionary and in 1927 a Latvian-German dictionary. Judging by the number of dictionaries he edited, Dravnieks has been rightly described by Veisbergs (2011, 88) as "the most prolific Latvian lexicographer". Dravnieks is mentioned as the only author of these bilingual dictionaries, however, as he confessed in his response to Kalniņš' review of his German-Latvian dictionary (Dravnieks 1926, 85–86), in the process of compiling this (and most probably also the other bilingual dictionaries) he had many aides, but he did not find it necessary to mention them as the co-authors of his dictionary.

Dravnieks' English-Latvian dictionary (1924) marks the beginning of the English-Latvian lexicographic tradition which will be discussed in the following part of this chapter.

The first one of the series of Dravnieks' bilingual dictionaries, namely, the German-Latvian dictionary published in 1910, was reviewed by Endzelīns ([1910] 1974, 651–658) and Kalniņš (1910). Since this dictionary is a predecessor of the first English-Latvian dictionary which has not been reviewed, a short account of the remarks made by Endzelīns and Kalniņš will be presented here.

Endzelīns ([1910] 1974, 651–652) speaks about the great necessity of German-Latvian dictionary stressing the fact that since the publication of Brasche's (1880) and Ulmann's (1872) dictionaries the Latvian language has been enriched by numerous new words and subdialect words. Endzelīns views the dictionary as targeted at both Latvian and German users, however, he also remarks that the German preface seems to indicate the Germans as the primary user group, while the absence or inconsistent indication of pronunciation (with the help of diacritic marks and stress pattern) for the Latvian equivalents makes one think that it could be targeted at the Latvian audience which, according to Endzelins, would definitely benefit from this information. Incidentally, Dravnieks (1926, 94) mentioned the "inhabitants of the Baltics" as the target audience of his German-Latvian dictionary, thus also stressing its bifunctional intention. Endzelins ([1910] 1974, 652) comes to the conclusion that orthography is the weakest aspect of the dictionary¹². The scholar also observes that descriptive equivalents used when an acceptable semantic equivalent does not exist, have not been typographically distinguished from semantic equivalents, which might mislead the user and lead to wrong interpretation and application of these constructions (ibid. 657).

¹² It should be remarked that Endzelīns criticizes the inconsistent orthography in general, not only its reflection in Dravnieks' dictionary. He also gives very concrete suggestions about how to improve and normalize the faulty Latvian orthography.

In his reply to Kalniņš' (1910 "Dzimtenes Vēstnesis" Nr. 90) review of the dictionary where the faulty orthography used in the dictionary is also criticized, Dravnieks ([1910] 1926, 86–87) states that he has used the orthography generally accepted at the time when the dictionary was being compiled and adds that it is largely based on the one used in the unfinished first Latvian encyclopaedia and the printed media.

It can be concluded that in this review Endzelīns touches upon some explicitly lexicographic issues (such as the target audience of the dictionary and presentation of various types of equivalents), however, the primary interest of Endzelīns as well as Kalniņš lies in solving problems related to normalizing Latvian orthography and avoiding unnecessary borrowings form the German and Russian language.

4.2 Development of English-Latvian Lexicographic Tradition

This subchapter presents a review of the general purpose English-Latvian dictionaries published from 1924 to the present day. Since a detailed analysis of the mega-, macro- and microstructural features of ELDs is carried out in Chapter 5, this subchapter will concentrate on the selection of dictionaries for the analysis according to the working definition of a bilingual dictionary devised for the purpose of the present study and a general description of these dictionaries. Thus, only the following type of bilingual dictionaries will be selected for further investigation:

- BDs of two national languages, English and Latvian (only the English-Latvian direction will be considered in the present study);
- BDs providing translation equivalents in the target language;
- BDs with a general macrostructure and microstructure;
- BDs with alphabetically arranged headwords in printed form.

This working definition of a bilingual dictionary allows to exclude dictionaries of dialects (as opposed to standard national languages), bilingual dictionaries which instead of TL equivalents provide explanations in the TL, specialized bilingual dictionaries (as opposed to general ones), dictionaries with headword arrangement other than alphabetical, as well as dictionaries in any other medium than print (electronic ELDs will be shortly discussed in the framework of the most recent period of the tradition).

The other task of this chapter is to present a review of all the general English-Latvian dictionaries compiled since 1924 when the first dictionary was published¹³. In the general review the ELDs will be described according to the following features:

¹³ There is an anouncement in "Izglītības Ministrijas Mēnešraksts" (1920 Vol.1, 191) that an E-L, L-E dictionary compiled by Dravnieks is due to be published in the following year, though no evidence can be

- the author(s), (the editor(s));
- the publisher(s),
- the year and place of publication, (the repeated editions);
- the approximate amount of headwords (and some basic information about the entry contents, for instance, the presence or absence of phraseology which considerably influences the volume of the dictionary);
- the language(s) of the title (only Latvian or Latvian and English, during the Soviet period occasionally also Russian) and the correspondence of the Latvian and English part of the title;
- the sources of the dictionary;
- the intended target audience;
- some additional relevant distinctive features of the dictionary (if present)¹⁴.

The data for the the general description of the dictionaries for each period can be found in tables in Appendix 2. The revised editions are presented separately according to the year of publication only if some notable changes have been introduced. After each period a summary of its most relevant characteristic features will be given.

The list of general ELDs reviewed in this section is largely based on the data obtained from the bibliographical index of dictionaries published in Latvia from 1900 till 1994 (Banga et al. 1995) which provides the most complete list of English-Latvian dictionaries published till 1994; the bibliography of dictionaries published in Latvia from 1900 till 1966 by Cakule (1969, 144–197); the list of ELDs provided by Guļāne (1973, 99–100); the catalogues of the National Library of Latvia and the Academic Library of the University of Latvia; the "Catalogue of the Libraries of National Importance" and Jēgers' comprehensive "Bibliography of Latvian published outside Latvia" from 1940 till 1991 (Jēgers 1968; 1972; 1977; 1988; 1994).

The full list of general ELDs is included in a separate section of the Bibliography. The number of headwords is indicated only for the dictionaries published by "Avots", since occasionally several dictionaries compiled by one author have been published in the same year.

found for the existence of such a dictionary. If it were published, it probably would have preceded the 1924 edition by several years, but due to the lack of evidence further on it will be assumed that the ELD (1924) is the first representative of the tradition.

¹⁴ The list of features selected for the general description of ELDs partly corresponds to the one presented by Svensen (2009, 482-483, based on Bergenholtz 2003a and Nielsen 2003) as the possible 'checklist' of criteria for dictionary reviews targeted at their evaluation. It should be noted that the list of criteria applied in the present study has been adapted to the characteristic features of bilingual dictionaries but intentionally excludes a systematic discussion of mega-, macro- and microstructural features because they are treated at depth in a separate chapter.

Sample entries of the headword **branch** from all the general ELDs discussed in the present study are provided in Appendix 3. The dictionaries are as far as possible arranged in chronological order. If the dictionary has several editions but the sample entry has not changed, it is presented only once, however, if some changes have been introduced in the subsequent editions, the entries are presented separately.

Since the beginnings of the English-Latvian lexicographic tradition in 1924 Latvia has gone through various drastic changes of political system (the loss of independence in 1940; WWII with its atrocities and huge numbers of refugees leaving the country; the establishment of the Soviet regime; the regaining of independence in 1991) and the English-Latvian lexicographic tradition has not had the preconditions to develop as an uninterrupted continuum. Therefore it has been decided to divide the general review and also the further mega-, macro- and microstructural analysis of the general ELDs into several periods determined primarily by the historical background and significant changes in the political system in Latvia, as well as the whereabouts of a significant number of Latvian refugees after WWII:

- 1) the period from 1924 till 1940 (in Latvia);
- 2) from 1945 till 1947 (in Germany and Sweden);
- 3) from 1948 till 1990 (in Latvia and abroad);
- 4) from 1991 till the present day (in Latvia and abroad).

Thus, the first period of the tradition starts during the time of the first period of independent Republic of Latvia in 1924 with the publication of the first ELD and finishes with the invasion of the Soviet army and loss of independence in 1940 (the last two dictionaries of the first period are published in 1940). During WWII Latvia was under Soviet and German occupation which could have contributed to the fact that no ELDs were published then, but it should be noted that some other publications related to the English and Latvian language pair were produced in Latvia during WWII, for instance, a course book characterized by an exceptionally high level of Soviet propaganda "Lessons in English: anglu valodas mācība vidusskolai un nepilnai vidusskolai" (Godjinniks and Kuznecs 1941) and a repeated edition of a pre-war Latvian-English dictionary (Turkina 1944). No ELDs were published in Latvia till 1948, however, several ELDs were published abroad in Germany and Sweden from 1945 till 1947 mostly in "Displaced Persons' Camps" (DPCs) in Germany where many Latvian refugees had found temporary shelter. Even though these were small dictionaries which have not brought a significant contribution to the overall development of the tradition (apart from some characteristic features related to the specific conditions of their publication), they serve as an important evidence for the location of a significant number of Latvian refugees outside Latvia and their need for ELDs. Thus, this period, being the shortest and the only one comprising exclusively publications outside Latvia, still should be singled out. The third period starting with the publication of the first ELD in Latvia after WWII in 1948 continues throughout the Soviet period till the regaining of independence in 1990 (Declaration of Independence on May 4). The most recent period of the tradition starts in 1991 (the complete renewal of independence), though the first significant ELD of this period was published only in 1995, and continues up to the present day.

Brief background information (concentrating on historical, political and cultural background) will be provided at the beginning of each of the sections, especially for the first periods when these factors are of paramount importance for the development of the tradition. It will be followed by a review (according to the established guidelines) of the ELDs published during the period and rounded up by a summary of their characteristic features.

Since the division into periods might appear to be somewhat artificial because it is determined by historical and political factors rather than changes in the lexicographic tradition, only a detailed analysis of the three structural levels of ELDs will determine whether the periods correspond to significant stages in the development of the lexicographic tradition. The stages of development of the tradition will be determined only after a detailed mega-, macro- and microstructural analysis of the ELDs.

4.2.1 ELDs Published in Latvia (1924–1940)

The English-Latvian lexicographic tradition started in 1924 with the publication of the first general ELD by Dravnieks. The first period largely overlaps with the first period of independent Republic of Latvia (1918–1940) which in the history of Latvia excels with a rapid development in culture and education.

One can judge about the growing importance of English as a foreign language by the publications in Latvian press, the numerous course books and English-Latvian/ Latvian-English dictionaries produced in Latvia in the 1920s and 30s. Already at the beginning of the 1920s, before the publication of the first ELD, in his article on modern English language in "Izglītības Ministrijas Mēnešraksts" Blese (1920, 229) stressed the importance of English as the most widespread and influential of all European languages, but also underlined the fact that apart from political and economic reasons, this language was interesting also from the linguistic point of view. Turkina (1924, 295) discussed the role of English as the world language which, according to her, was even threatening the role of French as the language of diplomacy.

A society for spreading of the English language was established in 1921. Its main tasks were to establish English teacher training centres, language courses, libraries and organizing lectures on the culture of English speaking countries since the interest about the English language in Latvia at the beginning of the 1920s was immense (Reinholds 1922, 432). Since 1920 in most primary schools in Latvia English and German were selected as the first foreign languages to be taught from the third grade (Ausējs and Melnalksnis 1922, 1108), but in the 1930s English was selected as the first foreign language to be taught at school (Veisbergs 2000, 218).

Notwithstanding the great interest in the English language and culture during the first years of the newly established state, there was a short supply of qualified English teachers. Therefore English teacher training establishments were set up in Latvia (e.g. "Latvijas Jaunatnes Savienības Valodu institūts", "Angļu Pedagoģiskā koledža") and in 1921 the number of their students already exceeded 1000 people. Another urgent problem was the dramatic shortage of qualified teacher trainers. To solve this problem the society for the spreading of the English language in collaboration with "The Committee of British Friends of Latvia" in 1921 contacted The Department of Phonetics at London University headed by the distinguished phonetician Jones with the aim to establish a branch of the department in Riga (Reinholds 1921, 1302). A year later a phonetics specialist from London University was invited to Latvia to train 70 phonetics teachers for Latvian schools (Reinholds 1922a, 87).

This collaboration resulted into a profound interest in English phonetics among the future compilers of ELDs and had an obvious impact on the English-Latvian lexicographic tradition since special attention was paid to phonetic transcription in the ELDs compiled during the first period of the tradition. Several compilers in the Preface of their dictionaries stressed the immense importance of pronunciation in acquiring the English language (Godiņš (1929), Roze and Roze (1931), Curiks and Bangerska (1937)), but *An English Pronouncing Dictionary* (compiled by Jones) is mentioned as the source of phonetic transcription in all the ELDs published from 1931 till 1940 and onwards.

The number of English course books is also considerable. At the beginning of the 1920s it was reported in "Izglītības Ministrijas Mēnešraksts" (1920 Vol.1, 193) that the publishing house "Valters un Rapa" had published several English course books. Initially English course books were compiled by foreign authors and were often not adapted to the needs of the Latvian audience (for instance, the metalanguage of the course book was Russian and it contained a small English-Russian dictionary), which reveals that there was a demand for English course books which was not yet fully satisfied. Soon this gap was filled with an

ample number of English course books with Latvian (often in combination with English) as the metalanguage, for instance, "Angļu valodas mācības grāmata" (Urch and Urch 1921, 1924, 1925, 1927, 1928); "Angļu valoda" (Glaeser 1928, 1931, 1935, 1936, 1939); "Angļu valodas kurss pašmācībai" (Freijs et al. 1931–1932); "Angļu gramatika" (Felsberga 1935, 1936, 1937, 1939); "Angļu valodas mācība pamatskolās" (Hunter Blair 1937), etc.

This widespread interest in the English language in the 1920s and 30s obviously determined the need for lexicographic resources and also explains why as many as seven general ELDs (and two Latvian-English dictionaries) were published in the comparatively short period from 1924 till 1940. All the dictionaries were published in Latvia, Riga (apart from Pelcis' dictionary published in Riga and Jelgava).

However, only three of the seven dictionaries, the ones compiled by Dravnieks (1924), Turkina (1937) and Pelcis (1940), contain 20 000 or more headwords – Turkina's dictionary contains approximately 30 000 headwords, Dravnieks' and Pelcis' dictionaries approximately 20 000. According to the number of headwords these three dictionaries could be attributed to the category of medium-sized dictionaries.¹⁵ However, the headword count has to be applied with caution since Pelcis' dictionary contains a comparatively limited microstructure and accordingly is smaller than the dictionaries by Dravnieks and Turkina. The rest of the ELDs compiled during this period (Godiņš (1929), Roze and Roze (1931), Curiks and Bangerska (1937), Akuraters (1940)) belong to the category of small

dictionaries.

Dravnieks (1924). The first English-Latvian dictionary published in 1924 is one of the series of bilingual dictionaries and their repeated editions produced by Dravnieks from 1910 till 1927 (German-Latvian (1910, 1925, 1933, 1938), Russian-Latvian (1912, 1922, 1931), Latvian-Russian (1923), English-Latvian (1924, 1931, 1933, 1936, 1938), Latvian-German (1927)). The ELD contains approximately 20 000 headwords (according to Laua 1981, 215) but it should be noted that the amount of headwords is not indicated in the dictionary, in fact only a few of the ELDs published before WWII contain this information. Several reprints – in 1931, 1933, 1936, 1938 (and later in 1957, 1964 and 1965 in the USA by "Grāmatu draugs"), testify to its popularity, though none of the repeated editions has been updated (the author died in 1927). Like the other Dravnieks' bilingual dictionaries published from 1922, all the editions of his ELD from 1924 to 1938 were published in Riga by "Valters un Rapa".

¹⁵ The division of dictionaries according to the number of headwords applied here contains three major categories: large dictionaries (over 85 000 headwords), medium-sized (20-80 000) and small ones below 20 000 headwords (Roze 1982, 94-95).

An interesting peculiarity of this dictionary is that the pronunciation of the English words is indicated by a combination of Gothic and Latin letters. This approach which is applied in some bilingual dictionaries at the beginning of the 20th century (for instance, *Dictionary of* the English and German Languages (Koehler 1913)) is not encountered in any other ELD. The title is provided only in Latvian but the publishers changed it several times. The first edition (1924) as well as the second (1931) are titled Anglu-latvju vārdnīca, the third edition (1933) - Anglu-latviešu vārdnīca; interestingly enough, there is another third edition published in 1936 (!) where the title is again Anglu-latviu vārdnīca, the fourth edition (1938) also carries the same version of the title. The approach is somewhat puzzling, considering that the dictionary was not updated, and might indicate the publishers' wish to "modernize" an already dated dictionary. The existence of two "3rd editions" is pure negligence on the part of the publishers. No primary or secondary sources of the dictionary are identified in any of the editions, which obviously does not mean that introspection is the only source. While compiling this dictionary Dravnieks might have used some English-German dictionaries published at the beginning of the 20th century, for instance, A New and Complete English and German Dictionary (Thieme 1902), Thieme-Preusser: Dictionary of the English and German Languages (Wessely 1903) or Dictionary of the English and German Languages (Koehler 1913). It should be noted that in his dictionary Dravnieks has applied two microstructural elements encountered in Koehler's dictionary, namely, the presentation of pronunciation with the help of Gothic letters and the use of special symbols instead of field labels. The presence of these microstructural features does not prove that Koehler's dictionary is one of the possible lexicographic sources of Dravnieks' ELD (especially because these microstructural features are frequently found in bilingual dictionaries published at the turn of the 19th and 20th century) but it testifies to the fact that Dravnieks has applied lexicographic methods popular at the beginning of the 20th century. However, it is obvious that the tradition of mentioning dictionary sources has not yet been established. The target audience of the dictionary is not identified either.

Several small ELDs were published between 1924 and 1937 before the appearance of the second middle-size ELD compiled by Turkina. With the entry count below 10 000 all of them belong to the category of small dictionaries with a limited microstructure (this aspect will be analysed more closely in Chapter 5, meanwhile it should only be noted that the microstructure of these small dictionaries does not contain phraseology or illustrative material that considerably reduces their volume).

Godiņš (1929). An exceptionally small pocket dictionary compiled by Godiņš was published in 1929 by the publishing house "Ikdiena". The number of headwords is not

indicated but it is written on the title page that the dictionary, despite its small size, contains more headwords than other dictionaries (it is not specified which ones), though it is obvious that the number of entries does not reach 10 000 items. The title *Anglu-latvju vārdnīca* is provided only in Latvian. This dictionary excels with its exceptionally small size, limited microstructure and indication of English pronunciation with the help of an elaborate, innovative and very carefully described system of pronunciation symbols. No sources used when compiling the dictionary are identified. The target audience is not specified either.

Roze and Roze (1931). A dictionary compiled by Klaudija and Kārlis Roze and edited by Blese was published in 1931 and printed at "Latvju kultūras" printing house. After WWII the dictionary was repeatedly published in Germany and Sweden. Though the number of headwords is not indicated, it is obviously larger than Godiņš' dictionary but could not exceed 10 000 headwords. In order to reduce the volume (and reduce printing costs, as indicated in the Preface) this dictionary does not include phraseology, which considerably reduces its microstructure. The title is provided both in Latvian and English -Angliski-latviska vārdnīca/ An English-Latvian Dictionary. University and secondary school students, as well as anyone else who wants to study English are identified as the target audience of the dictionary. It is worth noting that this is the first ELD to apply the International Phonetic Alphabet (IPA) which is further applied in all the general ELDs compiled since 1931. This is also the first ELD which mentions at least one of its lexicographic sources, namely, the Preface states that the phonetic transcription (IPA) has been taken from An English Pronouncing Dictionary by Jones (neither here, nor in other dictionaries published during this period, a concrete edition of Jones' dictionary is mentioned which means that it could be either the first edition (1917, reprinted in 1919) or any of the later revised editions published in 1924, 1926, etc.).

Curiks and Bangerska (1937). A small dictionary of approximately 7000 headwords ("and their senses" as stated in the Preface, which probably means that the number of entries is even smaller) compiled by Curiks and Bangerska was published by "Valters un Rapa" in 1937. Like Rozes' dictionary it does not include phraseology which considerably reduces its microstructure. The compilers also indicate in the Preface that the phonetic transcription (IPA) provided in the dictionary has been proposed by Jones, but *An English Pronouncing Dictionary* as its immediate source is not mentioned. It is also noted that IPA has become the most widespread means of phonetic transcription in Europe (Curiks and Bangerska 1937, 5). The title is provided in both languages, though its English version (on the second title page) only partly corresponds to the Latvian one (the subtitle is given in square brackets): *Angliski-latviska vārdnīca [ar Dr. D. Jones fonētisko transkripciju un*

glosaloģiski-gramatiskiem paskaidrojumiem]/ An English Dictionary [with pronunciation in the international phonetic transcription and Latvian glossary]. The greatest drawback of the English title is that it does not obviously state that the dictionary is bilingual and thus could mislead the potential user. However, the English title is of secondary importance since, according to the authors, the dictionary is targeted at the secondary school students and the intelligent part of society with a serious approach to English studies, which obviously implies only Latvian audience (ibid.).

Akuraters (1940). The last of the small ELDs produced during this period was compiled by Laima Akuraters in 1940 and published by "J. Roze" publishing house. This dictionary was also reprinted in Germany in 1946. The number of headwords is not indicated but it obviously does not exceed 10 000 items. Like the small dictionaries discussed above, it does not include phraseology and has a very limited microstructure. The title *Angliski-latviska vārdnīca* is provided only in Latvian. *An English Pronouncing Dictionary* is indicated as its only source, the target audience is not identified.

Turkina (1937). The only ELD published during the first period which exceeds the headword count of Dravnieks' dictionary and has a similar microstructural complexity (e.g. collocations and phraseology are included) was compiled by Turkina in 1937 and published by "Valters and Rapa". The number of headwords is not mentioned in its first (1937) edition but the second edition (1948) claims to include about 30 000 headwords. This dictionary was later published in Latvia in 1948 and the USA in 1958. The title *Angliski-latviska vārdnīca [Ar fonētisku izrunu, gramatiku, īpatnējiem izteicieniem un saīsinājumu paskaidrojumiem]* is provided only in Latvian, the target audience is not identified. Like some previously discussed dictionaries, it also uses IPA and indicates *An English Pronouncing Dictionary* as its source of phonetic transcription, stressing in the Preface that it provides pronunciation used by the educated part of society in Britain.

Pelcis (1940). The last of the medium-sized ELDs published during the first period is the 20 000 headword dictionary compiled by Pelcis in 1940 and published in Riga and Jelgava by "Biogrāfiskā archiva apgāds". The title is provided in Latvian and English: *Praktiskā angļu-latviešu vārdnīca/ A Practical English-Latvian Dictionary*. The versions correspond to each other apart from the fact that the definite ending of "praktiskā" in the Latvian title is translated with the indefinite article in the English version. It should be stressed that this is the first dictionary of the tradition which apart from indicating Jones' phonetic system as its source of phonetic transcription, also reveals that the headword list has been taken mostly from *The New Method English Dictionary* (1935) compiled by West and Endicott. An interesting feature of this dictionary is that it marks the 2000 most relevant words (as it is

claimed in the Preface, according to West's "General Service List" and Ogden's "Basic English word list") with an asterisk and thus attracts the user's attention to these vocabulary items. Even though it is obvious that the dictionary is compiled for English language learners of Latvian origin, it is not directly stated in the lengthy Preface.

English-Latvian learners' dictionaries

Apart from the above discussed general bilingual dictionaries some small learner's dictionaries were published during this period. For instance, a small English-Latvian dictionary was appended to Miller and Kersten's "First English Book" (1938). Even though microstructurally this dictionary is similar to the small general dictionaries compiled by Curiks and Bangerska (1937) and Akuraters (1940), a considerable difference can be found on the macrostructural level, namely, the headword list of Miller and Kersten's dictionary (as stated on the title page) claims to contain all the words encountered in primary school course books published till the study year of 1937/1938. The selection of headwords in such dictionaries does not result in a general macrostructure, accordingly, excluding these dictionaries from the list of ELDs considered in the present study.

The review of the seven ELDs published during the first period of the English-Latvian lexicographic tradition, reveals some typical characteristic features of this period:

- The author of dictionary is always identified (except for Dravnieks' dictionary (1924) where only one author is mentioned, while Dravnieks himself (1926, 85–86) acknowledges that several other people have contributed to compiling of the dictionary). The place and year of publication is also indicated;
- Three out of seven dictionaries are published by "Valters un Rapa" which proves to be the most prominent publisher of ELDs during the period;
- Three dictionaries contain around 20–30 000 headwords, though most are small not exceeding 10 000 headwords with a very limited microstructure;
- The number of headwords is indicated only in two dictionaries, revealing that this information is not yet viewed as relevant;
- In four dictionaries the title is provided only in Latvian, in three in Latvian and English, but in two of them the English title does not fully correspond to its Latvian counterpart, i.e. the tendency to provide bilingual titles is not yet firmly established;
- Five out of seven dictionaries indicate at least one lexicographic source, almost always it is the source of phonetic transcription which is also carefully described in all the dictionaries thus revealing that it is viewed as an important aspect for description of English;

- The intended target audience is indicated only in two dictionaries, which reveals that this information is not yet viewed as relevant;
- Changes in the indication of English pronunciation present a relevant characteristic feature of this period – the first two dictionaries of the tradition indicate English pronunciation by some less traditional means, while starting with the third dictionary (Roze and Roze 1931), only IPA is applied;
- Only one dictionary (Dravnieks 1924) undergoes several reprints during this period but it is not edited and updated since its first publication;
- Four out of seven dictionaries (Dravnieks 1924, Roze and Roze 1931, Turkina 1937 and Akuraters 1940) are later published in Latvia and abroad beyond the boundaries of this period, thus establishing the tradition of succession, though only Turkina 1937 is edited and updated (Turkina 1948).

The features traced in the initial period of the tradition (interrupted by the outbreak of WWII) will be further investigated in the following periods of its development.

Though all the seven ELDs will be subjected to detailed mega-, macro- and microstructural analysis, the two largest ones (Dravnieks 1924 and Turkina 1937) with the most developed macro- and microstructure, provide the most valuable material for structural analysis.

4.2.2 ELDs Published after WWII in Refugee Camps (1945–1947)

This period excels for two reasons – it is the shortest one and all the dictionaries are published in exile outside Latvia, mostly in Germany. The extraordinary conditions in which these dictionaries were published ask for an insight into the historical background of this period.

In 1944, frightened by the return of the Soviet army, a considerable number of people left Latvia. Most of them found shelter in Germany in "Displaced Persons' Camps" (DPCs), a considerably smaller number in Sweden, Denmark, Austria or Belgium. It has been estimated that approximately 10% of the inhabitants of Latvia left the country after WWII. The number of Latvian refugees in various countries was around 120 000 in Germany, 5–6000 in Sweden, 2–3000 in Austria and around 2000 in Denmark (Vilks 1947, 5; Daukste-Silasproge 2002, 26–27; Veigners 2009, 56 and 86). The number of refugees slightly varies from source to source mostly due to the unreliable statistical data.

The time Latvian refugees spent in DPCs in Germany (from 1944 till around 1950) is characterized as a period of active social and cultural life. Daukste-Silasproge (2002, 6–7) points out several preconditions which contributed to the development of cultural life in Latvian DPCs: the refugees (organized according to the national origin) lived in tightlyknit communities; such basic needs as food and shelter were at least partly secured, most refugees could not find work and had plenty of free time to participate in cultural activities; there were many educated people – artists, musicians, writers among Latvian refugees who were eager to maintain their Latvian identity.

The Latvian Central Committee (established and elected in 1945 and located in Detmold, the British Zone) was responsible for education and cultural life in Latvian DPCs. One of the major tasks of this organisation was to establish Latvian schools and develop a unified study program. During the first years of its activity it financially supported writers, musicians and artists, thus contributing to the development of cultural life in Latvian DPCs. The Latvian Central Committee was also responsible for establishing theatre troupes, choirs, orchestras, organizing art exhibitions, etc. which gave regular performances not only to refugees in DPCs but also outside, for instance to army troops (Vilks 1947, 6–10; Daukste-Silasproge 2002, 15–20).

There was an urgent need for books in Latvian DPCs but publishing was difficult because of shortage of paper, printing problems and the need to obtain permissions from the local authorities. Most books, newspapers and magazines were typewritten and mimeographed. Most of the books published in Germany were school books and reprinted editions of classical pieces. Numerous publishing houses were established in Germany, for instance, the ones owned by Mantinieks and Kiploks in Detmold and Darzins in Halle (both in the British zone) were among the most productive ones. The publishing house "Grāmatu Draugs" which was later moved to the USA (and published there several ELDs) was initially established in Germany (Daukste-Silasproge 2002, 168–174). The first years of exile were the most favourable for publishing books and other printed materials. This explains why nearly all the ELDs produced in Germany for the needs of Latvian refugees in DPCs were published in 1945 and 1946. In 1947 because of shortage of paper and limited financial resources the number of publications (especially in the British occupation zone) reduced considerably (Vilks 1947, 10). It was not profitable to publish Latvian books in Sweden because of the limited target audience (Daukste-Silasproge 2002, 168-171), which explains why only one of the ELDs published during this period was printed in Sweden, Stockholm.

Apart from ELDs which are the focus of this study, a lot of other publications related to the studies of the English language were produced in exile (the list is based on Jēgers' bibliography (1968)): several Latvian-English dictionaries compiled by Grāvelis (1946), Kalnbērzs (1946), Turkina (1947 and 1948), Roze and Roze (1946), Jēgers (1968, 225) mentions another edition of this dictionary in 1948; numerous English course books, for

instance, "The pronunciation of the English sounds and grammar" (Kļaviņš 1946), "English exercise book for beginners and advanced students" (Aume 1946), "Basic English. Angļu valoda 850 vārdos" (Ogden 1947).

Latvian DPCs in Germany were situated mostly in the American and British occupation zones, largely explaining the wish of the refugees to study the English language. Several authors and publishers mention in the Prefaces to their dictionaries the importance of English as an international language and its essential role in the lives of refugees (Kalnbērzs 1945; Krādziņš 1945; Roze and Roze 1945). Noteworthy is also the fact that most of the countries which later accepted the refugees – the USA, Australia, Great Britain and Canada – were English-speaking. In 1946–47 Latvian refugees started leaving DPCs, in 1948–49 the emigration reached a mass scale which led to the closing of many Latvian refugee camps in 1950.

Six or seven (the information on a dictionary compiled at a German war prisoner camp in 1945 is very scanty) general ELDs were published in different locations during this period. The dictionary compiled by Roze and Roze (1931) was even reprinted several times in various locations and by different publishers.

The list of ELDs published in exile shortly after WWII is probably not complete – some editions might have been lost and thus not included even in Jēgers' bibliography (Jēgers 1968; 1972; 1977; 1988; 1994) which gives the most comprehensive list. It should also be noted that since several of these publications are repeated editions of ELDs compiled before WWII, they will not be fully described here in order to avoid unnecessary repetition. Only the distinctive features of concrete publications will be pointed out. It also has to be underlined that all the dictionaries compiled during this period do not exceed 10 000 headwords and have a limited microstructure (phraseology and illustrative examples are almost never included).

Roze and Roze (1945 and 1946). The ELD compiled by Klaudija and Kārlis Roze and edited by Blese, first published by the authors in 1931 in Riga, was reprinted in exile several times (in Goeppingen (1945 and 1946); Flensburg (1945) and Stockholm [1946]). The Goeppingen editions (1945 and 1946), like the first edition, are the authors' publications and apart from the inclusion of a short Preface to the second edition, fully correspond to the first edition described in detail in the previous section. The Preface to the second edition points out the difficult circumstances in which the dictionary has been published (the necessity to obtain permissions from American military authorities and UNRRA ("The United Nations Relief and Rehabilitation Administration"), the difficulties related to obtaining letters with diacritic signs for printing the Latvian text and phonetic

symbols for the indication of English pronunciation), the great interest in studying the English language among the Latvian refugees and, accordingly, the necessity of ELDs. It is also stated that the dictionary has not been updated. The title *Angliski-latviska vārdnīca/ An English-Latvian Dictionary*, like in the first edition, is provided in Latvian and English. What concerns the edition published in Stockholm by "Vegastiftelsens Förlag", presumably in 1946 (the year of publication is also not indicated), its macro- and microstructure fully correspond to the previous editions but megastructurally it differs since this edition does not contain any front matter and accordingly provides no information on the circumstances of this publication. The title is provided only in Latvian. It should be noted that this is the only edition of the present dictionary and also the only ELD during the period which was not published in Germany.

The edition published in Flensburg by "R. Virsnieks" in 1945 corresponds to the previous editions macro- and microstructurally but there are some notable differences as well. First of all, it contains only part of the front matter of the original publication; secondly, its Preface is written by the publisher and only there among the names of the people who contributed to the production of the edition, we can find information about its authors, namely, Roze and Roze. The target audience of the dictionary is not clearly defined. This dictionary is also the first of the mimeographed editions characterized by low printing, binding and paper quality. Many of the publications produced in exile correspond to this description.

Krādziņš (1945). A small dictionary containing only 3000 headwords was compiled by Krādziņš, edited by Velde and published by the author in Landshut in 1945. Its title *Mazā angliski-latviskā vārdnīca/ English-Latvian Dictionary* is provided in Latvian and English, though the English version does not fully correspond to the Latvian one thus continuing the tradition of partial correspondence traced already in the first period. The sources of the dictionary are not identified, but the target audience, according to the compiler, comprises all the Latvians at the DPC aspiring to study the English language. Since the compiler had no access to the phonetic transcription symbols, for the indication of the English pronunciation, he has made use of the Latvia alphabet supplied by such letters as ä and ë. The system applied is described in the Preface of the dictionary.

Kalnbērzs (1945). A very small dictionary, according to the compiler, containing over 900 headwords, was compiled by Kalnbērzs and published by the Latvian Committee of the Central DP's Camp in Würzburg in 1945 (according to Jēgers (1968, 133), it was reprinted in 1946). The title *Angliski-latviska vārdnīca* is given only in Latvian. The sources of the dictionary are not identified apart from mentioning in the Preface that the

headword list is based on the list of 900 words suggested by British and American scholars as the most relevant ones for successful communication in English. The target audience of the dictionary is not stated directly but its purpose is identified – it is intended as a supplementary source for English courses and self-study courses. The compiler employs a slightly modified set of transcription symbols which is determined by the absence of IPA symbols at his disposal, as noted in the Preface.

