

CONTRIBUTION OF LATVIAN TECHNICAL INTELLIGENTSIA TO DEVELOPMENT OF TERMINOLOGY UNTIL THE ESTABLISHMENT OF THE REPUBLIC OF LATVIA

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Summary. The article considers the development of technical terminology in the Latvian language until the proclamation of the independent state of Latvia in 1918. The activists of the National Awakening became the first creators of technical terminology, describing current technical innovations as, for example, *Juris Alunāns* (1832–1864) did in 1860 for the telegraph. The need for technical terms became apparent after the Second Baltic Agricultural Exhibition when difficulties arose in describing the showcased exhibits in Latvian. Significant steps in the development of terminology were made on the initiative of student *Mikus Skruzītis* (also *Skruzīšu Mikus*; 1861–1905), who suggested collecting frequently used names of parts of various simple devices, and the initiative of *Nikolajs Puriņš* (also *Puriņu Klāvs*; 1858–1935) to publish self-education materials in construction («*Būvskola*» or Building School) and mechanical engineering («*Mašīnu būvskola*» or Machine Building School). As the proportion of Latvians employed in the industry and the number of persons who received technical education increased, the need to establish organizations that would take care of both technical education in Latvian and the coinage of the necessary terms became more apparent. The Baltic Technical Society (1906) and the Latvian Educational Society (1908), which established their own terminology committees, deserve special recognition. Encyclopaedic dictionaries were also important for the systematization of terminology, especially the conversational dictionary published by the Knowledge Committee of Riga Latvian Society (1903–1921). The research was carried out within the project «*Mūsdienu latviešu valodas lietojums un attīstība*» (Research on Modern Latvian Language and Development) of the National Research Program of the Latvian Council of Science (No. VPP-LETONIKA-2022/1-0001).

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Keywords: Latvian language, technical terminology, National Revival, Riga Polytechnic Institute, conversational dictionaries.

Introduction

The Terminology Committee of the Ministry of Education of Latvia was successfully established in 1919 due to the fact that since the middle of the 19th century, a large part of Latvian society already held a strong opinion that the formation of a modern nation was not possible without a well-developed system of terms in the national language. Discussions regarding the term creation process and the way it should be organized regularly arose in the Latvian press; book reviews almost always evaluated the used terms and deliberately identified the terms that were still missing in specific areas. Sometimes specialists formed working groups where they discussed the terms used in concrete fields, there were also several attempts to establish terminological committees that would work on a long-term basis [1]. Therefore, before discussing the activity of the Terminology Committee, it is necessary to describe the contribution to the field of technical terminology that had been made previously.

Beginnings of Latvian Terminology

Already in the second half of the 1850s, the most widely recognized activists of the National Awakening Movement published many articles on the problems of natural sciences, which touched upon not only the general principles of the world organization but also described the structure of specific devices and technical solutions used therein. Poet and publicist *J. Alunāns* described the working principles of the telegraph in Volume 1 of the collection «*Sēta, daba, pasaule*» (Homestead, Nature, World) (Fig. 1 p. 12) [2]. When describing the structure of the telegraph apparatus, such terms as conductor (*vadītājs*), positive (*pozitīvīga*) or attracting electricity (*pastādama elektrība*; the one which attracts), negative (*negatīvīga*) or repulsing electricity (*navināma elektrība*; the one which repels), closing wires (*slēdzamās drātes*), coiled wires (*aptīstītas drātes*; winding), current arrester (*straumes apturētājs*; switch), galvanic battery (*galvanīga baterija*), revised corrections (*pārlabotas iegrozīšanas*; accessories?), electric telegraphy (*elektrīga tālrakstīšana*), anchor (*enkurs*), pointer (*rādītājs*), marker (*zīmnesis*), marker (*zīmdevis*), printing machine (*drukājams aparāts*), bras roller (German: *Walze*) were used [2].



Figure 1. (a) The cover of the book «*Sēta, daba un pasaule*»; (b) the title page of the book «*Sēta, daba un pasaule*» and (c) description of the telegraph in the book (1860).

Difficulties associated with rendering various technical names into Latvian became apparent in the summer of 1871, when the Second Baltic Agricultural Exhibition was organized in Riga. In spite of the fact that at that time the purchase of houses had already started and a sufficiently wide stratum of Latvian landowners presenting a growing group of potential buyers was gradually formed, their needs were not catered in any way, because «the list or catalogue of exhibited items was not printed in Latvian, not even talking about the headlines in the exhibition and any announcements» [3]. Of course, the organizers of the exhibition could make excuses that they lacked dictionaries to look for Latvian terms, because the existing ones were outdated, but the new ones, both the so-called «*Krievu-latviešu-vācu vārdnīca*» (Russian-Latvian-German dictionary) by *Krišjānis Valdemārs* (1825–1891) [4] and Bishop Karl Christian Ulmann's (1793–1871) «*Lettisches Woerterbuch*» (*Latvian Dictionary*; see Fig. 2) were published only in 1872; however, it only confirmed the fact that terms were needed, but they were lacking.

