

Mono-, Bi- and Multilingual Technological Dictionaries in Hungary

1. The appearance of technological dictionaries

Although collection of specialised vocabularies started in Hungary as early as the 1600's (APÁCZAI 1653–1655), it was only at the end of the 18th century when the first strand of the language reform movement started focusing on the language of science. As a result, a vast variety of specialised dictionaries – so called working dictionaries – were created (FÖRIS 2004).

In a pamphlet *Hungarians* György Bessenyei expressed the need to create a Hungarian scientific language: “No nation has ever become scientist in another language than their own” (BESSENYEI 1778). Although collecting specialised vocabulary started in the 1830s and 1840s due to the encouragement of the Hungarian Academy of Sciences on the one hand, and due to some of the enthusiastic representatives of the profession on the other, it spread and became common only in the second half of the 19th century.

In this respect, the development of specialised bilingual dictionary writing was not behind the other European countries, where the appearance of such dictionaries became dominant only from the 1850s onwards (cf. SZARVAS 2005).

Among the pioneers of the creation of the Hungarian scientific language it is worth mentioning Péter Vajda in the field of biology, János Irinyi in chemistry, Pál Almási Balogh and Ferenc Toldy in medicine, and Pál Vásárhelyi creator of the Hungarian vocabulary in engineering [...]. Between 1832 and 1835, on the initiative of the Academy, word collection of Hungarian technical words began to concern a variety of crafts. Amongst others, such well-known poets participat-

ed in the work as János Kis, collecting around Sopron or Gergely Czuczor in the region of Révkomárom (HAIMAN 1982: 7).

In the 1800s collection and systematization of Hungarian terms or dissemination of the Hungarian equivalents of the source language terms was typical mainly of those areas of professions, which were introduced by foreign, mostly German speaking tradesmen. Such areas were mining, printing, railway construction and shipping.

In the development of Hungarian specialised lexicography the dominance of German language was enhanced by the fact that before the first World War in terms of Hungarian technological development and industrialization the relationships within the Austro-Hungarian Monarchy played a primary role, while between the two World Wars Germany was the most important economic and trade partner of Hungary.

2. Spreading of technological dictionaries in Hungary

One of the first manuscripts that remained intact in the Library of the Hungarian Academy of Sciences is Károly Szilády's *Dictionary of Book Press* containing brief descriptions of the objects (SZILÁDY 1982). Although the manuscript dates back to 1840, its printed version first appeared only in 1982. The renowned typographer of Kecskemét collected typographical expressions in the 1830s. He compiled the first Hungarian volume about book printing in 1840, and the material was constantly improved and expanded until 1855 as it is mentioned in the foreword. "[...] Szilády's methods in many respects are similar to those of his contemporaries. He uses existing but not too common terms in the field and uses words as specialised terms with a meaning different from earlier usage. He even creates new compounds and forms new words [...]" (HAIMAN 1982).

In the introduction to his dictionary Szilády not only gives the original term for typefaces but the Hungarian terms and their original typographical classification as well. He also introduces key expressions – most of which needed to be clarified in Hungarian – used in the print industry. The 23-page *Dictionary of Book Press* includes some 500 specialised terms in German in alphabetical order (own estimate) followed by the Hungarian equivalent and a brief, 1-2 line explanation in the tar-

get language. The different target language equivalents belonging to the source language term are numbered by the author.

The dictionary called *Master Words in Printing* was published in 1902 and was edited by Ferenc PUSZTAI (1902). In the first volume nearly 1,600 terms of the Hungarian source language and their German target language equivalent are exhibited over 68 pages in the form of a Hungarian–German wordlist. The synonymous lexical forms of both the source and the target language expressions are separated by commas. The second volume is quadrilingual – German, Hungarian, French and English – dictionary and includes over 128 pages of the source language terms and their German, Hungarian, French and English target language equivalents. The synonymous lexical forms of the source and the target language expressions are separated by commas here as well, while the equivalents of the different target languages are separated by semicolons.

In an effort to naturalize printing terms János Frecskay compiled three separate booklets as part of the *Dictionary of Crafts* devoted to professions like wood carving, shape cutting, copperplate engraving (booklet 2), book printing (booklet 6) and bookbinding (booklet 18) (FRECSKAY 1912). Furthermore, at the request of the International Publishers' Congress (Congrès International des éditeurs, 1913) a heptalingual dictionary was issued by the 8th congress held in Budapest in 1913. The *Vocabulaire technique de l'éditeur en sept langues : français, Deutsch, English, español, Hollandsch, italiano, magyar* (Specialised the Vocabulary of Printing in Seven Languages) presents 1,765 technical terms, relevant to book publishing, arranged in seven columns over 298 pages. The first column shows the terms, their part of speech and the gender of nouns in the source language (French), always followed by an explanation of the source language (VOCABULAIRE 1913). The source of explanation is either the Dictionary of the French Academy (*Dictionnaire de l'Académie française* in 1694), or the French Act on Copyright Laws (*Loi du 19 juillet 1791*, *Loi du 19 juillet 1793*) or the collection of *French and Foreign Laws on Literary and Artistic Property* (LYON-CAEN-DELALAIN 1896).

Besides typography the field of mining had also had a growing number of specialised dictionaries from the 1800s. Although Maria Theresa founded the Selmec Academy of Mining in 1770, the develop-

ment of the Hungarian miners' specialised language was hindered for nearly a hundred years because the mandatory lectures were all conducted in German. Teaching in Hungarian started only in 1868 in Selmec. The Selmec Library of the University of Miskolc owns a manuscript dating from 1845, which was the first attempt to compile a systematic German–Hungarian dictionary of *mining*. Students from the Hungarian readers' Society of Selmec Academy lead by Professor János Pettkó participated in the compilation of the *Mining Word Collection* (PETTKÓ 1845). In 1848 József Szabó – a member of the committee – published the German–Hungarian part of the *Dictionary of Mining* (SZABÓ 1848), which was partly based on the revised vocabulary of the *Mining Word Collection*, taking also some entries from the *Words of Physical Sciences* (BUGÁT–IRINYI–NENDTVICH 1844) as well as those Hungarian terms of mining from Lajos Irhóczi Kovách's *Civil Servants Dictionary* (IRHÓCZI KOVÁCH 1846) which, pursuant to the Act of 1844, were to replace the Latin terms. At that time Szabó was working at the Mining Department of the Ministry and, as he wrote in his dictionary's preface, he included those terms too that had been submitted upon his request published in the *Weekly Paper* (a periodical for miners between 1845 and 1848).

“... My Felsőbánya fellow officers have made a commendable work in collecting and screening terms customary among the mining folks of the Nagybánya district and presenting several German phrases that have been adopted badly or not at all in the Hungarian language” (SZABÓ 1848: 4). The 58-page two-column *Dictionary of Mining* includes nearly 3,500 terms (own estimate) of mining, mechanics, metallurgy, copper and iron hammering, accounting, foundry, chemistry and stamping.

If in the source language (i.e. German) a German term is synonymous with a more common term, the entry refers to the commonly used source-language expression and the target language equivalent is provided next to the latter. The different target language equivalents of the source language terms are separated by semicolons; word clustering is also typical of the dictionary.

“A specialised dictionary can never be perfect because of the progress of time and science, and due to new relations the existing vocabulary continually expands and modifies.” (PÉCH 1879: II) – We can read these lines in the preface of Antal Péch's *Hungarian–German Mining Dic-*

tionary from 1879, which was followed, in the spirit of this principle, by the author's extended and revised second edition in 1891 (PÉCH 1891).

In order to “... replace incorrectly adopted words and expressions with better ones” (PÉCH 1879: II) the dictionary includes all the words concerning mining and metallurgy, as well as words of any other trades commonly used for mining and even management. Thus the Hungarian–German part of the first edition contains 321 pages and nearly 19,000 entries, and the German–Hungarian part has 352 pages and 16,000 entries, while the second edition contains specialised terms on 365 and 378 pages respectively. As a result – as stated by the author – since the dictionary “goes beyond the scope of a dictionary of a single trade, I found it more appropriate to give it a more general title: *Mining Dictionary*” (PÉCH 1879: IV). The dictionary indicates the specific field of lexical unit for the following trades: mineralogy, mining, mining metrology, architecture, forestry, geology, engineering, metallurgy, salt mining and ore preparation.

The *Hungarian–German Mining Dictionary* (PÉCH, 1879) is a thorough work that fills a niche and has also founded the development of Hungarian mining terminology, contributing at the same time, to the evolution of a nationwide standardized language in mining, thus abolishing the linguistic differences of the different parts of the country. Both the German–Hungarian and the Hungarian–German volumes are two columned and the source or the target language expressions, synonymous lexical forms are separated by commas. The dictionary presents several collocations and their translations as well, which are separated by semicolons. Neither volume indicates parts of speech or – in the case of German nouns – gender.

Imre Szeőke's *Mining Dictionary* (SZEŐKE 1903), which was released in 1903, had a much smaller vocabulary compared to Péch's *Hungarian–German Mining Dictionary* vocabulary (163 pages single column including about 2,000 terms). Szeőke presents the German equivalents of Hungarian terms occurring in mining and mining law in brackets, but the dictionary's more important mission is to give the explanation of the source language terms in the same language. At the end of the *Mining Dictionary* an eleven-page appendix includes mining expressions of different dialects as well.

2.1. Specialisations of dictionaries

The first major, multi-craft specialised vocabulary was published by János Frecskay in 1912 on behalf of the Hungarian Academy of Sciences. In the preface Frecskay refers to the novelty of the initiative, of the Linguistic Committee of the Academy of Sciences in 1882, when they decided to complete the Academy's collection of terms of 1832–1835 “with specialised terms ‘popular’ among Hungarian craftsmen” (FRECSKAY 1912: VII). In order to do so, in 1883 the Academy encouraged the members of trade organisations to collect more specialised terms. The Academy's earlier collection of specialised words and the results of the 1883 survey provided the initial material for the later edition of the *Dictionary of Crafts*, although a number of craft representatives felt that German names for the tools, equipment, and works were genuine Hungarian words. The *Dictionary of Crafts* includes the description and specialised terms of 50 key trades typical of Hungary in 19th century in the form of both Hungarian–German and German–Hungarian dictionary. As “a result of technological progress (...) German terminology was used in the industry” (FÖRIS 2004: 45). Therefore the most important objectives of the *Dictionary of Crafts* were to get rid of linguistic uncertainties experienced in case of specialised vocabulary usage and to introduce and popularise a standardised Hungarian terminology instead of words of foreign origin. The description and the vocabulary of professions included in the dictionary appeared in separate booklets, which helped in disseminating the terms of a given trade. In the *Dictionary of Crafts* the following 50 trades are represented: gold-beater, gilder, joiner, carpenter, plating plumber, barrel maker or cooper, leather manufacturer, tanner, Hungarian tanner, chamois maker, boot maker and shoemaker, turners, wood-engraver, copper engraver, potter, comb maker, candle maker, soap maker, musical instrument maker, violin-maker, piano-maker, hatter, upholsterer, brush binding, wheelwright and hooper, basket maker, blacksmith, bricklayer, mason man, bookbinding, book printing, rope maker, locksmith, painter, decorator, slaughter man, butcher, miller, saddler, goldsmith, gold- and silversmith, jeweller, baker, coppersmith, copper-founder, tailor, furrier, and weaver.