ELD (1945). According to Jēgers (1977, 28), another ELD was published in Fallingbostel's SS soldier concentration camp in 1945 (though Siepkewerdum (!) is indicated as the place of publication). Since the description of the dictionary is based on the inspection of a copy without the title page, it can be imprecise and incomplete. It is reported that the dictionary has been initiated in a Latvian war prisoner camp in Fallingbostel (Lüneburg region) and finished in Ostfriesland (Witmund region), that the dictionary is mimeographed and has not been bound. The information available is insufficient to provide an adequate description of the dictionary, besides, since a copy of the dictionary has been compiled and published in a war prisoner camp makes it a unique representative of its own kind in the English-Latvian lexicographic tradition. It also reveals that there must have been an urgent need for an ELD and it must have taken a lot of effort to compile a dictionary in the conditions of a war prisoner camp.

Akuraters (1946). The ELD compiled by Akuraters and published in 1946 in Germany is another repeated edition of a pre-war dictionary in exile. Neither the publisher, nor the precise location of publication is indicated, though it is noted that the dictionary has been multiplied for the needs of Latvian refugees which at least indirectly indicates the intended target audience. It is a mimeographed edition where an incomplete and somewhat modified set of IPA transcription symbols has been employed. Macro- and microstructurally it resembles the first (1940) edition, its title *Angliski-latviska vārdnīca* is also provided only in Latvian.

Hunter Blair (1946). An ELD compiled by Hunter Blair was published by "T. Dārziņš" in Halle, Latvian camp, apparently in 1946 (the year is not indicated). The dictionary has no front matter, thus neither the number of headwords (definitely below 10 000), nor the target audience or the sources are identified. The title *Angliski-latviska vārdnīca/English-Latvian dictionary* is provided in both languages.

Kundziņš (1946). An ELD compiled by Kundziņš in Giften DPC was published by "P.Mantinieks and E.Ķiploks", apparently in Detmold where the publishing house was situated. According to the title (*Angliski-latviska un latviski-angliska vārdnīca/English-*

Latvian and Latvian-English dictionary. First part. Angliski-latviskā/ English-Latvian), this is the first English-Latvian part of the dictionary, but it implies also the publication of the second Latvian-English part. There is no evidence it has ever been published. The dictionary does not indicate the number of headwords (it could not exceed 10 000), its sources or the target audience. However, the compiler in the Preface mentions the extraordinary conditions in which the dictionary has been compiled and printed and asks the potential users to overlook the mistakes and shortcomings which might have been caused by these conditions.

ELD (1946). An ELD published in Germany in 1946 (Jēgers (1968, 89) mentions also an earlier edition (1945)) is a somewhat problematic case because neither the compiler, nor the place of publication is indicated, though the most problematic is its title *Latviskiangliska vārdnīca* (!)/ *English-Latvian dictionary* because the dictionary is only English-Latvian. Thus, the Latvian title is misleading while the English is correct. It is claimed in the Preface that it contains around 10 000 headwords as well as illustrative examples and idiomatic expressions (these items are included in some entries, though their number is quite low). As the sources of dictionary macrostructure two school books, English daily newspapers and the vocabulary extracted from a book on building construction and mechanics, are listed. The edition is mimeographed, of poor paper, printing and binding quality. The indication of pronunciation, as stated in the User's guide, is a modified version of Langenscheidt system where German letters have been replaced by Latvian ones. However, since the selection of headwords does not fully correspond to the demands set for general macrostructure, it will not be included in the list of ELDs subjected to closer structural analysis.

Another small ELD based on Ogden's Basic English system was reprinted in Halle by "T. Dārziņš" in 1947 (first published in Riga in 1935). The Basic English system had obviously become popular among Latvian refugees since the course book and the dictionary appended to it went through several editions in 1947 alone. However, since this dictionary does not correspond to the criteria of selection, it will not be used in further analysis.

The review of the ELDs published during the second period of the English-Latvian lexicographic tradition enables to single out some typical characteristic features of this period:

• The author of the dictionary is not always identified: out of the ten editions (including all the repeated editions of Roze and Roze which differ in this sense) this

is done only in eight. It could be explained by the great demand for ELDs at DPCs but not very strict regulations on copyright during this period);

- The place and year of publication, as well as the publisher are not always indicated either. The dictionaries were apparently published for the needs of the inhabitants of concrete DPCs, in a very small number of copies, accordingly, this information might not have been viewed as relevant (often the editions are also characterized by poor printing and binding quality);
- The number of headwords does not exceed 10 000 items, in several cases it is much lower (from nearly 900 to 3000); the approximate number of headwords is indicated only in three editions, though in several cases it is mentioned that the dictionary contains the necessary minimum of vocabulary items to ensure successful communication in the foreign language (this comment obviously reveals the publishers' wish to underline the dictionary's practical value);
- In seven editions the title is provided in Latvian and English, but in two of them the two versions of the title do not correspond – in one the English title is imprecise, in the other the Latvian title is totally misleading. Thus, the tendency to provide bilingual titles has increased since the previous period but there are still some problematic cases;
- Only in two dictionaries (both are repeated editions of the pre-war dictionaries) the source of phonetic transcription has been identified; in one dictionary some nonlexicographic sources are pointed out. Obviously, during this period it is not viewed as relevant to indicate the dictionary sources which could be explained by the purely practical purpose of these dictionaries;
- The intended target audience is indicated in nearly half of the editions, though mostly it is not precisely defined, namely, all the Latvians in DPCs who wish to study the English language. This shows that these dictionaries have been intended as learner's dictionaries, though not all of them live up to this promise;
- The presentation of English pronunciation reveals a peculiar characteristic feature of this period – an attempt is made to present pronunciation with the help of IPA phonetic symbols but due to limited access to some symbols in German printing houses or typewriter keyboards, it is often modified and some of the symbols are substituted by some other signs (often from the German alphabet) which have been available to the compilers. It reveals that the tradition of employing the IPA phonetic symbols already established during the first period continues, only due to some technical restrictions it has been modified;

• Only one dictionary (Roze and Roze) undergoes several reprints during this period, but it is not updated; none of the dictionaries compiled during this period have been published repeatedly after this period.

It is important to note that the dictionaries published during this time do not contribute much to the development of the English-Latvian lexicography since all of them are small with very limited microstructure, besides nearly half are reprints of the pre-war dictionaries, but they obviously reveal that due to necessity as well as profound interest in acquiring the English language, ELDs were compiled and reprinted even in very difficult circumstances of exile.

Though all the ELDs published during this period, except for those which do not correspond to the selection criteria (Ogden at al., 1947) or are not accessible (the dictionary compiled in the war prisoner camp (1945)) will be subjected to detailed mega-, macro- and microstructural analysis, but no significant development can be expected on any structural level of these dictionaries.

4.2.3 ELDs Published in Latvia and Abroad (1948–1990)

The third period of the English-Latvian lexicographic tradition starts with the publication of the first ELD in Latvia after WWII in 1948 and continues till the end of Soviet rule and regaining of independence in 1990.

It has been estimated (Knowles (1989) quoted in Piotrowski (1994, 13)) that there were nearly 5000 professional lexicographers in the USSR and that nearly 1000 bilingual dictionaries were produced in the Soviet Union from the end of the 1920s till mid-1960s. These numbers might be imprecise and do not cover the same period as considered in the present study, but they still reveal the attention paid to lexicography in the USSR. It is also observed by Piotrowski (1994, 21) that in the Soviet tradition it is the bilingual dictionary which is viewed as a typical learner's dictionary (versus, for instance, the British tradition where it is a monolingual dictionary) and thus an important aid in foreign language studies.

It should also be noted that the Russian language was of paramount importance, thus, for example, out of all the bilingual dictionaries compiled in Latvia during this period the Latvian-Russian and Russian-Latvian with four general dictionaries for each direction and one bidirectional dictionary form the largest group in the Latvian bilingual lexicography (Laua 1981, 215; Banga et al. 1995, 16–17). However, despite the so-called "iron curtain" or the ideological barrier separating the USSR from the Western world, a number of general bilingual dictionaries of the Latvian language in pair with such languages as

English (five English-Latvian, two Latvian-English and one bidirectional dictionary), German (three German-Latvian, two Latvian-German dictionaries), French (one French-Latvian, one bidirectional dictionary), were produced in Latvia during this period.

During the period of Soviet rule in Latvia, Latvian bilingual lexicography was strongly influenced and even determined by the general tendencies in Soviet bilingual lexicography. It reflects, for instance, in the lexicographic sources used – many general and specialized bilingual English-Russian dictionaries are mentioned as the sources used while compiling and editing ELDs, similarities can also be traced on all structural levels of ELDs and English-Russian dictionaries.

Though numerous and often of considerable volume, the English-Russian dictionaries produced during the Soviet times were not faultless. The American scholar Benson (1988, 221–223), for instance, describes the large English-Russian dictionary compiled by Galperin et al. (1972) as "the largest and the best Soviet English-Russian dictionary" (ibid. 221), but also criticizes its limited selection of pronunciation variants, the numerous wrong translations (especially of idiomatic English), the misuse of stylistic labels and problems related to the choice of headwords. He infers that the problems might have been solved if the authors of the dictionary is listed among the lexicographic sources of one ELD (Raškevičs et al. 1976 and 1985), but could have been used by compilers of other dictionaries as well.

Benson (1988, 225) points out the following overall drawbacks of Soviet lexicography: the omission of slang words and non-standard vocabulary, censorship of dictionaries (for instance, some entries in *The Oxford Advanced Learner's Dictionary of Current English* reprinted in the USSR in 1982 were altered to meet the demands of Soviet ideology; this step deeply disappointed the editors of the dictionary), ignorance of the latest developments in Western lexicography, unwillingness to collaborate with native speakers of the respective languages while compiling bilingual dictionaries. The scholar sees the reasons for these drawbacks in the fact that "lexicography in the Soviet Union is controlled by the government and party" (ibid.).

Since the Soviet times were characterized by a strong governmental control in all spheres of life, lexicography (especially bilingual lexicography dealing with the languages of the Western world) was certainly not an exception. Despite the strong lexicographic traditions, governmental control and at least partial isolation from the rest of the world had a negative impact on the quality of bilingual dictionaries.

It should also be noted that during the Soviet times there was a limited number of state owned publishing houses in Latvia, thus all the dictionaries published were produced at either of these publishing houses: "Latvijas Valsts izdevniecība" (LVI) (1946–1964) which later transformed into "Liesma" (1965–1992), but in 1980 the publishing house "Avots" was established as a branch of "Liesma" with the aim to publish dictionaries and literature of practical orientation.

It remains to be added that during this period some ELDs were also published in exile (mostly in the USA and Sweden), though all of them were repeated editions of previously compiled dictionaries, occasionally with some minor alterations.

Turkina (1948 and 1958). The first ELD published after WWII is a repeated edition of the dictionary compiled by Turkina in 1937. This edition published by "LVI" in 1948 is a reprint of the first edition apart from some minor changes adapting it to the demands of the Soviet propaganda. The 1958 edition of this dictionary published by "Imanta" in Copenhagen in 1958 is a reprint of the 1948 edition. Like the first one, both the following editions (1948 and 1958) provide the title *Angliski-latviska vārdnīca* only in Latvian, but in the 1948 edition on the reverse side of the title page it is also given in Russian.

The two editions published during this period, being reprints of the first edition (1937), do not contribute to the development of the tradition, apart from the fact that the publication in Copenhagen, Denmark is the second case in the practice of publishing reprinted editions of ELDs in the Western countries hosting large communities of Latvian emigrants. ELDs are published in exile throughout this period and even after the regaining of independence which testifies to the interest in and the need of ELDs among the Latvians living in exile. For instance, the first dictionary published in exile during this period (in Brooklyn by "Grāmatu Draugs" in 1957 and, according to Jēgers (1977, 53) also in 1964 and 1965) was a reprint of Dravnieks' dictionary (1924) which had not been edited and updated since its first publication. The rest of the exile publications of ELDs will be discussed along with their original publications in Latvia.

Belzēja et al. (1957 and 1966). The largest and most comprehensive ELD of this period is compiled by a group of authors (Belzēja, Curiks, Grīnblats, Jurka, Millere, Stradiņa, Timenčika, Feldhūns) and edited by Stradiņa. Its first edition was published by "LVI" in 1957, the second revised edition by "Liesma" in 1966 (edited by Belzēja, Juhņeviča, Raškevičs, Sosāre and Sprince). There is a notable difference between the number of headwords in the two editions – the first contains approximately 45 000 headwords, while in the second one it has dropped to 42 000. This decrease in headword count is explained not by the concise volume of the second edition, but rather by some

macro-microstructural changes introduced in the second edition (further discussed in Chapter 5). The title of this dictionary *Anglu-latviešu vārdnīca* is provided only in Latvian, but on the reverse side of the title page of the first edition also in Russian, which marks a shift from the previously distinctly marked tendency to provide the title in Latvian and English. This shift could be explained by the fact that in some English-Russian dictionaries published around the same time and used as the lexicographic sources of this dictionary, the title is provided only in Russian (e.g. the dictionary compiled by Arakin et al. (1953)), but it might also be determined by its obvious orientation to the Latvian target audience, namely, schoolchildren and students, as well as everybody who studies English, reads literature, specialized and publicistic texts in the English language. The dictionary firmly establishes the wording of the Latvian title, namely, *Anglu-latviešu vārdnīca* which is further used in all the ELDs published since 1966. Unfortunately during the Soviet period this dictionary undergoes only two editions.

This dictionary is the first one in the tradition to provide a comprehensive list of its lexicographic sources: 12 sources are listed in the Preface of the first edition and 17 in the second. The list in the first edition includes four English general monolingual dictionaries (The Shorter Oxford English Dictionary (1947), Webster's New International Dictionary of the English Language (1948), The Universal Dictionary of the English Language (Wyld 1946), The Concise Oxford Dictionary (1944)), one specialized dictionary of pronunciation (An English Pronouncing Dictionary (Jones 1945)), several general bilingual dictionaries (English-Deutsches Wörterbuch (Wahrig 1955), English-Russian Dictionary (Müller 1953), English-Russian Dictionary (Arakin et al. 1954)), one specialized bilingual dictionary (English-Russian Phraseological Dictionary (Kunin 1955)), and ELDs compiled by Turkina (1948), Dravnieks (1936) and Pelcis (1940). The list of sources for the second edition contains several more recent editions of the previously listed general English monolingual and bilingual dictionaries (e.g. The Shorter Oxford English Dictionary (1956), The Concise Oxford Dictionary of Current English (1959), English-Russian Dictionary (Müller 1965), etc.), several new titles have been added (e.g. Webster's New Collegiate Dictionary (1960), Chambers's Twentieth Century Dictionary (1956), etc.), but some have been dropped, for instance, all the previously listed ELDs. It is also stressed in the Preface to the second edition that the English spelling and style labels have been taken from The Concise Oxford Dictionary of Current English (1959) and the phonetic transcription from *Everyman's English Pronouncing Dictionary* (Jones 1958). This concrete indication of the sources is definitely more informative than

the list of numerous sources which, according to the compilers, have been used, even though it is not quite clear for what purpose and to what extent.

This dictionary was also published in the USA by "Latvju Grāmata" and the consortium of Latvian National Publishers in Waverly (Iowa). Jēgers (1988, 67) mentions two more repeated editions of this publication (2nd ed. (1975) and 3rd ed. (1977)). It was later reprinted also in Hayward (CA) in 1983 by "J. Zītars" and "Ziemeļkalifornijas latviešu ev.-lut. draudze" and once more in 1988 by "Jāņa Zītara grāmatnīca" (Jēgers 1994, 64). The repeated editions, according to the Preface to the 1971 edition, are based on the first and the second edition of the dictionary, though macro- and microstructurally they fully resemble the 1966 edition. The title of the dictionary is provided in both English and Latvian, and it is claimed in the Preface to the 1971 edition that the dictionary is indispensable to (and apparently also targeted at) Latvians, as well as to foreigners who come in contact with Latvians and their culture. The list of lexicographic sources mentioned in this Preface is a combination of the lists found in the first and the second editionary.

Raškevičs, Sosāre and Timenčika (1962). The second largest ELD compiled during this period was the 20 000 headword dictionary compiled by Raškevičs, Sosāre and Timenčika published by "LVI" in 1962 (edited by Rusmane and Sosāre). The second edition appeared in 1964, the third revised and updated edition was published by "Liesma" in 1976 (edited by Birzvalka), the fourth revised and updated edition - "Avots" in 1985 (edited by Birzvalka, Graustina and Sprince), in this edition the number of headwords has grown to 22 000. The regular repeated editions of this dictionary clearly reveal the changes in the publishing sector during the Soviet period – the publishing house "LVI" was renamed into "Liesma" 1965 and its branch responsible for dictionary publishing "Avots" was established in 1980. According to Jegers (1994, 143) the second edition (1976) was reprinted in 1983 in East Lansing by "Gaujas apgāds". Two more editions were published in Latvia after the regaining of independence in 1993 and 1997. In all the three editions published during the Soviet period the title of the dictionary is provided in Latvian and English, though in the first and second edition (1962 and 1964) also in Russian. The Preface of this medium-sized dictionary provides a surprisingly long list of lexicographic sources – in the 1962 edition 17 titles, in 1976 – 11 and in 1985 – 12. The number and to a large extent also the range of the sources is similar to the ones used while compiling and editing the ELD (1957) and its second edition (1966), which could be explained by the fact that two authors of the ELD (1962), namely, Raškevičs and Sosāre, are among the editors of the second edition (1966) of the ELD (1957).

Among the numerous general and specialized English monolingual and bilingual dictionaries listed as the sources of the ELD (1962), five should be specially underscored because they are mentioned in all its editions: *The Concise Oxford Dictionary of Current English* (1959, 1966 and 1972) as the source of the English spelling and style labels and *Everyman's English Pronouncing Dictionary* (1958 and 1972) as the source of phonetic transcription. The same sources are mentioned as the most relevant sources also in both editions of the ELD (1957 and 1966). *Webster's Third New International Dictionary of the English Language* (1961, 1967), *English-Russian Phraseological Dictionary* (Kunin, 1956, 1967) and *English-Russian Polytechnical Dictionary* (1946, 1971, 1979) are also mentioned in all the three editions of ELD (1962). Another major English-Russian dictionary *New English-Russian Dictionary* in two volumes (Galperin et al. 1972) is mentioned as the source of the 1976 and 1985 editions.

It is obvious that the list of lexicographic sources used for each new edition of the dictionary has been carefully updated, however, since only some dictionaries have been identified as the main lexicographic sources, it is not clear to what extent and for what purpose the others have been used. It is also obvious that the lists of lexicographic sources in 1957 and 1962 largely overlap, which can be explained by some of the authors and editors having worked at both projects as well as by limited access to foreign-based lexicographic sources (monolingual English dictionaries) during the Soviet period.

According to the Preface, the dictionary is targeted at schoolchildren, university students, as well as everybody who studies English, reads socio-political, literary and publicistic texts of medium complexity. The similarities in the description of the target audience and the purpose of the ELD (1957) and ELD (1962) are easily noticeable, the difference apparently lies only in the complexity of the texts. The similarities point to the fact that the ELD (1962) has been compiled as an abridged version of the larger and more comprehensive ELD (1957 and 1966).

Juhņeviča and Klētniece (1964). A very small ELD containing around 7500 headwords was published by "LVI" in 1964 with the second edition in 1966. This is the only general ELD with the English part based on an English-Russian dictionary compiled by Benyuch and Chernov in 1961. Its Latvian part was compiled by Juhņeviča and Klētniece. The second edition was based on the 1965 edition of the English-Russian dictionary which had been slightly revised and supplemented with geographical names. The English-Russian dictionary is mentioned as the main and only source of this ELD. The title is provided both in Latvian and English. It is said in the Preface of the dictionary that it contains lexical items frequently used in everyday life and while travelling, as well

as the most widely used phraseology (the amount of phraseological units is limited due to the small volume of the dictionary), names of nationalities and sports terminology. Somewhat unusual is the emphasis on sports terminology in a small dictionary targeted at the people studying the English language at the beginners' level and "everybody who has contacts with English-speaking citizens of foreign countries" (1964, 5) as stated in the Preface.

Birzvalka (1981). Another small ELD containing around 8500 headwords, compiled by Birzvalka was published in 1981 by the newly established publishing house "Avots". This dictionary had no repeated editions, though it obviously serves as the basis for the later E-L, L-E (English-Latvian, Latvian-English) dictionary compiled by Birzvalka and Sosāre (1989). The title is provided both in Latvian and English. Two dictionaries are mentioned as the major lexicographic sources – *Oxford Student's Dictionary of Current English* (1978) as the source of spelling of the headwords and *Everyman's English Pronouncing Dictionary* (Jones 1972) as the source of phonetic transcription. Though, nothing is said about the sources of the headword list, but the claim that it includes lexical items frequently used in everyday life, sports and while travelling, reveals a link with Juhņeviča and Klētniece (1964). This link is not recognized by the author or the publisher of the dictionary. The intended target audience of the dictionary (schoolchildren and the people studying English at the beginners' level) also underlines the possible link between the two dictionaries.

Birzvalka and Sosāre (1989). A small dictionary compiled by Birzvalka and Sosāre and published by "Avots" in 1989 is the only general E-L, L-E dictionary published during the third period. It contains approximately 8000 headwords in each part. This is also the only dictionary published abroad beyond the boundaries of this period.

It is indicated that the E-L part of the dictionary is based on the dictionary compiled by Birzvalka (1981) and that some (not specified) changes have been introduced. Like in Birzvalka (1981), the title is in Latvian and English, the lexicographic sources are the same and the target audience identified also nearly the same, namely, schoolchildren and the people studying the English language (without the previous emphasis on the beginner's level).

Apart from the above discussed general bilingual dictionaries, another small E-L, L-E dictionary (containing just around 3000 headwords in each part) targeted at primary- and secondary-school students, is compiled by Ducmane, Millere and Sīle and published by "Zvaigzne" in 1978, its second edited and updated edition (by Martinsone and Millere) – in 1990. The repeated editions of this dictionary were published by "Zvaigzne ABC" also

after the regaining of independence (in 1992, 1996 and 1997). However, since the macrostructure of this dictionary is based on English course books and supplemented by vocabulary items from extracurricular reading, it does not correspond to the selection criteria of the study and will not be discussed further.

The review of the ELDs published during the third period of the English-Latvian lexicographic tradition, enables us to single out some of its typical characteristic features:

- The author(s), editor(s), place and year of publication and the amount of headwords in the dictionaries published in Latvia is always clearly identified, while in several editions published in exile some of this information can be omitted (e.g. the year of publication in Dravnieks ([1957]) and the number of headwords in Belzēja et al. (1971));
- One major dictionary containing over 40 000 entries and a developed microstructure is published during this period, another dictionary of over 20 000 headwords, the rest of the dictionaries are either very small (under 10 000 headwords) or reprinted editions of dictionaries published in the first period of the tradition;
- Three dictionaries undergo several editions: Belzēja et al. (1957, 2nd ed. in 1966, reprints abroad in 1971, 1975, 1977, 1983 and 1988); Raškevičs et al. (1962, 1964, 1976 (reprinted abroad in 1983 and 1985) two more editions of this dictionary are published after the regaining of independence; a small dictionary by Juhņeviča and Klētniece (1964 and 1966). This testifies to the popularity of these dictionaries as well as the established tradition of succession since most of the repeated editions are edited and updated (but not the reprints published abroad);
- The title of the dictionaries published in Latvia at the beginning of the period is provided in Latvian (and Russian on the reverse side of the title page), but from the beginning of the 1960s the English title is added (except for Belzēja et al. 1966), while the title in Russian is removed. The title in ELDs published abroad is always provided in English and Latvian. The shift away from the already distinct tendency to provide the title in Latvian and English at the beginning of this period is apparently determined by some overall standards in the Soviet bilingual lexicography, in the 1960s it returned to bilingual titles which can be witnessed both in Latvian and in Russian bilingual lexicography. During this period the wording of the title in Latvia (*Anglu-latviešu vārdnīca*) is firmly established and used in all the ELDs published in Latvia since 1966;
- Lexicographic sources are identified in all the dictionaries compiled during this period, often the main sources (mostly one for the spellings and labels and one for

the phonetic description) are identified. The two largest dictionaries compiled by Belzēja et al. (1957) and Raškevičs et al. (1962) provide the longest lists of lexicographic sources including English general monolingual and bilingual (mostly English-Russian and English-Latvian) dictionaries as well as various English and Russian monolingual and bilingual specialized dictionaries. Two large English-Russian dictionaries – *English-Russian Dictionary* (Müller 1953 and 1965) and *New English-Russian Dictionary* (Galperin et al. 1972) are repeatedly mentioned in the lists of lexicographic sources, which might indicate to the extensive use of these dictionaries in the process of compiling of ELDs. In the subsequent editions of ELDs the list of sources, especially the main sources, is constantly updated, new sources are added. The indication of lexicographic sources is definitely one of the characteristic features of the current period.

• The intended target audience and often also the purpose of the dictionary is specified in all the ELDs compiled during this period which points to an established tradition in this aspect.

Despite the limitations imposed on the English-Latvian lexicography by the Soviet rule, this period is characterized by several positive developments: the publication details are clearly identified; the first comprehensive ELD with a developed macro- and microstructure, containing more than 40 000 headwords, is published; three dictionaries undergo several updated editions within this period and beyond its boundaries; the tradition to identify lexicographic sources is firmly established; the intended target audience is systematically indicated.

It is also important to note that several dictionaries published during this and also the previous periods, are published abroad. Even though these publications play a relevant role in maintaining the national identity of the Latvian communities living in exile, since most of them are reprints of previously published dictionaries (occasionally with some minor alterations) they do not contribute to the development of the tradition and as such will not be analysed further.

All the seven ELDs published during this period will be subjected to detailed mega-, macro- and microstructural analysis, though the two editions of the largest one (compiled by Belzēja et al. (1957 and 1966)) with the most developed macro- and microstructure, provide the most valuable material for the analysis.

4.2.4 ELDs Published after Regaining of Independence (1991) up to the Present Day

Since 1991 fifteen general ELDs have been published in Latvia and one abroad. The number is impressive but it should be noted that two of these dictionaries are repeated editions of dictionaries compiled during the Soviet period, six are bidirectional E-L, L-E dictionaries, several of the dictionaries are small and very small. This number could also be imprecise because several of the dictionaries published by "Avots" might be repeated editions of the same dictionary, though it is not always indicated.

After the collapse of the USSR and regaining of independence dictionary publishing in Latvia underwent significant changes. While during the Soviet period there was a limited number of state-owned publishing houses which produced dictionaries, after the regaining of independence "Avots" continued publishing general ELDs, but several new players entered the now open market of dictionary publishing. From 1991 (in fact 1993 when the first ELD was published) ELDs have been published by several more newly established publishing houses: "Livonija-5", "Latvijas Zinību biedrība", "Jāņa sēta", "Ekonomisko attiecību institūts" and "Design and Printing Services". However, this does not mean that many new ELDs have been compiled, just the opposite – many publishing houses produced one or two repeated editions of previously compiled ELDs, especially in the 1990s. Often the same dictionary was published by several publishing houses. The first newly compiled ELD was published by "Jāņa sēta" only in 1995. Almost all the ELDs of this period were published in Riga (apart from one published in New York), though in several cases the place as well as the year of publication are not indicated (these cases will be noted).

Raškevičs et al. (1993 and 1997). The fourth edition of the 22 000 headwords dictionary compiled by Raškevičs, Sosāre and Timenčika (published by "Avots" in 1985) was reprinted in 1993 and 1997. These editions were published by two different publishers ("Livonija-5" (1993) and "Ekonomisko attiecību institūts" (1997)), there are also some changes in the authorship – Raškevičs and Sosāre are mentioned as the compilers of the 1993 edition, while Raškevičs, Sosāre and Dekunova – of the 1997 edition. However, since no changes can be spotted on macro- and microstructural level of these repeated editions, they can be viewed as reprints of the 1985 edition with some minor megastructural changes (reduced front matter in both and the list of geographical names revised and updated by Dekunova in the 1997 edition). No changes can be observed in the title or the target audience of these editions, but unlike the previous editions of the dictionary, these publications do not include the list of lexicographic sources, it is only claimed in the Preface that the latest lexicographic and other sources were used. This

phrase is somewhat vague: it does not specify the concrete sources used; besides, since these are repeated editions of a previously compiled dictionary, the most recent lexicographic sources could have been used only in the process of updating, not compiling of the dictionary.

Birzvalka and Sosāre (1993, 1994, 2000). The small E-L, L-E dictionary compiled by Birzvalka and Sosāre (first published by "Avots" in 1989) was published repeatedly by "Latvijas zinību biedrība" in 1993 and "Avots" in 1994. The 1993 edition is apparently a reprint of the 1989 first edition, but the one published in 1994 is presented as the third revised edition of the dictionary. The information on the sources and the target audience in the Preface to the 1989 and 1993 editions is identical; it is only indicated in the Preface of the 1994 edition that a more recent edition of *Everyman's Pronouncing Dictionary* (1988) was used as the source of English pronunciation.

This dictionary was also published in New York by "Hippocrene books" in 1993 and 2000, though judging by the fact that the 2000 edition is described as the third reprint, the dictionary might have been reprinted between 1993 and 2000. It is claimed in the Preface that this edition has been supplemented with new entries by Maizīte. However, apart from some superficial differences related to visual presentation and promotional information in the back matter, it is difficult to find any changes in the main body. It leads to the conclusion that this most likely is a near reprint of the 1989 edition. Even though the Preface to this dictionary (accordingly, also the description of the target audience which is only Latvian) fully corresponds to the 1989 edition, the back cover blurb states that the dictionary is "an invaluable communication tool for native Latvians living in North America and for native English speaking students, travellers and business people" (back cover of the 2000 edition). This description of the target audience obviously claims that the dictionary is bifunctional, namely, targeted at both Latvian and English audience. However, since no adjustments have been made to the original Latvian-audience-oriented microstructure, such claims do not hold water and prove to be unjustified back-cover-blurb assertions rather than a significant turning point in the English-Latvian lexicographic tradition which so far does not contain any bifunctional ELDs.

Belzēja, Birzvalka et al. (1995, 1996, 1997, 2000, 2004). An ELD compiled by a group of authors (Belzēja, Birzvalka, Jurka, Mozere, Raškevičs and Treilons) and edited by Birzvalka was first published in 1995 by "Jāņa sēta". It should be noted that the compiling of this dictionary started already at the beginning of the 1980s. More than ten years later when the work was finished, considerable changes had taken place in Latvia which also affected dictionary publishing sector. As a result of this the editor of the

dictionary had to look for a publishing house which could publish the manuscript which meanwhile had already spent some time on the shelf. "Jāņa sēta", which had no previous dictionary publishing experience, was selected for this purpose¹⁶. This collaboration turned out to be successful since after the first publication the dictionary went through several repeated editions – the second in 1996, the third in 1997, a reprint in 2000, till its fourth edition was revised and updated in 2004 by Baldunčiks. The dictionary changed the owner in 2004 and its fifth edition was published by "Design and Printing Services" apparently in 2004 (the year is not indicated).

Apart from being the first newly compiled dictionary in this period, for twelve years it was also the largest one (until surpassed by ELD published by "Avots" in 2007) and, perhaps, most importantly, it forms the only line of dictionaries with a clear succession. Initially the dictionary was claimed to contain 45 000 headwords, but after the revision which also included addition of new headwords, the editor, having applied a more precise method of headword counting, came to the conclusion that the dictionary contains only around 42 000 headwords¹⁷ which is indicated in the fourth edition. It is also stated that apart from the main headwords the dictionary contains around 70 000 translated lexical items. As the target audience in the first three editions of the dictionary are indicated "teachers, university students and lecturers as well as [...] translators and others who read English texts and periodicals" (ELD 1995, 6), while in the fourth edition it is slightly modified, namely, the dictionary is meant "primarily for university students and teachers, interpreters and translators, government employees and journalists, and others who read in English" (ELD 2004, 6). It should also be stressed that this is the first dictionary in the tradition which provides in Latvian and English not only the title but also the Preface. Besides, already from the first edition also some titles of metafunctional outside matter components are provided in both languages (Anglu alfabets - English Alphabet; Saīsinājumi — Abbreviations). This approach could point to the bifunctional purpose of the dictionary, however, the fact that the User's guide is given only in Latvian, does not support this presumption. Neither the first three editions (1995, 1996, 1997) and the reprint (2000), nor the revised edition (2004) contain any list of sources, it is only stated that the recently published dictionaries have been used while compiling the dictionary; in the 2004 edition it is added that course books, scientific literature and internet sources have been used.

¹⁶ Personal communication with Rasma Mozere.

¹⁷ Personal communication with Juris Baldunčiks.

Mozere and Millere (2001). A very small bidirectional (L-E, E-L) pocket dictionary compiled by Mozere and Millere was published in Riga by "Zvaigzne ABC" in 2001. It contains approximately 6000 headwords in each part. The title is provided in Latvian and English. The combined Preface and User's guide of the E-L part of the dictionary is given in Latvian and English. Lexicographic or any other sources are not indicated. The intended target audience of the dictionary is very wide, including business people, travellers, students and everybody else who wishes to use the dictionary for quick reference. The small and handy size of the dictionary is specially accentuated.

ELDs published by "Avots" (1997-2007). Ten small and medium-sized ELDs (five of them are bidirectional E-L, L-E dictionaries) and one large dictionary containing around 85 000 headwords were published by "Avots" (the place and year of publication is not always identified) from 1997 till 2007. Two of the dictionaries are compiled by a group of authors, in one case the author has not been identified, but the rest of the dictionaries (according to the information on the title page) are compiled by Kalnina. In some cases several dictionaries contain the same number of headwords (e.g. ELD 2001; 2006) but it is not indicated that these are repeated editions of the same dictionary, which could mean that these are either original dictionaries or the publishers do not view it as important to reveal the succession of dictionaries. The link between the dictionaries with identical and similar amount of headwords will be discussed here and further investigated in the structural analysis of ELDs. Almost in all of these dictionaries the title is provided in Latvian and English, apart from two cases where it is given only in Latvian (ELD (2002) containing 6000 headwords and E-L, L-E dictionary (2003) containing 85 000 headwords in both parts), but the sources are identified only in two cases (E-L, L-E dictionary (2003) containing 85 000 headwords and the large ELD (2007) containing 85 000 headwords). Since several dictionaries published by "Avots" during this period are very similar, some additional criteria will occasionally be added to the already established system of description in order to underline their similarities and differences.