In order to confirm the interest of Latvians in the agricultural exhibition and to emphasize the necessity to use the Latvian language at such events, on 10 June 1871, a public worker, businessman, journalist, and one of the founders of Riga Latvian Society (RLS) *Rihards Tomsons* (1834–1893) organized a meeting of farmers in the house of RLS as part of this exhibition. Four more reports on the topical issues in agricultural were delivered together with a general introduction about the items demonstrated at the exhibition («*Izstādīšana un sarunāšanās par tiem uz šīs izstādes redzamiem un priekš mājas saimniecības jo vērā liekamiem zemkopības rīkiem, mašīnām, lopiem u. t. p.*») (*Exhibiting and Talking About Agricultural Tools, Machines, Livestock, etc. Demonstrated at this*

Exhibition and Important for the Home Economy) [5]. It is important to emphasize that after the meeting, a brochure with the minutes of the meeting and the texts of the reports were sent to each participant.

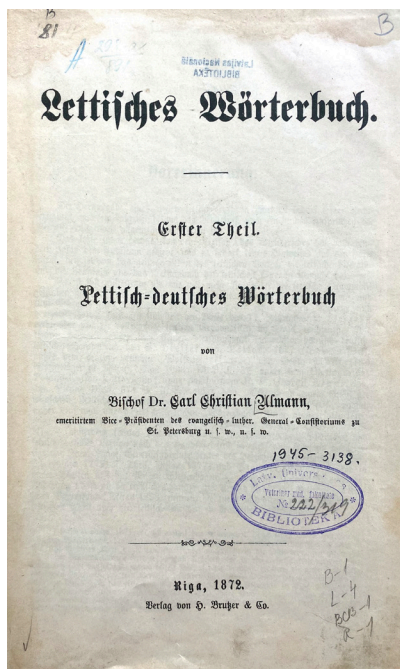


Figure 2. The title page of
«Lettisches Woerterbuch» (1872).

R. Tomsons can also be considered the author of the most comprehensive review of the basics of chemistry in the Latvian language at the time, which was published in many sequels in the 1875 and 1876 issues of the newspaper «Darbs» (Work) under the title «Bezorganiska ķēmija» (Inorganic Chemistry). In the introduction, before turning to specific questions, advice was given as per how to learn foreign terminology, «I would invite everyone to read the expressions in each issue one by one; because otherwise many terms and designations that will be used in the articles of the following issues would not be understood; I would ask you to take those new words into account and get used to using them» [6]. Such general terms were mentioned: magnifying glasses (*vairojamās glāzes*) or small glasses (*mazuma skatekļi*; magnifiers); isolators (*savrupinātāji*; insulators); conductors (*turpinātāji*; current conductors) and non-conductors (*neturpinātāji*; non-current conducting substances); weight (*atsvars*; molecular weight) and equivalent weight (*ekvivalentsvari*; equivalence); the method of resolution (*izšķiru ceļš*; *analītīga metode*; analytical method; German: *analytische Methode*) and the method of synthesis (*salaidu ceļš*; *sintētīga*

metode; synthetic method; German *syntetische Methode*); quality (*kādība*; *kvalitēte*; German: *Qualität*) and quantity (*cikkādība*; *kvantitete*; German: *Quantität*); heat gauge (*siltuma mērs*; *termometris*; thermometer); glass tube (*glāžu stobriņš*; *ierīte*; device); spirit of wine (*vīna gars*; German: *Weingeist*); pyrometer (*pirometrs*; *ugunsmērs*; fire gauge; German: *Pyrometer*), etc. [6, 7]. The paper was praised by an engineer-technologist, graduate (1913) of the Department of Chemistry of Riga Polytechnic Institute (RPI) *Augusts Kešāns* (1881–1954) because it was the most comprehensive article on chemistry for a long time and «in terms of scientific terminology, it will have influenced other authors» [8].

Technical Terminology in Press Publications and Books

The development of technical terminology was hindered by the small number of publications because it was much easier to publish general articles on natural sciences, linguistics, or law in general newspapers and public literary magazines rather than technical papers that delved into the topicalities of a branch of engineering. However, as the number of Latvians who had studied engineering or other technical disciplines, as well as the number of urban residents, increased, the interest in these issues grew as well.