Frecksay, when compiling the *Dictionary of Crafts*, worked up the majority of the literature available at that time, including the follow-

ing works: *The Rivalry of Goldsmith Mastery* (FELVINCZI 1716), *Peter W. Kecskeméti's Book of Goldsmithing* (Kecskemét W. Peter's Book of Goldsmiths, BALLAGI 1884), *Technologies and Crafts and a Brief Description of Some Constitutions of Those* (GERGELYFFI 1809), *Instructions for Weavers, for Young Master Weavers* (BERECZKY 1829), *Bootmaking with Special Attention to Specific Term of this Trade* (JENDROLOVICS–KAJDI 1855). Frecskay drew on the contemporary *Dictionary of Hungarian Dialects* (SZINNYEI 1893), the *Guard of Hungarian Language* (periodical from 1872), the *Linguistic Booklets* (linguistic journal since 1903), the *Hungarian Language* (Hungarian Linguistics Society, 1905) and the charters of incorporation from the eighteenth century. In response to the Academy's 1883 call for vocabulary collection several representatives of trade – either out of convenience or just ignorance – sent in only a few terms. In order to find the missing terms, Frecskay set off to a collecting trip in Transylvania, the Great Hungarian Plain and the Transdanubian area.

The Hungarian language at this time did not offer an appropriate expression to a number of terms; therefore Frecskay was not deterred from making new words and phrases or giving new interpretations to old or dialectical terms.

... if an unknown or less known word had to be used, which I found in the archive or in the language of country people, I just recorded them in a verb form then I transformed it into a noun to form the name of the actual device. There were cases where it seemed easier to reverse this process. Thus I tried to open the way for the unusual to enter into the language. In this way I wanted to make the language of trades colourful and ornamented with meaningful old words and common people's vocabulary, so that the beauty of our language could shine through (FRECSKAY 1912: IX).

The patriotic dictionary compiler's main ambition was the "Hunglicisation of the workshop language", that is "to advance the development of Hungarian national literacy by improving our language" (FRECSKAY 1912: IX). Thus the Hungarian–German dictionary includes approximately 11,000 entries; while the German–Hungarian dictionary contains only about 9,000 entries (see FÖRIS 2004: 48). Frecskay presented the words in two-column wrapping, in alphabetical order, target language synonyms are separated by a comma and the relevant profes-

sion is identified in parentheses behind the target word(s). If a source-language term proves to be relevant in a number of trades, the dictionary contains all the possible target language equivalents of the word, distinguishing trade-specific translations.

2.2. Exponential growth in the number of specialised dictionaries in Hungary

At the turn of the 19th and 20th centuries, in the industrialising Hungary the field of transportation was very important for lexicography, first rail and shipping, then from the middle of the 1900s aviation gained importance as well. In Hungary public transportation started off with horse-drawn rails in 1837, which was followed by steam railway in 1846, and this mode of transportation delivered nine million passengers in the country in 1888 (BOGDÁN, 1973). In the second half of the 19th century specialised railway dictionaries were published one after the other because on the one hand Hungarian language became the official language of administration of the Hungarian railway companies, and on the other hand non-native speaker officers needed to learn the terms of their job. The first railway dictionary is Ozoray's *Railway Construction, Business, Telegraphing and Engineering German–Hungarian and Hungarian–German Dictionary* (OZORAY 1872), followed by a two-volume dictionary – 136 pages – issued by a committee consisting of members of the Royal Hungarian Railways and Shipping Inspectorate and the Hungarian railway companies in 1875. The work on collecting railway terms continued; József MAYER (1879) added two more booklets to the list – 162 and 154 pages – and later Lajos J. MAYER (1882) also contributed to this collection of booklets by two volumes consisting of 162 and 154 pages. Révész's trilingual (German, Hungarian and French) *Vasúti szótár* (Railway Dictionary) appeared in two volumes consisting of 1,258 pages (RÉVÉSZ 1885–1886). István Görgey's *Hungarian–German and German–Hungarian Specific Dictionary of Railways* (GÖRGEY 1886–1887) was based on administrative instructions and official documents. Görgey wrote it for the technical and administrative railway service providers. The technological development of the 20th century resulted in the appearance of even more railway dictionaries; in 1978 the Hungarian version of the hexalingual (French, German, English, Ita-

lian, Spanish and Dutch) *UIC Railway Technical Dictionary* of the International Union of Railways was issued (NAGY 1978). The 564-page dictionary is a set of two volumes: while the first volume presents the entries in the order of indices, in the second volume we can find the entries in alphabetical order. In 1990 the Hungarian State Railways issued three bilingual dictionaries (Hungarian–English / English–Hungarian, Hungarian–French / French–Hungarian and Hungarian–German / German–Hungarian) called *Rail Operating Glossary*, each of which includes some 800 expressions (MIHÁLY 1995a, 1995b, 1995c) and an 862-page quadrilingual (Hungarian, English, German, French) *Specific Railway Dictionary* (MIHÁLY 1997). Today the *Railroad Construction Terminology* is available on-line (KORMOS, online) as well.

Albert Kenessey, the founder and first director of the Hungarian Shipping School, played a major role in creating Hungarian shipping terminology. Kenessey edited the first 151-page *German–Hungarian and Hungarian–German Dictionary of Shipping* in 1865 (KENESSEY 1865).

During the rapid technological development of sea and river navigation several Hungarian, sometimes temporary, expressions and adopted foreign terms appeared and were used miscellaneously, which sometimes lead to confusions. In 1917 Tibor Rónay attempted to establish a standard Hungarian fluvial and naval terminology, so he compiled a 243-page bilingual (German, Hungarian) shipping dictionary with 4,000 entries (RÓNAY 1917). In his preface Rónay expressed how much offensive he found “how offensive mixing foreign words in our speech is, just like the forced creation of Hungarian terms. That is the reason why I have been collecting shipping terms for many years, trying to replace incorrect expressions with better ones” (RÓNAY 1917).

The diversity of the development of shipping terminology is also confirmed by the fact that in the preface of the 462-page German–Hungarian dictionary of *shipping*, which was published in 1980s with 20,000 entries (VÉRSZTOVSEK–BENEDEK 1983), the editors complained about their limited space that allowed to present only the basic vocabulary of the particular subfields. They used old Hungarian shipping vocabularies as sources, or, in the case of missing or obsolete terms, they created new words by translating the expressions found in German encyclopaedias word by word. In 1981, KOM (1981) published a *Ships Manual* in four languages (Hungarian, English, German and Russian), which

offers useful information for Hungarian sailors and shipbuilders with university or college education.

Nowadays, due to the growing international interest towards navigation the influence of English language has strengthened. The first (English–Hungarian / Hungarian–English) sailing dictionary (NAGY 2009a), which was published in 2009, present the most important words and expressions of offshore sailing not only in alphabetical order, but also according to topics such as boat rental agreement, formal procedures, sailing boat parts, gears and fittings, engine, electricity and electronics, maintenance, sailing, navigation, weather, marine communication. The second part of the dictionary contains both the IMO Standard Marine Communication Phrases, as recommended by the International Maritime Organization (IMO) and their Hungarian target language equivalents as well. The era of information technology gave birth to the field of on-line dictionaries and glossaries, such as the monolingual *Hungarian Nautical Dictionary* (BALOGH, on-line), which gives the definitions of technical, nautical and administrative words and, if necessary, their pronunciation and synonyms as well. The glossaries collected from Nagy's above mentioned sailing dictionary according to different aspects are also available on-line, for example the Hungarian explanatory dictionary of English terms used in sailing (NAGY 2009b), *the Explanatory Dictionary of Aerodynamics* (NAGY 2009f), the *English–Hungarian Sailing Dictionary* (NAGY 2009e), and the *English–Hungarian / Hungarian–English Dictionary of Regattas* (NAGY 2009c, 2009d) that contains the most commonly used words and expressions in connection with sailing races (NAGY 2009c).

At the beginning of the 20th century following the development of rail and water transport Hungary's air transportation started off as well, when János Adrian, Hungary's first pilot took off with his aeroplane called 'Libelle', designed and built in Hungary, on 10th January 1910 (SZABÓ 2002). Shortly after, in 1920, the first 67-page, bilingual, (Hungarian–German / German–Hungarian) aerotechnical dictionary was published (Grand Aero Association, 1920), which was followed by Szikszay's trilingual (Hungarian–German–English) dictionary in 1944 (SZIKSZAY 1944). Nearly 14,000 terms involving the fields of air transport and aviation had been processed by the staff members of the Aerospace Department (313 pages). They collected all the vocabulary that

could be found in any English technical documentation (specifications, instructions) that was available in Hungary (SZENTESI 1990). In 2002 an improved and expanded version of aerotechnical dictionary appeared, which processed technical specifications of most aircraft types and technologies used in Hungary and included 27,000 entries on 736 pages (SZENTESI 2002).

From the 1900s onwards as a result of constantly accelerating pace of technological progress there was an explosion in the number of new terms and expressions. In many cases certain words had more than one equivalent; good and bad alike. In order to eliminate these adverse factors the *Technical Dictionary Series* was launched in the late 1950s and was continuously expanding up until the 1990s. This pioneer work aimed to clarify and improve the terminology of technology to make up for the lost decades.