The first ELD published by "Avots" in 1997 is a small dictionary containing around 9000 headwords. Neither the compiler, nor the place of publication is identified. The intended target audience are schoolchildren and the people studying English, going on tours and business trips. However, this dictionary presents obvious similarities with the E-L part of the bidirectional dictionary compiled by Birzvalka and Sosāre published by "Avots" in 1989 and 1994. The Preface and the User's guide are very similar, the illustrative examples in the User's guide (which have been changed) marking the most notable difference. In comparison with the bidirectional dictionary, the headword list of

the 1997 publication is supplemented by nearly 1000 items. These similarities might suggest that this dictionary was intended as a supplemented edition of the E-L part of the bidirectional dictionary by Birzvalka and Sosāre, even though no reference to it is made. The assumption that these publications are related and might be editions of the same dictionary still has to be proved by a detailed analysis of the dictionaries on macro- and microstructural level. The megastructural level is not relevant for determining the fact of succession of these dictionaries/editions because (apart from the metafunctional components) it carries only a supplementary character without a direct influence on the main body of the dictionary.

A small E-L, L-E dictionary compiled by Kalniņa was published in 1999. It is stated on its title page that each part of the dictionary contains around 10 000 headwords, but its Preface (nearly identical with the Preface of the 1997 dictionary) states that there are 9000 headwords in its E-L part. The User's guides of the dictionaries are also identical (apart from some illustrative examples which have been changed). Some obvious differences between the E-L part of the two dictionaries can be observed only on megastructural level (the 1999 edition contains some additional components in the back matter). The copyright page of the L-E part of the dictionary mentions two years – 1993 and 1999. It is specified that the author of the current edition is Kalniņa, it is also notified that "Avots" holds copyright since 1993, but a clear reference to the previous edition of the dictionary is not made.

An ELD containing 10 000 headwords was published in 2001. It is compiled by Kalniņa and edited by Aizstrauta. The information in the Preface and User's guide corresponds almost fully to the one in the ELDs published in 1997 and 1999. The three dictionaries (1997, 1999, 2001) exhibit some minor differences on mega- and microstructural level but the similarity among these publications is obvious. It seems to indicate to the possibility that these publications are repeated editions of the same dictionary, only the 2001 publication is supplemented by nearly 1000 headwords, which could qualify as an enlarged edition. This assumption still has to be proved by a detailed analysis of the dictionaries on macro- and microstructural level.

Another ELD containing 10 000 headwords was published in 2006. It is also compiled by Kalniņa, edited by Lase. This publication (apart from some minute differences, for instance, the omission of the domain label *poligr*.) fully corresponds to the 2001 edition. There is no reason to question the fact that this is a repeated edition of the one published in 2001, though no mention of it is made in the dictionary. A tiny ELD containing 6000 headwords and an exceptionally limited microstructure was compiled by Kalniņa and published in 2002. It has no preface, thus the sources and the target audience are not indicated, though, judging by its limited scope, small size and the list of various signs and their Latvian equivalents in the back matter, it could be compiled to meet the basic needs of tourists travelling to English speaking countries. The title is provided only in Latvian.

An E-L, L-E dictionary compiled by Kalniņa was published in 2002. Its title page claims that it contains 25 000 headwords, but its Preface claims that there are 24 000 headwords (a similar inconsistency in stating the number of headwords was already observed in the bidirectional dictionary (1999)). It should be noted that, apart from some minor changes in the illustrative examples and the list of labels, the Preface and User's guide of the 2002 dictionary fully correspond to the ones in 1997, 1999, 2001, 2006 dictionaries.

Another E-L, L-E dictionary containing 25 000 headwords and compiled by the same author was published in 2005. In this case it is recognized that this is a repeated edition of the 2002 dictionary, though it is not indicated that it has been revised, which leads to the conclusion that it is a reprint of the previous dictionary. The inconsistency between the number of headwords indicated on the title page and in the Preface has been eliminated. Judging by the similar macro- and microstructure and the amount of headwords, these two editions could also be enlarged versions of the 1999 bidirectional dictionary.

An E-L, L-E dictionary containing 22 000 headwords was compiled by the same author and published in 2003 (between the previously discussed 25 000 headword dictionaries). Judging by the nearly identical Prefaces and User's guides, this dictionary could be a slightly reduced variant of the 2002 bidirectional dictionary, but no mention of it is made. Three dictionaries containing a similar amount of headwords (35 000 up to slightly over 40 000) were published from 2002 till 2004: in 2002 (Grabe, Kalniņa and Purviņš – 40 000 headwords), in 2003 a bidirectional dictionary (Kalniņa – 85 000 headwords in both parts) and in 2004 (Kalniņa – 35 000 headwords). In comparison with the previously discussed small dictionaries, these have been expanded on both macro- and microstructural level, the volume of the front and the back matter has also increased considerably, there are still some similarities, but also notable differences in the metafunctional components of the megastructure.

The User's guide of the 40 000 headword ELD compiled by Grabe et al. (2002) is supplemented by several new components, but the information on the structure of the dictionary is almost identical with the previously discussed small dictionaries. The Preface is extended and there are some changes in the description of the target audience which now comprises schoolchildren, students, translators and everyone who reads literature in the English language. The focus on communication while travelling as the purpose of the dictionary has shifted to translation and reading of texts in the English language. The other ELD belonging to this group presents a slightly reduced number of headwords (35 000), is compiled by Kalniņa and was published in 2004. It reveals reductions on all structural levels (fewer headwords, fewer senses in some polysemous entries, a similar but slightly reduced scope of outside matter components), but otherwise it is similar to the 40 000 entry dictionary. The major difference is the intended target audience – now it is a combination of the one encountered in the series of the small dictionaries and in the 40 000 entry dictionary (2002); namely, schoolchildren and students and everyone who reads in English, goes on tours and business trips.

The E-L, L-E dictionary (2003) which apparently contains around 42 000 headwords in each part has no preface, thus the target audience is not identified. Its User's guide is expanded, but the information on the structure of the dictionary reduced. This is also the second dictionary in the "Avots" series which provides the title in Latvian only. This dictionary is the first one in the group of "Avots" dictionaries to identify its lexicographic sources. The list includes three English general monolingual dictionaries (*The New Penguin English Dictionary* (2001), *Webster's Third New International Dictionary* (1981), *The Oxford English Minidictionary* (1995)), one learners' dictionary (*Active Study Dictionary of English* (1988)), several specialized English monolingual dictionaries (e.g. *The Concise Oxford Dictionary of Proverbs* (1998), *Dictionary of Pronunciation* (1981)) and two bilingual dictionaries (Latvian-English dictionary). Some of the dictionaries are surprisingly old, (for instance, the *Dictionary of Pronunciation* (Cornwall Books, 1981), *Latvian-English Dictionary* (Turkina 1962)) or represented by old editions (for instance, *Active Study Dictionary of English* (1988)).

The largest ELD published by "Avots" was compiled by a group of authors (Kalniņa, Kičigins, Kvēle-Kvāle, Linde, Miezīte, Pavlova, Štāle, A. Strazdiņa and I. Strazdiņa), edited by Roze, and it was published in 2007. It is also the largest ELD during the whole period. Employing the system established in the fourth edition of "Jāņa sēta" dictionary (2004), it is stated that this dictionary contains 85 000 headwords and 175 000 translated lexical items. Surprisingly, this large dictionary has a very modest Preface (seven lines) which resembles a short abstract rather than a metafunctional component entitled to provide relevant information on the dictionary. The target audience is not indicated, but a

list of thirty five lexicographic sources is appended to the dictionary. This list includes the whole range of English monolingual general and specialized dictionaries used as the sources of the bidirectional dictionary compiled by Kalniņa (2003), the list has not been updated and still includes editions published at the beginning of the 1980s. The rest of the sources can be divided into the following groups: eleven Latvian monolingual specialized dictionaries – mostly terminological dictionaries representing various fields; twelve general and specialized bilingual and multilingual dictionaries including Latvian-English, English-Latvian, English-Russian language pairs; one bidirectional E-L, L-E dictionary ("Avots" 2003), ELD ("Jāņa sēta" 2004) and the *New English-Russian Dictionary* in three volumes (2001); one Russian monolingual specialized dictionary and one non-lexicographic source. The list of sources is long, but the usefulness of some of the sources for compiling a general bilingual dictionary in 2007 could be questioned. This is the most recently published general bilingual ELD which for the time being closes the list of dictionaries in this tradition.

It is important to note that this is the first period in the English-Latvian lexicographic tradition when apart from printed dictionaries also electronic general ELDs have been produced. The two largest and most relevant general E-L electronic dictionaries are *Tildes Datorvārdnīca internetā (Angļu-latviešu)*¹⁸ and *Angļu-latviešu vārdnīca*¹⁹. Noteworthy is the fact that both dictionaries are based on two editions of the ELD published by "Jāņa sēta" (1995 and 2004). In both cases the dictionary has been supplemented by terminology from several fields, but since the bulk of the dictionary corresponds to the dictionary discussed in this study in its paper format and the distinction between the two media is not among the issues covered in the present study, the electronic dictionaries will not be discussed further.

Apart from the above discussed general bilingual dictionaries, several learners' ELDs are published during this period. Repeated editions of the small E-L, L-E learners' dictionary originally compiled by Ducmane, Millere and Sīle and in 1990 revised and updated by Martinsone and Millere were published by "Zvaigzne ABC" in 1992, 1996 and 1997. A small bidirectional learners' dictionary compiled by Mozere and Millere was published by "Zvaigzne ABC" in 2002. Another very small learners' dictionary compiled by Auziņa (published by "LVAVP" in 2003) is targeted at the learners of the Latvian language. It should be noted that the microstructure of this dictionary contains some traits

¹⁸ Available at <http://dictionary.tilde.lv/default2.htm>.

¹⁹ Available at <http://www.letonika.lv/groups/default.aspx?g=2&r=10331062>.

of an active dictionary. A small ELD compiled by Strongina and targeted at primary school students was published by "Zvaigzne ABC" in 2008.

Noteworthy are also the Latvian versions of the semi-bilingual learners' dictionaries of the *PASSWORD* series: *PASSWORD* English-Latvian Learner's Dictionary (1996 and 2002) which contains both SL definitions and TL equivalents, and the considerably smaller *NEW PASSPORT* English-Latvian Learner's Dictionary (2000 and 2009) which contains TL equivalents and illustrative examples but does not contain the SL definitions. Both dictionaries were published by "Zvaigzne ABC" and their Latvian part translated by Treilona and Mozere.

However, since all these dictionaries are targeted at learners, their macrostructure and often also microstructure (one is even a semi-bilingual dictionary) does not correspond to the selection criteria of the present study, they will not be further discussed.

The general review of the ELDs published during the fourth period of the English-Latvian lexicographic tradition reveals some typical characteristic features of this period:

- The author(s) of the dictionaries (apart from one case ("Avots", 1997)) are always identified, but it is slightly puzzling that many ELDs published by "Avots" have been compiled by one author and some dictionaries with a similar amount of headwords and very similar macro- and microstructure may have different authorship (e.g. ELD (2002) with 40 000 headwords is compiled by Grabe, Kalniņa and Purviņš, but the bidirectional dictionary (2003) with 85 000 headwords in both parts by Kalniņa alone). The editor(s), in comparison with the previous period, are not consistently identified, often mentioned only in the back matter or not at all. The year and place of publication are not consistently indicated either, especially after the year 2000 this information has seemingly lost importance.
- Only several repeated editions of one dictionary (compiled by Birzvalka and Sosāre) are published abroad during this period, all the other ELDs are published in Riga. This reveals that after the regaining of independence the need for publication of ELDs abroad has reduced.
- The number of headwords is always identified; besides, in two dictionaries (the fourth edition of "Jāņa sēta" (2004) and "Avots" (2007)) the number of translated lexical items is also presented. Occasional discrepancies between the information provided on the title page and in the preface can be observed in two "Avots" dictionaries (the ELD (1999) and the 22 000 headword bidirectional dictionary (2003)), but the number of headwords identified in the fourth edition of "Jāņa sēta"

(2004) dictionary is smaller than in the previous editions because of the more precise and "realistic" method of entry counting.

- The first medium-sized ELD compiled by Belzēja, Birzvalka et al. was published by "Jāņa sēta" in 1995 and the only large dictionary containing over 80 000 headwords in 2007 by "Avots". "Jāņa sēta" dictionary is the only newly compiled dictionary during this period which undergoes several editions (1995, 1996, 1997, 2000 and 2004). Apparently, also several "Avots" dictionaries go through several editions, but it is not always recognized by the publishers.
- The title of the dictionaries is provided in both Latvian and English apart from two "Avots" dictionaries (published in 2002 and 2003) where it appears only in Latvian. Apart from these exceptions, the application of bilingual titles in this tradition is firmly established.
- The sources of the dictionaries are provided only in some cases in the repeated editions of the dictionary compiled by Birzvalka and Sosāre (1993, 1994 and 2000) and two dictionaries published by "Avots" (in 2003 and 2007). In several dictionaries it is noted that the latest lexicographic and other sources have been used, but no concrete sources are mentioned (Raškevičs et al. (1993, 1997) and all editions of the ELD published by "Jāņa sēta"). This clearly shows that the approach to the indication of dictionary sources has considerably changed in comparison with the third period and this information is no more viewed as relevant.
- The intended target audience and often also the purpose of the dictionary is specified in most ELDs compiled during this period (apart from three "Avots" dictionaries) which continues the tradition established in the previous period.

This period is characterized by the publication of comparatively many ELDs. However, in the first years after the regaining of independence only repeated editions of previously compiled dictionaries are published. The first notable contribution to the tradition is the ELD published by "Jāņa sēta" in 1995. This is also the only dictionary which during this period undergoes several editions and is considerably updated in 2004. The succession of dictionaries published by "Avots" is somewhat unclear: the similarities among some editions are obvious, but the link is not identified by the publishers.

Even though all the ELDs published during this period will be subjected to mega-, macro- and microstructural analysis, the ELDs published by "Jāņa sēta" (1995, etc.) and "Avots" (2007) having the most developed macro- and microstructure, provide the most valuable data.

CHAPTER 5 Analysis of Structural Levels of English-Latvian Dictionaries

The analysis of the mega-, macro- and microstructure of general ELDs will be performed according to the framework worked out in Chapter 3, though, the initial list of structural elements will be supplemented by components encountered in the ELDs subjected to the analysis in order to reveal the whole set of mega-, macro- and microstructural components present in the ELDs throughout the tradition.

The aim of the structural analysis is to single out the typical mega-, macro- and microstructural features of ELDs traced throughout the tradition. The data collected for each part of the analysis can be found in tables in Appendices 4–6. The conclusions about the development of each structural level of ELDs throughout the lexicographic tradition will be drawn at the end of each subchapter.

5.1 Megastructural Analysis of ELDs

The analysis of the megastructure of ELDs will be carried out according to the framework worked out in Chapter 3. The list of megastructural components belonging to the five basic categories (A. metafunctional components; B. components providing encyclopaedic information; C. components providing linguistic information; D. miscellaneous components; E. components of access structure) has been supplemented by several components encountered in the ELDs.

Prefaces and *user's guides*²⁰ as the most relevant metafunctional components of the outside matter will be discussed in more detail in order to reveal their contents and evaluate how successfully they fulfil their informative function in different periods of the tradition. The information on the number of headwords, the sources of dictionary and the intended target audience have already been discussed in the general review of the tradition. However, since this information is normally provided in the *preface* of the dictionary, it will be mentioned also in this part of the analysis, though not discussed in detail to avoid unnecessary repetition.

The ELDs subjected to megastructural analysis will be divided into the periods established previously. The table reflecting megastructural components and data for analysis is included in Appendix 4.

The analysis of the megastructure of general ELDs is intended to reveal:

²⁰ In this chapter the titles of megastructural components are presented in italics for easier distinction.

- 1. the presence of *prefaces* and *user's guides* as the most relevant metafunctional components of megastructure and their contents;
- the scope of megastructural components encountered in the other three categories of ELDs' outside matter components (those providing encyclopaedic information; providing linguistic information; miscellaneous components), as well as access structure components;
- 3. the typical position of the components (the front or back matter);
- 4. changes in the selection and arrangement of outside matter components in ELDs throughout the tradition.

Thus, the task of the megastructural analysis is to identify, classify and describe the typical outside matter components of ELDs at various periods, analyse the findings and draw conclusions on the general tendencies in the development of ELD megastructure. However, in this analysis no attempt will be made to compare the information encountered in the *preface* and *user's guide* to the actual contents of the dictionaries since the macro-and microstructural features of ELDs will be analysed separately.

Megastructure of ELDs of the first period (1924–1940)

Seven general ELDs were published during the first period of the tradition, three contain twenty to thirty thousand headwords, the others are considerably smaller but all, even the smallest ones, contain some outside matter components.

During the first period not all the general ELDs contain such metafunctional components (category A in the table of data for megastructural analysis) as *preface* and *user's guide*. Only four out of seven dictionaries contain *preface* and four contain *user's guide* (often without any distinct title), while only one dictionary in this period (Pelcis 1940) contains both *preface* and *user's guide*. Thus, the dictionaries normally contain either the *preface* or the *user's guide*; besides, their contents and functions can be similar. For instance, the information on the word-stock or types of lexical items included in the dictionary which is normally provided in *preface*, in some cases appears in *user's guide*. It reveals that the distinction between *preface* and *user's guide* as two distinct metafunctional components of megastructure is not yet firmly established.

The information provided in the *prefaces* of the four dictionaries which contain this component in most cases (apart from the ELD compiled by Pelcis (1940) which contains a relatively informative preface) can be described as scanty and fragmentary. Only occasionally the *preface* informs about the purpose of the dictionary, the outside matter components, the number of headwords, the target user group, the word-stock included (e.g.

the scope of vocabulary layers (temporal, register, field, etc.), the types of lexical items (derivatives, phraseology) included in the dictionary). It should be noted that in two dictionaries (Dravnieks (1924) and Turkina (1937)) some information on the word-stock can be found in *user's guide*, which could be explained by the fact that these dictionaries do not have a *preface*. The only exception is the information on the sources of the dictionaries – in five out of seven dictionaries at least one source is identified – almost always it is the source of English pronunciation found in these dictionaries, obviously viewed as a relevant aspect in the description of the English language.

Only three dictionaries contain a clearly distinguished user's guide (often without a particular title). Accordingly, information on the macro- and microstructural peculiarities of the dictionary, structure indicators and means of textual condensation is provided only occasionally. However, such typical component parts of the user's guide as the pronunciation key and the list of labels are provided very often: the former in all seven dictionaries, the latter in five. In the first two dictionaries of the tradition (Dravnieks (1924) and Godiņš (1929)) the pronunciation key presents two different sets of elaborately described pronunciation symbols, but in the other five dictionaries the International Phonetic Alphabet symbols were applied. Pronunciation key is the only component of user's guide found in all the ELDs of the first period, underlining the fact that the indication of English pronunciation was viewed as very important from the very beginning of this lexicographic tradition. Five dictionaries provide a *list of labels*, but it should be pointed out that while grammar labels and metalinguistic abbreviations (e.g. sk., u.c., etc.) are provided in most lists, domain, regional, register and semantic labels only in three cases. Style, temporal, attitude and frequency labels can be encountered very seldom, mostly only in one dictionary (Dravnieks (1924) which contains the longest list of labels).

The outside matter components providing encyclopaedic information (category B) are very scarcely presented in the ELDs published during this period, but when so, they always appear in the back matter (during this period and henceforward throughout the tradition). Only three dictionaries provide such lists of lexical items: *numerals* (Dravnieks 1924), *abbreviations* (Turkina 1937), *days of the week, months, continents, countries and nations of Europe* (Akuraters 1940). It should be noted that in this period outside matter components appear mostly in the front matter of dictionaries and only half of dictionaries contain some back matter components.

The components providing linguistic information (category C) are encountered much more frequently. They are almost always given in the front matter of the dictionary: *pronunciation rules, list of principal forms of irregular verbs* and *the rules for conjugation* *of verbs* are the most widespread ones. The ELD by Turkina (1937) presents the widest scope of this type of components. Apart from providing a *list of principal forms of irregular verbs*, it focuses mostly on providing grammar rules: *conjugation of verbs and auxiliary verbs, plural of nouns, gender of nouns* and *degrees of comparison of adjectives*. The comparatively large number of outside matter components containing linguistic information on the English language reveals that the compilers attempted to adjust the dictionaries to the needs of language learners. There are almost no components of unclear function (category D) in the ELDs of the first period.

Apart from the alphabetic arrangement of headwords encountered in all the general ELDs, the only other component of the outer access structure (category E) found in four dictionaries of the first period is the running heads – the first and/or the last headword or its part is provided on the top of the page.

The scope of megastructural components encountered in the ELDs published in this period is quite limited, though the components providing linguistic information obviously prevail. There is a lack of clear distinction between the metafunctional components (*preface* and *user's guide*), considerable development of these components and a clear tendency towards the unification of their contents.

Megastructure of ELDs of the Second Period (1945–1947)

Six general ELDs were published in the second period, but since the ELD by Roze and Roze was published three times by different publishers and these editions have megastructural differences, each edition has been considered separately, though it should be noted that one of these editions (published in Stockholm in 1946) does not contain any outside matter at all.

The lack of clear distinction between *preface* and *user's guide*, as well as the overlapping of their contents and functions, can be observed also in the second period. Only four of the dictionaries contain a clearly distinguished *preface* and three a *user's guide*, but only one (Kalnbērzs 1945) both of them. In the four dictionaries where *preface* is provided, it includes information on the target user group and the purpose of the dictionary, though normally generalized to Latvian refugees willing to study the English language individually and in organized courses. The *prefaces* very seldom contain some information on the word-stock included, the number of headwords, the outside matter components. However, often special emphasis is put on the difficult conditions in which the dictionary was produced.

The information provided in *user's guide* in most dictionaries is reduced to *pronunciation key* and the *list of labels* (usually including only the field and grammar labels, and metalinguistic abbreviations). The systematic inclusion of pronunciation key obviously continues the tradition of the first period, though in the second period the IPA is often slightly modified due to limited access to specialized phonetic symbols in the process of printing. Only two dictionaries (Kalnbērzs (1945) and Kundziņš (1946)) provide also some information on macrostructure, non-typographical structure indicators and regional labels.

The scope of megastructural components providing encyclopaedic information is extended and now contains lists of *abbreviations, numerals, days of the week, months, continents, countries and nations of Europe, British vs. American items and proper nouns.* The lists always appear in the back matter, but these megastructural components are not yet employed systematically, since only *days of the week* and *months* appear in two dictionaries, the rest only once.

The *list of principal forms of irregular verbs* and the *English alphabet* are the only components providing linguistic information and encountered in at least three dictionaries. Unlike in the first period, these components are provided both in the front and back matter. Two dictionaries contain lists of vocabulary items which could be viewed as miscellaneous components with a somewhat unclear function. Krādziņš (1945) excels with an exceptionally long list of the following components: *measures and weights; dates; signs and warnings; family members; time periods; household items; food, beverages and meals; human body; clothing; domestic animals; professions and occupations.* These lists of vocabulary items belonging to various lexical fields could have been provided in an attempt to meet the needs of Latvian refugees living in the British and American occupation zones and planning to emigrate to various English-speaking countries.

The structure components *running heads* and *table of contents* are employed only in two cases, which definitely reveals that any other access routes apart from the alphabetical arrangement of headwords have not been viewed as relevant. However, a small ELD compiled by Kalnbērzs (1945) is the first one in the tradition to provide a *table of contents*. The scope of megastructural components encountered in the ELDs published during the second period is rather limited that could be explained by the difficult conditions in which these dictionaries were published, as well as the volume and expenses constraints.

Megastructure of ELDs of the Third Period (1948–1990)

Six general ELDs were published during the period; most of them had several editions. When repeated editions present some megastructural differences, they will be considered separately.

In contrast to the previous periods, almost all the ELDs contain a preface and user's guide. The two exceptions are: the repeated edition of the ELD by Turkina (1948) does not contain *preface*, but Juhneviča and Klētniece's (1964 and 1966) contain a combination of preface and user's guide. In all the other cases the distinction between these metafunctional components is clearly marked. What concerns the contents of these components, some distinct tendencies can be observed. With a few exceptions the *preface* normally contains information on the purpose of the dictionary, the word-stock included (in most cases information is provided also on the scope of vocabulary layers and types of lexical items included), lexicographic sources, the number of headwords and the target user group. The user's guide, now found in all the dictionaries, with a few exceptions provides information on the macro- and microstructure of the dictionary, typographical and nontypographical structure indicators employed and means of textual condensation. The pronunciation key and list of labels are separate elements of the user's guide. In contrast to the previous periods when the *pronunciation key* was treated as an essential part of the user's guide and was present in all the dictionaries apart from Roze and Roze (1946) which had no outside matter components, it is missing in three small ELDs published during the third period (Juhņeviča and Klētniece (1964) Birzvalka (1981); Birzvalka and Sosāre (1989)). This might be explained partly by the small size of the dictionaries, but also, possibly, by the fact that the potential users' knowledge of the IPA (employed in ELDs since the beginning of the 1930s) might have already been taken for granted. However, pure oversight can not be ruled out either. The scope of the types of labels presented in the user's guide has definitely expanded and normally includes the field, regional, register, semantic (or meaning type), grammar labels and metalinguistic abbreviations. Style, temporal and attitude labels appear only in the largest dictionaries by Belzeja et al. (1957 and 1966) and Raškevičs et al. (1962, etc.). It can be concluded that the metafunctional components of the megastructure of the ELDs compiled during this period were considerably developed, became much more informative, as well as more uniform both in structure and contents.

The scope of megastructural components providing encyclopaedic information was not extended, on the contrary, it reduced to three lists of vocabulary items – *abbreviations, geographical names* and *personal names*. The former two appear in four out of six ELDs

of the period, the latter in three of them. It certainly indicates the tendency of unification of encyclopaedic components at the back matter.

Like during the previous period, the components providing linguistic information on the English language can be found both in the front and the back matter. However, in contrast to the previous periods, only the *English alphabet* is provided in four out of six dictionaries published during the period. The rest of the linguistic components, predominantly focusing on grammar rules (*conjugation of verbs and auxiliary verbs, plural of nouns, degrees of comparison of adjectives, word-formation, list of principal forms of irregular verbs*), are encountered only in one or two dictionaries. The dictionary by Turkina (which establishes a link with the first period since its first edition was published in 1931) contains the longest list of linguistic components. This seems to indicate that some outside matter components providing linguistic information lost their importance and were no more regularly included, some new appeared, but were not employed frequently enough to testify to some overall tendency.

Only the list of *measures and weights* and *British and American monetary units* can be mentioned as representatives of the category of miscellaneous components, but this category is represented very scarcely.

Among the outer access structure components the *running heads* obviously gained popularity and appeared in all the dictionaries apart from the smallest one by Juhņeviča and Klētniece. The *table of contents*, on the contrary, is encountered only in the back matter of the three editions of Belzēja et al.

The megastructure of the ELDs published in this period is characterized by a clear distinction between the metafunctional components (*preface* and *user's guide*), considerable development of these components and a clear tendency towards the unification of their contents. Obvious development and the tendency towards unification can be observed in all the categories of outside matter components.

Megastructure of ELDs of the Fourth Period (1991– the Present Day)

Fourteen general ELDs have been published during the period, some of them have had several editions (which will be treated separately only if they have some megastructural differences). Two dictionaries (by Raškevičs et al. and by Birzvalka and Sosāre) are repeated editions of the dictionaries compiled in the previous period. Several dictionaries published by "Avots" might be repeated editions of the same dictionary, but since in most cases it has not been indicated by the publishers, in this part of the analysis they will be treated as separate dictionaries.

All the ELDs contain user's guide and most of them preface. During this period the repeated editions of the ELD compiled by Raškevičs et al. (1993 and 1997) and the ELD published by "Jāņa sēta" (compiled by Belzēja et al. and first published in 1995), especially its fourth edition (updated and edited by Baldunčiks in 2004), contain the most developed *preface* providing important information on the purpose of the dictionary, the number of headwords and the target user group, the word-stock included, as well as the scope of vocabulary layers and types of lexical items included. In contrast, in some of the small dictionaries published by "Avots" (e.g. Kalniņa 2002 (6000 headwords), Kalniņa 2002 (25 000 headwords)) the preface comprises just a few lines and is not marked as a separate metafunctional component. Surprisingly, some of the largest ELDs published by "Avots" also either do not contain any preface at all (Kalnina 2003 (85 000 entries in E-L and L-E part)), or else it is very small, superficial and resembles a short abstract (Kalnina et al. 2007). Thus the prefaces normally contain information on the purpose of the dictionary, the number of headwords, the target user group; in less than half of the dictionaries some information on the word-stock is included, or the sources of the dictionary are listed. The information on the outside matter components in the back matter of the dictionary is provided in most of "Avots" dictionaries, but in most of them in the user's guide rather than in preface.

Similarly to the previous period, the *user's guides* in most of the cases are informative with an obviously unified structure and contents, but in several dictionaries published by "Avots" these metafunctional components are very similar or even identical. Thus, the *user's guides* usually contain information on macro- and microstructure, typological and non-typological structure indicators, means of textual condensation, pronunciation key and a list of labels which in most cases includes a wide scope of various labels (field, regional, register, semantic, grammar) and metalinguistic abbreviations, but style, temporal and attitude labels can be found only in the dictionaries containing more than 10 000 headwords.

Several smaller dictionaries by "Avots" do not contain the *pronunciation key* or in some E-L, L-E dictionaries it is provided only in the front matter of the L-E part of the dictionary where an inexperienced user might not look for it if only the E-L part of the dictionary is being consulted. A similar tendency was already observed during the previous period. It can be concluded that also during this period the metafunctional components of the megastructure (especially the *user's guides*) are informative (with the exception of the *pronunciation key* sometimes missing), with a unified structure and contents, but in several cases they are nearly identical and repetitive.

The megastructural components providing encyclopaedic information are mostly reduced to three lists of vocabulary items – *abbreviations, geographical names* and *personal names* which appear in at least half of the dictionaries, mostly excluding the smallest ones. This choice of encyclopaedic components appended at the back matter continues the tradition of unification observed already in the previous period. It should be noted that in this period another form of unification of encyclopaedic components can be observed. Namely, there are some components present (though not systematically) only in "Avots" dictionaries, for instance, *nationalities and languages, numerals, countries and territories* and *EU terminology*.

The components providing linguistic information on the English language, like in the previous periods, can be found both in the front and the back matter. The *English alphabet* is the only component encountered in most dictionaries (apart from the smallest "Avots" dictionaries), the rest of the components can be found almost exclusively in "Avots" dictionaries, including: *pronunciation rules, conjugation of verbs and auxiliary verbs, plural of nouns, contracted forms, punctuation in English, list of principal forms of irregular verbs, list of irregular plural forms of nouns, list of irregular degrees of comparison of adjectives.* Thus, regardless of the volume, the intended target audience and purpose, the dictionaries produced by this publishing house often contain the same set of outside matter components providing linguistic information.

The category of miscellaneous outside matter components is presented only in "Avots" dictionaries. The following miscellaneous components appear most frequently: *time (clock), measures and weights, fractions and decimals, numerals in mathematics, calculations, temperature, English words given in dictionary without phonetic transcription.* They also appear in dictionaries of various volume, intended target audience and purpose, which reveals a certain tendency towards repetitiveness.

The amount of outside matter components of encyclopaedic, linguistic contents, as well as miscellaneous components, especially in some "Avots" dictionaries, is ample, the back matter can reach up to 80 pages. The inclusion of such megastructural components in general ELDs reveals that these dictionaries have been intended as a tool in acquiring the foreign language from both linguistic and cultural perspective, however, the function of some components is unclear (for instance, the list of *English words given in dictionary without phonetic transcription*, because the pronunciation of these words can be found in the dictionary), neither it is clear why in some dictionaries the compilers decided to provide multiple additional lists of lexical items (e.g. *nationalities and languages, countries and territories, EU terminology*) when the ruling tendency in contemporary

lexicography is to incorporate such vocabulary items in the common headword list of the dictionary (Landau 2001, 149). It should also be noted that the inclusion of numerous additional wordlists occasionally leads to an unnecessary repetition, for instance such lexical items as Croatian, Czech, Danish, Dutch, English, Esperanto, Estonian (to mention only some of them) in the ELD ("Avots" 2007) appear as headwords as well as in the additional wordlist *nationalities and languages*.

The *running heads* are still the most widespread outer access structure components and can be encountered in most dictionaries published in this period, but only three provide the table of contents which is still rather rarely employed in ELDs. However, a new development in the field of access structure components is the introduction of thumb indexes in most "Avots" dictionaries.

The megastructure of the ELDs published during this period is characterized by the formation of a certain set of typical outside matter components. A particular set of components is encountered only in "Avots" dictionaries which points to a strong tendency towards the unification of the set inside this line of dictionaries.

Summary of Typical Megastructural Features of the English-Latvian Lexicographic Tradition

Metafunctional components. During the first two periods of the tradition (1924–1940 and 1945–1947) not all the dictionaries contain the two major metafunctional components – *preface* and *user's guide*. Neither is a clear distinction between them yet established, which often results in similar contents and functions of the two components. Only starting with the third period (1948–1990) *preface* and *user's guide* can be found in nearly all the dictionaries and they are clearly distinguished.

What concerns the contents of the *prefaces*, in the first period only the information about the source of English pronunciation is provided in most dictionaries. In the second period details about the target user group and the purpose of the dictionary are also supplied, and the difficult conditions of publication in exile are emphasised. In the third period the contents of *preface* are further enriched (by information on the word-stock included and lexicographic sources used), and a certain unification of contents and structure can be observed. The fourth period demonstrates a further unification of contents and structure, the *preface* has become an informative metafunctional component, though in several dictionaries it is very scanty.