M. Skruzītis, who is better known as a folklorist, ethnographer, and researcher of the history of Selonia, can be mentioned as a vivid example. After studying architecture, chemistry and agriculture at RP, he worked in magazine «*Austrums*» and newspaper «*Tēvija*». Undeservedly forgotten, but important in the history of the Latvian terminology is his 1894 article «*Teknisku nosaukumu lietā*» (On the Case of Technical Names). After pointing out that most farmers no longer use flax (*springuļi*), flax breaking machines and old ploughs (*veci arkli*), but rather more modern tools, he noted on the difficulty of writing about technical matters due to terminological ambiguities, «Each ... has noticed how many different names the writers use to designate a part of a tool. One calls the German «*Welle*» a shaft (*vārpsta*), another – axes (*asi*), the third – perhaps an axle-tree (*velbomis*; German: *Wellbaum*), and yet each of the two first names denotes something special» [9]. In his opinion, the terminology of these industries could be established in Latvian by collecting the names of parts of old and current tools, «I am sure that if you collect all the names of the parts of the loom (*stāvs, stelle*), the spinning-wheel (*vērpjamais ratiņš*) and other tools, you would already have a rich material for the designations of the parts of the current machines; by collecting popularly used designations for mounting the first crown of buildings (the first four logs) so that the corners of the

building come out at an angle of 90 degrees, making sure that one corner does not stand higher than the other three corners of the house (*pakši*), observing what names common people use when they arrange a canvas vertically or attach a handle to the scythe, for the most part, one could do without newly created or yet to be created words if someone wanted to write on physics or the division and measurement of the fields» [9]. Although it is clear that simply collecting the existing words would not be enough, it can be agreed that the availability of such material would allow the creators of terminology to use a larger pool of ideas for coining new words not relying solely on calquing and to more clearly distinguish the designations of related but not identical concepts.

After this publication, this matter was addressed in several issues of magazine «*Austrums*» published in 1894 and 1895 – both short notes by *M. Skruzītis* himself about some commonly used notations, which he created from the materials sent by the readers, and references by other authors, for example, a list of parts of the weaving loom compiled by writer, translator, and journalist *Fricis Mierkalns* (1873–1955) [10]. In the following years, news about the sent materials was periodically published, for example, a collection by a certain *Indriksons* from *Lazdona* about the construction of a spinning-wheel, weaving the canvas on the weaving loom, and the details of an old plough [11], and the names of agricultural tools from *Liezere* collected by *Aleksandrs Vanags* (1873–1919), a student of the Department of Engineering of RP [12]. In both cases, the sent collections were extensively commented on, supplemented with the titles that *M. Skruzītis* himself knew. It is difficult to determine whether these publications died out due to a low response from the interested parties, or because *M. Skruzītis* stopped cooperating with the journal at that time, focusing entirely on ethnographic issues.

Ansis Gulbis (1873–1936), who later became a book publisher, provided an analytical overview of the Latvian book publishing industry at the end of the 19th century. He focused specifically on what was still missing, «We do not have complete editions in any craft, especially those from which trained artisans could expand their knowledge in their craft. Carpenters, locksmiths, machine engineers and mechanics would benefit if they find some illustrated publications in German, which are also suitable for self-study... We are looking forward to the opening of the Latvian craft school, attention is still paid to the publication of textbooks for the new institution. These companies could invest in publishing books on machinery, electrical engineering, simple architecture, and art industry» [13]. It seems that the idea of a broader initiative for the dissemination of technical knowledge in the Latvian society with artisans and qualified workers as a special target group simultaneously occupied the minds of many specialists in technical fields, but the first

concrete steps to the practical solution of the matter were made by writer and publicist *Puriņu Klāvs*. In the history of the Latvian culture, he is better known as a not very successful author of plays and a long-time opponent of *Rainis* (real name *Jānis Pliekšāns*; 1865–1929) in the polemics between newspapers «*Dienas Lapa*» and the more conservative «*Baltijas Vēstnesis*» represented by him, while only a few know about his merits in the promotion of technical education and terminology. Although due to financial difficulties he did not obtain a diploma even after long studies at RP where he studied architecture (1878–1889; with interruptions), there is no doubt that he should be considered an expert in technical fields.