Within the frame of the *Technical Dictionary Series* one or two volumes appeared annually on average, but in 1960, for example, eight volumes enriched the series. Day by day studies and books appeared touching upon such branches of engineering that were previously little, if any, written about in Hungarian. The dictionaries of the series present the different scientific areas from a linguistic aspect, i.e. the field-specific vocabulary is presented in alphabetical order, instead of the monographic approach built on their internal, “natural” system.

In the case of each entry the authors aimed to give short definitions in plain language, thus they could be understood without university level education. The editorial principles of the *Technical Dictionary Series* include that after the entries their equivalents or expressions with similar meanings are mentioned, and at the same time these synonyms are also included as main entries. The volumes of the *Technical Dictionary Series* can be monolingual (KOVÁCS 1959, BREINICH–MOSONYI–VÁRHALMI 1960), trilingual (PALOTÁS 1959), quadrilingual (KARSAY–RÉDEY–L’AUNÉ–HOLÉCZY–BIRÓ 1961) or even pentalingual (POZSONYI 1975). In the trilingual dictionaries of the series besides Hungarian, German and Russian equivalents are presented by the authors. In the case of multilingual dictionaries besides the above mentioned three languages the fourth language is English and the fifth language is French.

In visual dictionaries traditional definitions are replaced or supplemented by images as visual tools create a clear and unambiguous def-

inition of a concept. A popular example of such visual dictionary is the *Visual Dictionary of Building Construction* (KILLER 2001) including 1,650 terms in three languages (Hungarian, English, German) and was first published in 1981. Another example of visual dictionaries is Sarc's quadrilingual (Hungarian, English, German, Russian) *Visual Dictionary of Engineering* (SARC 1989).

3. Categorisation of technological dictionaries according to professions

In the *Technical Dictionary Series* those about building industry dominate with 13 volumes that touch upon almost all areas of the building industry from load bearing structures, through water management to traffic control. The first volumes relate to civil engineering (BRETZ–PALOTÁS–ALBERT–CSÁGOLY–GÁSPÁR 1958) and electric engineering (KOVÁCS 1958). Here are some examples of further volumes that touch upon a wide scale of technical areas: hydraulics (KOVÁCS–MOSONYI–SCHILLING 1959), mechanics (PALOTÁS 1959, GILLEMOT–SINAY–KONKOLY–SZÁNTÓ–CZOBOLY 1960, VARGA–KISBOCSKÓI–GEREY–KUND 1962), typography (LOVÁSZ 1961), optics (BÁRÁNY 1961), plastics (HARDY 1970) and mechanical engineering (NAGY–VÖRÖS 1971).

The building industry made headway not only in respect of dictionaries of specialised terms but by the second half of the 20th century it became significant regarding technological dictionaries as well. On the one hand, with the help of modern transport infrastructure it was becoming easy to discover new areas. On the other hand, the reconstruction of European national monuments (Dome of Cologne, Notre Dame in Paris, Acropolis in Athens) starting in the 19th century brought the attention to architectural structures of previous eras, while the technological development introduced new procedures, materials and technologies in the building industry. Dictionaries regarding the various areas of architecture and building industry ventured to cover certain sections of the topic. The monolingual *Cyclopaedia of Modern Architecture* (365 pages) (KUBINSZKY 1978) introduces the architectural structures, terminologies and trends of modern times. The various architectural relics of the past: towns, fortresses, castles and mansions, in addition to folkloric archi-

tectural inheritance are covered by the monolingual *Hungarian ABC of National Monuments* (GERŐ 1984), which includes 1,000 entries and several drawings (230 pages). In the same year, the most often used dictionary in the field of architecture, the *Architectural Glossary* (ZÁDOR 1984) was published in Hungarian language containing 1,000 entries (125 pages) and several explanatory and illustrative drawings for readers with basic technical knowledge. The *Visual Dictionary of Building Construction* (KILLER 2001) also illustrates with drawings the basic terms of the building industry with their English, German and Hungarian equivalents. Such a publication containing 1,600 entries (258 pages) is an essential tool for professionals working in building industry, and for students and teachers of secondary and higher education. The *Budapest Cyclopaedia I-II* (BERZA 1993) is a cyclopaedic adaptation of cultural, historic, geographic, industrial and other knowledge in connection with Budapest and its predecessor settlements. The two-volume book was first published in 1973; the second, extended and revised edition contains 8,116 entries and 1,260 illustrations. The appearance of foreign investors in Hungary and the large number of foreign terms in the building industry was the reason for the publication of the *Trilingual Technical Dictionary*, (URBÁN-SOÓS 2002). The dictionary was primarily compiled for Hungarian readers and users; its first 2002 publication (886 pages) appeared in three volumes bound in one and contained 14,000 entries and 45,000 synonyms in three languages. This specialised dictionary contains terms connected primarily to architecture, and to professions related to architecture (such as building engineering, electric engineering, engineering of air ventilation, pneumatics, and hydraulic), in addition, to terms used in relation to professions in the building industry (builder, bricklayer, carpenter, roofer, welder, locksmith, plumber, painter-decorator, joiner, glazier, etc.) and electrical industry. Besides architecture, terminology used in trade, transport, administration and authorization in relation to the building industry can also be found in it. The publisher tries to update the dictionary every year or every other year.

In the case of specialised dictionaries, when talking about the representation of professions, beside architecture the previously mentioned typography (SZILÁDY 1982, PUSZTAI 1902) and mining (PETTKÓ 1845, SZABÓ 1848, PÉCH 1879, SZEŐKE 1903) (see Section 2), dictionaries of railway (OZORAY 1872, RÉVÉSZ 1885–1886, GÖRGEY 1886–1887),

shipping (KENESSEY 1865, RÓNAY 1917) and air transport (NAGY AEROSZÖVETSÉG 1920) need to be mentioned as well. The newly appearing areas of technology tried to unify the Hungarian specialised language that evolved as a result of various intermediary foreign languages (German, English, French, Russian) by publishing specialised dictionaries. The appearance of the first cars at the end of the 1800s and their introduction in Hungary at the beginning of the 1900s was, for example, also followed by the publishing of a specialised dictionary (KATONA–KESERŰ 1943, 173 pages). The major changes in the leather and shoe industry – the transformation of leather industry from chemical industry to mechanical industry, the conversion of shoe industry towards chemical industry, the increased use of leatherette, and shoes becoming more of a fashion item rather than consumer products – contributed to the compilation of a monolingual *Minilexicon of Leather and Footwear* (VERMES–SCHMÉL–VERMES 1978) made for leather industry professionals and shoe industry workers. The second edition can now be found online (VERMES, on-line). References used between a specialised term and a compound expression relating to it can be easily reached in the electronic version of the cyclopaedia with the help of links.

The 20th century developments in computer technology and the appearance of a large number of primarily English specialised terms in the Hungarian language made the compilation of an explanatory dictionary necessary. Within the *Membrane Books* series an English–Hungarian small-sized computer technology dictionary and glossary was published called *What is What in Hungarian in Computer Technology* (KIS 1986) which also contains the Hungarian equivalents of the English terms used in data processing. The publication of the English–Hungarian *PC and Internet Computing Dictionary* (TARR 2000), the Hungarian version of the 1997 English edition, was belated compared to the advancement of the industry. It explains the 4,000 most important specialised terms (216 pages) relating to PC, multimedia, Internet and computer networks. Since most of the terminology used in computer technology is English, the dictionary primarily functions as an English–Hungarian explanatory dictionary; nevertheless, thanks to the Hungarian–English glossary at the end of the volume, it becomes a fully fledged bilingual dictionary. The *English–Hungarian Dictionary of Informatics with Hungarian–English Glossary* (ILA 2004) published

in 2004 covering 3,000 terms had a similar structure. It explains terminology relating to software, applications, PC and peripheries, MS-DOS, multimedia and Internet. The development of the Hungarian specialised vocabulary for informatics and its unification, furthermore, to become the course book for the bachelor and master level higher education programs is the aim of the *Angol–magyar informatikai szótár* (English–Hungarian Dictionary of Informatics, IVÁNYI 2006), the online version of which (IVÁNYI, on-line) can be reached on the Tinta Publisher’s website. The dictionary was compiled by university lecturers of informatics; it contains 28,000 entries and covers 20 topics such as basic terms, algorithms, digital media, human-machine interaction, informatics of economics, graphics, networks, informatics systems, artificial intelligence, operating systems, programming languages, computer science, structure of computers and spatial informatics. The electronic version of the dictionary also shows the compound expressions in relation to the term being searched for. The publisher intends to continuously update the content of the dictionary.

4. Categorisation of technological dictionaries according to languages

In the case of foreign specialised dictionaries, on the one hand the number of languages – in this respect we may distinguish mono-, bi- and multilingual dictionaries – is a significant data, while on the other hand, in the case of bi- and multilingual specialised dictionaries of a given field, the source and target languages, in most cases English, French, German, and Russian besides Hungarian, indicate the trends of mediation concerning international scientific and technological knowledge. The early stage of compiling technological dictionaries in Hungary was characterised by the ambition to establish the sovereign usage of Hungarian scientific language and the vocabulary of trades, which were mostly introduced with the mediation of the German language within the Austro-Hungarian Monarchy. Thus the first bilingual specialised dictionaries, initially German–Hungarian, were published including fields such as printing (SZILÁDY 1982, PUSZTAI 1902), mining (PETTKÓ 1845, SZABÓ 1848, PÉCH 1879, SZEŐKE 1903), rail (OZORAY 1872, RÉVÉSZ 1885–

1886, GÖRGEY 1886–1887), shipping (KENESSEY 1865, RÓNAY 1917) and flight (NAGY AEORO-SZÖVETSÉG 1920). The role of German language in editing scientific and technological dictionaries remained important along with the vigorous expansion of English at the end of the 20th century. This tendency can be observed in the trilingual (Hungarian, German, English) dictionaries of architecture (URBAN–SOÓS 2002, URBAN 2004, 2006, 2008, 2011) and the automobile industry (Auto Parts-X-Meditor Ltd., on-line). Russian language emerged from the 1950s on in several volumes of the *Technical Dictionary Series* presenting terms and expressions in three languages (Hungarian, German, Russian: PALOTÁS 1959) or four languages (Hungarian, English, German, Russian: VARGA–SZÉCHY–KÉZDY–LAZÁNYI 1960, BARTA–KOZMA 1964, RÉDEY–KLÁR 1969, NAGY–MEDEK–KLÁR–1971, FRIGYES 1973, SZÉKELY–SZEPESI 1980, REDL–OLDAL 1983).