In the first two periods the most typical components of *user's guides* are the *pronunciation key* and the *list of labels*. In the third period the contents are enriched by

information on the macro- and microstructure of the dictionary, typographical and nontypographical structure indicators and means of textual condensation applied. In the third and fourth period for the first time in the tradition some small dictionaries do not contain the *pronunciation key*, which could be explained by the small size of the dictionaries and the presumed familiarity of the users with IPA symbols. *User's guides* are unified in structure and content-wise, but the tendency towards unification of the set of metafunctional components is the strongest in "Avots" dictionaries.

Components providing encyclopaedic information. In the first period encyclopaedic components are very scarce, in the second the scope is extended, but they are still not systematically applied. In the third and fourth period their scope is reduced to a basic set of three elements - abbreviations, geographical names, personal names. In the fourth period some encyclopaedic components are found only in "Avots" dictionaries, with a strong tendency towards unification of the set and even repetitiveness. From the first period onwards the encyclopaedic components are situated almost exclusively in the back matter. Components providing linguistic information. In the first period the ELDs contain an ample number of linguistic components, the three most popular ones being the list of principal forms of irregular verbs, pronunciation rules and conjugation of verbs. It reveals that dictionaries have been intended as useful tools in foreign language studies. In this period linguistic components are mostly situated in the front matter. In the second period the set of linguistic components is mostly limited to the *list of principal forms of irregular* verbs, the English alphabet; they appear both in the front and back matter. In the third period the *English alphabet* is the only component found in nearly all dictionaries, the others appear sporadically in the front and back matter. The *English alphabet* is the only component found in nearly all dictionaries also during the fourth period, other linguistic components are found almost exclusively in "Avots" dictionaries which demonstrate a strong tendency towards unification, occasionally also repetitiveness of linguistic

components. In this period linguistic components can still be found in both front and back matter, but preference is given to the back matter. In the course of the tradition the linguistic components have been shifted from the front to the back matter, which possibly points to their decreasing importance.

Miscellanous components are encountered mostly in the second and fourth period, almost always in the back matter. The second period excels with numerous lists of vocabulary items covering various lexical fields. Though their function is not always clear, their inclusion might be related to the needs of the refugees planning to move to Englishspeaking countries. In the fourth period miscellaneous components of unclear function are found only in the dictionaries published by "Avots", exhibiting a tendency towards unification of this category of components, but at times also repetitiveness.

Components of access structure. While in the first period *running heads* are found in half of the dictionaries, in the second period they appear only in one dictionary, which might be explained by the technical constraints faced by the publishers in exile. However, in this period the *table of contents* is used for the first time. In the third period *running heads* are found in almost all the dictionaries and become a typical access structure element. The *table of contents* is used in this period only once. In the fourth period *running heads* are still applied in almost all the dictionaries (except for the smallest ones), the *table of contents* – in three dictionaries. Thumb indexes are introduced in the majority of "Avots" dictionaries (apart from the smallest and largest ones), thus introducing another access structure component.

Megastructure and Type(s) of ELDs

The information provided on the megastructural level of dictionary is less relevant for determining the type(s) of ELDs than the one found on the microstructural level, however, megastructuctural analysis does provide some useful clues for determining whether these dictionaries are active or passive. Even though in some dictionaries the *preface* is in both Latvian and English and occasionally also the titles of some outside matter components are bilingual, the contents of the metafunctional components (preface and user's guide) focus solely on the description of the English language. The components providing encyclopaedic and linguistic information are also targeted at the description of English. Still, there are some exceptions when an attempt has been made to suggest a potential bifunctionality of the dictionary on the megastructural level (the edition of the ELD by Belzēja et al. (1957) published in Waverly, USA in 1971 and the bidirectional ELD by Birzvalka and Sosāre (1989) published in New York, USA in 1993 and 2000). The former states in its *preface* that it could be used by Latvians and foreigners (without a further specification of this user group) and provides both *English* and *Latvian alphabets*. The latter claims in its back cover blurb (but not in the *preface*) that it is targeted at native speakers of both Latvian and English. However, since the body of both dictionaries remained unaltered on the microstructural level, the claims on the possible bifunctionality remain on the megastructural level only, and as such cannot be taken seriosly.

Considering the contents of megastructural components of the ELDs (apart from the above mentioned metafunctional components in ELDs published abroad), all of them

describe the English language, all are monofunctional, targeted at the Latvian audience and as such fall in the category of passive dictionaries.

5.2 Macrostructural Analysis of ELDs

The analysis of the macrostructure of ELDs will be carried out according to the framework worked out in Chapter 3. The set of criteria for macrostructural analysis contains five basic categories (A. types of main and secondary headwords; B. means of textual condensation; C. the principle of alphabetization; D. types of entries and techniques of secondary headword arrangement; E. criteria for presenting homonymous headwords). The list of the main criteria has been supplemented by some additional sub-criteria in order to reveal the macrostructural features characteristic of ELDs.

The ELDs subjected to megastructural analysis will be divided into the periods established previously. The macrostructure of ELDs will be viewed diachronically to reveal changes which have taken place throughout the tradition.

When the micro- and macrostructural levels overlap, it had to be decided to which part of the analysis the concrete issue should be attributed in order to avoid unnecessary repetition. Namely, the main and secondary headwords (their presentation and arrangement, as well as the types of entries (flat and tiered) resulting from this arrangement) are discussed in the framework of macrostructural analysis, but the lexicographic description of the main and secondary headwords is dealt with in the framework of microstructural analysis. However, due to the lack of typographic distinction, it is often difficult to set apart the secondary entries from the illustrative material (this issue will be discussed further in the course of analysis). The table reflecting macrostructural components and data for analysis is included in Appendix 5.

The lexicographic material for the analysis has been selected from all the general ELDs analysed. The initial headword sample list has been taken from ELD ("Jāņa sēta", 2004). The following samples of headwords have been selected for closer scrutiny in various parts of the analysis:

a full list of main and secondary headwords²¹ (from the beginning of letter L till the headword leather which constitutes approximately 400 main headwords in the ELD published by "Jāņa sēta" in 2004) is the basic sample for determining the types of main and secondary headwords, textual condensation strategies, principles of

²¹ The selection of a certain number of headwords for the comparison of macrostructural features in various dictionaries is similar to the one applied by such scholars as, for instance, Ilson (1990, 35-36), Jackson (2002,78–79), Svensén (2009, 370ff.).

alphabetization, the types of entries (flat or tiered) and techniques of secondary headword arrangement, criteria for presenting homonymous headwords;

- samples of separate polysemous headwords which normally contain many secondary headwords (cut, set, eye and draw) are selected for closer analysis of textual condensation strategies, principles of alphabetization, the types of entries and techniques of secondary headword arrangement;
- to detect the criteria for presentation of homonymous headwords, the following homonyms have been selected for closer analysis (lie, mine, row, lead, wind, march March, may May, miss Miss);
- to detect the inclusion of inflected forms as headwords, the following irregular verb inflections (*was/were, bought, drove/driven, sank/sunk, woke/woken*) and irregular plurals of nouns (*children, feet, men, mice, wives*) have been selected for analysis.

Macrostructure of ELDs of the first period (1924–1940)

The macrostructure of the seven general ELDs published in the first period contains single and multiword items as the main headwords (category A in the table of data for macrostructural analysis). From the group of single items the following types of main headwords – single lexical and grammatical words, derivatives, closed and hyphenated compounds – are the most relevant ones since they appear in all the dictionaries of this and the following periods. These types obviously form the basis of the main headword list in the ELDs throughout the tradition and as such will not be further discussed while analysing the contents of the main headword list in the dictionaries of other periods.

The irregular inflected forms constitute another subgroup of single item headwords. In the first period four dictionaries (the three largest ones – Dravnieks (1924), Turkina (1937), Pelcis (1940) and a smaller one compiled by Curiks and Bangerska (1937)) include irregular inflected forms of verbs and irregular plurals of nouns as the main headwords. These are mostly cross-reference entries which lead to the infinitive of the verb or the singular form of the noun. Abbreviations appear as the main headwords in four dictionaries (but not in Turkina's dictionary where they are provided in the back matter), productive affixes in five, but in both cases their number is very limited. The most popular contracted forms of auxiliary verbs are encountered only in the three largest dictionaries of the period. A comparatively broad scale of multiword items is encountered in the main headword lists during this period. Open compounds (e.g. **liaison officer**, **locus standi**) are encountered in four dictionaries, but one ELD (Curiks and Bangerska 1937) even presents as the main headwords such collocations as **at once**, **at noon**, **at last**, as well as some longer phrases

like, for instance, **last but one**, **set at liberty**. Phrasal verbs (e.g. **leave off**, **depend on**, etc.) are in the main headword list in three smaller dictionaries, but their number is so limited that it reminds of an experiment rather than a systematically applied approach. Idiomatic expressions (e.g. **lay hold of, by and by, by heart**) are encountered in the headword lists of two small dictionaries, but their number is also far from ample.

To conclude, during this period a rather wide scope of multiword items are included in the main headword lists of dictionaries, but their number is quite small and apart from open compounds other multiword items appear almost entirely in small dictionaries which often contain a limited number or no secondary headwords. This reveals that the inclusion of these multiword items in the main headword list might be an attempt to compensate for the absence of secondary headwords.

Secondary headwords. Derivatives and compounds (closed and hyphenated) belong to the group of single item secondary headwords. Derivatives appear as secondary headwords in four out of seven dictionaries, closed and hyphenated compounds in five. From the group of multiword items idioms are encountered in five dictionaries, phrasal verbs in three, collocations in four (only in two cases presented in bold which might imply that when not highlighted, they might have been intended as illustrative material rather than secondary headwords). Open compounds are provided as secondary headwords (in bold) only in one dictionary (Pelcis 1940).

Such secondary headwords as derivatives, compounds and phrasal verbs are almost always presented in bold, collocations and idioms less frequently. Since bold type is commonly applied for marking various types of single and multiword items in the entries of ELDs during this period, it might be viewed as a criterion for distinguishing among secondary headwords and illustrative material. But as it is applied inconsistently (e.g. in Dravnieks's dictionary phrasal verbs and idioms appear without any typographical distinction), it still has to be approached with caution.

The following means of textual condensation and representation symbols are used (category B): vertical stroke and slash are used in two dictionaries to distinguish the changeable part of the main headword; but swung dash, dash or slash are used in four dictionaries to replace the headword in the secondary headword or example. If the headword is capitalized, it is presented by the first letter, for instance in Turkina (1937) – [**labour**] – $L\sim$, $L\sim$ Department). These representation symbols can also replace the unchanged part of the headword and introduce the inflection of the derivative (e.g. in Dravnieks (1924), [**lenient**] – ~ence, ~ency, ~ty) or the second root of the compound (e.g. in Turkina (1937), [**lady**] – ~-bird, ~-help). Only in one dictionary (Pelcis 1940) all single

and multiword item secondary headwords (derivatives, compounds, collocations, phrasal verbs and idioms) appear in full form and are marked in bold.

The principle of alphabetization (category C). During the first as well as the following periods of the tradition the letter-by-letter principle of alphabetization is used in ELDs, which implies that the spaces between the multiword items are not taken into consideration and they are perceived as solid words. However, the arrangement of the main and especially secondary headwords is not always strictly alphabetical. As an example of an extreme case of breach of alphabetical order in the main headword list a small dictionary compiled by Godiņš (1929) can be pointed out, where the headword **drawer** in the main headword list is followed by the compound **chest of drawers**, but **large** – by the idiom **at large**, which obviously destroys the alphabetical sequence. While this is a highly untypical case in the English-Latvian lexicographic tradition, the breach of alphabetical order among secondary headwords is much more frequent.

Types of entries and techniques of secondary headword arrangement (category D). All the ELDs of this period contain flat entries (without any secondary headwords), but five of them contain also tiered ones. In the tiered entries the secondary headwords are arranged using niching or nesting. In four dictionaries an attempt is made to arrange the secondary headwords (mostly it refers to compounds) according to the niching technique, not destroying the alphabetical order of the macrostructure. In some entries the goal is achieved, for instance, in Turkina (1937) the headword dress-ball is followed by compounds ~-box, ~-circle, ~-coat and ~-clothes which do not destroy the alphabetical order since the next main headword is dresser. In other cases it is not, for instance, in Roze and Roze (1931) the headword ear is followed by compounds ~-ring or ear-drop, ear-lap, ear-wax which are not only not arranged in strict alphabetical order, but also destroy the common alphabetical order of the macrostructure since the next main headword is earl. Only one dictionary (Turkina 1937) applies the principle of listing when presenting compounds: each secondary headword appears in a new line. The rest of the secondary headwords in five dictionaries (apart from the two small ones which do not contain any tiered entries) are arranged according to the nesting technique which does not attempt to observe strict alphabetical order. Only the clustering principle (all secondary headwords arranged in succession) is applied in these cases.

The criteria for presenting homonymous headwords (category E). Close scrutiny reveals that the difference in meaning, pronunciation and capitalization of items with identical spelling are viewed as criteria for presenting them as homonyms in all seven dictionaries of this period, though in some their application is not systematic (chiefly Akuraters (1940)

and Pelcis (1940)). The criterion of different meaning and etymology is viewed as sufficient for presenting lexical items as homonyms in six dictionaries, though only in three of them it is applied systematically. Different parts of speech are always presented in a common entry. Homonyms are numbered only in Dravnieks' dictionary, in others they are neither numbered, nor distinguished by any other means.

Macrostructure of ELDs of the second period (1945–1947)

Six small general bilingual dictionaries were published during the second period of the tradition. The ELD compiled by Roze and Roze was repeatedly published by three different publishers in Germany and Sweden, but since these reprints display no macrostructural differences apart from the representation symbols used for textual condensation and some differences in layout, no other distinction will be made among these reprints and they will be perceived as one edition of the dictionary.

The types of main headwords. The basic types of single-item headwords (single lexical and grammatical words, derivatives, closed and hyphenated compounds) form the basis of the main headword list also during this period. The only difference is that in the headword lists of two dictionaries (Kalnbērzs (1945) and Hunter Blair (1946)) there are very few instances of closed and hyphenated compounds. The irregular forms of verbs appear in the headword lists of three dictionaries, the irregular plurals of nouns in four, abbreviations in two (though only one dictionary provides a list of common abbreviations in its back matter), contracted forms and productive affixes also in two dictionaries. The scope of multiword main headwords is quite limited, namely, open compounds are found only in two dictionaries, in three dictionaries the headword list contains collocations, for instance, **ashamed, to be of; deal, a great; account for; unheard of**. However, in some dictionaries (due to unconventional layout of the entry) it is difficult to detect whether a phrase or collocation has been intended as the main or secondary headword.

The situation that various types of single-item headwords appear in comparatively few dictionaries (often in two out of six) could be explained by the fact that all the dictionaries in this period are small or very small and the compilers tried to restrict the headword list to absolute minimum in order to reduce the volume and printing costs. The scope of multiword units is reduced in comparison with the first period, but the omission of phrasal verbs and idioms from the main headword list is rather a general tendency of shifting these multiword items to the level of secondary headwords than an omission due to the limited volume.

Since the dictionaries are small with a very limited entry structure, the scope of single item and multiword secondary headwords is also limited – only half of the dictionaries contain derivatives, compounds, phrasal verbs and idioms. In most no typographic distinction is made (presumably, mostly due to technical restrictions). Collocations which appear in the entries of three dictionaries without any typographical distinction were most likely intended as illustrative material rather than secondary headwords.

What concerns the textual condensation and representation symbols, a slash or vertical stroke is used in half of the dictionaries to separate the changeable part of the main headword, while a dash or a slash replaces the main headword and introduces the inflection of the derivative or the second root of the compound in the secondary headword.

In nearly all the dictionaries letter-by-letter principle of alphabetization is used, only one dictionary (Krādziņš 1945) occasionally applies the word-by-word system when presenting multiword items in the main headword list, though this is obviously an exceptional case.

All the dictionaries contain flat, and all but one at least a small number of tiered entries. Only the technique of nesting is used in the tiered entries, i.e. no attempt was made to arrange the main and secondary headwords in strict alphabetical order. In all the dictionaries the clustering principle is applied (apart from one dictionary where the listing principle is occasionally attempted). The preference for the space-saving clustering secondary headword arrangement is understandable in conditions when the volume had to be reduced to minimum to cut printing costs.

As to the criteria for presenting homonymous headwords, due to the very small amount of headwords in the dictionaries of this period, the number of instances is insufficient for passing judgement about the application of a certain criterion. However, the difference in meaning, etymology, pronunciation and capitalization of items with identical spelling are clearly the most typical criteria for presenting lexical items as homonyms, even though they are not applied systematically. Different parts of speech are always presented in a common entry. During this period homonyms are not numbered or distinguished by any other means.

Macrostructure of ELDs of the third period (1948–1990)

From the six general bilingual dictionaries in the third period only one (Turkina 1948) is a repeated edition of a dictionary compiled during the first period. However, no changes affecting its macrostructure have been introduced since its first publication. The first edition of the largest ELD of the period (Belzēja et al.) was published in 1957, the second

in 1966 and a near reprint (without any noticeable changes on the macrostructural level) of the second edition in 1971. Since considerable changes affecting the macro- and microstructural level of the dictionary were introduced in the second edition, at some point the two editions will be treated separately. The dictionary by Raškevičs et al. (1962) had three more editions without any macrostructural changes, therefore the editions will not be treated separately. Three small dictionaries are published during this period, and two of them: Birzvalka (1981) and an E-L, L-E dictionary by Birzvalka and Sosāre (1989) will be treated as one since in the E-L part of the latter no macrostructural changes were introduced.

The basic types of single item main headwords (single lexical and grammatical words, derivatives, closed and hyphenated compounds) form the basis of the main headword list as in the dictionaries of the previous periods and will not be further discussed. However, significant changes have affected the treatment of irregular inflected forms of verbs and irregular plurals of nouns – in this period they are found in all ELDs, the same concerns contracted forms of auxiliary verbs. Abbreviations, on the contrary, disappeared from the main headword list (with a single exception of a small dictionary by Juhņeviča and Klētniece (1964)) and are normally provided in the back matter. Productive affixes were also removed from the headword list and are found only in Turkina's dictionary, but Raškevičs et al. (1962) provide a summary on word-building patterns and productive affixes in the front matter. Open compounds are the only multiword items which appear as main headwords in nearly all the dictionaries apart from Turkina's.

The number of single-item secondary headwords was also considerably reduced – derivatives appear as secondary headwords only in one small dictionary, in the rest they were integrated in the main headword list. Closed and hyphenated compounds are given as secondary headwords in half of the dictionaries. What concerns the inclusion of multiword items as secondary headwords, open compounds and collocations are occasionally included but never distinguished typographically, which makes it doubtful that they were intended as secondary headwords. Phrasal verbs are included as secondary headwords in all the dictionaries of the period, but they are not always typographically distinguished. Their presentation also differs. Idioms are present in all the dictionaries, in most cases at least part of them are given in a separate section at the end of the entry, but they are never typographically distinguished, which raises doubts about their distinction from illustrative material.

The only means of textual condensation and representation symbols applied are two vertical strokes separating in two dictionaries the changeable part of the main headword,

and a swung dash to replace the main headword in the secondary headword. Thus the swung dash can introduce the inflection of the derivative, the second root of the compound or the particle of the phrasal verb. In three dictionaries the headword in the secondary headwords is presented by the first letter.

In all the dictionaries the letter-by-letter principle of alphabetization is applied. During this period it refers to the arrangement of the main headwords and of phrasal verbs and compounds, but not idioms which are not systematically arranged alphabetically, even when placed in the special section at the end of the entry.

All the dictionaries contain both flat and tiered entries. It should be stressed that in one dictionary (Raškevičs et al. 1962) the alphabetical order of compounds is strictly observed, i.e. they are arranged employing the niching technique. It is also used in Turkina's dictionary, though not so systematically; this is also the only dictionary where compounds are arranged employing the principle of listing. In all the other dictionaries for secondary headwords the more space-saving clustering principle is used.

In all the dictionaries of the period the difference in meaning, pronunciation and etymology of items with identical spelling are viewed as criteria for presenting lexical items as homonyms and in nearly all dictionaries (except for the repeated edition of Turkina's dictionary) the homonymous headwords are presented as separate headwords and marked by letters (e.g. **lag^a**, **lag^b**, **lag^c**). When apart from differing in meaning homonyms also differ in capitalization, they are presented as separate headwords but not marked by letters.

The first edition of the ELD by Belzēja et al. (1957) is the only one in this period as well as in the whole tradition where, apart from the above mentioned criteria of homonymy, different parts of speech are presented in separate entries and, accordingly, also viewed as homonyms (e.g. $last^{a}(n)$, $last^{b}(n)$, $last^{c}(a)$, $last^{d}(v)$).

Macrostructure of ELDs of the Fourth Period (1991 – the Present Day)

From the fourteen ELDs published in the fourth period only two (Raškevičs et al. and Birzvalka and Sosāre) are repeated editions of dictionaries published during the previous period. When dictionaries are published repeatedly during this period (Raškevičs et al., Birzvalka and Sosāre, and Belzēja et al.) they are not treated separately since they do not exhibit any notable macrostructural differences. It has been decided to treat as repeated editions also two small dictionaries published by "Avots" – Kalniņa (2002 and 2005 (E-L, L-E, 25 000 entries)) and Kalniņa (2001 and 2006, 10 000 entries) since they contain an

identical number of headwords and do not reveal any other differences on macrostructural level, even though the compilers acknowledge the succession only in one of the cases.

All the dictionaries of this period contain the same set of basic types of single-item main headwords (single lexical and grammatical words, derivatives, closed and hyphenated compounds), so this group will not be further discussed.

The irregular forms of verbs can be found in all the dictionaries, while irregular plurals of nouns are not included in the headword lists of six small dictionaries (containing approximately 12 000 and less headwords) published by "Avots". While in the previous period abbreviations were found in the main headword list of only one small dictionary, now they are encountered in two dictionaries: a small pocket dictionary (Mozere and Millere 2001) having no list of abbreviations in the back matter and the largest ELD of the period (Kalnina et al. 2007) which includes some abbreviations in the main headword list, but also contains a special section in the back matter. The inclusion of abbreviations in both places is somewhat puzzling: occasionally information is unnecessarily doubled (e.g. LSD, O.K., etc. appear in both locations). Contracted forms are included in the headword lists of nearly all the dictionaries apart from two very small ones, but productive affixes in only one dictionary. A new development in the headword lists of this period is the inclusion of trademarks (e.g. MauserTM) in the headword lists of the fourth edition of Belzēja et al. (2004, edited by Baldunčiks) and the largest and most recent of "Avots" dictionaries (Kalnina et al. 2007). Open compounds are the only multiword items included in all the dictionaries.

From the set of single-item secondary headwords only compounds are encountered in the repeated editions of Raškevičs et al. dictionary, which reveals that this type of items has almost completely disappeared from the secondary headword lists of ELDs.

The set and presentation of multiword secondary headwords has been considerably unified – collocations are included in most dictionaries (apart from one very small dictionary of around 6000 headwords which has no secondary headwords), but more likely as illustrative examples since no typographic distinction has been made. Phrasal verbs appear in all the ELDs of the period (apart from the smallest one) and are arranged in a highly unified manner – the main headword is presented by the first letter, the particle is given in bold. The only differences can be found in the number of phrasal verbs (which normally depends on the volume of the dictionary) and their place in the entry (either at the end of the numbered senses or in a separate section). Idioms, likewise, appear in all the dictionaries apart from the smallest one, their presentation is also highly unified – the main headword is presented by the first letter or an inflection introduced by a swung dash (if its

form differs from the main headword). Part of idioms usually appear with the various senses of the headword, others in a special section at the end of the entry, but since they are not typographically distinguished, often it is unclear which have been meant as secondary headwords and which as illustrative material.

The means of textual condensation and representation symbols are also highly unified – two vertical strokes separate the changeable part of the main headword in nearly all the dictionaries, but the swung dash replaces the main headword and introduces the inflection of the derivative in examples and idioms. However, during this period the swung dash is used less often since the main headword in phrasal verbs and idioms in most dictionaries is presented by the first letter with a full stop.

The letter-by-letter principle of alphabetization is applied to both the main headword list and the list of secondary headwords (compounds can be found only in Raškevičs et al.) and phrasal verbs, but idioms are not always presented in a strict alphabetical order. For instance, in the idiom section of the headword **long** in Belzēja et al. (1995) and its subsequent editions the alphabetical order is observed at least partly – *in the l. run, l. drink, l. ears, l. face*, etc. However, the idioms for the headword **lion** are not arranged alphabetically – *l. in the path (way), the British L., the* ~'s share, to put one's head in the ~'s mouth, to twist ~'s tail.

All the dictionaries contain both flat and tiered entries (except for the small dictionary without the secondary headwords which has only flat entries). Apart from the arrangement of compounds in Raškevičs et al. (1993 and 1997) where the niching technique has been applied, in the rest of the dictionaries the secondary headwords (phrasal verbs and idioms) are normally arranged employing the nesting technique. In all the dictionaries the secondary headwords are presented employing the clustering principle.

In all the dictionaries of this period the difference in meaning, etymology, pronunciation and capitalization of items with identical spelling are viewed as criteria for presenting them as homonyms and all homonymous headwords are presented as separate headwords and marked by letters (except when homonyms differ in meaning and capitalization, then no other indication apart from the capitalization is employed). This aspect, like many other aspects of macrostructure during this period, is also marked by a very distinct tendency towards unification.

Summary of Typical Macrostructural Features of the E-L Lexicographic Tradition

The types of main headwords. The basic set of single-item main headwords (single lexical and grammatical words, derivatives, closed and hyphenated compounds) remains

unchanged throughout the tradition. The irregular inflected forms of verbs and irregular plurals of nouns constitute a subgroup of single-item main headwords which mostly introduce cross-reference entries leading to the infinitive of the verb or to the singular form of the noun. During the first two periods these items appear in the headword lists of nearly half of the dictionaries, in the third period they are included in all the dictionaries. However, during the fourth period the irregular plurals of nouns have been removed from the headword lists of the small dictionaries (containing approximately 12 000 and less headwords) published by "Avots". It can be concluded that these items are typically included in the main headword lists of ELDs since the third period, but the removal of the irregular plural forms of nouns from the small dictionaries apparently reveals a method of headword list abridgement, as well as points to unification of the headword lists in dictionaries published by "Avots".

Abbreviations, productive affixes and contracted forms appear in the main headword lists of ELDs from the beginning of the tradition. While in the first period they are included in nearly half of the dictionaries, in the second period only in one third, which might be explained by the small volume of these dictionaries and an attempt to reduce the headword lists to minimum in order to reduce printing costs. However, in the third period only the contracted forms are included in nearly all dictionaries while productive affixes and abbreviations have been almost completely removed from the headword lists to the outside matter components. The fourth period displays a similar tendency, though abbreviations have returned to the headword lists of two dictionaries, in one of them even in both locations – the main headword list and a special component in the back matter. The elimination of abbreviations from the headword lists of ELDs in the third period can be explained by the fact that during this period they were systematically relegated to a special section in the back matter. The fourth period exhibits some feeble signs of movement of these items back to the main headword list, which would correspond to the general tendency in contemporary lexicography.

Multiword-item main headwords. At the beginning of the tradition this group includes open headwords, but occasionally also collocations and longer phrases, phrasal verbs and idiomatic expressions. More multiword-item headwords are found in small dictionaries with very few or no secondary headwords and more than half of the dictionaries in the first period correspond to this description. In the second period the list is reduced to open compounds, collocations and some phrases, though due to the unconventional layout encountered in most of the dictionaries of this period the distinction between main and secondary headwords is not always obvious. In the third period the scope of multiworditem main headwords is reduced to open headwords which appear in nearly all dictionaries, in the fourth period in all of them. The rest of the multiword items have acquired the status of secondary headwords or illustrative examples. It can be concluded that the scope of multiword-item main headwords has been considerably reduced since the beginning of the tradition.

The types of secondary headwords. Derivatives and compounds (closed and hyphened) form the set of single-item secondary headwords from the very beginning of the tradition. However, if during the first two periods both types of items are found in at least half of the dictionaries, in the third period compounds can still be found in nearly half of the dictionaries, but derivatives only in one. In the fourth period compounds are found as secondary headwords only in one dictionary. It can be concluded that the scope and frequency of application of single-item secondary headwords have considerably reduced during the third and fourth period, since these items have gradually been moved to the main headword list.

The scope of multiword secondary headwords has remained unchanged since the beginning of the tradition: open compounds, collocations, idioms and phrasal verbs. However, open compounds, even though occasionally present in tiered entries throughout the tradition, have almost never been typographically distinguished. The same is true of collocations highlighted only in two dictionaries during the first period, but later they appeared in most dictionaries without any typographic distinction. This leads to the conclusion that they must have been intended as illustrative material rather than secondary headwords. Phrasal verbs are provided in nearly half of dictionaries during the first two periods and nearly all dictionaries during the last two, often (though not always) they are presented in bold, which obviously points to their status of secondary headwords. Idioms also appear in more than half of dictionaries during the first two periods and nearly all dictionaries during the last two periods, but they have almost never been typographically marked, which makes their status as secondary headwords doubtful. Besides, during the third and especially the fourth period part of idioms appear with the separate senses of polysemous headwords, while others in a special section at the end of the entry, which further confuses the issue.

The following means of textual condensation and representation symbols are used: vertical stroke, slash (during the first two periods), two vertical strokes (in the last two periods) to distinguish the changeable part of the main headword. The swung dash, dash or slash are used during the first period, dash and slash (most likely due to limited

technical means) during the second period in order to replace the main headword and introduce the inflection of the derivative or the second root of the compound. In the third period swung dash remains the only representation symbol (mostly representing the headword in compounds) but more and more often the headword is presented by the first letter. During the last period the swung dash is rarely used (mostly to replace the headword and introduce the inflection of the derivative in examples and idioms) and the headword is almost always presented in secondary headwords by the first letter. Thus, in the last two, especially the fourth period, a considerable unification of representation symbols can be observed.

The leading approach to alphabetization throughout the tradition has been the letter-byletter principle. However, it has been applied mostly to the main headword list, but even there it is breached in several dictionaries during the first and the second period. During the third period the letter-by-letter principle is applied to the main headword list systematically; it is also applied to the arrangement of secondary headwords – compounds and phrasal verbs. The arrangement of idioms is only partly alphabetical. In the fourth period the arrangement of main headwords and phrasal verbs is also fully alphabetical, some progress is made also in the arrangement of idioms, however, there are still many exceptions.

All the ELDs contain flat and most (apart from some small dictionaries without any secondary headwords) also tiered entries. In all the periods apart from the second one an attempt was made to arrange compounds as secondary headwords according to the niching technique which does not destroy the alphabetical order of the macrostructure. It should be noted that during the first period it was attempted in nearly half of dictionaries (there are comparatively many dictionaries which include compounds as secondary headwords in this period), but not always implemented successfully. Only one dictionary in the first period applies the principle of listing to compounds – each secondary headword appears in a new line, the rest apply the more space saving principle of clustering. In the third and the fourth period there are also some rare cases of niching, in one dictionary (Raškevičs et al. 1962) it is applied very systematically, but it should be stressed that during these periods single-item secondary headwords are less frequently used. The rest of the secondary headwords are normally arranged according to the nesting technique, not attempting to observe strict alphabetical order, and only the clustering principle (all items arranged in succession) is applied in these cases.

The criteria for presenting homonymous headwords have remained almost unchanged throughout the tradition: the difference in meaning, etymology, pronunciation and capitalization of items with identical spelling have been viewed as criteria for presenting these items as homonyms. But during the first two periods the application of these criteria is often not systematic. The third period excels with the fact that in one dictionary (the first edition of Belzēja et al. (1957)) different parts of speech are presented in separate entries and viewed as homonyms. Homonyms (apart from the ones with different capitalization – here and henceforward) are numbered in one dictionary, no distinction is applied in the second period, homonyms are marked by successive letters in most dictionaries in the third period and in all the dictionaries of the fourth period, which again reveals a distinct tendency towards unification.

This analysis leads to the overall conclusion that the first period can be viewed as the time of formation of the macrostructural features, the development during this period is quite uneven and marked by various solutions and even experiments. The second period is not marked by many innovative solutions, which can be explained by the small volume of the dictionaries and the difficult conditions in which they were compiled and published in refugee camps. In the third period the development of macrostructural features continues and a unification of various macrostructural aspects can be observed. The fourth period is marked by a strongly established tradition and distinct unification on the macrostructural level of dictionaries, though in dictionaries published by "Avots" it can also lead to repetitiveness, namely, the amount of headwords varies, but the types, presentation and arrangement of headwords are often identical.

5.3 Microstructural Analysis of ELDs

The analysis of the microstructure of ELDs will be carried out according to the framework worked out in Chapter 3. The set of criteria for microstructural analysis contains four basic categories and several subcategories (A. the core structures of entries: A.1 left-core formal structure, A.2 right-core semantic structure: A.2.1. semantic-pragmatic section, A.2.2 contextual section; B. position of examples and MWEs (integrated, unintegrated or partially integrated); C. general organization principle of the entry; D. types of entries). This framework allows adding elements to the lists of left-core formal structure and right-core semantic structure to reflect the real set of elements which slightly changes in the course of the tradition. In fact, it is even difficult to predict all the elements before the beginning of analysis, i.e. the list is to some extent open-ended.

The ELDs subjected to microstructural analysis will be grouped into the periods established previously and the microstructure of ELDs will be viewed diachronically to reveal changes throughout the tradition.

It should be noted that category D. (types of entries) for microstructural analysis partly overlaps with category D. (types of entries and techniques of secondary headword arrangement) for macrostructural analysis. However, in macrostructural analysis this section focuses on the presentation and arrangement of main and secondary headwords and the types of entries (flat and tiered) resulting from this arrangement, while in microstructural analysis attention is paid to the problems related to the distinction between the main and secondary headwords and their lexicographic description. The table reflecting microstructural components and data for analysis is provided in Appendix 6. The entry samples quoted are numbered for easy reference.

The following entries have been selected for closer scrutiny: the full list of entries (from the beginning of letter L to the headword **leather**, which comprises approximately 400 main headwords in the ELD published by "Jāņa sēta" in 2004), however, additional entries can be studied in order to verify the presence of certain microstructural elements not encountered in the selected sample.