In accordance with the system of organized self-education popular at the time, he organized translation and adaptation of the study papers (German: *Unterrichtsbrieft fuer Selbststudium*) based on the principles of German professor O. Karnack (?-?; in German it was more often called the *Karnack-Hachfeld* system) into Latvian, so that Latvian workers and craftsmen could supplement their theoretical knowledge through self-study. Two series were launched – «*Būvskola*» (Building School; Fig. 3) and «*Mašīnu būvskola*» (Machine Building School), addressing compatriots employed in the construction industry and machine-building factories, respectively. In accordance with the original plan, small (up to 32 pages, average 24 pages) numbered textbooks were periodically published with an outline of the theoretical material, which depending on the topic was also supplemented by problems to be solved or detailed drawings presented on separate pages. The textbooks came out in a mixed order so that the subscriber of each series could learn several courses at the same time, but following a sequential progression from the simplest to the complex and from general to special. From 1901 to 1906, the total of 50 notebooks were published in the «*Būvskola*» series, and 49 – in the «*Mašīnu būvskola*» series. The series shared 34 textbooks, which dealt with general questions (arithmetic; draftsman's office knowledge and geometric drawing; algebra; planimetry and stereometry; projection theory and draftsman's geometry; mechanics). The following courses related to various construction professions were intended only for the readers of «*Būvskola*»: building structures (masonry work), wood working, carpentry, and internal construction and roofing (roofer's and tinsmith's work), for the readers of «*Mašīnu būvskolas*» – machine elements, machine drawing, and machine building materials.

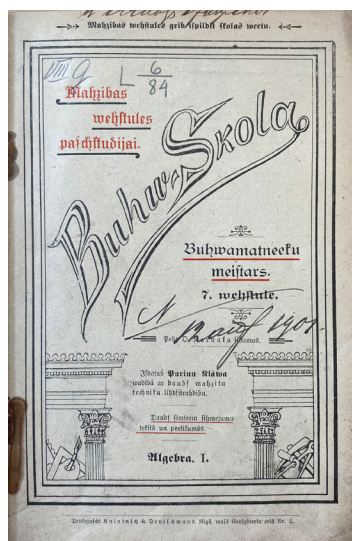


Figure 3. The cover of the 7th textbook
«Būvskola». Algebra I (1901).

The financing for the initiative was initially provided by the donation of bricklayer master *Frīdrihs Zaļupe* (?-?), later – by architect *Konstantīns Pēkšēns* (1859–1928), a graduate (1885) of RP. Although the edition was not completed, apparently due to the lack of funds, it nevertheless stimulated discussions on terminology. The editor attracted industry specialists, former RP / RPI students, among them *Kārlis Graudiņš* (1863–1915, studied at the Department of Engineering; 1884–1890), *Jānis Pauļevskis* (also *Pavļevskis*; 1872–1922, studied at the Department of Engineering; 1892–1902), *Aleksandrs Vanags* (studied at the Department of Engineering; 1891–1893, 1894–1897, at the Department of Architecture; 1898), as well as a graduate (1895) of the Department of Mechanics *Didrihs Vidbergs* (also *Vidbergs-Piķieris*, 1864–?) and a graduate (1908) of the Department of Engineering of RPI *Jūlijs Kornets* (1878–1968). Architect *Augusts Malvess* (1878–1951), a graduate (1906) of the Department of Architecture of RPI, referred to the publication «*Būvskola*» in his «*Tehniskā vārdnīca celtniecībai*» (Technical Dictionary for Construction; 1931), making numerous references to *P. Kl.* (*Puriņu Klāvs*).

Riga Latvian Society and Latvian Technical Terminology

On 13 and 14 June 1901, *D. Vidbergs* reported on the technical literature written in Latvian in the last ten years at the summer meetings of the RLS Knowledge Committee. He emphasized that there were very few books of that kind (including eight on general and six on

special issues), however, in his opinion, a new era had begun when the letters of *Puriņu Klāvs* started to get published. The need for editions of that kind was dictated by life itself, because Latvians were no longer a plough nation, because «a whole fourth of Latvians live from trade and industry» [14]. Newspapers and books were already actively disseminating knowledge on agriculture, but the same should have been done «also in the industry and handicrafts, where Latvian masters do not dominate, but are simple workers», therefore «concern for the well-being of the people makes the promotion of industrial literature our duty» [15]. So far, very little effort had been invested into the matter because «the publication of technical books is connected with considerable financial expenses, while the number of buyers of such books is not very large, and therefore it is difficult to find investors for the publication of such books» [15].