Within the frame of the *Technical Dictionary Series* several monolingual dictionaries were published in different areas, such as the construction industry (KOVÁCS–SEBESTYÉN–CSÁKVÁRI–JANCSÓ 1976), transportation (VÁSÁRHELYI 1960), agriculture and alimentation (MAGYARI 1980), founding (VÖRÖS 1978), computing (SZELEZSÁN–FREY 1973) industrial engineering and business administration (LUKÁCS 1966) and metallurgy (NAGY 1987). The tradition of editing monolingual dictionaries dates back to the first half of the 20th century. Hungary's first *Technological Encyclopaedia* (LÓSY–SCHMIDT–BARÁT 1928), which was published in 1928, aimed to embrace the areas of science and technology in a complex and systematic way, therefore it includes vocabulary within the field of architecture, engineering and mechanical engineering, electro technology, chemical industry, mechanical technology, mining, metallurgy and forestry as well. The dictionary presents each technological field under a headline, in which the entries of a certain trade are in alphabetical order. This two-volume, 824 and 653-page dictionary contains 1,800 graphic texts and 188 tables of images.

In the 1970s, enriched by the results of forty years after the 1928 edition, the three-volume *Encyclopaedia of Technology*, (POLINSZKY 1970–74) was published, which – due to the large-scale development of technology – was shortly followed by the fourth, complementary volume (POLINSZKY 1978). The encyclopaedia containing by that time 27–30,000 entries and 6,000 figures, with the exception of military technology, em-

brace all the areas of technology, such as communications, electronics, electric power industry, biological and food processing industries, business administration and industrial engineering, wireless communication, chemical engineering, civil engineering, urban design, architecture, metallurgy, hydrocarbon mining, mineral grounding, light industry and its related industries, mechanical engineering, and solid mineral mining. The fourth, supplementary volume contains a further 7,000 entries and more than a thousand figures and touches upon modern technological areas including military technology, nuclear and isotope technology, environmental protection, geo engineering, engineering psychology, systems management and space research as well. In the fourth volume the authors also included some terms – marked with an asterisk – already presented in the previous volumes, which needed extending, correcting or supplementing. More than one hundred experts contributed to the birth of the *Encyclopaedia of Technology*, with the objective of besides standardising and upgrading the Hungarian terminology, also defining the theoretical basis of technological science, and the materials and procedures in a simple and modern way. The richness of literary references and explanations, requiring secondary education guarantee orientation for a wider readership in the different fields of technology.

The Small Encyclopaedia of Construction (HIR–ORAVECZ 1971) narrows down technological fields to 35 topics of building construction in order to explain terms briefly, describe them concertedly and also give representative data of that particular field.

In the first half of the 20th century more complex bilingual (German, Hungarian) dictionaries covering several technological disciplines and complex subject matters (ACSÁDY 1900, 1901; SZABÓ 1912; RÉVÉSZ 1926) appeared in the market. Since the 1950s the objective of the Akadémiai Kiadó's bilingual dictionaries for experts, translators and interpreters has been to share the technological terms of nearly 80 specialised fields. The dictionaries of technology or science and technology were published in different language combinations, such as English–Hungarian (RÁZSÓ–FONÓ 1951, BLASOVSKY–HAVAS–KATONA–OLÁH 1951, KATONA–BLASOVSKY–HAVAS–OLÁH 1959, NAGY–KLÁR 1959, MAGAY–DÉCSI–KISS 2003, MAGAY–KISS–TARDOS–VÉRTES–DÉCSI–VÉGH 2009), Russian–Hungarian (HEVESI 1951, KATONA–KESZTHELYI–LEVASICS–MIHÓK–SZILY 1975) and German–Hungarian (KATONA–FONÓ–HALMAI–LEVASICS–

SZELKE 1953). Due to rapid progress in technology the extended *Hungarian–German Technological Dictionary* was published by Terra publishing house (NAGY–MEDEK–KLÁR 1971).

Akadémiai Kiadó's bilingual dictionaries of science and technology draw expressions from such subfields of science which support and are closely related to technology (e.g. atom physics, geology, chemistry, mathematics etc.). In the case of all three language combinations (English–Hungarian, German–Hungarian and Russian–Hungarian) the editors gave preference to well established Hungarian expressions and terms instead of their unnecessarily used foreign equivalents and in case of more or less equivalent terms they endeavoured to give priority to one of them.

When compiling the first French–Hungarian technological dictionary (VÉGH–RUBIN–KLÁR 1965), due to the lack of tradition the authors had to face severe difficulties, such as selecting relevant vocabulary or the necessity of leaving out some as a result of limited space. In this respect and taking into consideration the two countries industrial and economical relationships, terms and expressions of five major fields were chosen: mechanical engineering, mechanical technology, electricity, telecommunication and structural engineering. Terms in connection with coal and oil mining, organic and inorganic chemistry, chemical industry, plastics industry, medicinal chemistry, hydrology, geology and geophysics, geodesy, textile industry, hydraulic engineering, land surveying, atom physics and atom mechanics, textiles, shoe and clothing industry, transport and rail, and the theory of technological branches are also included in the dictionary.

5. Categorisation of technical dictionaries according to format

Dictionaries can also be categorised according to their format. In the 19th century and at the beginning of the 20th century, like in the case of most branches of lexicography, printed format was used typically to publish technological dictionaries. These printed mono-, bi- or multi-lingual technological dictionaries were made available for users as small booklets, or as publications in several volumes depending on the number

of entries they contained. The emerging of the increasing number of new specialised terms as the side effect of continuous technological developments, computer technology opened new perspectives in compiling dictionaries as printed technological dictionaries had become partially out of date by the time they were published owing to the time-consuming nature of collecting specialised vocabulary. The appearance of new data storage devices (floppy, CD, CD-ROM) made it possible to store a large number of specialised terms (KOVÁCS 2005) and to indicate linguistically relevant information, while with the help of the new search engines it was possible to switch between languages and to expand search filters (e.g. search for expressions). By the spreading of the Web 2.0 based social networks the need of sharing technological content also appeared within the community of technological dictionary makers, i.e., to make relevant specialised vocabulary of certain areas available to others (e.g. several online architectural dictionaries were made for builders). Dictionaries available on electronic storage device or online offer flexible user access and expandable vocabulary such as the trilingual (English–German–Hungarian) dictionary (VERLAG DASHÖFER 2005) which contains 20,000 specialised terms and expressions in each language and are relevant to architecture, construction, building engineering, building electricity, building structure, building physics and other related areas. Similarly to this the second edition of the previously mentioned *Trilingual Technological Dictionary* published in 2004 (URBÁN 2004) was made available on CD-ROM and contained altogether 16,000 entries and 60,000 synonyms, while the third edition (URBÁN 2006) contained 22,000 entries and 80,000 synonyms. The fourth edition (URBÁN 2008) with new additions contained 28,000 entries and 100,000 synonyms, while the last that is the fifth extended edition published in February 2011 (URBÁN 2011) contains 32,000 entries and 114,000 synonyms. In the case of the CD-ROM it is possible to choose any of the three languages to search in and the other two language variants of the searched term also appear at the same time. The dictionary indicates the part of speech and technical labelling of each term; it separates the homonyms by numbering and indicates all occurrences of the searched term whether it is a separate entry, a part of a compound word or shows up in the explanatory section of another term. The fifth extended version of the dictionary is also available online or in a format suitable for Android operating systems.

It was to serve the needs of laymen that the monolingual online and thus ever expanding *Construction Glossary* (DEMETER, on-line) was compiled for builders and contractors, just like the dictionary of specialised terms and expressions containing vocabulary most often used in the building industry including their explanation (HÁZ.HU KFT., on-line), or the *Visual Dictionary of Architecture* (NÉMETH, on-line) which besides the Hungarian explanation of most often used English architectural terms also contains the illustration or picture of the given terminology. Similarly to the previously listed dictionaries, a building company's specialised dictionary lists the most important terms used in building industry (GÖBÉSZ Kft., on-line). Also available on the internet is the eight-page-long *Glossary of Architecture and Art for Students* (DEBRECENI EGYETEM, on-line), in addition to the *Technological Dictionary* (eBolt Internetes Műszaki Áruház, on-line) of a web shop explaining the abbreviations and terms used by various manufacturers, or the European encyclopaedia (MLIS 2003) in eight languages (French, English, Italian, Spanish, German, Hungarian, Romanian, Russian) intended for experts and researchers working with urban design and dwellings.

The English–Hungarian online technological dictionary of Tinta Publisher (Tinta Könyvkiadó, on-line) aims to help those who have some basic English knowledge but during the course of their work they deal with technological texts. The dictionary contains more than 35,000 equivalent pairs and its important asset is that it offers not only specialised terms but also a wide range of expressions and phrases used in the language of technology. The dictionary covers several areas of the world of science and technology, including mining, electro technology, building industry, plastic industry, printing industry, founding, paper industry, land and water transport and metallurgy. The online dictionary can be used either as an English–Hungarian or as a Hungarian–English technological dictionary thanks to its efficient search engine which enables searching in both languages. We can also find on the Internet a *statistical* dictionary in five languages (Hungarian, English, German, French, Romanian: The International Statistical Institute on-line), a trilingual (Hungarian–English, Hungarian–German) automobile industry dictionary (Autotechnika-X-Meditor Kft., on-line) and an automobile dictionary containing 24,339 entries (HORVÁTH, on-line), in addition to a monolingual *Pocket Dictionary for Telecommunica-*

tion (TELEC, on-line), a *Photographer Glossary* (PHOTOGRAPHER, on-line) and a *Dictionary for Railroad Construction Terminology* (KORMOS, on-line). These dictionaries and glossaries mainly contain the specialised terms of the given area in accordance with the needs of laymen or expert groups that created them, which in the case of the laymen is limited to the most important terms, while in the case of the expert community online dictionaries aim to cover the entire vocabulary of the given field as it was the purpose of the glossary of terminologies used in environmental technology (EURÓPAI, on-line) which makes technical vocabulary relating to environmental protection available in all official languages of the EU in addition to Icelandic, Norwegian and Turkish.