Microstructure of ELDs of the First Period (1924–1940)

The analysis of the basic microstructural components is first divided according to its core structures (category A. in the table of data for microstructural analysis) – the left-core formal structure (category A.1) and the right-core semantic structure (category A.2). The left-core formal structure contains information on spelling, morphology, the part of speech and pronunciation of the headword. From the seven general ELDs published in the first period only the four larger ones (Dravnieks (1924), Roze and Roze (1931), Turkina (1937), Pelcis (1940)) provide spelling variants of the headword (e.g. laic, laical, toward(s)), the others do not reflect spelling variants of the headword. This period excels with a wide scope of grammatical information provided on the headword, which shows that the dictionaries are intended as useful tools in language learning. Most (except for the two smallest ones) provide the principal forms of verbs and irregular plurals of nouns – this type of grammatical information is later established as a typical element of the left-core formal structure of ELDs. It is of interest that one dictionary (Roze and Roze 1931) provides also the regular inflections of verbs and nouns, and the third person singular inflections of verbs - none of this information is encountered later in the tradition (apart from the repeated editions of this dictionary during the second period), and indeed, it often looks redundant²²:

(1) **lap, -s** (...) *n*. stērbele; auss ļipiņa; ..

²² here and elsewhere in this subchapter the entry samples are often abridged to avoid unnecessary repetition of microstructural elements.

(2) **last, -s, -ed** (...) *v.i.* ilgt; glabāties; pietikt; ...

Nearly half of the dictionaries indicate the transitivity of verbs (see the above quoted entry **last**) – an information type which is hardly ever encountered in other periods. Another notable feature of this period is the symbol ' \Box ' used to indicate that an adverb can be formed regularly by adding the inflection –ly:

(3) lame (...) 1. □ klibs; trūcīgs, nepilnīgs. 2. sakropļot, izķēmot; padarīt tizlu. (Dravnieks 1924)

It is noteworthy that in Dravnieks (1924) the symbol is applied without a part of speech label, but in Turkina (1937) it is combined with the part of speech label '*a*.'. Part of speech labels appear to be a problematic aspect of grammatical description of the headword in the first period: only three dictionaries apply them consistently, two selectively (not for all parts of speech), two small dictionaries have none at all. Part of speech sections are numbered (using Arabic numbers) only in the two largest dictionaries of the period. The International Phonetic Alphabet is firmly established as the means of indicating English pronunciation in this period in most dictionaries, though the first two ELDs (Dravnieks (1924) and Godiņš (1929)) use different systems of phonetic transcription, Dravnieks even chooses to present the pronunciation with the help of Gothic letters. The stress pattern is indicated in nearly all the dictionaries, though only one provides both primary and secondary stress.

The right-core semantic structure (category A.2) is further divided into the semanticpragmatic and contextual sections. The semantic-pragmatic section focuses on the presentation of the meaning of the headword. In the first period the senses of polysemous headwords are not numbered, the equivalents representing various senses are marked only by a semicolon or a comma if the meaning is closely related (as in samples 1,2 and 3). Even after the introduction of sense numbering in later periods, the distinction between the equivalents with a more closely related meaning (a comma) and a more distant meaning (a semicolon) is retained. Only the four largest dictionaries provide various usage labels, in one dictionary (Dravnieks 1924) alongside with the usual abbreviations occasionally special symbols are applied instead of field labels, for instance, crossed swords to indicate military terms, locomotive for railway terminology, a flower for botanical terms, etc. Similar symbols were applied in dictionaries at the beginning of the 20th century, for Sachs-Villatte Enzyklopädisches französisch-deutsches und instance. deutschfranzösisches Wörterbuch (1911) (quoted in Svensén 2009, 85). However, this is the only instance when such symbols have been applied in the English-Latvian lexicographic tradition.

All dictionaries of the first period include semantic equivalents, the larger ones can even provide several possible equivalents for one sense, for instance, 'aizbraukt, aizceļot' in:

(4) **leave** (...) 1. atļauja; (ari ~ of absence) atvaļinājums; atvadīšanās. 2. (*irr.*) v/a. atstāt; novēlēt; atļaut; atvēlēt; to ~ off – mitēties; atmest (parašu); v/n. aizbraukt, aizceļot; aiziet (no vilciena); beigties.. (Dravnieks 1924)

This approach is later firmly established in the tradition (apart from the smallest dictionaries). Explanatory equivalents normally applied when a semantic equivalent is not available in the TL, can be found in all the dictionaries, but less frequently in the small ones (where the potentially 'difficult' headwords could have been omitted).

(5) **bath-brick** (~-*br1k*) s. metalu spodrināmais akmens. (Turkina 1937)

Pelcis' (1940) dictionary excels with a very frequent application of this approach, at times the explanatory equivalents can be of considerable length and remind of encyclopaedic glosses rather than bilingual dictionary equivalents:

(6) **laity** (`leiiti) publika, pretstatā amata locekļiem, pm. mācītājiem, ārstiem, advokātiem. (Pelcis 1940)

The translational and functional equivalents can be encountered only in those dictionaries which provide examples and MWEs, namely in four dictionaries, three smallest ones do not contain these microstructural elements, accordingly, also translational and functional equivalents.

(7) **leave** (*li:v*) **1** s. atvaļinājums; šķiršanās; atļauja; by your \sim ! – ar jūsu atļauju; I beg \sim to inform – atļaujos paziņot; to give \sim - atļaut, piešķirt atvaļinājumu; to take \sim - atvadīties; to take French \sim - aiziet neatvadījies; **2.** pret. un p.p. left (*left*) v.a. ļaut; laist; atstāt; atmest; nothing is left but... – nekas cits neatliek kā...; I have nothing left – man nekas nav palicis; left on hand – pāri palicis; to \sim word – likt teikt; to \sim **alone** – atstāt mierā; atstāt vienu; to \sim **off** – beigt, mitēties; to \sim **out** – izslēgt; aizmirst; v.n. aizbraukt, aizceļot; beigties.. (Turkina 1937)

This entry sample contains both translational and functional equivalents, for example, the contextual use of the headword in the phrase by your $\sim! - ar j\bar{u}su at a juju$ is translated by one of the semantic equivalents retaining the same part of speech, which makes it a translational equivalent, while in to take *French* $\sim - aiziet neatvad \bar{i} jies$ the grammatical category as well as the wording differs (a functional equivalent). If no decontextualized equivalence is possible, only contextual translation is sometimes provided in the two largest dictionaries of the period:

(8) down (...) 4. s.: the ups and ~s of life – dzīves nepastāvība, likteņa grozība.. (Dravnieks 1924)

(9) down (...) 4. *prp*. ~ the country – uz laukiem (braukt).. (Turkina 1937)

TL glosses are encountered in the microstructure of most of the dictionaries, but are not always typographically or otherwise (e.g. with the help of brackets) distinguished from equivalents, for instance,

(10) legion (...) n., leģions (seno romiešu kara pulks apm. 4200–6000 vīru).. (Roze and Roze 1931)

(11) a (...) nenoteicamais artikuls līdzskaņa priekšā.. (Turkina 1937)

(12) kukri (...) smags līks kaujas nazis Gurka strēlnieku pulkos Indijas armijā. (Pelcis 1940)

In the first sample the encyclopaedic gloss is not typographically distinguished but put in brackets, in the second the explanatory gloss (resembling the metalinguistic definition in a monolingual dictionary) is not distinguished from equivalents, in the third sample the extended explanation obviously reaches beyond a mere explanatory equivalent. The various types of glosses in this period are often not clearly distinguished from equivalents. Even though the separate senses of polysemous headwords are not yet numbered, both types of sense indicators (specifiers and collocators) are found in most dictionaries, though more frequently in the largest ones.

(13) **account** (....) 1. (calculation) rēķināšana; (izdevumu) aprēķins; (bill) rēķins; rēķinums; konts; atbildība (par darbību); (report) ziņojums; .. (Dravnieks 1924)

(14) acme (ækmi) s. (slavas) augstums; (slimības) krīze.. (Turkina 1937)

(15) land (...) sauszeme (pretēji jūrai); izkāpt (no kuģa).. (Pelcis 1940)

Additional information distinguishing among various senses of polysemous words is provided with the help of specifiers, for instance, *par darbību, pretēji jūrai, no kuģa*. Collocators, for instance, *izdevumu, slavas, slimības*, provide the possible collocations (depending on the part of speech these are typical subjects or objects) of the headword in a particular sense, often in a somewhat generalized way which can be further specified depending on the context (e.g. a particular illness, etc.). Dravnieks' dictionary is the only case during the whole tradition where SL synonyms (e.g. *calculation* and *bill*) are provided as specifiers. Such specifiers could testify that the dictionary is non-directional or, in other words, targeted at both speech communities, however, a closer inspection of the microstructure reveals that it is not the case.

The first period excels by occasional explicit usage notes in two dictionaries:

(16) Vārdi ar prefiksu **inter** apzīmē vai nu kādu savstarpēju darbību, vai iejaukšanos vai darbību starplaikā. (Akuraters 1940)

(17) **Lord** visu dižciltīgo tituls, lietots kad nezin vai negrib minēt ļoti zemu tituli, pm. baronu aizvien sauc par lordu, bet hercogu sauc pareizā titulī. Pēc likuma dižciltīgu ar lorda tituli nemaz neeksistē. Ir salikteņi: **Lord chief Justice** augstākais tiesnesis .. (Pelcis 1940)

This microstructural element does not repeat in any ELDs outside the present period (apart from the reprint of Akurater's dictionary in the second period).

The contextual section of the right core semantic structure focuses on the application and presentation of illustrative examples and various MWEs. Less than half of the dictionaries (only the largest ones) contain items which could be viewed as illustrative examples (mostly collocations and short phrases or so-called clause examples). No sources of examples are indicated during this and the following periods, leading to the conclusion that all the examples have been invented by the compilers. It should be noted that in this and the later periods the frequent lack of typographical distinction between illustrative examples and secondary headwords makes it difficult to distinguish among them. In four dictionaries at least some secondary headwords are typographically distinguished (mostly phrasal verbs, for instance, sample 7), but in three cases all the translated items in the entry are marked in bold, which also makes the distinction problematic. Idiomatic phrases and phrasal verbs are provided at the end of the entry or a part of speech section in five dictionaries, in the small dictionaries their amount can be very modest. Only one dictionary (Turkina 1937) presents part of idioms (those not related to specific senses) and phrasal verbs in a separate section, which in cases when the amount of these secondary headwords is exceptionally high, can be even presented in a separate entry. This is the only instance of this approach during the whole tradition, apart from the repeated edition of the dictionary in 1948:

(18) **cut** īpatnējos izteicienos: to cut **across** – iet šķērsām; iet pa taisnāko ceļu; to ~ **after** – skriet atpakaļ; to ~ **down** – nosviest zemē; nocirst; nopļaut; saīsināt; samazināt (izdevumus); pazemot; ... to ~ **loose** – atrauties; atmest; ... (Turkina 1937)

It is somewhat difficult to judge about the types of microstructure (category B.) in the ELDs of the first period determined by the position of the examples and MWEs. Two dictionaries have partially integrated microstructure since the examples and MWEs appear with separate senses as well as in a section at the end of the entry, two dictionaries have very limited illustrative material, but three do not contain any illustrative material at all.

Dictionaries can be divided into micro- and macrostructure-oriented ones (category C.) according to the presentation of parts of speech in one common entry (microstructure-oriented) or in separate entries as homonyms (macrostructure-oriented). All the dictionaries published in the first period are microstructure-oriented, a somewhat exceptional case is Turkina's (1937) dictionary where some entries are divided into two parts to distinguish the secondary entries (idioms and phrasal verbs); however, this division is not related to the distribution of parts of speech of a single headword.

The types of entries (category D.) can be divided in flat, tiered (the latter containing secondary headwords) and cross-reference entries which serve as a mere indication to another entry. All ELDs of the period (and the whole tradition) contain flat entries, while two of the seven dictionaries of the first period do not contain tiered entries due to the absence of secondary headwords. More than half of the dictionaries contain cross-reference entries, for example,

(19) lives (...) s. pl. no life. (Turkina 1937)

(20) lain (...) *p.pt.* gulošs (no lie) (Curiks and Bangerska 1937).

If the first sample is a typical cross-reference entry, the second one is an entry with a cross reference (to entry 'lie').

The microstructure of the ELDs of the first period can be described as varied and uneven, different solutions are 'tried out', almost no unification has taken place. The two largest dictionaries (Dravnieks (1924) and Turkina (1937)) have established a firm foundation for the further development of the microstructure of ELDs.

Microstructure of ELDs of the Second Period (1945–1947)

Six dictionaries were published during the second period, two of them (Roze and Roze (1931), and Akuraters (1940)) were reprints of dictionaries compiled during the previous period, Rozes' dictionary was published three times but since the editions are very similar, they will be viewed as one apart from the cases when some minor changes have been implemented in any of the editions. It means that this period is tightly related to the previous one, besides all the dictionaries are small with rather (or in some cases very) limited microstructure, which is largely determined by the difficult circumstances in which they were compiled and published.

The left-core formal structure. Alternative spellings of the headword are indicated only in half of the dictionaries. The most relevant type of grammatical information on the headword is the list of principal forms of irregular verbs found in most of the dictionaries. The rest of the grammatical information types appear only in Rozes' dictionaries (irregular and plural forms of nouns, regular inflections and the third person singular inflections and transitivity of verbs) which to large extent were typical only of this dictionary also in the first period. Four of six dictionaries have no part of speech labels, two have no labels at all. This clearly shows that grammatical description of the headword is not viewed as relevant. Pronunciation indicated with IPA is provided in all the dictionaries, however, in most cases it has been modified due to the limited access to the special symbols applied in IPA:

(21) large (la:dzh)..; library (laibräri).. (Kalnbērzs 1945)

(22) **labour** = -leibë..; **marriage** = -märidž (Krādziņš 1945)

The stress pattern is indicated in nearly all the dictionaries, though the approach is not uniform (e.g. the stress can be indicated before or after the stressed syllable, a hyphen '-' can be used before the stressed syllable, for instance, in sample (22)).

The right-core semantic structure, semantic-pragmatic section. The study reveals that the senses of polysemous words are still not numbered, Kalnbērzs (1945) where homonyms are presented in a single entry and numbered being the only exception:

(23) light (...) 1. gaisma; gaišs; spīdēt; 2. viegls;.. (Kalnbērzs 1945)

Very few usage labels are used during this period, half of the dictionaries do not contain any (in one case they are listed in the front matter but almost never used in the entries), which reveals that labelling is not viewed as a relevant microstructural element. What concerns the types of equivalents, all dictionaries contain semantic equivalents, though only Roze and Roze (1945, 1946) occasionally provide several equivalents for one sense. Explanatory equivalents are applied in half of the dictionaries, the smallest ones obviously avoid this space-consuming type equivalent. Translational and functional equivalents are also encountered only in half of the cases since the smallest dictionaries do not contain any illustrative material or MWEs. TL glosses are found in three dictionaries, but are very rare (obviously due to space limitations), no typographic distinction is normally applied, only brackets are used.

(24) a (...) kāds (nenoteicamais artikuls) (Kalnbērzs 1945)

Both types of sense indicators (specifiers and collocators) are applied in most dictionaries, though less frequently and consistently than in the major dictionaries of the previous period, which again is due to the volume constraints.

(25) journey (...) *celojums (sauszemes)*. (Kalnbērzs 1945)
(26) lash [...] aukla (pātagas), pātagas cirtiens, pātaga; cirst, sist (ar pātagu), šaust, piesiet, spert. (Kundziņš 1946)

The study of the contextual section reveals that the dictionaries of this period contain very little illustrative material and MWEs. Only two contain a limited number of short clause examples, but one dictionary (Hunter Blair 1946) contains some instances which at least partly correspond to the two types of examples not encountered in the previous period, namely full sentence examples (sample (27)) and skeleton examples (samples (28, 29)):

(27) into (...) I went into the garden ... es iegāju dārzā.

(28) keep (...) phr. keep someone company ... pakavēt laiku kādam.

(29) make (...) make (someone do something) ... piespiest..

The dictionaries of this period contain very few secondary headwords which are not presented in separate sections, in two dictionaries all the inside translations are presented in bold, which makes the distinction between illustrative material and secondary headwords difficult. This distinction is not viewed as relevant.

Like in the previous period, it is difficult to judge about the types of microstructure according to the position of the examples and MWEs since their number is very limited. None of the dictionaries contains a special section for MWEs, but they are usually provided with the concrete senses or part of speech sections, which indicates to integrated microstructure. However, due to scanty evidence this conclusion is not convincing.

Nearly all the dictionaries are microstructure-oriented, only one small dictionary occasionally presents as headwords MWEs, which to some extent might qualify this dictionary as macrostructure-oriented, though these cases are rather rare, for instance, the following items appear as headwords:

(30) afraid, to be of; look at; look for. (Krādziņš 1945)

All ELDs of the second period contain flat entries, while due to the absence of secondary headwords only half of them have tiered entries. Only two contain cross-reference entries, possibly due to the compilers' wish to save space and reduce the printing costs.

Microstructure of ELDs of the Third Period (1948–1990)

Out of the six ELDs published during this period one is a repeated edition of a dictionary published during the first period (Turkina, published twice: in 1948 in Latvia and 1958 in the USA), the rest are newly compiled dictionaries. The largest dictionary (Belzēja et al. 1957 and 1966) undergoes two editions and since significant changes are introduced in the second edition, in some cases the two editions will be treated separately. Raškevičs et al.'s dictionary (1962), being the second largest, also goes through several editions but without any microstructural changes. The other dictionaries (Juhņeviča and Klētniece (1964), Birzvalka (1981), Birzvalka and Sosāre (1989)) are much smaller with a comparatively limited microstructure.

The left-core formal structure. Alternative spellings are systematically and similarly presented only in half of the dictionaries (the largest ones), most typically providing alternative spellings either in full form or only giving the optional letter, which testifies to a unification of approach

(31) lagoon, lagune (...) n ģeogr. laguna (Belzēja et al. 1957)

(32) laconic[al] (...) a lakonisks (Belzēja et al. 1957)

The grammatical description of the headword is similar in nearly all the dictionaries, especially the ones compiled during this period: the principal forms of irregular verbs and the irregular plural forms of nouns are provided in all the dictionaries; irregular comparative degrees of adjectives and adverbs in nearly all newly compiled dictionaries.

(33) **late** (...) (*comp.* later [`leitə] *vai* latter [`lætə]; *sup.* latest [`leitist] *vai* last [lɑ:st]) (Belzēja et al. 1966)

The two largest ones also provide information on the syntactic functions of adjectives, namely, attributive (labelled *attr.*) or predicative (*predict.*). Government of verbs (if different in the TL) is indicated in all the dictionaries, thus convincingly introducing an additional element of the grammatical description of the headword:

(34) lament (...) II v 1. vaimanāt; 2. (for, over) apraudāt. (Raškevičs et al. 1962)

IPA (without any modifications) is again re-established for English pronunciation in all the dictionaries, primary and secondary stress is now indicated. The three largest dictionaries also indicate pronunciation variants, e.g. depending on the position of the headword

(35) to (...) III part [patskaņu priekšā tu; līdzskaņu priekšā tə] I told him to go but he doesn't want to – es liku viņam iet, bet viņš negrib; I said that to test you – es to teicu, lai jūs pārbaudītu. (Belzēja et al. 1957)

Part of speech labels are consistently used in all the dictionaries thus establishing this label as a typical element of ELD microstructure. Part of speech sections in polysemous entries are numbered with Arabic numbers in nearly all the dictionaries except for Turkina (1948 and 1958) where Roman numbers are used and the first edition of Belzēja et al. (1957) where each part of speech is presented as a homonym in a separate entry.

Right-core semantic structure, semantic-pragmatic section. The senses of polysemous headwords are numbered using Arabic numbers in all the ELDs since the first edition of Belzēja et al. (1957). Raškevičs et al. (1962) introduce also numbering for polysemous MWEs, further applied in the dictionaries compiled during this and the following period

(36) **leap** [li:p] I *n* lēciens; l. in the dark – riskants pasākums; by \sim s and bounds – 1) lieliem lēcieniem; 2) ļoti ātri; .. (Raškevičs et al. 1962)

Various usage labels are consistently applied in all the dictionaries to indicate usage restrictions, thus, firmly establishing their role in the microstructure of ELDs. The set of abbreviations is unified and appears in various dictionaries with very little variation, though their number is normally reduced in smaller dictionaries, for instance,

(37) **landing** (...) **3.** *mil*. desants; l.operation – desanta izsēdināšana; **4**. *av*. nosēšanās; .. (Belzēja et al. 1966)

Like in the previous periods, all the dictionaries include semantic equivalents, often, especially in the largest ones, several possible equivalents for one sense can be provided, for instance

(38) **lay**^e [lei] **I** *n* **1.** izkārtojums; stāvoklis; novietojums; (...) **3.** izvāļāt, nomīdīt (*sējumu*); .. (Belzēja et al. 1966)

(39) laze [leiz] v sar slinkot, slaistīties. (Raškevičs et al. 1976)

Explanatory equivalents are quite frequently applied in the larger dictionaries, but are infrequent in the smallest ones. Translational and functional equivalents are used in the entries of all the dictionaries, especially frequently in the largest ones containing many translated examples and MWEs. When decontextualized equivalence is not available, only contextual translation is provided in all the dictionaries and is presented in a highly unified manner similar to the one in the dictionaries of the first period (samples 8 and 9), for instance

(40) **down**^c [daun] I *n* 1.: the ups and ~s of life – labie un sliktie brīži dzīvē; .. (Belzēja et al. 1966)

TL glosses become a typical microstructural element of ELDs, they are used in all dictionaries and are typographically distinguished by italics. The sense indicators (specifiers and collocators) are also presented in italics and applied in all dictionaries.

The contextual section of right-core semantic structure. All the dictionaries contain short clause examples which often consist of mere collocations or short phrases. Skeleton examples using simplification, abstraction and listing are not encountered in the dictionaries of this period. Four dictionaries (apart from the two smallest ones) similarly to sample (27) quoted in the previous section, present examples resembling short full sentence examples even though the first letter is not capitalized. Here as well this approach is mostly applied when exemplifying function words

(41) that (...) 3. now th... – tagad, kad ...; tā kā; you ought to write now th. you know the address – tā kā jūs tagad zināt adresi, jums vajadzētu aizrakstīt; ... (Raškevičs et al. 1962)

MWEs (idioms and phrasal verbs) are provided as secondary headwords in all the dictionaries. Phrasal verbs are highlighted in bold in all the dictionaries apart from both editions of Belzēja et al., but idioms are not typographically distinguished from illustrative material, which makes the distinction problematic and might cause confusion. Part of idioms (not related to any of the senses) appear in a separate section (marked by the symbol \diamond) in all the dictionaries compiled. Phrasal verbs are presented either as separate numbered senses, or under one of the numbered senses or in a special section (marked by the symbol \Box). The latter approach is practiced in this period only once (in Belzēja et al. 1966) but has an important impact on the next period. The following entry (abridged)

presents a typical layout of a polysemous entry in this dictionary which is adopted as a model by several dictionaries in the fourth period

(42) $lock^{b}$ [lok] I *n* 1. atslēga; aizšaujamais, bulta; under lock and key – zem atslēgas; 2. *(šautenes u. tml.)* atslēgs; 3. *tehn.* aizturis; aizbāznis, tapa; bremze; 4. *(satiksmes līdzekļu, ledus)* sastrēgums; (...) II *v* 1. slēgt; aizslēgt; 2. apņemt; apkampt, apskaut; 3. sakost *(zobus)*; 4. savienot; savīt *(rokas, pirkstus);* (...) \Box to l. in – ieslēgt; to l. oneself in – ieslēgties; to l. out – 1) nelaist iekšā; 2) pasludināt lokautu; (...) \Leftrightarrow to l. the stable-door after the hourse is stolen – barot suni, kad vilks jau lopos. (Belzēja et al. 1966)

Judging by the position of the illustrative material and MWEs, all the dictionaries have partially integrated microstructure, since examples and MWEs can appear with concrete senses as well as in separate sections or at least at the end of the entry.

All the dictionaries apart from Belzēja et al. (1957) where each part of speech is presented as a homonym in a separate entry, are microstructure-oriented and combine all parts of speech in one entry. Belzēja et al. (1957) is the only macrostructure-oriented general ELD in the tradition.

All the dictionaries contain flat and tiered entries because during this period there are no dictionaries without any secondary headwords. Cross-reference entries are also encountered in all the dictionaries.

Microstructure of ELDs of the Fourth Period (1991- the Present Day)

Approximately fourteen ELDs were published during the fourth period, two of them – (Raškevičs et al., Birzvalka and Sosāre) were repeated editions of the dictionaries published during the previous period.

The left-core formal structure. Alternative spellings are presented in most dictionaries (except for the smallest ones: Mozere and Millere (2001) and Kalniņa (2002) which contain only 6000 headwords), following the unified approach established in the previous period (see samples 31 and 32).

The grammatical information on the headword in the left-core formal structure, like in the previous period, is limited to the principal forms of irregular verbs, irregular plural forms of nouns, irregular comparative degrees of adjectives and adverbs. It can be found in all the dictionaries apart from the smallest ones. A new development is the indication of government of verbs (when it differs in the TL) in nearly all the dictionaries. The indication of English pronunciation with the help of IPA and the primary and secondary stress have become a norm and are applied in all the dictionaries apart from the smallest one which does not include pronunciation. Part of speech labels and numbered part of speech sections (Roman numbers) are also applied in all the dictionaries. No new developments can be observed in this section in the fourth period. The right-core semantic structure, semantic-pragmatic section. Since first applied in Belzēja et al. (1957), the senses of polysemous headwords are indicated by Arabic numbers in all the ELDs also in this period. The senses of polysemous MWEs are also consistently numbered in all the dictionaries except for the smallest one (Kalniņa (2002) which does not contain any MWEs), according to the pattern established in the previous period (see samples 36 and 42). All four types of equivalents are applied in all the dictionaries except for translational and functional ones in Kalniņa (2002), since it does not contain any examples or MWEs which ask for these types of equivalence. The largest and the most recent dictionary of the period (Kalniņa et al. 2007) frequently applies explanatory equivalents even though it has been observed in metalexicographic literature (e.g. Adamska-Sałaciak 2006, 116ff.) that this approach is more typical of older dictionaries, but in contemporary lexicographic practice contextual translation with the help of translational and functional equivalents could be applied. Providing an approximate TL equivalent and a gloss could be another solution. A couple of sample entries to illustrate the point

(43) landjobber (...) *n* spekulants, kas veic zemes pirkšanu un pardošanu.

(44) land patent (...) *n amer. jur.* dokuments, kas apstiprina īpašuma tiesības uz zemi.

For the headword **tied cottage** which also presents a case of zero equivalence a different solution has been used – also a definition-type explanation is provided, but italics stress its approximate character revealing that it is not intended as an equivalent with a potential of being insertable, but more likely as a TL gloss. This approach is occasionally practiced, especially in the largest ELDs.

(45) **tied cottage** (...) *n māja, ko piešķir darbiniekam vai strādniekam viņa līguma laikā* (Belzēja et al. (2004), Kalniņa et al. (2007))

Target language glosses (in italics), are provided in almost all the dictionaries. Only contextual translation is given when no decontextualized equivalent can be found according to the pattern established in the previous period (see sample 40). Sense indicators (specifiers and collocators) are provided in all the dictionaries and systematically marked in italics.

The contextual section of right-core semantic structure. Even though all the dictionaries (apart from Kalniņa 2002) contain some illustrative examples, the small dictionaries (Mozere and Millere (2001) and five small dictionaries published by "Avots") contain a very limited scope of illustrative material. All the dictionaries contain clause examples of various lengths, but mostly they give mere collocations or short phrases. Typical skeleton examples with simplification, abstraction and listing are not encountered in ELDs. Like

during the previous periods, the largest dictionaries occasionally present examples resembling short full sentence examples, even though the first letter is not capitalized; here as well this type of illustrative material is mostly encountered in the entries of function words (see sample 41). No typographic distinction is made between the illustrative material and secondary headwords (apart from phrasal verbs presented in bold in all cases). This lack of distinction has obviously become a typical feature of ELD microstructure. Idioms and phrasal verbs are presented as secondary headwords in all the dictionaries (apart from Kalniņa 2002), the idioms not related to any of the senses are given in a separate section introduced by the symbol \diamond . Phrasal verbs are presented either simply at the end of the entry (usually practiced in smaller dictionaries) or in a special section marked by \diamond , \Box or \Box (practiced in nearly half of the dictinaries), apart from some variation in the symbols, the system resembles the one illustrated in sample (42). Somewhat puzzling is the fact that in some "Avots" dictionaries (Grabe et al. 2002, Kalniņa 2003, Kalniņa 2004) the symbol \Box applied to introduce the phrasal verb section is not described in the User's guide.

According to the position of the illustrative material and MWEs, all the dictionaries have partially integrated microstructure, and since all parts of speech are presented in a single entry, all the dictionaries are microstructure-oriented. All contain flat and nearly all tiered and cross-reference entries (apart from Kalniņa, 2002).

A closer scrutiny of the microstructure of ELDs of this period reveals that the two dictionaries containing 10 000 headwords (by Kalniņa, published by "Avots" in 2001 and 2006) and the two bidirectional (E-L, L-E) dictionaries containing 25 000 headwords (by Kalniņa, published by "Avots" in 2002 and 2005) can be viewed as repeated editions since they do not reveal any differences on macrostructural and microstructural level.

Summary of Typical Microstructural Features of the E-L Lexicographic Tradition

The analysis of the left-core formal structure of ELDs reveals that the spelling variants of the headword during the first three periods are presented only in nearly half of the dictionaries and only in the fourth period this microstructural feature is firmly established. Even though the grammatical description of the headword is more detailed in the first period, a typical set is formed in the third and further established in the fourth period, namely, the principal forms of irregular verbs, irregular plural forms of nouns, irregular comparative degrees of adjectives and adverbs, and government of verbs, can now be found in most, except for the smallest ELDs. In the first two periods part of speech labels were presented irregularly but in the third period they are firmly established as an indispensable microstructural element. The sections of parts of speech inside the entry were not typically numbered during the first periods; numbering with Roman numbers was firmly established in the third period. The indication of pronunciation with the help of IPA was basically established in the first period, jeopardized in the second period by the lack of specialized symbols, but later re-established in the third period and applied without exception, the largest dictionaries of the third and the fourth period also present pronunciation variants. The stress pattern is presented in the ELDs from the very beginning of the tradition, but the indication of the primary and secondary stress has become typical since the third period. Many elements of the left-core formal structure, though initiated in the first period, where firmly established mostly in the third and the fourth period.

The semantic-pragmatic section of right-core semantic structure. During the first two periods the senses of polysemous words were not numbered, though from the very beginning the equivalents closer in meaning were separated with a comma, but in other cases with a semicolon. The numbering of senses by Arabic numbers was introduced and established in the third period. Slightly later in the same period the numbering of polysemous senses of MWEs was introduced. This microstructural element obviously enhances the chances of finding the necessary information in highly polysemous entries and therefore can be viewed as an important step in the shaping of ELD microstructure.

Usage labels have been applied in ELDs from the very beginning of the tradition, though during the first two periods somewhat fragmentarily. They are established as an indispensable part of the microstructure only in the third period which is also marked by a unification of the set. Four types of equivalents (semantic, explanatory, translational and functional) have been applied from the very beginning of the tradition. However, if the semantic equivalents are applied in all the dictionaries, explanatory are less frequent in the smaller ones – this tendency, apparently determined by the wish to save space and to avoid 'problematic' headwords and senses, can be encountered in the whole tradition. The largest dictionary in the fourth period (Kalnina et al. 2007) includes a considerable number of explanatory equivalents. Translational and functional equivalents are found only in the dictionaries containing illustrative examples and MWEs, which means that during the first two periods they are encountered only in nearly half of the cases, but in almost all dictionaries of the third and fourth period. The method, when only contextual translation is provided in the absence of a semantic equivalent, is practiced occasionally at the beginning of the tradition, but later firmly established in the third and the fourth period. TL glosses are often applied without any typographic distinction during the first period, almost not applied in the second one (probably due to the small volume of the dictionaries and space restrictions), but mostly presented in italics and also in brackets in the dictionaries of the third and the fourth period. Specifiers and collocators are applied in ELDs from the very beginning of the tradition but more frequently and consistently, also typically in italics, during the last two periods. Dravnieks' dictionary (1924) is the only dictionary in the tradition which occasionally presents specifiers in English, which might indicate that the dictionary is targeted also at English users. However, the study of the rest of the microstructure reveals that it is not the case. Only two dictionaries in the first period contain usage notes – a microstructural feature which is not established in the tradition.

The analysis of the contextual section of the right-core semantic structure reveals that the dictionaries of the first and especially the second period contain little illustrative material, while the ones of the third and the fourth period, especially the largest ones, contain a considerable number of examples, but in most cases these are short clause examples. Occasionally, especially in function word entries, examples resembling full sentence examples can be encountered. Even though such secondary headwords as idioms and phrasal verbs are included in the microstructure of ELDs from the first period, no typographic distinction has ever been made between idioms and illustrative examples throughout the tradition. Phrasal verbs are presented in bold since the middle of the third period. Only from the third period part of idioms (the ones not related to any of the senses) appear in a separate section, phrasal verbs are consistently presented in a separate section in nearly half of the dictionaries only in the fourth period. It can be concluded that according to the position of illustrative examples and multiword secondary headwords in the first two periods, the ELDs did not follow a particular pattern, but in the last two periods illustrative examples and part of idioms appear with concrete senses of the headword, but the rest of idioms and phrasal verbs in separate sections, which means that the dictionaries have a partially integrated microstructure.

All the dictionaries of the tradition (apart from Belzēja et al. (1957) where each part of speech is presented as a homonym in a separate entry) are microstructure-oriented since all parts of speech are presented in one entry. All ELDs contain flat entries (without secondary headwords), tiered entries (with secondary headwords) are encountered in most dictionaries in the first period, only half during the second, but in nearly all cases (apart from exceptionally small dictionaries) in the last two periods. Cross-reference entries have become typical since the third period.

The findings of microstructural analysis reveal that there is a well-established tradition the foundation of which was laid in the first period, it was firmly established and largely unified in the third and mostly stabilized in the fourth period.