After this report by *D. Vidbergs*, the idea matured that RLS should also become more actively involved in economic life because many Latvians living in the big city, both entrepreneurs and workers, were employed in the industry. This convincingly overturned the still widespread myth about Latvians as a «plough nation», because, according to historian *Kaspars Kļaviņš*, Latvia was one of the most industrialized regions of Europe at the beginning of the 20th century (the percentage of urban residents in Latvia was close to the highest indicator of that time – the one that characterized the structure of the Belgian society) [16]. However, the difference was that the growing stratum of modern agriculture society had both its own influential associations and stable press traditions started by writer, journalist *Juris Māters* (also *Māteru Juris*; 1845–1885) in «*Baltijas Zemkopis*» (1875–1885) and until World War I continued by magazine «*Zemkopis*» (started in 1893, published intermittently until 1940), whereas there were no such publications and associations for those employed in the industry.

The Industrial Department of RLS established in 1901 on the initiative of *N. Puriņš* tried to bridge that gap. One of the main tasks of this department was to «publish books to spread all kinds of theoretical and practical technical knowledge» [17]. The content of these books would be made up of the reports read at the department meetings, which would allow for the creation of thematic collections of articles in the future, with the hope that «students of our technical university, especially from the senior courses, would take an active part in the work of the Department and drawing up of the reports, as well as in compiling the collection of articles» [18]. It seemed that there was no need to worry about the potential target audience for the publications, because «a whole fourth of Latvians make a living from trade and industry» [14].

Industrial Department of Riga Latvian Society

At the meeting of the newly established Industrial Department on 9 October 1901, *A. Vanags* delivered a report on the Latvian terminology in technology, emphasizing that difficulties for the compilers of technical articles often arise because «the Latvian language often lacks technical names» [19]. However, the terms were actually there, they had only not been sufficiently recognized, «In practice, however, our craftsmen use technical names among themselves, but they are often not known to technical literary workers. Therefore, he invited the members of the Industrial Department to save and collect Latvian technical names as actively as possible to ensure that these names are further used in writing» [19]. This initiative was consistent with the idea previously popularized by *M. Skurzītis* that not everything needs to be created anew because appropriate designations often already exist in the vernacular; they simply need to be elevated to the status of terms.

However, due to unclear reasons, the activity of the Industrial Department of RLS did not turn out to be as successful as it was hoped (a more extensive study on this issue would certainly be useful), and during its activity in 1905, a single collection of articles was published. It comprised three articles: «*Par kartupeļu izstrādāšanu*» (On Harvesting Potatoes) by a graduate (1901) of the Department of Chemistry of RPI, engineer technologist *Spricis Paegle* (1876–1962), «*Dzelzsbetona konstrukcijas*» (Reinforced Concrete Constructions) by a former student of the Department of Engineering of RPI *J. Pauļevskis*, and «*Par ēku piepi*» (About Polypore on the Buildings) by *Pēteris Bērziņš* (1875–?), presumably a student of the Department of Engineering at the time, later a graduate of RPI (1908) [20]. All three worked in the Latvian Student Corporation «*Selonija*».

In the autumn of 1905, a decision was made to publish a special professional newspaper and to transform the Industrial Department of RLS into an independent Industrial Society. To implement these initiatives, a special action committee was established, which apart from an active architect *A. Vanags* also included a chemist, graduate (1893) of the Department of Chemistry of RP *Kārlis Roberts Vidiņš* (1865– 1909), and electrical engineer *K. Zutis* (?-?). It is clear that the establishment of an independent association would have allowed to conduct a more intense activity, because the status of the RLS branch, according to the Statutes, did not allow either to undertake financial obligations or to accumulate funds. In 1908, the Medical Department of RLS established in 1902 underwent a similar evolution and was transformed into an independent Latvian Medical Association [21]. The fact that it did not really work out for the Industrial Department may be explained by the

crisis of confidence in RLS in the Latvian society after the revolution of 1905 due to the conservative position taken by some leaders of the society, especially lawyer *Fricis Veinbergs* (1844–1924). For this reason, after 1906, a series of other Latvian public organizations began to form, which took over the earlier functions of RLS at least in some areas.



Figure 4. Title page of «Konversācijas vārdnīcas» by J. Dravnieks (1893).