Useful glossaries can also be found at the end of course books focusing on a certain technical language such as the *English Course Book for Building Industry* (BOGNÁRNÉ 2007). The book basically divides into two sections; the first one consists of ten chapters which contain basic grammar necessary for the specialised language used in the building industry, in addition to the basic vocabulary. These chapters are followed by chapters covering the various professions according to the different work phases. Thus, the course book presents general topics (processions, organization of construction) and technical terms of bricklaying, carpentry, tiling, and decorating. After each chapter in the book there is a bilingual glossary containing new words and expressions in alphabetical order.

6. The objectives of the editors of technological dictionaries

In the early years of the birth of specialized dictionaries (see Section 2) the primary ambition of the editors and publishers of technological dictionaries was to create a unified and at the same time Hungarian specialised language (FRECSKAY 1912, PÉCH 1879), and even in the 20th century the reason behind the publishing of the earlier presented *Trilingual Technological Dictionary* (URBÁN–SOÓS 2002) was the large number of foreign investors in Hungary and the increased use of foreign words and expressions. Another important reason for creating technological dictionaries was to provide modern aid for professionals by making dic-

tionaries that would also enhance international communication. This is what characterizes the *Dictionary of Book and Paper Conservation in Five Languages* (BEÖTHY-NÉ-KASTALY 1997) which contains in different languages and in alphabetical order the most often used terms of basic actions, materials, tools and instruments of book and paper restoration, bookbinding and some graphic techniques. The purpose of the dictionary is to make the reading, understanding and translation of technical literature easier for professionals. This gap filling work is primarily made for book and paper restoration professionals, but it is also useful for bookbinders, librarians, archivists and museologists.

As it is written in its preface, the main purpose of the dictionary dealing with film production is, for example, the (not self-serving) unification of the Hungarian terminology for univocal communication, and in connection with this, the discovery and separation of words used with similar meaning in related professions or even in different professional areas.

The first edition of the *English–Hungarian Technical Dictionary* was published in 1951 (BLASOVSKY–HAVAS–KATONA–OLÁH 1951). It was based on Kondratov's *Russian–English* (KONDRATOV 1948) and Belkind's *English–Russian Polytechnical Dictionaries* (BELKIND 1946) published in the former Soviet Union, and also on several other specialised dictionaries. In addition it also contains the appropriate entries of some popular technological dictionaries, for example, terminology from the most comprehensive and authoritative single-volume dictionary of its kind, the *Chambers's Technical Dictionary* (TWENEY–HUGHES 1940) whose new edition, the *Chambers Dictionary of Science and Technology* (1988) was completely revised and updated, *The Century Dictionary and Cyclopaedia* (WHITNEY 1889–91), and the *Webster's New International Dictionary* (Merriam-Webster, 1935). The editors of the first published *English–Hungarian Technical Dictionary* (RÁZSÓ–FONÓ 1951) published in 1951, when choosing which terms to include in the dictionary, considered aspects important for the national economy. The dictionary deals in detail with materials relating to mining, textile industry, agricultural machinery and food industry, while materials related to the medical field and the military include only the most important terms. The purpose of the editors in the case of the 1959 revised edition and in the later editions was, on the one hand, to leave out outdated or misused terms, on the

other hand, to specify terms previously described and introduce their Hungarian equivalent.

The *English–Hungarian Dictionary of Science and Technology* (MAGY–KISS–TARDOS–VÉRTES–DÉCSI–VÉGH 2009), which came out in 1993 and was reprinted in 2003 and 2009, contained more than 215,000 English terms and expressions from the vocabulary of 80 different specialised fields and their Hungarian equivalents. This user friendly, clear structured dictionary is reliable, and contains exact professional data fulfilling the requirements of the modern ages for professionals, translators and persons studying for specialised language examinations.

Some dictionary makers are driven to collect expressions relevant to course books. The editorial purpose of the *Hungarian–Slovak, Slovak–Hungarian architectural dictionary* (BARTUSZ 1993), containing 6,750 Slovak and 5,750 Hungarian entries relating to general architecture, building materials, buildings, preserved buildings, building procedures, design work and rural development, was to collect specialised terms found in course books, and they did so by using encyclopaedias, lexica, Czech and Hungarian specialised terminology. In relation to the dictionary it might be worth examining the difference between the Slovakian and the Hungarian architectural terminology (cf. HOBOTH 2011).

Other dictionary makers were driven by the need to present the most updated interpretation and to preserve technological terminology as well as to fulfil needs that resulting from the economic development and the freedom of worldwide division of labour, such as the makers of the *Dictionary of Metallurgical Terminology* (HATALA–MOLNÁR 2004), who collected the Hungarian terms used in metallurgy and other related industries – casting, iron metallurgy, and in relation to this protection of environment, quality assurance, and organizational technology – furthermore, they prepared the Hungarian explanation of almost 11,000 entries and their multilingual translations (Czech, German, English, Italian, Polish, Swedish). Within the framework of the European Union's Metaltransys project it was possible to involve foreign partner institutions to expand the number of entries, to prepare animations, videos and explanatory figures, and in addition, to explain entries not only in Hungarian but in English, German and Swedish as well. The so revised *Dictionary of Metallurgical Terminology* (HATALA–MOLNÁR 2004) expands beyond the framework of the usual explanatory dictionary

and it is also available on CD-ROM and on the Internet. The financial framework of the project ensures the possibility to professionally expand the dictionary and to have it translated to other languages as well.

Additional purpose of the writers of specialised dictionaries can be to fulfil the needs of the academic sphere and to help the professional language of research-development innovations to be implemented within the framework of international projects and cooperation. Thus, for example, the *Technical Acoustics* (REICHARDT 1978) in eight languages (English, German, French, Russian, Spanish, Polish, Hungarian, Slovak) was especially prepared for researchers, developer technologists, in addition to translators, interpreters and terminologists. The dictionary contains 4,000 entries in all languages relating to the basic terminology of acoustics, the formation of acoustic vibes, the spreading and conversion of acoustic waves, measuring instruments, furthermore, speech recognition and speech synthesis.

It is worth mentioning that due to the social importance of technological language the interest towards technological writing has also increased, thus the need to filter out disturbing paradoxes has also risen. The *Technological Spelling Dictionary*, (CSÁNYI-FÁBIÁN-CSENGERI 1990) containing 80,000 terms, compound words and locutions (735 pages) covers the vocabulary of the most important disciplines in order to connect the spelling of specialised vocabulary to the spelling of everyday vocabulary.

7. Summary

The study has shown that the history of technological lexicography dates back centuries in Hungary, and that even reviewing the works of this highly complex area is a very challenging task for scientists because of the vast number of works, the fertility of the area and, due to the technological development, the continuously expanding list of topics. From the historical review of Hungarian technological lexicography it is apparent that the key role of the German language as a mediating language has been overtaken by English, which in most cases functions as a *lingua franca*.

In the 21st century the toolbox of the information society offers easy access and search ability even in the case of narrow technical subfield, and simultaneously the number of users demanding printed specialised dictionaries is gradually decreasing. With further specialisation the acceleration of technological development has become a major characteristic feature of certain trades which give requirements to publishers they can hardly meet. Since it is hard for the publishers to keep up with the development and the continuously changing requirements, in recent years online dictionaries dealing with the vocabulary of well-defined subfields have become widespread. The same tendency can be observed in the case of technological lexicography.

References

Dictionaries

- ACSÁDY Jenő (1900) *Magyar és német műszaki szótár I. Német–magyar rész* (Hungarian and German Technical Dictionary. German–Hungarian part). Athenaeum, Budapest.
- ACSÁDY Jenő (1901) *Magyar és német műszaki szótár II. Magyar–német rész* (Hungarian and German Technical Dictionary. Hungarian–German part). Athenaeum, Budapest.
- APÁCZAI CSERE János (1653–1655) *Magyar Enciklopédia* (Hungarian Encyclopedia). Apáczai Csere János, Utrecht.
- Autotechnika-X-Meditor Kft. (on-line) *Háromnyelvű autóiipari szakszótár: Magyar–angol, magyar–német* (Hungarian–English, Hungarian–German Automobile Industry Dictionary). <http://autotechnika.hu/muszaki-szakszotar.html>
- BALOGH Zsolt (on-line) *Hajózási Értelmező Szótár* (Hungarian Nautical Dictionary). <http://www.hajozasiszotar.fw.hu/masodik.htm>
- BARTA István–KOZMA László (1964) *Híradástechnika* (Communication Technology). Terra, Budapest.
- BARTUSZ Gyula (1993) *Magyar–szlovák, szlovák–magyar építészeti szótár* (Hungarian–Slovakian, Slovakian–Hungarian Architectural Dictionary). Slovenské pedagogické nakladateľstvo, Bratislava.
- BÁRÁNY Nándor (1961) *Finommechanika, optika* (Precision Mechanics, Optics). Terra, Budapest.
- BELKIND, Lev Davidovich (1946) *Anglo–Russkii Politekhnikeskii Slovar* (English–Russian Polytechnical Dictionary). Gostechizdat, Moscow.
- BEÖTHY NÉ KOZOCSA Ildikó–KASTALY Beatrix (eds) (1997) *Ötnyelvű könyv- és papírrestaurálási szakszótár* (Dictionary of Book and Paper Conservation in Five Languages). National Széchényi Library, Budapest.
- BERZA László (ed.) (1993) *Budapest lexikon I–II*. (Budapest Cyclopaedia I–II). Akadémiai Kiadó, Budapest.
- BLASOVSKY MIKLÓS–HAVAS LÍVIA–KATONA LÓRÁNT–OLÁH GYÖRGY (eds) (1951) *Angol–magyar műszaki szótár* (English–Hungarian Technical Dictionary). Akadémiai Kiadó, Budapest.
- BOGNÁRNÉ TÓTH RÉKA (2007) *Angol építőipari szakmai nyelvkönyv* (English Course Book for Building Industry). Szega Books Kft, Pécs.
- BREINICH MIKLÓS–MOSONYI EMIL–VÁRHALMI ERNŐ (1960) *Vízerőművek és víziutak* (Hydroelectric Power Plants and Waterways). Terra, Budapest.