Microstructure and Type(s) of ELDs

The information provided at the microstructural level of dictionary is the most relevant for determining the type(s) of ELDs, namely, whether these dictionaries belong to the active or passive type.

The first question to be clarified concerns the metalanguage in the entries of ELDs. The following entries from two recently published ELDs which are typical representatives of the lexicographic tradition and the microstructural solutions applied, demonstrate the leading tendencies in the choice of the metalanguage.

dean^a [dI:n] n 1. (fakultātes) dekāns; d.'s office – dekanāts; 2. (diplomātiskā korpusa) vecākais; 3. (baznīcas) dekāns (augstāks garīdznieks) (Belzēja et al. 2004) dean^a [dr:n] n 1. (fakultātes) dekāns; (Oksfordas un Kembridžas universitātē) pasniedzējs audzinātājs, d.'s office – dekanāts; 2. (diplomātiskā korpusa) vecākais; 3. (baznīcas) dekāns (augstāks garīdznieks, nākamais pēc bīskapa katoļu un anglikāņu baznīcā); rural d. - prāvests; 4. bazn. klostera priekšnieks; vecākais mācītājs; baznīcas pārzinis; 5. kompānijas vai grupas vadonis (galva); 6. (D.) jur. priekšsēdis; priekšsēdētājs; D. of Faculty – advokātu kameras priekšsēdētājs (Skotijā) (Kalnina et al. 2007) stalking-horse ['sto:kinho:s] n 1. iegansts; 2. amer. pol. fiktīva kandidatūra (ko izvirza, lai sakautu opozicionāru partiju). (Belzēja et al. 2004; Kalniņa et al. 2007) than (uzsvērtā forma [ðæn]; neuzsvērtā forma [ðən, ðn]) conj nekā.. (Belzēja et al. 2004, Kalnina et al. 2007) thesaurus $[\theta_1$ 'so:rəs] n (pl thesauri $[\theta_1$ 'so:rai], thesauruses $[\theta_1$ 'so:rəsiz]) **1.** ($zin\bar{a} \bar{s}anu$ u.tml.) krātuve; 2. enciklopēdija; 3. tēzaurs (vārdnīca); 4. inform. tēzaurs. (Belzēja et al. 2004, Kalnina et al. 2007, only the last sense is not included in this dictionary) write [rait] v (p. wrote [rout], novec. writ [rit]; p.p. written ['ritn], novec. writ [rit]) rakstīt.. (Belzēja et al. 2004, Kalniņa et al. 2007)

Although the entries **dean** and **thesaurus** differ in length (the number of senses varies), the above quoted entries obviously present an identical approach to the choice of the metalanguage: 1) wordclass markers (e.g. *n*, *v*, etc.), and all the other grammar labels (e.g. *pl*, *p.*, *p.p.*, etc.) are given in English; 2) domain labels (e.g. *bazn.*, *jur. pol.*), regional labels (e.g. *amer.*) and temporality labels (e.g. *novec.*); collocators (e.g. *fakultātes*, *baznīcas*), specifiers (e.g. *Skotijā*), TL glosses (e.g. *Oksfordas un Kembridžas universitātē*, *augstāks garīdznieks*, *nākamais pēc bīskapa katoļu un anglikāņu baznīcā*), and metalinguistic glosses (e.g. *uzsvērtā forma*, *neuzsvērtā forma*) are given in Latvian.

It can be concluded that in both ELDs all metalinguistic information (apart from grammar labels), is provided in Latvian. Clearly, Latvian users are the intended target audience of these dictionaries. Apparently no attempt has been made to cater for the needs of both speech communities. The fact that grammar labels are given in English is more likely the result of a well-established tradition rather than an attempt to make these dictionaries suitable for the needs of English speech community.

In order to answer the questions – whether the information in ELDs is primarily provided on the equivalents or the headwords and which specific types of information are provided – the above quoted entry samples have to be subjected to a closer scrutiny. The entries provide the following information on the headword:

- phonetic description with the help of IPA and comments on phonetic features of the headword (e.g. [dɪ:n], ['stɔ:kɪŋhɔ:s], uzsvērtā forma [ðæn]),
- grammatical information the part of speech labels as well as parallel plural forms (e.g. *pl* thesauri, thesauruses) and the principal forms of verbs (e.g. *p*. wrote, *p.p*. written),
- old-fashioned forms (e.g. novec. writ),
- domain labels (e.g. bazn., jur., pol.) and regional labels (e.g. amer.),
- encyclopaedic and culture-specific information (e.g. Oksfordas un Kembridžas universitātē, Skotijā).

Even though some of these information types appear in the left-core formal comment part of the entry in close vicinity of the headword (e.g. phonetic description, grammatical information), while others (e.g. domain, regional, etc. labels as well as encyclopaedic and culture-specific information) can be found in the right-core semantic comment part, this information is obviously targeted at clarifying the meaning of the SL headword, not the Latvian equivalents. It can also be noted that the entries of both ELDs have no phonetic or grammatical information on the TL equivalents. This reveals that both ELDs, as well as the other dictionaries of the tradition (since the general approach with slight variations is the same) are passive-decoding dictionaries for the speakers of the Latvian language. The only exception in the whole tradition is the first ELD by Dravnieks (1924) where specifiers, though not consistently, are provided in English (see sample (13)). However, a closer inspection of the microstructure reveals that this is the only microstructural element in this dictionary which is indicative of its possibly active character, the rest reveal it as a passive dictionary.

CHAPTER 6 Guidelines for a Model of General Bilingual ELD Corresponding to the Latest Developments in Contemporary Bilingual Lexicography

The analysis of the structural levels of ELDs reveals that there is a well-established lexicographic tradition characterized by a set of characteristic features on the mega-, macro- and microstructural levels of dictionaries which has formed throughout the tradition; it has been largely unified in the third and stabilized in the fourth period. Thus, contemporary ELDs are similar on all structural levels. Even though comparatively many dictionaries have been produced during the fourth period, it is characterized by a further unification on all structural levels, but very little innovation. Moreover, the latter part of the period is marked by repetitiveness and even stagnation. Notably, many modern lexicographic solutions and primary sources of evidence are not applied when compiling and editing contemporary ELDs. It can be inferred that the English-Latvian lexicographic tradition is in urgent need of updating which could be achieved by adapting some of its typical structural features and elements to contemporary tendencies in bilingual lexicography and by applying corpora and lexical databases as the primary sources of evidence. It should be noted that since the present guidelines in majority of cases²³ at least hypothetically could refer to both active and passive general bilingual ELDs and dictionaries of various sizes, the plural form is applied when referring to the ELDs in this chapter. This chapter gives an outline of improvements necessary for updating each structural level of ELDs. Sample entries or entry fragments are introduced to illustrate the suggested updates on the microstructural level.

Several improvements are necessary on the **megastructural** level. In the present ELDs the contents of the preface does not always contain precise information on the purpose of the dictionary, the target user group, the word-stock and the scope of vocabulary layers (temporal, register, field) included, the sources of evidence, the number of entries and the outside matter components the dictionary contains. Some of these information types are similar for all general bilingual dictionaries (the purpose, the word-stock and the vocabulary layers included), while the others (the target user group, the number of entries, the sources of evidence, the outside matter components) can vary considerably even in the realm of general bilingual dictionaries. Special attention should be paid to the description of the target user group and the functional type of the future general ELDs. The L1 of the

²³ Apart from the suggested improvements on the microstructural level where only the passive type of ELDs is considered.

intended users (Latvian or English) and the fact whether the dictionary is designed to meet the encoding or decoding needs of the users should be underscored. If an attempt is made to meet both encoding and decoding needs of the users representing Latvian and English speech communities, or in other words, to combine an active dictionary for the users of one speech community and a passive one for the other, it should be underlined in the preface in order to avoid unnecessary embarrassment possibly caused by the superfluous information the entries contain for the users of both speech communities. It is beyond any doubt that the promises concerning the type of the general ELD made in the preface should reflect in its microstructure (unfortunately there are some counterexamples in the English-Latvian lexicographic tradition).

The largest contemporary ELDs provide quite detailed user's guides containing information on the macro- and microstructure of the dictionary, typographical and nontypographical structure indicators, means of textual condensation, pronunciation key, a list of labels and metalinguistic abbreviations. No information is provided on the crossreference system applied in the dictionaries, which is limited to cross-reference entries. If a more developed system of cross-referencing is introduced in ELDs, it should be described in the user's guide. Even though the user's guides are usually informative and wellillustrated, the form of presentation is not user-friendly, namely, the information is provided in plain text which does not reflect the actual layout of the dictionary entry and the position of the particular microstructural element being described. The user's guides of ELDs could be made more user-friendly following the example of the contemporary monolingual advanced learners' dictionaries (e.g. Longman Dictionary of Contemporary English and Oxford Advanced Learner's Dictionary). The User's guides in these dictionaries are presented in eye-catching schemes where entry samples are supplied with informative notes specifying the mode of presentation of some microstructural element or indicating its place within the entry. The inclusion of such user's guides in ELDs would encourage the users to consult rather than ignore this useful metafunctional component with an excuse that it is so bulky and difficult to understand. It is relevant to note that these suggestions concern only the necessary improvements related to the selection of information types and mode of presentation of the user's guide, the exaggerated unification and repetitiveness observed in the user's guides of some ELDs within the fourth period, is unwelcome.

The outside matter components providing encyclopaedic information (e.g. abbreviations, geographical names, personal names) should be incorporated in the central headword list. This approach not only corresponds to the typical practice in contemporary

lexicography, but also facilitates the lookup potential of these items. The contents of the components providing encyclopaedic information encountered in the present ELDs should be reconsidered and included only when their compliance with corpus evidence has been verified.

The components providing basic linguistic information (e.g. the list of principal forms of irregular verbs, the English alphabet) are important and should appear in a general bilingual dictionary targeted at the Latvian audience. In an active ELD targeted at the English audience these components would provide information on the Latvian language. If an attempt is made to produce a bifunctional ELD, both the components providing linguistic information on the English and Latvian language will have to be provided. Miscellaneous outside matter components of unclear function (for instance, a list of *English words given in dictionary without phonetic transcription* found in some ELDs published by "Avots") should not be included in future ELDs.

Some improvements are necessary also on the **macrostructural** level of ELDs. First of all it should be emphasized that large representative corpora and lexical databases providing data on the frequency and usage peculiarities of lexical items must become the primary source of evidence for the selection of headwords for ELDs since the selection criteria so far have been somewhat unclear. The criteria for the inclusion in the main headword list of terms from various fields of knowledge should also be clearly defined since the selection of these items should be based on the analysis of general and special corpora.

The unnecessary doubling between the central wordlist and the outside matter components, for instance, the repetition of some names of nationalities and languages that are encountered in the largest "Avots" ELD (Kalniņa et al. (2007) can be avoided if these items are incorporated in the central wordlist. Derivatives and compounds with fully transparent and predictable meanings should also be excluded from the headword list. For instance, the extended list of **self**- compounds provided in Kalniņa et al. (2007) contains the following nouns – **self-conceit, self-confidence, self-content, self-interest** and **self-willed**. Since the TL equivalents of these pairs of headwords do not reveal any semantic difference, it can be inferred that the inclusion of such lexical items with fully predictable meaning in the headword list is ungrounded. If only one headword of such pairs is selected for inclusion, the choice should be based on corpus analysis.

Such multiword secondary headwords as idioms and phrasal verbs should be selected taking into account corpus data, not just their presence in previously compiled dictionaries

which might not reflect their current use. For example, in the idiom section of the headword **lady** the two largest ELDs compiled by Kalniņa et al. (2007) and Belzēja et al. (2004) list the following idiomatic phrases: *the leading lady, lady of the frying pan, Our Lady, Lady Day, extra (walking) lady, lady of easy virtue* (the last two appear only in Kalniņa et al. (2007)). From this set the DANTE lexical database²⁴ contains only *leading lady* and *Our Lady*, but lists also *ladies first, ladies who lunch, lady of the night* and a proverb *it isn't over till the fat lady sings*. Also the list of phrasal verbs found in the entries of these ELDs can contain some items with a very low frequency even in very large corpora (e.g. *ukWaC*²⁵ and *LEXMCI* containing over 1.5 billion words). For instance, only two of the six phrasal verbs provided for the headword **laugh** (*laugh at* and *laugh off*) are frequently found in the above mentioned large English language corpora, the rest of them are very rare. These examples reveal that a careful analysis of corpus data is necessary before the selection of multiword secondary headwords to be included in the ELDs since the present dictionaries may not reflect their actual use.

The typographic distinction of secondary headwords should be mandatory. Only phrasal verbs are presented in bold in the contemporary ELDs, while idioms which also are (and definitely should be) intended as secondary headwords are not typographically distinguished from illustrative examples and collocations.

On the **microstructural** level the necessary improvements will be structured according to their place in the entry, namely, the left-core formal structure and the right-core semantic structure. In the left-core formal structure more attention should be paid to the variants of English pronunciation, namely, apart from the British variant traditionally provided in ELDs also the American pronunciation should be presented and marked by a special symbol or label in order to inform the users about the regional varieties of English pronunciation. In the following examples the label AmE is used to introduce the American pronunciation variant:

ladybird ['leidib3:d, AmE '-b3:rd] n ent. mārīte (...)
omega ['əumigə, AmE ou'megə] n omega (...)
yacht [jɒt, AmE jɑ:t] n jahta (...)

Several improvements and the application of new sources of evidence are necessary for updating the semantic-pragmatic section of the right-core semantic structure. For an easier selection of the TL equivalents and contextual translations an English-Latvian parallel

²⁴ DANTE. A lexical database for English available at http://www.webdante.com/. DANTE database is based on the data retrieved from the 1.7 billion word *LEXMCI* corpus of English. If not indicated otherwise the samples quoted in this chapter are selected from this source.

²⁵ *ukWaC* corpus of English was searched by applying the corpus query system *Sketch Engine* available at <http://the.sketchengine.co.uk>.

corpus would be very useful and probably would have to be compiled for this purpose. The number of explanatory equivalents should be reduced since their overuse does not contribute to effectiveness of a bilingual dictionary. However, if another type of equivalent cannot be provided, a clear distinction (e.g. with the help of italics) should always be made between the explanatory equivalents which are insertable in the TL text and the ones which are TL glosses with a merely explanatory function. This method is applied in ELDs but not consistently. In cases when a better solution is not available and in a passive ELD the TL gloss is still applied, for instance, as in the previously quoted entry **tied cottage**

tied cottage (...) *n māja, ko piešķir darbiniekam vai strādniekam viņa līguma laikā* (Belzēja et al. (2004), Kalniņa et al. (2007)),

the TL gloss can be supplied with a corpus-based illustrative example which demonstrates typical usage of the lexical item. Such examples (consisting of full sentences or sentence fragments) do not have to be translated since the meaning of the headword has already been described in the gloss, for example,

Shepherds often lived in **tied cottages** belonging to the farmer. occupants of **tied cottage.**²⁶

The issue of sense ordering in polysemous entries has not been discussed in detail in the present thesis, however, it should be noted that the entries of the contemporary ELDs show a tendency towards a logical ordering of senses which is occasionally combined with historical one. The contemporary corpus-based dictionaries usually combine the frequency and logical ordering of senses, which would be a viable solution for the improvement and modernization of sense ordering in future ELDs. A more detailed treatment of sense ordering in ELDs is provided by Karpinska (2009).

The contextual sub-section of the semantic-pragmatic structure of English-Latvian dictionary entries is in urgent need of authentic illustrative examples (subdued to various degrees of adaptation). Full-sentence examples or at least longer sentence fragments presenting the headword in a broader context are seldom encountered in ELDs. Such illustrative material should be introduced in passive ELDs, especially in the entries of function words where a broader context is often necessary to clarify the meaning and the usage peculiarities of the headword. In the proposed entry sample the transparent collocations are translated and supplied with slightly abridged and modified corpus examples (in italics), idiomatic phrases are highlighted in bold, translated and also supplied with examples. Here as well the illustrative examples are not translated since their task is

²⁶ The samples have been retrieved from *ukWaC* corpus.

to illustrate a typical context and collocability of the headword rather than provide precise translation of the whole context.

between [bi'twi:n] I prep starp; The pedestrian crossing is dangerous because it is placed between two junctions. **b. you and me, b. ourselves** sar. – starp mums [runājot]; Between you and me, I think he did it, or at least had it done for him. II adv starpā; in b. – pa vidu; pa starpām; The truth of the matter probably lies somewhere in between. Do you have rigid meal times and snack in between? \diamond in **b. times**, **b. times** – starplaikos; In between times, if he wasn't sunbathing by the pool, he was sitting in a tavern.

Corpus data and pre-dictionary databases also provide useful information on grammatical and usage peculiarities of lexical items. Such information can be retrieved from a corpus, but is already explicitly presented in pre-dictionary databases, for instance, DANTE lexical database. In dictionaries this information can be reflected in various grammar and usage labels. The contemporary ELDs contain an ample number of various usage labels, however, they have to be tested against corpus evidence.

ELDs do not provide much grammatical information. Phrasal verbs, for instance, do not receive any grammatical description apart from the one conveyed by collocators and specifiers. It could be claimed that a detailed description of the grammar of phrasal verbs would not be necessary in a passive bilingual dictionary, however, since research shows (e.g. Cop 1991, Adamska-Sałaciak 2006) that large passive general bilingual dictionaries can be used not only for decoding needs but to some extent have also productive functions, this information gap could be filled by providing illustrative examples showing the phrasal verb in a typical context. The treatment of some phrasal verbs of **look** will suffice to illustrate the approach.

l. after -1) rūpēties par; 2) pieskatīt; uzraudzīt; *The accommodation and food* was of a high standard and we were well looked after. I wouldn't mind looking after the house for you. **l. ahead** – raudzīties nākotnē; Looking ahead, we are well placed to continue to progress. **l. around**, **l. round** – 1) skatīties apkārt; I remember looking around behind me before I hit the ground. 2) apskatīt, aplūkot. It was a bright sunny day and perfect for looking around the town. **l. at** – 1) (ātri) izlasīt; Students will find it useful to look at some introductory texts. 2) izskatīt; pārbaudīt; The inspection did look at all areas of activity.

It should be remarked that some improvements suggested in this chapter would increase the volume of the dictionary which might be problematic for paper dictionaries, but definitely not daunting for electronic ones. The fact that the future of English-Latvian lexicography is not tied exclusively to the somewhat limiting paper version, cannot be questioned.

Model Entry of an Active English-Latvian Dictionary

Since all the ELDs analysed in the framework of this study are passive dictionaries, a model entry of the possible active English-Latvian dictionary intended for English speakers, will be provided. ELDs (Belzēja et al. (2004) and Kalniņa et al. (2007)), several English and Latvian monolingual dictionaries as well as the lexical database DANTE were consulted in the process of compiling this entry. The entry **branch** has been selected to present the relevant distinctive features of such a dictionary:

branch I *n* **1.** (of a tree) zars m; **2.** (of a business, shop, company etc.) filiāle *f*, nodaļa *f*; **branch office** – filiāle *f* **3.** (of government) departaments m; **4.** (of river) atteka *f*; (of road) atzarojums m; (of railway) atzars m; **5.** (of knowledge) nozare *f*; **6.** (of family) zars m, līnija *f*; **7.** comput. zars m; **branch and bound algorithm** – zaru un robežu algoritms; **II** v sazarot[ies] ([3^{rd} pers. pres.] -ojas; [past] -ojās); **4 to branch off**: 1) (of road) nogriezties (-žas; -ās); 2) novirzīties (-os, -ies, -ās; -ījos) (from the topic of the conversation); **to branch out** 1) (about a company) paplašināties (-inās; -inājās); 2): (about a person) she decided to branch out on her own – viņa nolēma uzsākt patstāvīgu darbību.

- Metalanguage used in this entry for sense indicators, grammar labels and field labels (e.g. *computing*) is English,
- Grammatical information is provided on the TL equivalents: the gender of nouns (*m*, *f*); verb inflections (e.g. *-os*, *-ies*, *-ās*; *-ījos*). Which forms are provided for various verbs could be clarified in the front matter of the dictionary in order to avoid unnecessary repetition of this information in the entries. For instance, if the verb is normally used in the 3rd person, only the 3rd person present and past forms are provided (*-ojas*; *-ojās*),

This entry illustrates only some of the microstructural peculiarities of the possible active ELD targeted at English speakers but the most relevant distinguishing factors are immediately obvious: the metalanguage is English and grammatical information is provided only on the TL equivalents.

So far only passive general ELDs have been compiled in Latvia for the English-Latvian language pair. In order to meet the demands of English users, an active ELD would have to be compiled, however, such lexicographic project is quite unlikely to be carried out in the nearest future because of the high costs and comparatively low demand for this kind of dictionary. More likely an attempt could be made to meet both encoding and decoding needs of the users of both speech communities in a single dictionary.

Conclusions

The present study which was conducted with the aim to review the development of the English-Latvian lexicographic tradition, as well as to single out the typical features of ELDs traced throughout the tradition at the levels of their mega-, macro- and microstructure, pinpoint the problematic aspects and offer theoretically grounded solutions applied in contemporary lexicographic practice, makes it possible to draw the following conclusions.

- The drastic changes in the political system in Latvia have hindered the development of the English-Latvian lexicographic tradition by not allowing it to develop as an uninterrupted continuum. The English-Latvian lexicographic tradition falls in four periods: the first period from 1924 till 1940 (in Latvia), the second from 1945 till 1947 (in refugee camps abroad), the third period from 1948 till 1990 (in Latvia and abroad) and the fourth period from 1991 till the present day (in Latvia and abroad). Despite revealing the uneven development of the tradition, the periods also testify to its continuity.
- The typical features of the first period, marking the beginning of the tradition, are the following: the authorship of the dictionary is always indicated; there is a distinct leader among the publishers of the ELDs; less than half of the dictionaries contain around 20–30 000 headwords, the others are much smaller, the number of headwords is usually not indicated; in the majority of cases the title is provided only in Latvian; from lexicographic sources only the source of phonetic transcription is indicated; the target audience is rarely pointed out; during the period significant changes take place in the choice of phonetic transcription, IPA is firmly established; only one dictionary undergoes several reprints inside the period. The development of the tradition is interrupted by the outbreak of WWII.
- The second period of the lexicographic tradition takes place after WWII in refugee camps. The typical features of the period: the author is not indicated in all dictionaries since there are no strict regulations on copyright, the year and place of publication are also not always stated; the number of copies is fairly small and the quality poor; the number of headwords does not exceed 10 000, i.e. the dictionaries are very small; the sources of the dictionaries are rarely mentioned; pronunciation is indicated in a somewhat distorted way because of the limited technical means, the target audience is defined as all the Latvians in refugee camps who wish to study the English language.

The period is very short and marked by numerous hardships and limitations, at the same time it is exceptionally productive, revealing that ELDs were in great demand.

- The third period of the tradition starts in Latvia shortly after WWII and continues throughout the Soviet period till the regaining of independence in 1991, some dictionaries are also published abroad but these are only repeated editions and as such do not contribute to the development of the tradition. The typical features of the period: the author(s), place and year of publication and the amount of headwords in the dictionaries published in Latvia is always clearly identified; the first ELD with more than 40 000 entries and a complex structure is published; various dictionaries undergo several editions, establishing the tradition of succession; during this period the title is provided also in English, being one of the characteristic features of the Soviet bilingual lexicography; multiple lexicographic sources are identified in dictionaries; the intended target audience and purpose is specified in all the ELDs. Despite the limitations imposed on the tradition by the Soviet rule, this period is characterized by obvious development of the tradition.
- The typical characteristic features of the fourth period after the regaining of independence: the authors, the year and place of publication are almost always presented at the beginning of the period, though in the latter part some of this information could be missing; the number of publications is much larger than in the previous periods, several new dictionaries exceeding 40 000 headwords are published; the first major dictionary of the period published by "Jāņa sēta" undergoes several editions, but the succession of some other dictionaries is not completely clear; apart from a few exceptions, the application of bilingual (English and Latvian) titles in this period is firmly established; the sources of dictionaries are rarely identified which reveals that the approach to the indication of dictionary sources has considerably changed in comparison with the third period and this information is no more viewed as relevant; the target audience and the purpose are specified in most dictionaries are published abroad which reveals that after the regaining of independence the need for such publications has reduced.
- The megastructural analysis of ELDs throughout the tradition reveals the following typical features of the outside matter and access structure components: a clear distinction among the metafunctional components is established only in the third period when these components also become more informative and unified in contents and structure; the components providing encyclopaedic information are scarcely applied in

the first period, develop in the second, unify in the third and are reduced to a basic set of three in the third period (apart from some components characteristic only of "Avots" dictionaries); the components providing linguistic information have gradually lost their importance since the first period; the running heads are found in ELDs throughout the tradition, the table of contents and thumb indexes are established only in the fourth period, revealing that the scope of access structure components has broadened only recently.

- The macrostructural analysis of the ELDs leads to the following overall conclusions: the • basic set of single-item main headwords (single lexical and grammatical words, derivatives and compounds) remains unchanged throughout the tradition; abbreviations and productive affixes are relegated to the outside matter components in the third period; derivatives and compounds appear as secondary headwords from the very beginning of the tradition, but are almost completely moved to the main headword list in the third and fourth period; the basic set of multiword secondary headwords (idioms and phrasal verbs) has remained unchanged since the beginning of the tradition, though their typographic presentation, means of textual condensation and position in the entry has changed; the letter-by-letter principle is the leading approach to alphabetization; both niching and nesting techniques have been applied for arranging secondary headwords, but only nesting is applied in the latter part of the tradition since only multiword expressions are used as secondary headwords; the criteria for presenting homonymous headwords have remained almost unchanged throughout the tradition focusing on the difference in etymology, pronunciation and capitalization of items with identical spelling.
- The microstructural analysis of the ELDs reveals that most elements of the left-core formal structure in the course of tradition do not undergo any significant changes, the most relevant ones are related to the application of part of speech labels and part of speech numbering the practice firmly established in the third period; the presentation of pronunciation by IPA and the primary stress are applied almost from the very beginning of the tradition; in the right-core semantic structure such relevant structural element as sense numbering is introduced only in the third period; the four kinds of equivalents are present in the dictionaries of all periods, the translational and functional are absent in the smallest dictionaries; the contextual section reveals that short clause examples are used throughout the tradition, mostly in the larger dictionaries, in the last two periods some examples resembling full-sentence examples can be encountered in the entries of the largest dictionaries; since the beginning of the tradition most ELDs

have partially integrated microstructure and (apart from one exception) are microstructure-oriented dictionaries.

- Mega- and microstructural analysis reveals that all the general ELDs provide description of the English headwords, the metalanguage used is almost exclusively Latvian, all the dictionaries are monofunctional, targeted at the Latvian audience and as such fall in the category of passive dictionaries, which implies that there are no active dictionaries in the English-Latvian lexicographic tradition.
- Even though the periods of the English-Latvian lexicographic tradition are initially determined by extralinguistic factors, the analysis of the ELDs throughout the tradition on the mega- macro- and microstructural level leads to the conclusion that the initially established periods largely correspond to the four stages of development of the present lexicographic tradition.
- The English-Latvian lexicographic tradition is ruled by a well-established tradition, but if it is to correspond to the latest developments in contemporary bilingual lexicography according to the structure of dictionaries and sources of evidence, there is an urgent need of updating on all three structural levels. While implementing the necessary updates large representative corpora, parallel corpora and lexical databases have to be used as the primary sources of evidence.
- On the megastructural level attention should be paid to the contents of metafunctional components and the necessity of outside matter components providing encyclopaedic information. On the macrostructural level the criteria of headword selection, the verification of the actual use of multiword expressions, the typographical distinction between secondary headwords and illustrative material should be reconsidered. On the microstructural level the necessary updates are related to the introduction and presentation of pronunciation variants, selection of equivalents with the help of a parallel corpus, choosing the adequate type of equivalent, selection of authentic corpus examples and the application of corpus-based information on grammar and usage.

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- 8. Belzēja, Z., Birzvalka, I., Jurka, L., Mozere, R., Raškevičs, J., Treilons, A. [2004] *Angļu-latviešu vārdnīca*. J. Baldunčiks (ed.), (5th ed.). Rīga : Design & Printing Services.
- 9. Birzvalka I. (1981) Angļu-latviešu vārdnīca. Rīga : Avots.
- 10. Birzvalka I., Sosāre M. [1994] *Angļu-latviešu vārdnīca un latviešu-angļu vārdnīca*. Rīga : Avots, 1989; [Rīga] : Latvijas Zinību biedrība, 1993; Rīga : Avots.
- 11. Birzvalka I., Sosāre M. (2000) *Angļu-latviešu vārdnīca un latviešu-angļu vārdnīca*. New York, NY : Hippocrene books.
- 12. Curiks, J., Bangerska I. Angliski-latviskā vārdnīca. Rīga : Valters un Rapa, 1937.
- 13. Dravnieks, J. (1924) Angļu-latvju vārdnīca. (2nd ed. 1931, 3rd ed. 1933, 1936, 4th ed. 1938). Rīga : Valters un Rapa.
- 14. Dravnieks, J. (1957) Angliski-latviska vārdnīca. Bruklina : Grāmatu draugs.
- 15. Godiņš, E. (1929) Angļu-latvju vārdnīca. Rīga : Ikdiena.
- 16. Grabe, Ā., Kalniņa, Dz., Purviņš, A. (2002) *Angļu-latviešu vārdnīca*. Rīga : Avots. [40 000 entries]
- 17. Hunter Blair, J. [1946] Angliski-latviska vārdnīca. Halle: Dārziņš.
- 18. Juhņeviča, I., Klētniece, A. (1964) *Angļu-latviešu vārdnīca*. Rīga : LVI. (2nd ed. Rīga : Liesma, 1966).
- 19. Kalnbērzs, J. (1945) *Angliski-latviska vārdnīca*. Vircburga : Vircburgas Centrālās nometnes latviešu komiteja.
- 20. Kalniņa, Dz. (1999) Angļu-latviešu/ latviešu-angļu vārdnīca. Rīga : Avots. [20 000 entries]
- 21. Kalniņa, Dz. (2001, 2006) Angļu-latviešu vārdnīca. Rīga : Avots. [10 000 entries]

- 22. Kalniņa, Dz. (2002, 2005) *Latviešu-angļu/ angļu-latviešu vārdnīca*. [Rīga] : Avots. [25 000 entries]
- 23. Kalniņa, Dz. (2002) Angļu-latviešu vārdnīca. Rīga : Avots. [6000 entries]
- 24. Kalniņa, Dz. (2003) Angļu-latviešu/ latviešu-angļu vārdnīca. Rīga : Avots. [22 000 entries]
- 25. Kalniņa, Dz. (2003) Angļu-latviešu/ latviešu-angļu vārdnīca. Rīga : Avots. [85 000 entries]
- 26. Kalniņa, Dz. [2004] Angļu-latviešu vārdnīca. Rīga : Avots. [35 000 entries]
- 27. Kalniņa, Dz., Kičigins, E., Kvēle-Kvāle, K., Linde, A., Miezīte, D., Pavlova, R., Štāle, D., Strazdiņa, A., Strazdiņa, I. (2007) *Angļu-latviešu vārdnīca*. E. Roze (ed.). Rīga : Avots. [85 000 entries]
- 28. Krādziņš, O. (1945) Mazā angliski-latviskā vārdnīca. [Landshute].
- 29. Kundziņš, H. (1946) Angliski-latviska un latviski-angliska vārdnīca. Pirmā daļa, Angliski-latviskā. [Detmolda] : Pētera Mantinieka apg., Edgara Ķiploka apg.
- 30. Mozere, R., Millere, A. [2001] *Latvian-English, English-Latvian pocket dictionary*. Rīga : Zvaigzne ABC.
- 31. Pelcis, V. (1940) *Praktiskā angļu-latviešu vārdnīca*. Rīga, Jelgava : Biogrāfiskā archiva apgāds.
- Raškevičs, J., Sosāre M., Timenčika, Ļ. (1962) Angļu-latviešu vārdnīca. Rīga : Latvijas Valsts Izdevniecība. (2nd ed. 1964; 3rd ed. Rīga : Liesma, 1976; 4th ed. Rīga : Avots, 1985).
- 33. Raškevičs, J., Sosāre, M. (1993) Angļu-latviešu vārdnīca. Rīga : Livonija-5.
- 34. Raškevičs, J., Sosāre, M., Dekunova, A. (1997) *Angļu-latviešu vārdnīca*. Rīga : Ekonomisko attiecību institūts.
- 35. Roze, K., Roze, K. (1931) Angliski-latviska vārdnīca. Rīga : Austra.
- 36. Roze, K., Roze, K. (1945, 1946) *Angliski-latviska vārdnīca*. Goeppingen : Autora izdevums.
- 37. [Roze, K., Roze, K.] (1945) Angliski-latviska vārdnīca. Flensburga : R. Virsnieks.
- Roze, K., Roze, K. [1946] Angliski-latviska vārdnīca. Stockholm : Vegastiftelsens Förlag.
- 39. Turkina, E. (1937) Angliski-latviska vārdnīca. Rīga : Valters un Rapa.
- 40. Turkina, E. (1948) Angliski-latviska vārdnīca. Rīga : Latvijas valsts izdevniecība.
- 41. Turkina, E. (1958) Angliski-latviska vārdnīca. Kopenhāgena : Imanta.
- 42. Angļu-latviešu vārdnīca [1997]. [Rīga] : Avots. [9000 entries]

Appendices

Appendix 1

Information Types in Bilingual Entry

information types	Rey- Debove (1971)	Haas (1962)	Zgusta (1971)	Atkins (1985)	Whitcut (1985)	Atkins ([1996] 2002)
headword:	х	х	х	Х	х	х
- in canonical form	х		х			
- variant spellings		х		Х	х	
secondary headword(s)						Х
- MWEs as secondary			х			
headwords						
phonetic transcription	х	Х	Х	Х	X	Х
grammatical description of		Х	Х			
headword:						
- grammar labels	х			Х	х	х
- morphological (inflections)	х		Х	Х	х	
- syntactic information		Х	Х	Х		х
sense number(s)	х					х
TL equivalent(s)	(x)	Х	Х	Х	(x)	х
examples transl. in TL:	х		Х	Х	X	Х
- typical						х
- problematic						х
- idiomatic			Х	Х		х
usage labels:	х	Х	Х	Х	х	х
- domain	х					х
- stylistic						х
- register	х				х	х
- regional	х				х	х
- diachronic	х				х	х
- evaluative/attitude	х					х
- frequency	x					
sense (semantic) indicators	х	(x)	Х	Х		Х
encyclopaedic glosses	х		Х			
collocators				Х	х	Х
cross-references	х			Х		х
representation or repetition symbols (~)	Х					