However, there was one important RLS initiative in the area of terminology development, which successfully continued and allowed uniting Latvians of various political persuasion, namely, «*Konversācijas vārdnīca*» (Conversational Dictionary) of the RLS Knowledge Committee, which began in 1902. The first attempt to present an encyclopaedic dictionary to the Latvian society was connected with the name of lexicographer and book publisher *Jēkabs Dravnieks* (also *Draviņ-Dravnieks*; 1858–1927). His publication with a self-confident title on the title page «*Konversācijas vārdnīca. Ar daudz mācītu latviešu palīdzību H. J. Dravnieka izdots*» (Conversational Dictionary. Published by H. J. Dravnieks with the Help of Many Learned Latvians) (Fig. 4) was launched on 1 February 1891, involving as many specialists as possible, including the already mentioned *M. Skruzītis* (theatre matters), agronomist *Jānis Bergs* (1863–1927), editor and statistician *K. Graudiņš*, who studied engineering at RP, and *Mārtiņš Bīmanis* (1864–1946), a student of the Department of Engineering of RP, later graduate (1891) and Rector of the University of Latvia (UL). Although this work had not been extensively analysed from the point of view of the history of technology, the short pages and numerous explanations of foreign words found in it definitely gave an impetus to the development of the technical language as well. When due to the insolvency of *J. Dravnieks*, the publication of the «*Konversācijas vārdnīca*» stopped in 1898 after the

publication of the 27th issue (a total of 986 pages were published until the beginning of the entry «*Kristjans*», or no more than two-fifths of the intended volume), there were no more doubts that such an edition was necessary, it was rather discussed how to do it better [22].

Discussing the role of such a dictionary, the aforementioned *K. Graudiņš* emphasized that, in addition to the usual encyclopaedia, specific exploratory function and detailed information about local geography, nature, and society, it had to play another important role in the Latvian society, because «various types of knowledge are presented in Latvian but not for the sake of this knowledge itself but for the sake of the language (the so-called technical terms), where this same knowledge has not been completely ignored» [23]. He elaborated on the idea of popularizing the terms in the encyclopaedia, «... Many sciences and arts are only now beginning to be practiced more in the Latvian language and the necessary terms have just been coined. But only specialists themselves know these terms and even they sometimes lack this knowledge, especially new beginners. For this reason, it is necessary to collect them in a handbook not only for the specialists themselves but also for the general readers as well». From the point of view of the development of terminology, it is not important whether the classifications were created independently or were translated from other languages with amendments [23].

The decision to publish a new encyclopaedia was made by the Knowledge Committee of RLS on 1 November 1902, one year was devoted to the preparatory work [24]. The cultural goals of the dictionary and its need were described by pedagogue, poet, literary critic, and literary historian *Teodors Zeiferts* (1865–1929), «In his daily life, a Latvian stumbles upon many objects and phenomena that are not only interesting but clearly necessary to understand. ... He needs scientific advice if he wants to act conscientiously. ... It is important to have a correct understanding of every matter that one comes across» [25].

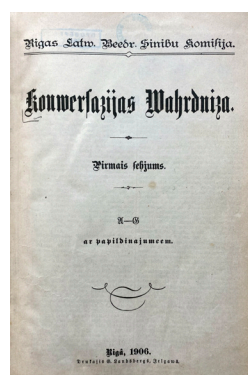


Figure 5. Title page of «*Konversācijas vārdnīca*» (Conversational Dictionary). Volume 1 with additions (1906).

RLS planned to start full-scale work on the conversational dictionary in 1904, however, the Action Committee wanted the first book published already at the end of 1903. In mid-September 1903, heads of departments – former RP / RPI students – were named, in agriculture – a graduate (1890) of the Department of Agriculture of RP, agronomist *Jānis Mazvērsīts* (1866–1943), in engineering affairs – a graduate (1898) of the Department of Engineering of RPI, engineer *Mārtiņš Robs* (1874–1947), in commerce – a graduate (1896) of Department of Commerce of RPI, an RPI lecturer *Ernests Birkhāns* (1872–1941), as well as the «polytechnicians» already mentioned in the article: in chemistry – *K. R. Vidriņš*; in mechanical engineering – *D. Vidbergs*; in construction – *J. Pauļevskis* [26]. Not all of the mentioned industry specialists became long-term contributors to the dictionary, so it is important to mention a number of other RP / RPI students, for example: *Jānis Asars* (1877–1908; painting, chemistry, non-Latvian writing); *K. Graudiņš* (construction); engineer *Jūlijs Benšons* (1873–1949; mathematics and technology); a student of the Department of Engineering of RPI *Jānis Beitāns* (1882–1954; technology), as well as RP / RPI graduates: theologian and promoter of commercial education, a graduate (1904) of the Department of Commerce of RPI *Vilis Olavs* (until 1890 – *Plute*; 1867–1917; history); a graduate (1903) of the Department of Commerce of RPI *Jānis Ozols* (1878–1968; trade); a graduate (1908) of the Department of Architecture of RPI architect *Mārtiņš Nukša* (1878–1942; architecture and painting); a graduate (1911) of the Department of Commerce of RPI, economist *Pauls Ašmanis* (1881–1952; trade); a graduate (1913) of the Department of Chemistry of RPI *Augustus Kešāns* (1881–1954; chemistry); a graduate (1908) of the Department of Engineering of RPI, engineer *Jūlijs Kornets* (1878–1968; technology), and a graduate (1906) of the Department of Architecture of RPI *A. Malvess* (architecture). Having gained experience, several of them later, in 1919, became involved in the work of the Terminology Committee of the Ministry of Education, while Professor *A. Kešāns* even ensured the spiritual succession between the creators of the conversational dictionary of RLS and the Terminology Committee of the Latvian Academy of Sciences. In 1946, he became the first head of the Sub-Committee for Technical Sciences.