- BRETZ Gyula–PALOTÁS László–ALBERT János–CSÁGOLY József–GÁSPÁR Géza (1958) *Építőanyagok* (Building Materials). Terra, Budapest.
- CSÁNYI Piroska–FÁBIÁN Pál–CSENGERI PINTÉR Péter (1990) *Műszaki helyesírási szótár* (Technical Spelling Dictionary). Műszaki Könyvkiadó, Budapest.
- DEBRECENI EGYETEM, on-line = Debreceni Egyetem Műszaki Kar Építésmérnöki Tanszék (on-line) *Hallgatói építészeti és művészeti szakszótár* (Debrecen University: Glossary of Architecture and Art for Students). <http://epitesz.eng.unideb.hu/uploads/2012/2012-osz-3300/HALLGATOI-EPITESZETI-ES-M%C5%B0VESZETI-SZAKSZOTAR.pdf>
- DEMETER Kornél (on-line) *Építőipari szakszótár* (Construction Glossary). http://www.epitesportal.hu/epitoipari_szakszotar.php
- eBolt Internetes Műszaki Áruház (on-line) *Műszaki szótár* (Technical Dictionary). <http://www.ebolt.hu/Dictionary.php>
- EURÓPAI, on-line = EURÓPAI KÖRNYEZETVÉDELMI ÜGYNÖKSÉG (on-line) *Környezetvédelmi terminológiai és betekintési szolgáltatás*. (Environmental Terminology and Monitoring Service). <http://glossary.eea.europa.eu/EEAGlossary/>
- FRECSKAY János (1912) *Mesterségek Szótára. I. Ötven iparág leírása* (Dictionary of Crafts. Description of Fifty Crafts). *II. Ezen iparágak egyesített magyar–német és német–magyar szótára* (Combined Hungarian–German and German–Hungarian Dictionary of these Crafts). Hornyánszky, Budapest.
- FRIGYES Andor (1973) *Irányítás- és mérés technika. Folyamatszabályozás* (Management and Measurement. Process Control). Akadémiai Kiadó, Budapest.
- GERŐ László (1984) *Magyar műemléki abc* (Hungarian ABC of National Monuments). Műszaki Könyvkiadó, Budapest.
- GILLEMOT László–SINAY Gábor–KONKOLY Tibor–SZÁNTÓ István–CZOBOLY Ernő (1960) *Mechanikai technológia I–II*. (Mechanical Technology I and II). Terra, Budapest.
- GÖBÉSZ Kft. (on-line) *Építőipari szakszótár* (Dictionary of Builders) <http://www.gobesz.hu/epitoipari-szakszotar.html>
- GÖRGEY István (1886–1887) *Magyar–német és német–magyar vasúti szakszótár* (Hungarian–German and German–Hungarian Specific Dictionary of Railways). Pesti Ny., Budapest.
- HARDY Gyula (1970) *Műanyagok* (Plastics). Terra, Budapest.
- HATALA Pál–MOLNÁR István (eds) (2004) *Metaltransys Kohászati Értelmező szótár* (Dictionary of Metallurgical Terminology). Ba.Co Bt. <http://www.metalingua.com/szotar/feltolt/base/index.php>
- HÁZ.hu Kft. (on-line) *Építőipari szakszavak, szakkifejezések* (Construction Specialist Words and Phrases). <http://www.haz.hu/szakszavak>

- HEVESI Gyula (ed.) (1951) *Magyar–oroszműszaki és tudományos szótár* (Hungarian–Russian Technical and Scientific Dictionary). Akadémiai Kiadó, Budapest.
- HIR Alajos–ORAVECZ Béla (eds) (1971) *Építőipari kislexikon* (The Small Encyclopaedia of Construction). Műszaki Könyvkiadó, Budapest.
- HORVÁTH Róbert (on-line) (2008–2013) *Járműszótár* (Car Dictionary). http://www.jarmuszotar.hu/jarmuszotar_hunen.php
- ILA László (ed.) (2004) *Angol–magyar informatikai értelmező szótár magyar–angol szószedettel* (The Hungarian–English Dictionary of Informatics with Hungarian–English Glossary). PANEM, Budapest.
- IRHÓCZI KOVÁCH Lajos (1846) *Új kimerítő tisztírási szótár* (Officers’ Dictionary). Buda.
- IVÁNYI Antal (ed.) (2006) *Angol–magyar informatikai szótár* (English–Hungarian Dictionary of Informatics). Tinta Könyvkiadó, Budapest.
- IVÁNYI Antal (ed.) (on-line) *Angol–magyar informatikai szótár* (English–Hungarian Dictionary of Informatics). http://www.tintakiado.hu/informatikai_szotar.php
- KARSAY Ferenc–RÉDEY István–L’AUNÉ Ottó–HOLÉCZY Gyula–BIRÓ Péter (1961) *Általános geodézia* (General Geodesy). Terra, Budapest.
- KATONA László–KESERŰ Margit (1943) *Német–magyar és magyar–német automobil és motorkerékpár szakszótár. Deutsch–ungarisches und ungarisch-deutsches Automobil und Kraftrad Fachwörterbuch* (German–Hungarian and Hungarian–German Automobile and Motorcycle Glossary). [Németh.] Budapest.
- KATONA Lóránt–BLASOVSKY Miklós–HAVAS Lívია–OLÁH György (eds) (1959) *Angol–magyar műszaki szótár* (English–Hungarian Technical Dictionary). Akadémiai Kiadó, Budapest.
- KATONA Lóránt–FONÓ Lajos–HALMAI Ferenc–LEVASICS Elemér–SZELKE Árpád (eds) (1953) *Magyar–német műszaki és tudományos szótár* (Hungarian–German Technical and Scientific Dictionary). Akadémiai Kiadó, Budapest.
- KATONA Lóránt–KESZTHELYI Ernő–LEVASICS Elemér–MIHÓK László–SZILY Ernő (eds) (1975) *Magyar–oroszműszaki szótár I–II.* (Hungarian–Russian Dictionary of Engineering I and II). Akadémiai Kiadó, Budapest.
- KENESSEY Albert (1865) *Német–magyar és magyar–német hajózási műszótár* (German–Hungarian and Hungarian–German Dictionary of Shipping). Heckenast, Pest.
- KILLER, Wilhelm K. (2001) *Építőipari képes szótár. Angol–német–magyar* (Visual Dictionary of Building Construction. English–German–Hungarian). Terc Kereskedelmi és Szolgáltató Kft., Budapest.

- KIS Ádám (1986) *Mi micsoda magyarul a számítástechnikában* (What is what in Hungarian in Computer Technology. Computer technology dictionary). Tömegkommunikációs Kutatóközpont, Budapest. (Membrán könyvek)
- KOM Ferenc (ed.) (1981) *Hajók kézikönyv* (Ships Manual). Műszaki Könyvkiadó, Budapest.
- KONDRATOV, Leon Nikolai, (1948) *Russkii–Anglo Politekhnikeskii Slovar* (Russian–English Polytechnical Dictionary). Gostechizdat, Moscow.
- KORMOS Gyula (on-line) *Vasútépitési szakszótár* (Dictionary for Railroad Construction Terminology). http://www.uvt.bme.hu/letoltes/v_szotar.pdf
- KOVÁCS György–MOSONYI Emil–SCHILLING Ferenc (1959) *Hidraulika és műszaki hidrológia* (Hydraulics and Technical Hydrology). Terra, Budapest.
- KOVÁCS Károly–SEBESTYÉN Gyula–CSÁKVÁRI András–JANCSÓ Gábor (1976) *Építőipar I. Hatások és tulajdonságaik* (Construction Industry. Effects and Properties). Akadémiai Kiadó, Budapest.
- KOVÁCS K. Pál. (1958) *Általános elektrotechnika* (General Electrical Engineering). Terra, Budapest.
- KOVÁCS K. Pál (1959) *Villamos gépek* (Electrical Machines). Terra, Budapest.
- KOVÁCS Terézia (ed.) (2005) *Magyar–angol Környezetvédelmi Értelmező Szótár*. (Hungarian–English Explanatory Dictionary of Environmental Protection). Akadémiai Kiadó, Budapest.
- KUBINSZKY Mihály (ed.) (1978) *Modern építészeti lexikon* (Cyclopaedia of Modern Architecture). Műszaki Könyvkiadó, Budapest.
- LÓSY-SCHMIDT Ede–BARÁT Béla (eds) (1928) *Technikai lexikon* (Technological Encyclopaedia). Győző Andor, Budapest.
- LOVÁSZ Kálmán (1961) *Nyomdaipar* (Printing). Terra, Budapest.
- LUKÁCS László (1966) *Üzemszervezés, üzemgazdaság* (Industrial Engineering and Business Administration). Terra, Budapest.
- MAGAY Tamás–KISS László–TARDOS Katalin–VÉRTES László–DÉCSI Gyula–VÉGH Béla (1993) *Angol–magyar műszaki és tudományos szótár* (English–Hungarian Dictionary of Science and Technology). Akadémiai Kiadó, Budapest.
- MAGAY Tamás–DÉCSI Gyula–KISS László (2003) *Angol–magyar műszaki és tudományos szótár I–II. CD-vel* (English–Hungarian Technical and Scientific Dictionary I–II, with CD). Akadémiai Kiadó, Budapest.
- MAGAY Tamás–KISS László–TARDOS Katalin–VÉRTES László–DÉCSI Gyula–VÉGH Béla (2009) *Angol–magyar műszaki és tudományos szótár* (English–Hungarian Dictionary of Science and Technology). Akadémiai Kiadó, Budapest.
- MAGYARI BECK Vladimir (1980) *Mezőgazdaság és élelmiszerügy I. Termények és termékek, elsődleges feldolgozásuk, szervezeti keretek* (Agriculture and Ali-