Appendix 2

Description of the ELDs Published During the Four Periods of the English-Latvian Lexicographic Tradition

ELDs published from 1924 till 1940

Author(s); publisher(s)	Year of and place of publication, repeated editions	Number of headwords	Title: Latvian (L); Latvian and English (L+E)	Sources of dictionary	Later editions in Latvia (L) abroad (A) (outside this period)	Indication of target audience
Dravnieks 'Valters un Rapa'	1924 Riga 1931 1933 1936 1938	[≈ 20 000]	L	-	A (1957)	-
Godiņš 'Ikdiena'	1929	-	L	-	-	-
Roze and Roze 'Autora izd.', printed by "Latvju kultūras" printing house	1931 Riga	-	L+E	An English Pronouncing Dictionary	A (1945, 1946)	University and secondary school students, anyone who wants to study English
Curiks, Bangerska 'Valters un Rapa'	1937 Riga	≈ 7000	L+E	An English Pronouncing Dictionary	-	Secondary school students and the intelligent part of society with a serious approach to English studies
Turkina 'Valters un Rapa'	1937 Riga	[≈ 30 000]	L	An English Pronouncing Dictionary	L (1948) A (1958)	-
Akuraters 'J. Roze'	1940 Riga	-	L	An English Pronouncing Dictionary	A (1946)	-
Pelcis 'Biogrāfiskais arhīvs'	1940 Riga, Jelgava	≈ 20 000	L+E	The New Method English Dictionary (1935) "General Service List", "Basic English word list"	-	[Learners of the English language]

ELDs published from 1945 till 1947

Author(s); publisher(s)	Year of and place of publication, repeated editions	Number of headwords	Title provided in: Latvian (L); Latvian and English (L+E)	Sources of dictionary	Later editions in Latvia (L) abroad (A) (outside this period)	Indication of target audience
Roze and Roze 'Authors' edition', printed by "Druckerei Kirchner"	1945, 1946 Goeppingen	-	L+E	An English Pronouncing Dictionary	-	University and secondary school students, anyone who wants to study English
[Roze and Roze] "R.Virsnieks"	1945 Flensburg	-	L+E	-	-	[Latvian refugees wishing to study the English language]
Krādziņš	1945 [Landshut]	≈ 3000	L+E	-	-	Latvian refugees wishing to study the English language
Kalnbērzs The Latvian Committee of the Central DP's Camp in Würzburg"	1945 Würzburg	900+	L	-	-	[Latvian refugees wishing to study the English language]
-	1945	-	-	-	-	-

	Siepkewerdum (!)					
Roze and Roze "Vegastiftelse ns Förlag"	[1946] Stockholm	-	L	-	-	-
Akuraters	1946 [Germany]	-	L	An English Pronouncing Dictionary	-	-
-	1946 [Germany]	≈ 10 000	L+E (!)	2 school books, technical terminology	-	[Latvian refugees wishing to study the English language]
Hunter Blair "T. Dārziņš"	[1946] Halle	-	L+E	-	-	-
Kundziņš "Pēteris Mantinieks", "Edgars Ķiploks"	1946 [Giften]	-	L+E	-	-	-

ELDs published from 1948 till 1990

Author(s); editor(s)	Year of and place of publication , publisher(s), repeated editions	Number of head- words	Title: in Latvian (L);Latvi an and English (L+E); Latvian and Russian (L+R)	Sources of dictionary	Later editions in Latvia (L) abroad (A) (outside this period)	Indication of target audience
E. Turkina Ed. A. Feldhūns	1948, Riga "Latvijas Valsts Izdevniecīb a" (LVI)	~30 000	L (+R)	English Pronouncing Dictionary (Jones)	-	-
Z. Belzēja J. Curiks A. Grīnblats L. Jurka A. Millere M. Stradiņa L. Timenčika A. Feldhūns Ed. M. Stradiņa	1957, Riga <i>"LVT</i> "	~45 000	L (+R)	The Shorter Oxford English Dictionary (1947), Webster's New International Dictionary of the English Language (1948), The Universal Dictionary of the English Language (Wyld 1946), The Concise Oxford Dictionary (1944), An English Pronouncing Dictionary (Jones 1945), English-Deutsches Wörterbuch (Wahrig 1955), English-Russian Dictionary (Müller 1953), English-Russian Dictionary (Müller 1953), English-Russian Dictionary (Arakin et al. 1954), English-Russian Phraseological Dictionary (Kunin 1955), ELD (Turkina 1948), ELD (Dravnieks 1936), ELD (Pelcis 1940)	-	Schoolchildren and students, as well as everybody who studies English, reads literature in English
J. Dravnieks	[1957] [Brooklyn] "Grāmatu draugs" 1964 2 nd , 1965 3 rd , repr.	~20 000	L+E	-	-	-
J. Raškevičs M. Sosāre Ļ. Timenčika edited by E. Rusmane and M. Sosāre	1962, Riga 1964 (2 nd ed.) " <i>LVT</i> "	~20 000	L+E (+R)	The Concise Oxford Dictionary of Current English (1959), Everyman's Engl. Pronouncing Dictionary (Jones 1958), The Shorter Oxford English Dictionary (1956), Webster's New International Dictionary of the English Language (1961), Chambers's Twentieth Century	L (1993, 1997)	Schoolchildren, university students, as well as everybody who studies English, reads texts in English

				Dictionary (1956), The Advanced Learner's Dictionary of Current English (1958), A Dictionary of Modern English Usage (Fowler 1959), An English-Reader's Dictionary (Hornby et al. 1959), English-Deutsches Wörterbuch (Wahrig 1955), Buildwörterbuch – Deutsch und English (1957), ELD (Belzēja et al. 1957), ELD (Belzēja et al. 1957), ELD (Turkina 1948), English-Russian Dictionary, Moscow (Müller 1960), English-Russian Dictionary Moscow (Arakin et al. 1955), English-Russian Dictionary (Ahmanova 1957), English-Russian Phraseological Dictionary (Kunin 1956), English-Russian Polytechnical Dictionary (Belkinda 1946) + various terminological dictionaries (?)		
I. Juhņeviča A. Klētniece	1964, Riga " <i>LVT</i> "	~7500	L+E	The English part taken from <i>English-Russian Dictionry</i> (Benyuch and Chernov 1961)	-	People studying the English language at the beginners' level and having contacts with English-speaking citizens
I. Juhņeviča A. Klētniece	1966, Riga "Liesma"	~7500	L+E	The English part taken from <i>English-Russian Dictionry</i> (Benyuch and Chernov 1965)	-	People studying the English language at the beginners' level and having contacts with English-speaking citizens
Z. Belzēja J. Curiks A. Feldhūns A. Grīnblats L. Jurka A. Millere M. Sosāre L. Timenčika Ed. Z. Belzēja I. Juhņeviča J.Raškevičs M. Sosāre E. Sprince	1966, Riga (2 nd ed.) <i>"Liesma"</i>	~42 000	L	The Shorter Oxford English Dictionary (1947; 1956), The Concise Oxford Dictionary of Current English (1959), Webster's New International Dictionary of the English Language (1961), Webster's New Collegiate Dictionary (1960), Chambers's Twentieth Century Dictionary (1956), The Universal Dictionary of the English Language (Wyld 1956), A Dictionary of Modern English Usage (Fowler 1959), The Advanced Learner's Dictionary of Current English (Hornby et al., 1958), An English-Reader's Dictionary (Hornby et al. 1959), Everyman's English Pronouncing Dictionary (Jones 1958), English-Deutsches Wörterbuch (Wahrig 1962), Buildwörterbuch, Deutsch und Englisch (1957), English-Russian Dictionary (Müller, 1965), English-Russian Phraseological Dictionary (Kunin 1955), English-Russian Polytechnical Dictionary (Chernuhin 1962), [A dictionary of the new meanings of scientific terms in English - (Chornaja 1965)]		Schoolchildren and students, as well as everybody who studies English, reads literature in English
Z. Belzēja J. Curiks	1971, Waverly	[~42 000]	E+L	based on the second ed. (1966) of the dictionary	-	[Latvians living abroad]

A. Grīnblats L. Jurka A. Millere M. Sosāre L. Timenčika A. Feldhūns Ed. Z. Belzēja I. Juhņeviča J. Raškevičs M. Sosāre E. Sprince	(Iowa) "Latvju Grāmata" 1975 2 nd , 1977 3 rd ed. "Latvju Grāmata", "Latvian National Publishers Repr. in 1983, 1988					
J. Raškevičs M. Sosāre Ļ. Timenčika edited by I. Birzvalka	1976, Riga (3 rd ed.) " <i>Liesma</i> " (Jēgers 1994, 143) – reprinted from 1976 edition Reprinted in 1983 East Lansing (Michigan) " <i>Gaujas</i> <i>apgāds</i> "	~20 000	L+E	The Concise Oxford Dictionary of Current English (1966), Everyman's Engl. Pronouncing Dictionary (Jones 1958), The Shorter Oxford English Dictionary (1961), The American Heritage Dictionary (1973), The New Merriam-Webster Pocket Dictionary (1973), Webster's Third New International Dictionary of the English Language (1967), A Dictionary of American Slang (Wentworth et al. 1966), New English-Russian Dictionary, 2 vols. (Galperin et al. 1972), English-Russian Phraseological Dictionary (1971)	L (1993, 1997)	Schoolchildren, university students, as well as everybody who studies English, reads texts in English
J. Raškevičs M. Sosāre Ļ. Timenčika edited by I. Birzvalka, M. Graustiņa and E. Sprince	1985, Riga (4 th ed) <i>"Avots"</i>	~22 000	L+E	The Concise Oxford Dictionary of Current English (1972), Everyman's English Pronouncing Dictionary (Jones 1972), Longman Dictionary of Contemporary English (1978), Oxford Advanced Learner's Dictionary of Current English (1981), The American Heritage Dictionary (1973), The New Merriam-Webster Pocket Dictionary (1973), Webster's Third New International Dictionary of the English Language (1967), A Dictionary of American Slang (Wentworth et al. 1975), English-Russian Dictionary, 2 vols. (Galperin et al. 1972), Addition to The Large English-Russian Dictionary (1980), English-Russian Phraseological Dictionary (1980), English-Russian Polytechnical Dictionary (1979)	L (1993, 1997)	Schoolchildren, university students, as well as everybody who studies English, reads texts in English
I. Birzvalka	1981, Riga "Avots"	~8500	L+E	Oxford Student's Dictionary of Current English (1978) Everyman's English Pronouncing Dictionary (Jones 1972)	-	Schoolchildren and the people studying English at the beginners' level
I. Birzvalka M. Sosāre (E-L, L-E)	1989, Riga "Avots"	~8000 (E-L) ~8000 (L-E)	L+E	Oxford Student's Dictionary of Current English (1978) Everyman's English Pronouncing Dictionary (Jones 1972)	L (1993, 1994) A (2000 – only ?)	Schoolchildren and the people studying the English language

ELDs published from 1991 to the present day

Author(s); editor(s)	Year of and place of publication, publisher(s), repeated editions	Number of headwords	Title: in Latvian (L);Latvia n and English (L+E)	Sources of dictionary	Indication of target audience
J. Raškevičs M. Sosāre Ed. D. Freimane	1993, Riga "Livonija-5"	~ 22 000	L+E	[the latest lexicographic and other sources used while compiling and editing the d-y]	Schoolchildren and the people studying the English language
I. Birzvalka	1993, Riga	~8000	L+E		Schoolchildren and the
M. Sosāre	"J995, Kiga "Latvijas Zinību Biedrība" 1994 "Avots"	~8000 (E-L) ~8000 (L-E)	LTE	Oxford Student's Dictionary of Current English (1978) Everyman's English Pronouncing Dictionary (1988)	people studying the English language
I. Birzvalka M. Sosāre (updated by L.Maizīte)	c1993 (2000), New York <i>"Hippocrene</i> books"	~8000 (E-L) ~8000 (L-E)	L+E	Oxford Student's Dictionary of Current English (1978) Everyman's English Pronouncing Dictionary (1972)	Schoolchildren and the people studying the English language [in the preface]
					Latvians living in North America and native English speaking students, travellers and business people [back cover blurb]
Z. Belzēja I. Birzvalka L. Jurka R. Mozere J. Raškevičs A. Treilons Red. I. Birzvalka	1995 1996 (2 nd ed.) 1997 (3 rd ed.) 2000 2004 Riga <i>"Jāņa sēta"</i>	~45 000	L+E	The latest lexicographic and other sources used while compiling and editing the dictionary	Teachers, university students and lecturers, everybody who reads English texts and periodicals
J. Raškevičs	1997 Riga	~ 22 000	L+E	The latest lexicographic and other	Schoolchildren, university
M. Sosāre A. Dekunova	Ekonomisko attiecību institūts	22 000		sources used while compiling and editing the dictionary	students, everybody who studies English and reads texts in English
?	[1997], [Riga] "Avots"	~9000	L+E	-	Schoolchildren and the people studying English, going on tourism and business trips
Dz. Kalniņa	1999 Riga "Avots"	~20 000 [E-L, L-E]	L+E	-	Schoolchildren and the people studying English, going on tourism and business trips
A. Millere R. Mozere	[2001] Riga "Zvaigzne ABC"	~6000	L+E	-	students, travellers and business people
Dz. Kalniņa	2001 Riga "Avots"	~10 000	L+E	-	Schoolchildren and the people studying English, going on tourism and business trips
Dz. Kalniņa	2002 [Riga] "Avots"	~6000	L	-	-
Dz. Kalniņa	2002, 2005 Riga "Avots"	~25 000 [E-L, L-E]	L+E	-	Schoolchildren and the people studying English, going on tourism and business trips
Ā. Grabe Dz. Kalniņa A. Purviņš	2002 Riga "Avots"	~40 000	L+E	-	Schoolchildren, students, translators and everyone who reads literature in the English language
Dz. Kalniņa	2003 [Riga] "Avots"	~22 000 [E-L, L-E]	L+E	-	Schoolchildren and the people studying English, going on tourism and business trips
Dz. Kalniņa	2003 [Riga] "Avots"	[~85 000] [E-L, L-E]	L	The New Penguin English Dictionary (Penguin Group, 2001) The Concise Oxford Dictionary of Proverbs (Oxford, 1998) Oxford Dictionary of Synonyms and Antonyms (Oxford, 1999) Pronunciation Dictionary (Longman, 1998)	-

Z. Belzēja I. Birzvalka L. Jurka R. Mozere J. Raškevičs A. Treilons Ed. J. Baldunčiks	[2004] (4 th ed.) Riga "Jāņa sēta" [2004?] (5 th ed.) "Design and Printing Services"	~42 000 headwords , ~70 000 translated lexical items	L+E	Active Study Dictionary of English (1988) Webster's Third New International Dictionary (1981) Dictionary of Pronunciation (Cornwall Books, 1981) Dictionary of Scientific and Technical Terms (McGraw-Hill Book Company, 1984) The Oxford English Minidictionary (Oxford, 1995) LED (Turkina 1962) ELD (1996) – "Jāņa sēta" (?) [latest lexicographic sources, course books and scientific literature, internet sources have been used while compiling and editing the d-y]	University students and teachers, interpreters, translators, government employees, journalists, and others who read in English
Dz. Kalniņa	2004 [Riga] "Avots"	~35 000	L+E	-	Schoolchildren and students and everyone who reads in English, goes on tourism and business trips
Dz. Kalniņa	2006 [Riga] "Avots"	~10 000	L+E	-	Schoolchildren and the people studying English, going on tourism and business trips
Dz. Kalniņa E. Kičigins K. Kvēle- Kvāle A. Linde D. Miezīte R. Pavlova D. Štāle A. Strazdiņa I. Strazdiņa Red. E. Roze	2007 [Riga] "Avots"	~85 000 headwords , ~175 000 translated lexical items	L+E	E-L, L-E (2003), 1084p. ["Avots"?] ELD 4th ed. 1234 p. ["Jāņa sēta" 2004?] [Numerous specialized terminological dictionaries which are very imprecisely described] Active Study Dictionary of English (1988) Chambers Compact Dictionary (Edinburg) The New Penguin English Dictionary (Penguin Group, 2001) Dictionary of Pronunciation (Cornwall Books, 1981) Dictionary of Scientific and Technical Terms (McGraw-Hill Book Company, 1984) Oxford Dictionary of Synonyms and Antonyms (Oxford, 1999) Pronunciation Dictionary (Longman, 1998) The Concise Oxford Dictionary of Proverbs (Oxford, 1998) Webster's Third New International Dictionary (1981) The Oxford English Minidictionary (Oxford, 1995) New English-Russian Dictionary, 3 vols. (Mednikova and Apresjan 2001)	

Entry BRANCH in English-Latvian Dictionaries

Dravnieks, J. (1924) *Anglu-latvju vārdnīca*. Rīga : Valters un Rapa (2^{nd} ed. 1931, 3^{rd} ed. 1933, 1936, 4^{th} ed. 1938).

Dravnieks, J. (1957) Angliski-latviska vārdnīca. Bruklina : Grāmatu draugs.

branch (branfch) 1. zars, zariņš; arods; nozare; (ciiis) linija; pēcnācēji; daļa, nodalījums, 2.zarot, izzaroties; nogriezties.

Godiņš, E. (1929) Angļu-latvju vārdnīca. Rīga : Ikdiena.

branch (brans) zars; zarot

Roze, K., Roze, K. (1931) *Angliski-latviska vārdnīca*. Rīga : Austra. Roze, K., Roze, K. (1945, 1946) *Angliski-latviska vārdnīca*. Goeppingen : Autora izdevums.

Roze, K., Roze, K. [1946] Angliski-latviska vārdnīca. Stockholm : Vegastiftelsens Förlag.

branch, -es (bran:tf) n., zars: atzarojums; nozare; atteka; v. t., iedalīt nozarēs; zarot; -less adj., bezzaru; -ed, kupis; -y, zarains.

Curiks, J., Bangerska I. (1937) Angliski-latviskā vārdnīca. Rīga : Valters un Rapa.

branch — bran(t)/ — v. t. sazarot, sadalit, n. zars, nozare

Turkina, E. (1937) Angliski-latviska vārdnīca. Rīga : Valters un Rapa.

branch (bra:n(t)]) 1. s. zars, atzarojums; zara ilnija (ģimenē); nodaļa; atteka; 2. v. n. sazaroties, atzarot, atdalīties, sadalīties; this road ~es off — šis ceļš nogriežas; v. a. sadalīt zaros.

Akuraters, L. (1940) Angliski-latviska vārdnīca. Rīga : Roze.

branch (bramt]) sazarot; zars; nozarojums

Pelcis, V. (1940) *Praktiskā angļu-latviešu vārdnīca*. Rīga, Jelgava : Biogrāfiskā archiva apgāds.

branch* (bra:ntj) zars; atteka (upes); nozare; firmas vai biedrības nodaļa; v. zarot.

[Roze, K., Roze, K.] (1945) Angliski-latviska vārdnīca. Flensburga : R. Virsnieks.

branch, -es (brañĉ) n., zars, atzarojums; nozare; attoka; v.t., iedalit nozaros; zarot; - 1 e s s adj., bézzaru; - o d , kupls; - y , zarains.

Krādziņš, O. (1945) Mazā angliski-latviskā vārdnīca. [Landshute].

branch = brahnč = ZOTS

Kalnbērzs, J. (1945) Angliski-latviska vārdnīca. Vircburga : Vircburgas Centrālās nometnes latviešu komiteja.

branch (bra:ntsh) zars; nozare; nodala (filiale); (sa)zarot, nozaroties (out)

Akuraters, L. (1946) Angliski-latviska vārdnīca. [Germany].

bradoh(bra:nt/)zars; nozarojums

Hunter Blair, J. [1946] Angliski-latviska vārdnīca. Halle: Dārziņš.

branch, bra:ntf, n. zars.

Kundziņš, H. (1946) Angliski-latviska un latviski-angliska vārdnīca. Pirmā daļa, Angliskilatviskā. [Detmolda] : Pētera Mantinieka apg., Edgara Ķiploka apg.

branch [brānš] zars, atzaro. jums, nodaļa; atzaroties, sazaroties

Turkina, E. (1948) Angliski-latviska vārdnīca. Rīga : Latvijas valsts izdevniecība. Turkina, E. (1958) Angliski-latviska vārdnīca. Kopenhāgena : Imanta.

branch [bram(t), j] 1. s. zars, at-zarojums; zara līnija (ģinienö); nodaļa; atteka; root and ~ pilnīgi, no galvas līdz kājām; ~ of the seā — jūras hicis; nozare; žuburs (lukturim), atradzis (briedim); 2. v. n. sazaroties, atzarot, at-dalīties, sadalīties; this road ~es off — šis ceļš nogriežas; to be ~cd — celties no; v. a. sadalīt zaros

Belzēja, Z., et al. (1957) *Angļu-latviešu vārdnīca*. Stradiņa, M. (ed.). Rīga : Latvijas valsts izdevniecība.

branch^a [bra:n1] n l. zars; 2. no-zare; 3. filiale, nodaļa; b. establishment — filiale; 4. (upes) attcka; 5. (ceļa, kalnu grēdas) atzarojums; b. line — (dzelzceļa) nozarojums; 6. (ģimenes) zars, līnija
branch^b [bra:n1] v l. (arī to b. out; to b. forth) sazarot, sazaroties; 2: to b. away (off) — atzaroties; this road ~es off — šis ceļš nogriežas

Raškevičs, J., Sosāre, M., Timenčika, Ļ. (1962) *Angļu-latviešu vārdnīca*. Rīga : Latvijas Valsts Izdevniecība (2nd ed. 1964)

branch [braint]] 1 n 1. zars; 2. nozare; 3. filiāle; 4. (upes) atteka; 5. (ceļa) atzarojums; 11 v 1. sazarot; sazaroties; 2.: to b. away (off) — atzaroties; to b. out sazaroties

Raškevičs, J., Sosāre, M., Timenčika, Ļ. (1976) *Angļu-latviešu vārdnīca*. 3rd ed. Rīga : Liesma (4th ed. Rīga : Avots, 1985).

Raškevičs, J., Sosāre, M. (1993) Angļu-latviešu vārdnīca. Rīga : Livonija-5.

Raškevičs, J., Sosāre, M., Dekunova, A. (1997) *Angļu-latviešu vārdnīca*. Rīga : Ekonomisko attiecību institūts.

branch [brannt]] I n 1. zars; 2. nozare; 3. filiāle; 4. (upes) atteka; 5. (cefa) atzarojums; II v 1. sazarot; sazaroties; 2: to b. ofi — atzaroties; to b. out — sazaroties **Juhņeviča, I., Klētniece, A.** (1964) *Angļu-latviešu vārdnīca*. Rīga : LVI (2nd ed. Rīga : Liesma, 1966).

branch [bra:ntf] n 1. zars; 2. nozare;

Belzēja, Z., et al. (1966) *Angļu-latviešu vārdnīca*. Juhņeviča, I. et al. (eds.). Rīga : Liesma. **Belzēja, Z., et al.** (1971) *English-Latvian dictionary*. *Angļu-latviešu vārdnīca*. Waverly (Iowa) : Latvju Grāmata.

branch [brannf] I n 1. zars; 2. nozare; 3. filiāle, nodaļa; b. establishment filiāle; 4. (upes) atteka; 5. (ceļa, kalnu grēdas) atzarojums; b. line — (dzelzceļa) nozarojums; 6. (ģimenes) zars, līnija; II v (ari to b. out; to b. forth) sazarot; sazaroties; \Box , to b. away (off) — atzaroties, this road ~es off — šis ceļš nogriežas

Birzvalka I. (1981) *Angļu-latviešu vārdnīca*. Rīga : Avots.

Birzvalka I., Sosāre M. [1994] *Angļu-latviešu vārdnīca un latviešu-angļu vārdnīca*. Rīga : Avots, 1989; [Rīga] : Latvijas Zinību biedrība, 1993; Rīga : Avots.

Birzvalka I., Sosāre M. (2000) *Angļu-latviešu vārdnīca un latviešu-angļu vārdnīca*. New York, NY : Hippocrene books.

branch [braints] n 1. zars; 2. nozare; 3. filiāle; 4. (cefa, upes) atzarojums

Belzēja, Z., et al. (1995) *Angļu-latviešu vārdnīca*. Birzvalka, I. (ed.). Rīga : Jāņa sēta (2nd ed. 1996, 3rd ed. 1997, 2000).

Belzēja, Z., et al. (2004) *Angļu-latviešu vārdnīca*. Baldunčiks, J. (ed.) (4th ed.), Rīga : Jāņa sēta, (5th ed., Design & Printing Services).

branch [bra:ntf] I n 1. zars; 2. nozare; 3. filiāle, nodaļa; b. establishment (office) — filiāle; 4. (upes) atteka; 5. (ceļa, kalnu grēdas) atzarojums; b. line dzelzceļa nozarojums; b. pipe tehn. īscaurule; 6. (ģimenes) zars, līnija; II v sazarot[ies]; = to b. off — atzaroties; this road ~es off — šis ceļš nogriežas; to b. out — sazaroties

Angļu-latviešu vārdnīca [1997]. [Rīga] : Avots. [9000 entries]

branch [bra:nt] n 1. zars; 2. nozare; 3. filiāle; 4. (ceļa, upes) atzarojums

Kalniņa, Dz. (1999) Angļu-latviešu/ latviešu-angļu vārdnīca. Rīga : Avots. [20 000 entries]

branch [bra:ntf] n 1. zars; 2. nozare; 3. filiāle; 4. (ceļa, upes) atzarojums

Mozere, R., Millere, A. [2001] *Latvian-English, English-Latvian pocket dictionary*. Rīga: Zvaigzne ABC.

.branch [bront]] I n zars; nozare; filiāle; II v sazaroties; atzaroties

Kalniņa, Dz. (2001, 2006) Angļu-latviešu vārdnīca. Rīga : Avots. [10 000 entries]

branch [bra:ntf] n 1. zars; 2. nozare; 3. filiāle; 4. (cela, upes) atzarojums Kalniņa, Dz. (2002) Angļu-latviešu vārdnīca. Rīga : Avots. [6000 entries] branch n zars

Kalniņa, Dz. (2002, 2005) *Latviešu-angļu/ angļu-latviešu vārdnīca*. [Rīga] : Avots. [25 000 entries]

branch (bra:ntʃ] n 1. zars; 2. nozare; 3. filiāle; 4. (ceļa, upes) atzarojums

Grabe, Ā., Kalniņa, Dz., Purviņš, A. (2002) *Angļu-latviešu vārdnīca*. Rīga : Avots. [40 000 entries]

branch [bra:nt]] I n 1. zars; 2. nozare;
3. filiāle, nodaļa; b. establishment (office) - filiāle; 4. (upes) atteka;
5. (ceļa, kalnu grēdas) atzarojums;
6. (ģimenes) zars, līnija; II v sazarot[ies]

Kalniņa, Dz. (2003) Angļu-latviešu/ latviešu-angļu vārdnīca. Rīga : Avots. [22 000 entries]

branch [bra:nt]] n 1. zars; 2. nozare; 3. filiāle; 4. (ceļa, upes) atzarojums

Kalniņa, Dz. (2003) Angļu-latviešu/ latviešu-angļu vārdnīca. Rīga : Avots. [85 000 entries]

branch [bra:ntf] I n 1: zars; 2. nozare; 3. filiāle, nodaļa; b. establishment (office) – filiāle; 4. (upes) atteka; 5. (ceļa, kalnu grēdas) atzarojums; 6. (ģimenes) zars, līnija; II v sazarot[ies]

Kalniņa, Dz. [2004] Angļu-latviešu vārdnīca. Rīga : Avots. [35 000 entries]

branch [bru:ntf] In 1. zars; 2. nozare;
3. filiāle, nodaļa; 4. (upes) atteka;
5. (ceļa, kalnu grēdas) atzarojums;
6. (ģimenes) zars, līnija; II v sazarot[ies]

Kalniņa, Dz., et al. (2007) Angļu-latviešu vārdnīca. Roze, E. (ed.). Rīga : Avots. [85 000 entries]

branch [bra:nt]] I n 1. zars; 2. nozare; b. development programme – nozares attīstības plāns; leading b. – vadošā nozare; auxiliary b. – palīgnozare; nonproduction b. – neražojošā nozare; 3. filiāle, nodaļa; b. establishment (office) – filiāle; 4. (upes) atteka; 5. (ceļa, kalnu grēdas) atzarojums; b. line – dzelzceļa nozarojums; b. pipe tehn. – īscaurule; 6. (ģimenes) zars, līnija; 7. inform. zars; b. and bound algorithm – zaru un robežu algoritms; II v sazarot[ies]; I to b. off – this road ~es off – šis ceļš nogriežas; 1) nogriezties no galvenā ceļa uz mazākas nozīmes ceļu; 2) novirzīties (no tēmas); to b. out – paplašināties; atvērt (jaunu cehu, nodaļu u. tml.); ♦ to b. into a long discourse – ielaisties garos spriedelējumos

Data for Megastructural Analysis

The first period (1924–1940)

		Dravnieks (1924)	Godiņš (1929)	Roze, Roze (1931)	Curiks, Bangerska (1937)	Turkina (1937)	Akuraters (1940)	Pelcis (1940)
A	'Metafunctional components'							
A1	preface (contains info on):		+	+	+			+
	purpose of the di-y			+	+			(+)
	word-stock included	UG				UG		+
	-scope of vocabulary layers included (temporal, register, field)							+
	-types of lexical items included (derivatives, phraseology, etc.)	UG		+				+
	sources of the di-y			+	+	+	+	+
	number of headwords				+			+
	target user group			+	+			(+)
	outside matter components				+	+		
	most frequently used w-s marked							+
A2	user's guide (contains info on):	+	-	-	-	+	-	+
	- macrostructure:	+				(+)		
	- microstructure:	+				+		+
	structure indicators used in di-y:	+						+
	- typographical	+						+
	- non-typographical					+		+
	means of textual condensation	+				+		
	pronunciation key (for di-y)	+	+	+	+	+	+	+
	list of labels (in di-y):	+		+	+	+		+
	-field	SB		+		+		
	-regional	+				+		+
	-register	SB				+		+
	-style	+						
	-temporal	SB						
	-attitude (evaluative)	+						
	-frequency	SB						
	-semantic/ meaning type (metaphorically, figur-ly)	+				+		+
	-grammar labels (pos, gender, number,	+	1	+	+	+		+

[FM (in front matter), BM (in back matter), PR (in preface), UG (in user's guide), SB (symbol)]

etc.)							
-metalinguistic abbreviations (sk., u.c.,	+		+		+		+
u.tml., etc.)							
cross-reference system							
B components providing encyclopaedic inf. on the lg. being described (lists of lexical items)							
geographical names							
nationalities							
personal names							
abbreviations					BM		
ls	BM				DIVI		
days of the week	DIVI				-	BM	
months						BM BM	
continents						BM BM	
countries and nations of Europe						BM	
C components providing linguistic inf. on					_	DIVI	
Ig. being described							
alphabet	FM						
pronunciation rules	FM	FM	FM				FM
grammar rules:	FM		FM		FM		
- conjugation of verbs	FM		FM		FM		FM
- conjugation of aux. verbs					FM		
- plural of nouns					FM		
- gender of nouns					FM		
-degrees of comp. of adjectives					FM		
lists of irregular verbs	FM		FM	FM	FM	FM	
list of verb+ preposition				BM			
word-formation (affixation)							FM
D miscellaneous components							
-reading of numbers in English							FM
correction of mistakes					BM		
E access structure							
table of contents							
"running heads"	+			+	+		+

The second period (1945–1947)

[FM (in front matter), BM (in back matter), PR (in preface), UG (in user's guide)]

	(in none matter), biv (in o	Roze (Goep. 1945)	Roze (Flensb. 1945)	Roze (Stockh. 1946)	Krādziņš (1945)	Kalnbērzs (1945)	Akuraters (1946)	Hunter Blair (1946)	Kundziņš (1946)
А	'Metafunctional components'			-					
A1	preface (contains info on):	+	+		+	+			
	purpose of the di-y	+	(+)		+	+			
	word-stock included	+				+			UG
	-scope of vocabulary layers included (temporal, register, field)					+			
	-types of lexical items included (derivatives, phraseology, etc.)	+							UG
	sources of the di-y	+(1)					+		
	number of headwords				+	+			
	target user group	+			(+)	(+)			
	outside matter components								UG
A2	user's guide (contains info on):					(+)		+	+
	macrostructure:					+			+
	microstructure:					+			
	structure indicators used in di-y:								
	- typographical								
	- non-typographical					+			+
	means of textual condensation					+			
	pronunciation key (for di-y)	+	+		+	+	+	BM	+
	list of labels (in di-y):	+	+			(+)		BM	+
	-field	+	+			+			+
	-regional					+			+
	-register								
	-style								
	-temporal								
	-attitude (evaluative)								
	-frequency								
	-semantic/ meaning type (metaphorically, figur-ly)					+			
	-grammar labels (pos, gender, number, etc.)	+	+			+		BM	+
	-metalinguistic abbreviations (sk., u.c., u.tml., etc.)	+	+			+		BM	+
D	cross-reference system								
В	components providing encyclopaedic inf. on the lg. being described								
	(lists of lexical items)								

	geographical names						
	nationalities						
	personal names						
	abbreviations			BM			
	ls		BM	Diff			
	days of the week		BM		BM		
	months		BM		BM		
	continents		DIVI		BM		
	countries and nations of Europe				BM		
	American vs. British items			BM	DIVI		
	proper nouns + pronunciation			DIVI		BM	
С	components providing linguistic					DIVI	
C	inf. on lg. being described						
	alphabet		BM	FM			FM
	pronunciation rules	FM	Divi	1 101			1 101
	grammar rules:	1 191	 				
	- conjugation of verbs	FM	 				
	- conjugation of aux. verbs	FM	 				
	- plural of nouns	1.161					
	- gender of nouns						
	-degrees of comp. of adjectives						
	lists of irregular verbs	FM		BM	FM	BM	BM
	list of verbs+ prepositions	F IVI		DIVI	L IAI	DIVI	DIVI
D	word-formation (affixation) miscellaneous components						
D	reading of numbers in English						
			BM				
	time (clock) measures, weights, etc.		BM BM			DM	
						BM	
	dates		BM BM				
	signs, warnings family members		BM BM				
			BM BM				
	time (periods, etc.) house, household items		BM BM				
	food, beverages, meals		BM				
			BM BM				
	human body clothing		BM BM				
	domestic animals		BM BM				
			BM BM				
	professions, occupations		BM			DM	
	"menu" (food, beverages)	+	 			BM	
	British, American money correction of mistakes		 DM			BM	EM
		<u> </u>	 BM			DM	FM
	advertisements of other publications					BM	
E	access structure						
	table of contents			BM			
	"running heads"						+