Although the compilation of the conversational dictionary took a long time due to the turnover of collaborators and World War I and the subsequent War of Independence, with the support of the Culture Fund, the work was brought to an end in 1921, requiring 18 years instead of the planned six years (the volume had also increased from 72 to 99 notebooks) [27]. In addition, it is important that this completed conversational dictionary became the most authoritative source of terms

that could be used as a reference by both employees working in the state administration and by the lecturers of the newly founded UL.

Other Organizations and their Contribution to the Latvian Technical Terminology

After the revolution of 1905, numerous other Latvian public organizations were established, uniting the part of the society that was not satisfied with the conservative position of Riga Latvian Society. One of such organizations was the Baltic Technical Society founded in 1906, which set the dissemination of technical knowledge and promotion of industry as one of its goals [28]. The word «Baltic» was included in the name of the Society due to the circumstances of the time, because the Tsar's authorities would not have allowed the use of the word «Latvia» in the same way as it was with the current national anthem, which at that time was allowed to be sung with the words «God bless the Baltics». This Society organized three-year evening courses for craftsmen, where «they learned machine drawing, calculation, and gained knowledge about sewing machines, motors, electricity – thereby adapting to the requirements of the local industry and crafts» [28]. The courses were held in Latvian, so the Society's interest in developing terminology was understandable. The compilation of terms was undertaken by engineer *Kārlis Marovskis* (from 1926 – *Brežģis*; 1885–1958), who also performed the duties of the Society librarian.

On 29 February 1908, the Latvian Education Society was founded, its purpose was to «take care of the education and cultural development of the Latvian people, teaching and educating the youth and disseminating useful knowledge and skills across the nation» [29]. In this Society, the Terminology Committee was established already before World War I, it was led by the lawyer *Alfrēds Čikste* (1871–1958) [30]. Unfortunately, detailed information about the work of this committee before World War I is missing, and its existence was not reflected in the annual activity reports for the period from 1908 to 1914, which could testify to its informal nature. It can be ascertained from circumstantial sources that in addition to *A. Čikste*, RPI graduates, engineers *J. Kornets* and *Alfrēds Razums* (1880–1929; graduated (1909) from the Department of Engineering), architect *A. Vanags* also worked there [31].

It is precisely the lack of terms that often prevented many potential authors from writing in Latvian about various technical innovations in conditions where «each compiler and translator of scientific books creates scientific names at his own discretion, in this respect great

misunderstandings arise» [32]. The efforts of various societies to promote the writing and translation of scientific books and school textbooks by granting various awards were welcomed, but there was a special need for a German-Russian-Latvian scientific and technical dictionary. «Such a dictionary would be of great importance for every intelligent Latvian who would like to know how to write or translate. In this respect, such a dictionary can play a major role in promoting the Latvian culture, but it is hard to believe that we Latvians will soon have such a dictionary» [32].

When the voluminous dictionary of *J. Dravnieks* came out in 1910, 30 years after the German-Latvian dictionary compiled by K. C. Ullmann and *Gustavs Braže* (1802–1883), a new wave of discussions about the lack of terms in the Latvian language started in the press. Responding to criticism, *J. Dravnieks* emphasized that he used both words used in the conversational dictionary and the opportunity to directly ask for advice from many of its collaborators. In the preface of the dictionary, *J. Dravnieks* paid special tribute to *A. Vanags*, whom he mentioned among the consultants who helped him the most. Describing the difficulties he faced, he noted, «... A person who has not been involved in compiling a dictionary has no idea how many terms we still lack! It wouldn't be difficult to come up with words, but the task of the dictionary, as *K. Mīlenbahs* correctly explained to me, is to record words that are used in popular speech or literature, but not to give invented words that have not yet been used anywhere. So, improvement in this respect can only be expected when we have more scientific literature» [33]. The Russian-Latvian dictionary by *J. Dravnieks*, which was published in 1913, played a similar role.