- mentation. Crops and Products. Primary Processing and Organizational Framework). Akadémiai Kiadó, Budapest.
- MAYER József (1879) *Vasúti anyagok, leltári és berendezési tárgyak szótára. I. Német–magyar. II. magyar–német* (Railway Materials. Dictionary of Inventory and Objects. German–Hungarian, Hungarian–German). Wien.
- MAYER J. Lajos (1882) *Vasúti műszótár az összes vasúti szolgálat számára – német–magyar és magyar–német rész. Technisches Wörterbuch für den Gesamten Eisenbahn-Dienst – deutsch-ungarischer und ungarisch-deutscher Theil* (Railway Dictionary for all Rail Service – a German–Hungarian and Hungarian–German part). Franklin Társulat, Budapest.
- MERRIAM-WEBSTER (1935²) *Webster's New International Dictionary*. Unabridged. G & C Merriam Company, Springfield, Massachusetts.
- MIHÁLY Zsolt (1995a) *Vasútüzemi szakszótár. Magyar–angol, Angol–magyar* (Rail Operating Glossary. Hungarian–English, English–Hungarian). Magyar Államvasutak Rt., Budapest.
- MIHÁLY Zsolt (1995b) *Vasútüzemi szakszótár. Magyar–francia, Francia–magyar* (Rail Operating Glossary. Hungarian–French, French–Hungarian). Magyar Államvasutak Rt., Budapest.
- MIHÁLY Zsolt (1995c) *Vasútüzemi szakszótár. Magyar–német, Német–magyar* (Rail Operating Glossary. Hungarian–German, German–Hungarian). Magyar Államvasutak Rt., Budapest.
- MIHÁLY Zsolt (1997) *Vasúti szakszótár (magyar, angol, német, francia)* (Specific Railway Dictionary: Hungarian, English, German, French). Magyar Államvasutak Rt., Budapest.
- MLIS 2003 (online) *Muleta* <http://www.muleta.org/muleta2/initRecherche.do>
- NAGY AERO-SZÖVETSÉG (1920) *Aerotechnikai szótár. Magyar–német, német–magyar* (Aero Technical Dictionary. Hungarian–German, German–Hungarian). Állami Nyomda, Budapest.
- NAGY Ernő–KLÁR János (eds) (1959) *Angol–magyar műszaki szótár. Teljesen átdolgozott és bővített kiadás* (English–Hungarian Technical Dictionary. Completely revised and extended edition). Akadémiai Kiadó, Budapest.
- NAGY Ernő–KLÁR János (eds) (1971) *Magyar–német műszaki szótár* (Hungarian–German Technical Dictionary). Terra, Budapest.
- NAGY Ernő–VÖRÖS Imre (1971) *Gépelemek* (Machine Elements). Terra, Budapest.
- NAGY József (ed.) (1978) *UIC vasúti szakszótár. Magyar rész I. Nemzetközi vasútegylet általános vasúti szakszótár* (UIC Railway Technical Dictionary. Hungarian Part 1st International Union of Railways General Railway Dictionary). Budapest.

- NAGY Péter–MEDEK Béla–KLÁR János (eds) (1971) *Félvezetők erősáramú alkalmazása* (Application of Power Semiconductor). Terra, Budapest.
- NAGY Zoltán (1987) *Vaskohászat* (Metallurgy). Akadémiai Kiadó, Budapest.
- NAGY Zoltán (2009a) *Angol–magyar, magyar–angol charterszótár. Hajóberlők vitorlásszótára* (English–Hungarian and Hungarian–English Charter Dictionary). Charter Sailing Dictionary). Private publication. <http://www.vitorlasszotar.hu/szotarletoltes.php>
- NAGY Zoltán (2009b) *Hajózási Értelmező Szótár. A vitorlázásnál használt angol kifejezések értelmezése magyar nyelven* (Encyclopaedia of Shipping. English Interpretation of Terms used in Sailing in Hungarian). <http://www.vitorlasszotar.hu/seaterms.php>
- NAGY Zoltán (2009c) *Angol–magyar vitorlás versenyszótár. A vitorlásversenyekkel kapcsolatban gyakran használt angol szavak és kifejezések gyűjteménye* (English–Hungarian Dictionary of Regattas. A Collection Frequently Used English Words and Phrases of Sailing Races). http://www.vitorlasszotar.hu/on_line_angol_magyar_versenyszotar.php
- NAGY Zoltán (2009d) *Magyar–angol vitorlás versenyszótár. A vitorlásversenyekkel kapcsolatban gyakran használt angol szavak és kifejezések gyűjteménye* (English–Hungarian Dictionary of Regattas. A Collection Frequently Used English Words and Phrases of Sailing Races). http://www.vitorlasszotar.hu/on_line_magyar_angol_versenyszotar.php
- NAGY Zoltán (2009e) *Angol–magyar vitorlásszótár* (English–Hungarian Dictionary of Sailing). http://www.vitorlasszotar.hu/eng_angol_magyar.php
- NAGY Zoltán (2009f) *A vitorlázás elmélete. Aerodinamikai értelmező szótár* (The Theory of Sailing. Aerodynamic Dictionary). http://www.vitorlasszotar.hu/vitorlazeselmelet_aerodinamikai_kifejezesek.php
- NÉMETH Balázs (on-line) *Képes építészeti szöszedet angol–magyar* (English–Hungarian Visual Dictionary of Architecture). http://www.horber.hu/horber_szoszedet/szotar/szotar_start/szotar_angol.htm
- OZORAY Árpád (1872) *Vasút-építési, üzleti, távirászati és gépészeti német–magyar és magyar–német szótár* (Railway Construction, Business, Telegraphing and Engineering German–Hungarian and Hungarian–German Dictionary). Petrik G., Pest.
- PALOTÁS László (1959) *Műszaki mechanika* (Engineering Mechanics). Terra, Budapest.
- PÉCH Antal (1879) *Magyar és német bányászati szótár. Bergmännisches Wörterbuch in ungarischer und deutscher Sprach. 1. Magyar–német rész, Ungarisch–*

- deutscher Theil. 2. Német–magyar rész, Deutsch–ungarischer Theil.* Joerges nyomda, Selmecz.
- PÉCH Antal (1891) *Magyar és német bányászati szótár. Bergmännisches Wörterbuch in ungarischer und deutscher Sprache I. Magyar–német rész, Ungarisch–deutscher Theil. 2. Német–magyar rész, Deutsch–ungarischer Theil.* Joerges nyomda, Selmecz.
- PETTKÓ János (ed.) (1845) *Bányászati Szófüzér* (Mining Word Garland). Manuscript. Selmecz.
- PHOTOGRAPHER, on-line = *Fotós glosszárium* (on-line) (Photographer Glossary). <http://www.fotos.hu/0103szotar.php>
- POLINSZKY Károly (ed.) (1970–74) *Műszaki lexikon I–III.* (Encyclopaedia of Technology I–III). Akadémiai Kiadó, Budapest.
- POLINSZKY Károly (ed.) (1978) *Műszaki lexikon IV.* (Encyclopaedia of Technology IV). Akadémiai Kiadó, Budapest.
- POZSONYI Gábor (1975) *Filmgyártás és filmtechnika* (Film Production and Film Techniques). Akadémiai Kiadó, Budapest.
- PUSZTAI Ferenc (ed.) (1902) *Nyomdászati mesterszók. I. Magyar–német. II. Német–magyar–francia–angol* (Master' Words in Printing. I. Hungarian–German. II. Hungarian–German–French–English). Pallas Részvénytársaság Nyomdája, Budapest.
- RÁZÓ Imre–FONÓ Lajos (1951) *Angol–magyar műszaki szótár* (English–Hungarian Technical Dictionary). Akadémiai Kiadó, Budapest.
- REDL Endre–OLDAL Endre (1983) *Elektronika I–II. Híradástechnika, vákuumtechnika* (Electronics I–II. Communication Technics, Vacuum Technology). Akadémiai Kiadó, Budapest.
- REICHARDT, Walter (1978) *Technische Akustik: Englisch, Deutsch, Französisch, Russisch, Spanisch, Polnisch, Ungarisch, Slowakisch* (Technical Acoustics: English, German, French, Russian, Spanish, Polish, Hungarian, Slovakian). Technik Verlag, Berlin.
- RÉDEY István–KLÁR János (1969) *Földrajzi helymeghatározás* (Geographical Positioning). Terra, Budapest.
- RÉVÉSZ Sámuel (1885–1886) *Vasúti szótár I–II. Német–magyar–francia, Magyar–német–francia, Francia–német–magyar* (Railway Dictionary I–II. German–French–Hungarian, Hungarian–German–French, French–German–Hungarian). Kilián Frigyes, Budapest.
- RÉVÉSZ Samu (1926) *Technikus szótár. 1. Magyar–Német 2. Német–magyar* (Technician's Dictionary. 1. Hungarian–German 2. German–Hungarian). Dick Manó, Budapest.
- RÓNAY Tibor (1917) *Német–magyar hajós-szótár. Deutsch–Ungarisches nautisches Wörterbuch.* Magyar Adria Egyesület, Hungária Nyomda, Budapest.

- SARC, Vlagyimir Vlagyiszlakovics (1989) *Képes Műszaki Szótár* (Visual Dictionary of Engineering). Műszaki Könyvkiadó, Budapest.
- SZABÓ József (1848) *Bányaműszótár. Német–magyar rész* (Dictionary of Mining. German–Hungarian part). Buda.
- SZABÓ Miklós (1912) *Technikai zsebszótár. 1. Német–magyar 2. Magyar–német* (Technical Pocket Dictionary. 1. German–Hungarian 2. Hungarian–German). Budapest.
- SZELEZSÁN János–FREY Tamás (1973) *Számítástechnika* (Computer Science). Akadémiai Kiadó, Budapest.
- SZENTESI Csaba (ed.) (1990) *Angol–magyar repülésműszaki kifejezések gyűjteménye* (English–Hungarian Aviation Collections of Technical Terms). Légitforgalmi és Repülőtéri Igazgatóság Repüléskutatási Központ, Budapest.
- SZENTESI Csaba (2002) *Angol–magyar repülésműszaki szótár* (English–Hungarian Dictionary of Aviation). Magyar Légitforgalmi Szolgálat, Budapest.
- SZÉŐKE Imre (1903) *Bányászati szótár* (Mining Dictionary). Bagó Márton, Budapest.
- SZÉKELY Béla–SZEPESI György (1980) *Rendszerismeret, operációkutatás* (System Knowledge, Operations Research). Akadémiai Kiadó, Budapest.
- SZIKSZAY Gerő (1944) *Magyar–német–angol repülő* (Hungarian–German–English Aviation). Budapest.
- SZILÁDY Károly (1982) *Könyvsajtói műszótár, a tárgyak rövid magyarázatával együtt* (Dictionary of Book Press, along with a Brief Description of the Items). Lapkiadó Vállalat, Budapest.
- SZINNYEI József (1893) *Magyar Tájézőtár* (Hungarian Dictionary of Language Areas). Hornyánszky, Budapest.
- TARR Bence (ed.) (2000) *Angol–magyar PC és Internet számítástechnikai értelmező szótár magyar–angol szószedettel* (English–Hungarian PC and Internet Computing Dictionary with Hungarian–English Glossary). PANEM, Budapest.
- TELEC, on-line = *Távközlési kiszótár* (on-line) (Pocket Dictionary of Telecommunication). <http://dragon.klte.hu/~beneg/szotar.htm>
- The International Statistical Institute (on-line) *Statisztikai szótár* (Dictionary of Statistics). <http://isi.cbs.nl/glossary/index.htm>
- Tinta Könyvkiadó (on-line) *Angol–magyar, magyar–angol műszaki szótár*. (Hungarian–English, English–Hungarian Technical Dictionary). <http://www.tintakiado.hu/szotar/angol/muszaki/>
- TWENEY, Charles Frederick–HUGHES, Leslie Ernest Charles (eds) (1940) *Chambers' Technical Dictionary*. Macmillan Co., New York.
- URBÁN Viktor–Soós Eszter (eds) (2002) *Háromnyelvű műszaki szakszótár. Építészeknek, építőipari kivitelezőknek, épületgépészeknek, villamostervezőknek,*