The third period (1948–1990)

Turkina Belzēja Belzēja et al. Rašekvičs Rašekvičs Juhņeviča, Belzēja et Birzvalka Birzvalka, (1948)2nd ed. et al. (1976, Klētniece et al. et al. al. (1981) Sosāre (1957)(1966) (1962) 1985) (1964, (Waverly, (1989) 1966) 1971) А 'Metafunctional components' A1 +(PR+UG) preface (contains info on): + + + + + + + purpose of the di-y + + + + + (+) (+) word-stock included + + + + + + + + + -scope of vocabulary layers $^+$ + $^{+}$ $^{+}$ (+) +included (temporal, register, field) -types of lexical items + + ++(+) $^{+}$ included (derivatives, phraseology, etc.) sources of the di-y $^{+}$ + + $^+$ $^{+}$ $^{+}$ + $^{+}$ number of headwords + + ++ + + + + target user group + + $^+$ $^+$ $^+$ $^+$ + $^+$ outside matter components $^+$ $^{+}$ $^+$ $^+$ $^+$ $^+$ $^{+}$ A2 user's guide (contains info $^+$ + $^+$ + +(+) $^{+}$ $^+$ $^+$ on): macrostructure: + + + + + $^{+}$ + +microstructure: $^{+}$ + + + $^{+}$ + $^{+}$ + $^+$ structure indicators used in di-+ + + ++ $^{+}$ + + y: - typographical + + $^+$ $^{+}$ $^{+}$ $^{+}$ + $^{+}$ - non-typographical + + + + + + +++ means of textual condensation $^+$ $^{+}$ + $^+$ $^{+}$ + $^+$ $^+$ $^+$ pronunciation key (for di-y) ++ ++ + $^{+}$ list of labels (in di-y): + + + + ++ $^{+}$ $^{+}$ + -field + + ++ +++ + + -regional $^{+}$ $^{+}$ + + $^{+}$ + $^{+}$ $^+$ + -register + $^+$ + $^+$ $^{+}$ $^+$ $^+$ $^+$ $^+$ -style + $^{+}$ $^+$ $^+$ + $^{+}$ -temporal $^+$ $^{+}$ $^+$ $^{+}$ $^{+}$ -attitude (evaluative) + + + + + -frequency -semantic/ meaning type + + $^+$ $^+$ $^{+}$ $^{+}$ $^+$ + $^{+}$ (metaphorically, figur-ly) -grammar labels (pos, gender, +++++ ++++number, etc.) -metalinguistic abbreviations + + + + + + + + + (sk., u.c., u.tml., etc.) cross-reference system +

[FM (in front matter), BM (in back matter), PR (in preface), UG (in user's guide)]

	short description of each part				+	+				
В	of speech components providing									
Б	encyclopaedic inf. on the lg.									
	being described									
	(lists of lexical items)									
	geographical names		BM	BM	BM	BM	BM		BM	BM
	nationalities									
	personal names		BM	BM	BM	BM				
	abbreviations	BM	BM	BM	BM	BM			BM	BM
	ıls									
	days of the week									
	months									
	continents									
	countries and nations of Europe									
	American vs. British items				1	+ +		1		
	proper nouns + pronunciation									
С	components providing									
	linguistic inf. on lg. being described									
	English alphabet		FM	FM		FM	FM	FM	FM	FM
	pronunciation rules									
	grammar rules:									
	- conjugation of verbs	FM			BM	BM				
	- conjugation of aux. verbs	FM								
	- plural of nouns	FM								
	- gender of nouns	FM								
	-degrees of comp. of adjectives	FM								
	lists of irregular verbs	FM			BM	BM				
	list of verb+ preposition									
	word-formation (affixation)	FM			FM	FM				
	Proverbs, idioms, sayings							BM		
	American slang							BM		
D	miscellaneous components									
	reading of numbers in English									
	time (clock)									
	measures, weights, etc.				BM	BM (1976)	BM			
	dates									
	signs, warnings									
	family members									
	time (periods, etc.)									
	house, household items									
	food, beverages, meals									
	human body									
	clothing									

	domestic animals									
	professions, occupations									
	"menu" (food, beverages)									
	British, American monetary				BM		BM			
	units									
	afterword							BM		
	correction of mistakes									
	advertisements of other					BM		BM		
	publications					(1985)				
E	access structure									
	table of contents		BM	BM				BM		
	"running heads"	+	+	+	+	+		+	+	+

The fourth period (1991 – the present day)

[FM (in front matter), BM (in back matter), CBM (in common back matter of E-L,L-E di-s) PR (in preface), UG (in user's guide)]

		Raškevičs et al. (1993, 1997)	Birzvalka, Sosāre (1993, 1994)	Birzvalka, Sosāre (1993, 2000) <i>"Hipp. Books"</i>	Belzēja et al. (1995, 2004)	ELD "Avots" (1997) {9000}	Kalniņa (1999) {E-L,L- E, 20 000}	Mozere, Millere (2001) E-L, L- E	Kalniņa (2001, 2006) {10 000}	Kalniņa (2002) {6000}	Kalniņa (2002, 2005) {E-L,L- E, 25 000}	Grabe et al. (2002)	Kalniņa (2003) {E-L, L- E, 22 000}	Kalniņa (2003) {E-L, L- E, 85 000}	Kalniņa (2004) {35 000}	Kalniņa et al. (2007)
A	'Metafunctional															
	components'															
A1	preface (contains info on):	+	+	+	+	(+)	(+)	+	(+)		(+)	+	(+)		+	
	purpose of the di-y	+	+	+	+	+	+	+	+		+	+	+		+	
	word-stock included:	+	+	+	+							+			+	+
	-scope of vocabulary layers included (temporal, register, field, regional)	+			+							+			+	+
	-types of lexical items included (derivatives, phraseology, etc.)	+	+	+	+							+				+
	sources of the di-y	-	+	+	(+)							(+)		+		BM
	number of headwords	+	+	+	+	+	+	+	+	+	(+)	+	+	(+)	+	
	target user group	+	+	+	+	+	+	+	+		+	+	+		+	
	outside matter components	+				UG	UG	+	UG		UG	+ (also in UG)	UG		+	(+)
A2	user's guide (contains info on):	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	macrostructure:	+	+	+	+	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
	microstructure:	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	structure indicators used in di-y:	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	- typographical	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	- non-typographical	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	means of textual	+	+	+	+	+	+	+	+		+	+	+	+	+	+
	condensation															
	pronunciation key (for di-y)	+	(+)	(+)	+			+			(+)	+	+	+	+	+
	list of labels (in di-y):	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	-field	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	-regional	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	-register	+	+	+	+	+	+	+	+		+	+	+	+	+	+
	-style	+			+							+	+	+	+	+
	-temporal	+			+			+				+		+	+	+
	-attitude (evaluative)	+			+			+					+	+	+	+
	-frequency															
	-semantic/ meaning type	+	+	+	+	+	+	+	+		+	+	+	+	+	+
	(metaphorically, figur.)															
	-grammar labels (pos,	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	gender, number, etc.)															
	-metalinguistic	+	+	+	+	+	+	+	+		+	+	+	+	+	+
	abbreviations (sk., u.c.,															
	u.tml., etc.)															
	cross-reference system												(+) to			
	cross reference system												BM			
	short description of each	+											Bill			
	part of speech															
	abstract	+										BM				FM
В	components providing							1						1	1	
_	encyclopaedic inf. on the															
	lg. being described															
	(lists of lexical items)															
	geographical names	BM	BM	BM	BM						BM	BM		CBM	BM	BM
	nationalities, languages										BM					
	personal names	BM			BM						BM	BM		CBM		BM
	abbreviations	BM	BM	BM	BM	BM	BM		BM		BM	BM		CBM	BM	BM
	ls						BM				BM	BM		CBM	BM	BM
	days of the week													-		
	months															
	continents		1													
	countries, territories		1	1	1		BM				BM			1		
	American vs. British lexical						21.12				2					BM
	items															2
	proper nouns (different															
	kinds) + pronunciation															
	EU terminology													CBM		BM
С	components providing															
	linguistic inf. on lg. being															
	described															

pronunciation rules							FM	FM	CBM	FM	FM
grammar rules:											
- conjugation of verbs							BM				
- conjugation of aux. verbs									CBM	BM	BM
- plural of nouns							BM	CBM	CBM	BM	BM
- gender of nouns											
-degrees of comp. of											
adjectives											
-contracted forms							BM		CBM	BM	BM
-punctuation in English							BM		CBM	NM	BM
list of irregular verbs	BM			BM		BM	BM	CBM	CBM	BM	BM
list of irregular plural forms of nouns		BM		BM	BM	BM	BM	CBM	CBM	BM	BM
list of irregular degrees of comparison of adjectives, (adv-s)						BM	BM	CBM	CBM	BM	BM
list of verb+ preposition											
word-formation (affixation)	FM										
	FIVI										
Proverbs, idioms, sayings		 									
American slang											
) miscellaneous components											
reading of numbers in English											
time (clock)			BM			BM					
measures, weights, etc.							BM		CBM	BM	BM
dates											
signs, warnings					BM (2001)						
family members					(2001)						
time (periods, etc.)											
house, household items											
food, beverages, meals											
human body											
clothing											
domestic animals											
professions, occupations											
"menu" (food, beverages)					<u> </u>						
British, American monetary units											
fractions, decimals			BM		+ +	BM		1			
calculations			BM		+ +	 BM					(BM)
numerals in mathematics			Din		+ +	 D111	BM		CBM	BM	(2)
temperature					+		BM		CBM	BM	BM
English words given in d-y					+		FM		FM	FM	DIVI
without phon. transcription							FIVI		FIVI	FIVI	
languages and lg groups								1			BM

	afterword														
	correction of mistakes														
	advertisements of other	+		+									+		+
	publications														
E	access structure														
	table of contents	FM			FM										BM
	"running heads"	+	+	+	+		+	+		+	+	+	+	+	+
	thumb index					+	+		+	+	+		+	+	

Data for Macrostructural Analysis

The first period (1924–1940)

	Dravnieks (1924)	Godiņš (1929)	Roze, Roze (1931)	Curiks, Bangerska (1937)	Turkina (1937)	Akuraters (1940)	Pelcis (1940)
A. Types of main and secondary HWs							
A.1. Main HWs							
single items:							
single words	+	+	+	+	+	+	+
derivatives	(+)	+	+		+	+	+
closed compounds	+	+	+	+	+	+	+
hyphenated compounds	+	+	+	+	+	+	+
inflected forms:							
-irregular inflected forms of verbs	+			+	+		+
-irregular plurals of nouns	+			+	+		+
abbreviations	+	+		+	+		+
contracted forms	+				+		+
partial words (productive affixes)	+	(+)			+	+	+
multiword items:							
open compounds, (also collocations)	+	+		+			+
phrasal verbs		+		+			(+)
idioms		+		+			
phrases (similes, proverbs, etc.)				+			
A.2. Secondary HWs single items:							
derivatives	+		+			+	+
closed, hyphenated compounds	+		+		+	+	+

multiword items:							
open compounds							+
collocations	+				+	+	+
phrasal verbs	+				+		+
idioms	+		+		+	(+)	+
B. Means of textual condensation:							
main headwords:							
- swung dash							
- vertical stroke			+				
- slash						+	
secondary headwords:							
 swung dash 	+				+		
- dash			+				
- slash						+	
C. Principle of alphabetization applied:							
-letter-by-letter principle	LBL						
-word-by-word principle							
D. Types of entries and techniques of							
secondary headword arrangement:							
- flat	+	+	+	+	+	+	+
- tiered:	+		+		+	+	+
niching	(+)		(+)		(+)		(+)
listing					+		
clustering	(+)		(+)				(+)
nesting	+		+		+	+	+
listing					+		
clustering	+		+		+	+	+
E. Criteria for presenting homonymous HWs:							
-different meaning and etymology	+	+		+	(+)	(+)	(+)
-different meaning and	+	+	+	+	+	(+)	+
pronunciation							
-different meaning and	+	+	+	+	+		+
capitalization (the same							
pronunciation)							
-different POS, related meaning							

The second period (1945–1947)

	Roze, Roze (Goep. 1945)	Roze, Roze (Flensb. 1945)	Roze, Roze (Stockh. 1946)	Krādziņš (1945)	Kalnbērzs (1945)	Akuraters (1946)	Hunter Blair (1946)	Kundziņš (1946)
A. Types of main and secondary HWs A.1. Main HWs								
single items:								-
single words	+	+	+	+	+	+	+	+
derivatives	+	+	+	+	+	+	+	+
closed compounds	+	+	+	+	(+)	+	(+)	+
hyphenated compounds	+	+	+	+		+	(+)	+
inflected forms:								
-irregular inflected forms of verbs		-			(+)	+	+	
-irregular plurals of nouns		-			(+)	+	+	+
abbreviations				+	, , , , , , , , , , , , , , , , , , ,			+
contracted forms					(+)		+	
partial words (productive affixes)					\	+		+
multiword items:		-						
open compounds				+				+
phrasal verbs								
idioms								
phrases (similes, proverbs, etc.)				+		(+)		+
A.2. Secondary HWs single items:								
derivatives	+	+	+		+	+		
closed, hyphenated compounds	+	+	+			+	+	
multiword items:								
open compounds						+	+	+
collocations					+	+	+	
phrasal verbs	(+)	(+)	(+)		+	-	(+)	
idioms					(+)	(+)	(+)	
B. Means for indication of textual condensation:								
main headwords:								
- swung dash			+					
 vertical stroke 								
- slash	+	+			+	+		
secondary headwords:								
 swung dash 								
- dash								
- slash	+	+	+		+	+		
C. Principle of alphabetization applied:								
-letter-by-letter principle -word-by-word principle	LBL	LBL	LBL	LBL (WBW)	LBL	LBL	LBL	LBL

D. Types of entries and techniques of secondary headword arrangement:				-				
- flat	+	+	+		+	+	+	+
- tiered:	+	+	+		+	+	+	
niching								
listing								
clustering								
nesting	+	+	+		+	+	+	
listing					(+)			
clustering	+	+	+		+		+	
E. Criteria for presenting homonymous								
HWs:								
-different meaning and etymology	(+)	(+)	(+)	+	(+)	(+)		+
-different meaning and	+	+	+	(+)	(+)	(+)	(+)	+
pronunciation								
-different meaning and	+	+	+	+	(+)			+
capitalization (the same								
pronunciation)								
-different POS, related meaning								

The third period (1948–1990)

	Turkina (1948, 1958)	Belzēja et al. (1957)	Belzēja et al. (1966, 1971)	Raškevičs et al. (1962, 1964, 1976, 1985)	Juhņeviča, Klētniece (1964, 1966)	Birzvalka (1981)	Birzvalka, Sosāre (1989)
A. Types of main and secondary HWs							
A.1. Main HWs							
single items:							
single words	+	+	+	+	+	+	+
derivatives	+	+	+	+	+	+	+
closed compounds	+	+	+	+	+	+	+
hyphenated compounds	+	+	+	+	+	+	+
inflected forms:							
-irregular inflected forms of verbs	+	+	+	+	+	+	+
-irregular plurals of nouns	+	+	+	+	+	+	+
abbreviations					+		
contracted forms	+	+	+	+	+	+	+
partial words (productive affixes)	+			+			
multiword items:							
open compounds		(+)	+	+	+	+	+
phrasal verbs							
idioms							
phrases (similes, proverbs, etc.)							

A 2 Green dame HW/-						1	
A.2. Secondary HWs single items:							
derivatives					+		
closed, hyphenated compounds	+			+	+		
multiword items:							
open compounds	-			+	+		
collocations		+	+	+			
phrasal verbs	+	+	+	+	+	+	+
idioms	+	+	+	+	+	+	+
B. Means for indication of							
textual condensation (applied):							
main headwords:							
 swung dash 							
 vertical stroke 				+	+		
- slash							
secondary headwords:							
- swung dash	+			+	+		
- dash							
- slash							
- HW (first letter only)		+	+			+	+
C. Principle of alphabetization:	LBL						
-letter-by-letter principle -word-by-word principle	LBL						
D. Types of entries and							
techniques of secondary							
headword arrangement:							
- flat	+	+	+	+	+	+	+
- tiered:	+	+	+	+	+	+	+
niching	+			+			
listing	(+)			'			
clustering	(1)			+			
nesting	+	+	+	+	+	+	+
listing	+						
clustering	+	+	+	+	+	+	+
E. Criteria for presenting					,		
homonymous HWs:							
-different meaning and	(+)	+	+	+	+	+	+
etymology							
-different meaning and	+	+	+	+	+	+	+
pronunciation							
-different meaning and	+	+	+	+	+	+	+
capitalization (the same							
pronunciation)							
-different POS, related		+					
meaning							

	Raškevičs et al. (1993, 1997)	Birzvalka, Sosāre (1993, 1994), (1993, 2000 <i>"Hipp. Books"</i>)	Belzēja et al. (1995, (), 2004)	ELD "Avots" (1997) {9000}	Kalniņa (1999) {E-L,L-E, 20 000}	Mozere, Millere (2001) E-L,L- E	Kalniņa (2001, 2006) {10 000}	Kalniņa (2002) {6000}	Kalniņa (2002, 2005) {E- L, L-E, 25 000}	Grabe et al. (2002)	Kalniņa (2003) {E- L, L-E, 22 000}	Kalniņa (2003) {E- L, L-E, 85 000}	Kalniņa (2004) {35 000}	Kalniņa et al. (2007)
A. Types of main and secondary HWs A.1. Main HWs									-					
single items:									-					
single words	+	+	+	+	+	+	+	+	+	+	+	+	+	+
derivatives	+	+	+	+	+	+	+	+	+	+	+	+	+	+
closed compounds	+	+	+	+	+	+	+	+	+	+	+	+	+	+
hyphenated compounds	+	+	+	+	+	+	+	+	+	+	+	+	+	+
inflected forms:														
-irregular inflected forms of verbs	+	+	+	+	+	+	+		+	+	+	+	+	+
-irregular plurals of nouns	+	+	+			+				+		+	+	+
abbreviations	+	+	+		+		+		+	+		+	+	+
contracted forms	+	+	+	+	+		+		+	+	+	+	+	+
partial words (productive affixes)	+					+								+
TMs indicated			+ 2004											+
multiword items:														
open compounds	+	+	+	+	+		+	+	+	+	+	+	+	+
phrasal verbs														
idioms														
phrases (similes, proverbs, etc.)														
A.2. Secondary HWs single items:														
derivatives														
closed, hyphenated compounds	+													
multiword items:						1			1					
open compounds	(+)								1					
collocations	(+)	(+)	(+)	(+)	(+)	(+)	(+)		1	(+)	(+)	(+)	(+)	(+)
phrasal verbs	+	+	+	+	+	+	+		+	+	+	+	+	+
idioms	+	+	+	+	+	+	+		+	+	+	+	+	+
B. Means for									1					

The fourth period (1991 – the present day)

indication of textual														
condensation:														
main headwords:														
 swung dash 														
- two vertical														
strokes	+	+	+	+	+		+		+	+	+	+	+	+
- slash														
secondary headwords:														
- swung dash	+													
- dash														
- slash														
- first letter of HW		+	+	+	+	+	+		+	+	+	+	+	+
C. Principle of														
alphabetization:														
-letter-by-letter	LBL													
-word-by-word	LDL													
D. Types of entries														
and techniques of														
and techniques of														
secondary headword														
arrangement:														
- flat	+	+	+	+	+	+	+	+	+	+	+	+	+	+
- tiered:	+	+	+	+	+	+	+		+	+	+	+	+	+
niching	+													
listing														
clustering	+													
nesting	+	+	+	+	+	+	+		+	+	+	+	+	+
listing														
clustering	+	+	+	+	+	+	+		+	+	+	+	+	+
E. Criteria for														
presenting														
homonymous HWs:														
-different	+	+	+	+	+	+	+	+	+	+	+	+	+	+
meaning and														
etymology														
-different	+	+	+	+	+	+	+	+	+	+	+	+	+	+
meaning and			'						'					'
pronunciation														
-different	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	+	+	+	+	+	+	+	+	+	+	+	+	+	+
meaning and														
capitalization														
(the same														
pronunciation)														
-different POS,														
related meaning														

Data for Microstructural Analysis

The first period (1924–1940)

	Dravnieks (1924)	Godiņš (1929)	Roze, Roze (1931)	Curiks, Bangerska (1937)	Turkina (1937)	Akuraters (1940)	Pelcis (1940)
A. The core structures of entry							
A.1 Left-core formal structure:							
alternative spellings of the headword	+		+		+		+
grammatical information on the <i>HW</i> :							
principal forms of irregular verbs			+	+	+		+
irregular plural forms	+		+	+	+		+
regular pl inflections			+				
comparative degrees of adject.				+			
a symbol indicating that adv can by formed from adj by adding <i>l-y</i>	+				+		
transitivity of verbs	+		+	+	+		
3 rd per sing. inflections of verbs			+				
inflections of regular verbs (-ed, etc.)			+				
government of verbs (if different in TL)							
phonetic transcription:							
- IPA			+	+	+	+	+
-another system of phonetic symbols	+	+					
stress pattern indicated in phonetic transcription	+		+	+	+	+	+
part of speech labels used	+		+	+	+		
part of speech sections are numbered:							
- Roman numbers							+/-
- Arabic numbers	+				+		
A.2 Right-core semantic							
structure:							
A.2.1 Semantic-pragmatic section:							
senses of polysemous words are numbered							

various types of usage labels are	+		+		+		+
applied to indicate usage	Ŧ		+		Ŧ		т
restrictions							
types of equivalents used:							
- semantic	+	+	+	+	+	+	+
- explanatory	+	+	+	+	+	+/-	+
- translational	+		+		+		+
- functional	+		+		+		+
if no decontextualized	+				+		+/-
equivalence is available, only							
contextual translation is provided	1			+			
TL glosses	+		+	+	+		+
-typographical distinction made							
sense indicators (specifiers)	+ +	+	+ +	+	+ +	+	+ +
sense indicators (collocators)	+	+	+		+		
usage notes						+	+
A.2.2 Contextual section:		-	-	-			
illustrative examples (translated							
in the TL):							
- full sentence examples					+/-		
- collocations, short phrases	+				+		+
(clause examples)							
- skeleton examples (employing							
simplification, abstraction and							
listing techniques)			,				
typographic distinction made			+/-		+	+/-	
between examples and secondary							
headwords							
Separate sections:					. /	. /	. /
- idioms	+/- +/-		+/- +/-		+/-	+/-	+ /-
-phrasal verbs	+/-		+/-		+/-	+/-	+/-
B. Position of examples and		-		-		-	
MWEs							. /
integrated microstructure			+/-				+/-
partially integrated	+				+		
microstructure							
unintegrated microstructure							
C. General organization							
principle of the entry							
microstructure-oriented	+	+	+	+	+	+	+
macrostructure-oriented							
other solutions					+		
D. Types of entries in ELDs							
flat	+	+	+	+	+	+	+
tiered	+		+		+	+/-	+
cross-reference entries	+			+	+		+
<u> </u>			*		-		

The second period (1945–1947)

	Roze (Goep. 1945)	Roze (Flensb. 1945)	(Roze Stockh. 1946)	Krādziņš (1945)	Kalnbērzs (1945)	Akuraters (1946)	Hunter Blair (1946)	Kundziņš (1946)
A. The core structures of entry								
A.1 Left-core formal structure:								
alternative spellings of the headword	+	+	+				+	+
grammatical information on the <i>HW</i> :						-		-
principal forms of irregular verbs	+	+	+	+	+		+	
irregular plural forms	+	+	+					
regular pl inflections	+	+	+					
comparative degrees of adjectives								
a symbol indicating that adv can by formed from adj by adding <i>l-y</i>								
transitivity of verbs	+	+	+					
3 rd per sing. inflections of verbs	+	+	+					
inflections of regular verbs (-ed, etc.)	+	+	+					
government of verbs (if different in TL)								
phonetic transcription:								
- IPA	+	+	+	+	+	+	+	+/-
-another system of phonetic symbols					+/-			+/-
stress pattern indicated in phonetic transcription	+	+	+		+	+	+	+
part of speech labels used	+	+	+		+		+	
part of speech sections are numbered:								
- Roman numbers								
- Arabic numbers								
A.2 Right-core semantic								
structure:								
A.2.1 Semantic-pragmatic								
section:								
senses of polysemous words are numbered					+/-			
various types of usage labels are applied to indicate usage restrictions	+	+	+		+/-			+/-
types of equivalents used:								
- semantic	+	+	+	+	+	+	+	+
- explanatory	+	+	+			+/-	+/-	+

- translational	+	+	+		+		+	
- functional	+	+	+		+		+	
if no decontextualized								L
equivalence is available, only								
contextual translation is provided								
TL glosses	+	+	+		+		+/-	
-typographical distinction made								
sense indicators (specifiers)	+	+	+		+	+	+	+
sense indicators (collocators)	+	+	+		+		+	+
usage notes						+		
A.2.2 Contextual section:								
illustrative examples (translated								
in the TL):								
- full sentence examples							+/-	
- collocations, short phrases					+		+	
(clause examples)								
- skeleton examples (employing							+/-	
simplification, abstraction and								
listing techniques)								
typographic distinction made	+/-	+/-	+/-			+/-		
between examples and secondary								
headwords								
Separate sections:	+/-	+/-	+/-		+/-	+/-	+/-	
- idioms	+	+	+		+	+	+	
-phrasal verbs	+	+	+		+	+	+	
B. Position of examples and								-
MWEs						-		
integrated microstructure	+/-	+/-	+/-		+		+	
partially integrated								
microstructure						-		
unintegrated microstructure								
C. General organization								
principle of the entry								
microstructure-oriented	+	+	+		+	+	+	+
macrostructure-oriented				+/-		-		
other solutions						-		
D. Types of entries in ELDs								
flat	+	+	+		+	+	+	+
tiered	+	+	+		+	+/-	+	
cross-reference entries							+	+

The third period (1948–1990)

	Turkina (1948, 1958)	Belzēja et al. (1957)	Belzēja et al. (1966, 1971)	Raškevičs et al. (1962, 1964, 1976, 1985)	Juhņeviča, Klētniece (1964, 1966)	Birzvalka (1981)	Birzvalka, Sosāre (1989)
A. The core structures of					· · · · · ·		
entry							
A.1 Left-core formal structure:							
alternative spellings of the headword	+	+	+	+			
grammatical information on the HW:							
principal forms of irregular verbs	+	+	+	+	+	+	+
irregular plural forms	+	+	+	+	+	+	+
regular pl inflections							
irreg. comparative degrees of adjectives		+	+	+	+	+	+
irreg. comparative degrees of adverbs		+	+	+		+	+
a symbol indicating that adv can by formed from adj by adding <i>l-y</i>	+						
transitivity of verbs	+						
3 rd per sing. inflections of verbs							
inflections of regular verbs (-ed, etc.)							
government of verbs (if different in TL)		+	+	+	+	+	+
phonetic transcription:							
- IPA	+	+	+	+	+	+	+
-another system of phonetic symbols							
stress pattern indicated in phonetic transcription	+	+	+	+	+	+	+
part of speech labels used	+	+	+	+	+	+	+
part of speech sections are numbered:							
- Roman numbers			+	+	+	+	+
- Arabic numbers	+						
A.2 Right-core semantic structure: A.2.1 Semantic-							
pragmatic section:]		

		1			7		1
senses of polysemous words		+	+	+	+	+	+
are numbered (Arabic)							
senses of MWEs are				+	+	+	+
numbered							
various types of usage	+	+	+	+	+	+	+
labels are applied to indicate							
usage restrictions							
types of equivalents used:							
- semantic	+	+	+	+	+	+	+
- explanatory	+	+	+	+		+	+
- translational	+	+	+	+	+	+	+
- functional	+	+	+	+	+	+	+
if no decontextualized	+	+	+	+	+	+	+
equivalence is available,							
only contextual translation							
is provided							
TL glosses	+	+	+	+	+	+	+
-typographical distinction							
made							
sense indicators (specifiers)	+	+	+	+	+	+	+
	+	+	+	+	+	+	+
sense indicators	+	+	+	+	+	+	+
(collocators)							
usage notes							
A.2.2 Contextual							
section:							
illustrative examples							
(translated in the TL):							
- full sentence examples	+	+/-	+	+	+		
(clause examples)							
- collocations, short phrases	+	+	+	+	+	+	+
- skeleton examples							
(employing simplification,							
abstraction and listing							
techniques)							
MWEs provided:							
typographic distinction	+	-	-	+	+	+	+
made between examples							
and secondary headwords							
Separate sections:							
- idioms	+		+	+	+	+	+
-phrasal verbs			+	+	+	+	+
B. Position of examples							
and MWEs							
integrated microstructure			1]		
partially integrated	+	+	+	+	+	+	+
microstructure							
unintegrated microstructure							
Bratea merostraetare		I	1		J	1	I

C. General organization principle of the entry							
microstructure-oriented	+		+	+	+	+	+
macrostructure-oriented		+					
other solutions	+						
D. Types of entries in ELDs							
flat	+	+	+	+	+	+	+
tiered	+	+	+	+	+	+	+
cross-reference entries	+	+	+	+	+	+	+

The fourth period (1991 – the present day)

	Raškevičs et al. (1993, 1997)	Birzvalka, Sosāre (1993, 1994), (1993, 2000 <i>"Hipp. Books"</i>)	Belzēja et al. (1995, 2004)	ELD "Avots" (1997) {9000}	Kalniņa (1999) {E-L,L-E, 20 000}	Mozere, Millere (2001) E- L,L-E	Kalniņa (2001, 2006) {10 000}	Kalniņa (2002) {6000}	Kalniņa (2002, 2005) {E- L, L-E, 25 000}	Grabe et al. (2002)	Kalniņa (2003) {E- L, L-E, 22 000}	Kalniņa (2003) {E- L, L-E, 85 000}	Kalniņa (2004) {35 000}	Kalniņa et al. (2007)
A. The core structures of entry														
A.1 Left-core formal structure:														
alternative spellings of the headword	+		+		+	+	+		+	+	+	+		+
grammatical information on the <i>HW</i> :														
principal forms of irregular verbs	+	+	+	+	+	+	+		+	+	+	+	+	+
irregular plural forms	+	+	+	+	+	+	+		+	+	+	+	+	+
regular pl inflections														+
comparative degrees of adjectives	+	+	+	+	+	+	+		+	+	+	+	+	+
comparative degrees of adverbs	+	+	+	+	+		+		+	+	+	+	+	+
a symbol indicating that adv can by formed from adj by adding <i>l-y</i>														
transitivity of verbs														
3 rd per sing. inflections of verbs														
inflections of regular verbs (-ed, etc.)														
government of verbs (HW)	+	+	+	+	+		+		+	+	+	+	+	+
phonetic transcription:														
- IPA	+	+	+	+	+	+	+		+	+	+	+	+	+
-another system of phonetic symbols														
stress pattern indicated in	+	+	+	+	+	+	+		+	+	+	+	+	+

phonetic transcription														
part of speech labels used	+	+	+	+	+	+	+	+	+				+	+
part of speech sections are numbered:														
- Roman numbers	+	+	+	+	+	+	+	+	+	+	+	+	+	+
- Arabic numbers														
A.2 Right-core semantic														
structure:														
A.2.1 Semantic-pragmatic														
section:														
senses of polysemous words are	+	+	+	+	+	+	+	+	+	+	+	+	+	+
numbered (Arabic numbers)														
senses of MWEs are numbered	+	+	+	+	+	+	+		+	+	+	+	+	+
various types of usage labels are	+	+	+			+								
applied to indicate usage restrictions														
types of equivalents used:														
- semantic	+	+	+	+	+	+	+	+	+	+	+	+	+	+
- explanatory	+	+	+	+	+	+	+	+	+	+	+	+	+	+
- translational	+	+	+	+	+	+	+		+	+	+	+	+	+
- functional	+	+	+	+	+	+	+		+	+	+	+	+	+
if no decontextualized	+	+	+	+	+	+	+		+	+	+	+	+	+
equivalence is available, only contextual translation is provided														
TL glosses -typographical distinction made	+	+	+	+	+	+	+		+	+	+	+	+	+
sense indicators (specifiers)	+	+	+	+	+	+	+	+	+	+	+	+	+	+
sense indicators (collocators)	+	+	+	+	+	+	+	+	+	+	+	+	+	+
usage notes								-						
A.2.2 Contextual section:														
illustrative examples (translated						+								+
in the TL):														
- full sentence examples (clause	+		+/-			+/-								
examples)														
- collocations, short phrases	+	+	+	+	+	+	+		+	+	+	+	+	+
- skeleton examples (employing simplification, abstraction and														
listing techniques)					l .									
typographic distinction made	+	+	+	+	+		+		+	+	+	+	+	+
between examples and secondary headwords														
Separate sections:														
- idioms	+	+	+	+	+	+	+		+	+	+	+	+	+
-phrasal verbs	+	+	+	+	+		+		+	+	+	+	+	+
B. Position of examples and MWEs														

integrated microstructure														
partially integrated	+	+	+	+	+	+	+		+	+	+	+	+	+
microstructure														
unintegrated microstructure														
C. General organization														
principle of the entry														
microstructure-oriented	+	+	+	+	+	+	+	+	+	+	+	+	+	+
macrostructure-oriented														
other solutions														
D. Types of entries in ELDs														
flat	+	+	+	+	+	+	+	+	+	+	+	+	+	+
tiered	+	+	+	+	+	+	+		+	+	+	+	+	+
cross-reference entries	+	+	+	+	+	+	+		+	+	+	+	+	+