- klímatervezőknek, EIB-BUS tervezőknek. Német–magyar–angol* (Trilingual Technical Dictionary. For Architects, Building Contractors, Building Engineers, Electrical Designers, Climate Designers, EIB-BUS Designers. German–Hungarian–English). Urbanus Trading BT., Budapest.
- URBÁN Viktor (ed.) (2004) *Háromnyelvű műszaki szakszótár CD-Rom* (Trilingual Technical Dictionary on CD-Rom). Urbanus Trading BT., Budapest.
- URBÁN Viktor (ed.) (2006) *Háromnyelvű műszaki szakszótár CD-Rom* (Trilingual Technical Dictionary on CD-Rom). Urbanus Trading BT., Budapest.
- URBÁN Viktor (ed.) (2008) *Háromnyelvű műszaki szakszótár CD-Rom* (Trilingual Technical Dictionary on CD-Rom). Urbanus Trading BT., Budapest.
- URBÁN Viktor (ed.) (2011) *Háromnyelvű műszaki szakszótár CD-Rom* (Trilingual Technical Dictionary on CD-Rom). Urbanus Trading BT., Budapest.
- VARGA József–KISBOCSKÓI László–GEREY Tamás–KUND Ede (1962) *Vízgépek, belső égésű motorok* (Water Machines, Internal Combustion Engines). Terra, Budapest.
- VARGA László–SZÉCHY Károly–KÉZDY Árpád–LAZÁNYI István (1960) *Alagutak, alapozás, földművek, talajmechanika* (Tunnels, Foundations, Earthworks, Soil Mechanics). Terra, Budapest.
- VÁSÁRHELYI Boldizsár (1960) *Közlekedésügy. 1. kötet: Kényszerpályás és közúti közlekedés. 2. kötet: Hajózás, repülés, posta és csővezetékes szállítás* (Transportation Systems. Vol. 1: Rail Bound and Road Traffic. Vol. 2: Shipping, Aviation, Postal Services and Transport via Pipelines). Terra, Budapest.
- VÉGH Béla–RUBIN Péter–KLÁR János (eds) (1965) *Francia–magyar műszaki szótár I–II.* (French–Hungarian Dictionary of Engineering I–II). Akadémiai Kiadó, Budapest.
- VERLAG DASHÖFER 2005 = *Háromnyelvű építőipari szakszótár* (Trilingual Dictionary of Builders). CD-ROM. (2005) Verlag Dashöfer.
<http://www.dashofer.hu/szakkonyv/epitoipar/szotar/szoftver/haromnyelvu-epitoipari-szakszotar-cd-rom/FCD01S>
- VERMES Lászlóné–SCHMÉL Ferenc–VERMES László (eds) (1978) *Bőr- és cipőipari minilexikon* (Minilexicon of Leather and Footwear). Műszaki Könyvkiadó, Budapest.
- VERMES Lászlóné (ed.) (on-line) *Bőr- és cipőipari minilexikon. 2. javított kiadás.* (Minilexicon of Leather and Footwear. 2nd Revised Edition).
<http://mek.oszk.hu/01200/01207/html/>
- VERSZTOVSEK BORISZ–BENEDEK Zoltán (1983) *Német–magyar hajózási szakszótár* (German–Hungarian Dictionary Maritime Trade). Tankönyvkiadó, Budapest.

- VOCABULAIRE 1913 = *Vocabulaire technique de l'éditeur en sept langues: Français, Deutsch, English, español, Hollandsch, italiano* (1913) Congrès international des éditeurs, Berne.
- VÖRÖS ÁRPÁD (ed.) (1978) *Öntészet* (Founding). Akadémiai Kiadó, Budapest.
- WALKER, Peter (1988) *Chambers Science and Technology Dictionary*. Cambridge University Press, Cambridge.
- WHITNEY, William Dwight (1889–91) *The Century Dictionary and Cyclopaedia*. The Century Company, New York.
- ZÁDOR Anna (1984) *Építészeti szakszótár* (Architectural Glossary). Corvina Kiadó, Budapest.

Other literature

- BALLAGI Aladár (1884) *Kecskeméti W. Péter ötvöskönyve* (Kecskeméti W. Peter's Goldsmith's Book). Franklin-Társulat, Budapest.
- BESSENYEI György (1778) *Magyarság* (Hungarians). Bécs.
- BERECZKY János (1829) *Útmutatás a takácsmesterségre, a takácsmesterségen lévő ifjúság számára* (Instructions for Weavers, for Young Master Weavers). Pest.
- BOGDÁN István (1973) *Régi Magyar mesterségek* (Old Hungarian Crafts). Neumann Kht., Budapest.
- BUGÁT Pál–IRINYI János–NENDTVICH Tamás (1844) *Természettudományi Szóhalmoz* (Words of Physical Sciences). Pest.
- Dictionnaire de l'Académie française* (1st ed.). (1694) (Dictionary of the French Academy). La Veuve de Jean Baptiste Coignard, Paris.
- FELVINCZI György (1716) *Az ötvös mesterségről való vetélkedés* (The Rivalry of Goldsmith Mastery). Lőcse.
- FŐRIS Ágota (2004) *A mesterségek szótárai. Magyar–olasz egybevetés* (The Crafts Dictionaries. Hungarian–Italian Collation). In TÓTH Szergej–FÖLDES Csaba–FŐRIS ÁGOTA (eds) *Lexikológiai és lexikográfiai látkép. Problémák, paradigmák, perspektívák* (Lexicology and Lexicography Overview. Problems, Paradigms, Perspectives). Generalia, Szeged, 44–49. (Fasciculi Linguistici Series Lexicographica 3.)
- GERGELYFFI András (1809) *Technologia, vagyis a mesterségek és némely alkotmányok rövid leírása* (Technologies and Crafts and a Brief Description of some Constitutions of those). Pozsony.
- HAIMAN György (1982) Szilády Károly és a Könyvnyomdászati Műszótár. *Könyvsajtói műszótár, a tárgyak rövid magyarázatával együtt* (Károly Szilády and the Specific Dictionary of Printing. Specific Printing Dictionary with Brief Explanations of Objects). Lapkiadó Vállalat, Budapest.

- HOBOTH Katalin (2011) Kétnyelvű (magyar–szlovák, ill. szlovák–magyar) építészeti szakszótár(ak) és tankönyvi szójegyzékek terminológiai problémái (Terminological Problems in Bilingual (Hungarian–Slovakian and Slovakian–Hungarian) Dictionaries of Architecture and Student’s Book Glossaries). In PARAPATICS Andrea–CSERNÁK-SZUHÁNSZKY Debóra (eds) *FÉL-ÚTON 7. A hetedik Félúton konferencia*. ELTE, Budapest. <http://linguistics.elte.hu/studies/fuk/fuk11/>
- JENDROLOVICS János–KAJDI János (1855) *A csizmadiaság különös figyelemmel az e mesterségben előforduló műszavakra* (Bootmaking with Special Attention to Specific Term of this Trade). Pest.
- Loi du 19 juillet 1791, relative aux théâtres et au droit de représentation et d’exécution des œuvres dramatiques et musicales* (1791). (19 July 1971 Law Related to the Rights of Performing Drama and Musical).
- Loi du 19 juillet 1793, relative à la propriété littéraire et artistique*. (1793). (19 July 1973 Law Related to Literary and Artistic Rights)
- LYON-CAEN, Charles–DELALAIN, Paul (1896) *Lois françaises et étrangères sur la propriété littéraire et artistique: suivies des conventions internationales conclues par la France pour la protection des œuvres littérature et d’art* (French and Foreign Laws on Literary and Artistic Property: Followed by the International Conventions Concluded by France for the Protection of Works of Art and Literature). Cercle de la librairie.
- SZABÓ József (2002) *A magyar repülés kilencven évének képes története 1910–2000* (The Ninety-Year History of Hungarian Aviation in Pictures 1910–2000). *Repüléstudományi Közlemények, 2. Különszám*, Zrínyi Miklós Nemzetvédelmi Egyetem, Budapest, 213–226.
- SZARVAS Katalin (2005) *Zwei- und mehrsprachige, in Ungarn zwischen 1945 und 1998 erschienene Fachwörterbücher der Technik mit Deutsch und Ungarisch*. Dissertation.

Egy- két- és többnyelvű műszaki szakszótárak Magyarországon

A tanulmány bemutatja a műszaki szaklexikográfia kialakulását és fejlődésének főbb állomásait Magyarországon, illetve megkísérel átfogó képet adni az ezen a rendkívül szerteágazó területen keletkezett művek sokszínűségéről és sokaságáról, valamint a rohamos technikai fejlődés következtében a szaklexikográfiát napjainkban is jellemző bővülő témakináltról. A XXI. század információs társadalmának technikai eszközkészlete a speciális szaknyelvi tartalmak esetében is könnyebb hozzáférést és kereshetőséget kínál, s ezzel párhuzamosan az egyes szakmákon belüli szakosodás következtében egy-egy szakterületen egyre szűkebb felhasználói kört érint az igényes szempontok alapján szerkesztett nyomtatott szótárak megjelenése. A kiadóknak nehéz lépést tartani a technikai fejlődésre is egyre markánsabban jellemző akcelerációval és a folyamatosan módosuló felhasználói igényekkel. Ennek következtében az utóbbi évtizedben előtérbe kerültek az on-line felhasználású, egy-egy szűkebb szakterület szakszókincsének feldolgozására összpontosító megoldások, valamint a műszaki szaklexikográfia esetében is megfigyelhető Magyarországon az interaktivitás irányába történő elmozdulás.