The need for a comprehensively developed, harmonized and nuanced terminology of various branches was seen as an important prerequisite for the comprehensive cultural development of the nation. An entry in Rainis' diary on 2 February 1912 is significant in this respect. Along with reflecting on the idea of a Latvian university abroad, he noted that a scientific journal and «learned societies for the establishment of terminology» were also necessary for the successful development of the nation [34].

Now it is time to focus on a lexicographic edition («*Latviešu-vācu vārdnīca līdz ar svešvārdu paskaidrojumiem sastādīta no R. P. I. studentu pulciņa*» [Latvian-German Dictionary with Explanations of Foreign Words Compiled by the R. P. I. Student Group]), Rīga, *L. P. Vītola apgādībā*, 1914, 288 pages, Fig. 6), which, very likely, is incorrectly associated with RPI students. It must be said that very scanty information can be found about this edition both in reviews of the history of Latvian lexicography and in the press in general, and the author of the article has not been able

to find any detailed information about the existence of such a possible group, not to mention its composition. The publisher does not provide such information either, stating in the preface that the need for such a dictionary was great, because the last dictionary with such a language direction was published in 1879, therefore it was considered very outdated [35].

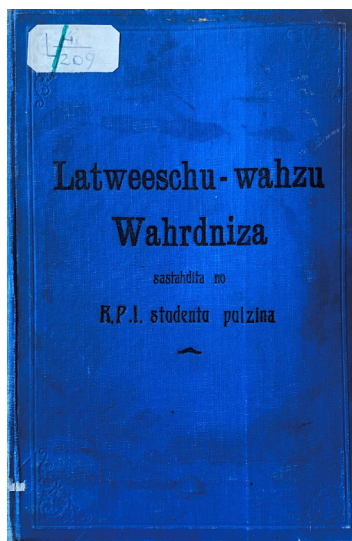


Figure 6. The cover of the book «Latviešu-vācu vārdnīca līdz ar svešvārdu paskaidrojumiem sastādīta no R. P. I. studentu pulciņa» (1914).

This edition may be considered a mixed type dictionary, because some of the Latvian words (especially loanwords) are also given an explanation in Latvian without providing a German equivalent, for example «subscription (*abonaments*) – advance payment for newspapers, lunches, theatre performances, etc. das Abonnement; swindler (*afērists*) – adventurer, dubious shopkeeper, fraud, der Affairist; atom (*atoms*) – a basic substance that is so tiny that it cannot be divided any more, der Atom».

A review and at the same time a debunking report about this dictionary was given by a competent evaluator who signed with the initials J. V. At the beginning of the review, without denying the relevance of such a dictionary, he expressed his surprise at the appearance of this edition, because it was known that «none of our linguists is working on composition of any practical dictionary » [36]. In addition, the surprise was said to be twofold: firstly, because it was published by *Vītols*, who was said to have a money-grabbing reputation in the book circles («who, with his Lautenfelds or Rautenfelds novels, excited all the broodies of Riga equally well»), but, secondly, that the creators of the dictionary were students, because «it can't be the work of one day, even one year» and «it was done quietly by the students of Riga Polytechnicum», even

though it does not have a faculty of linguistics [36]. Analysing the choice of words in more detail (it lacks, for example, scene, painting, collision, inclination, relationship, animal husbandry, household, economy, folk school, threshing machine, spring, letter), the reviewer pointed out that the students would have had to «seriously protest against the nefarious use of their name and desecration of their honour» [36]. There seems to be no reason to consider such an assessment too harsh.

Conclusions

Arvīds Lepiks (1889–1965), a graduate (1913) of Department of Mechanics of RPI, specialist in agricultural machinery, in his report at the First Conference of Latvian Engineers and Technicians in 1921 gave an apt assessment of the achievements of technical specialists in the field of terminology, «In the past, political dependence, narrowing the possibilities of using the Latvian language, suppressed every need for special technical Latvian literature, but then both works and translations appeared, for example «*Mašīnbūvskola*» and «*Būvskola*», which remained uncontested in the current years in terms of their scope. At that time, the translator of every technical or generally special work was at the same time the founder of technical terminology, because this field was completely uncultivated, and everyone who wanted to provide people with technical work had to be a pioneer of terminology» [37].

In general, it can be stated that, taking into account the limitations of its use, the Latvian technical terminology was sufficiently formed and stabilized, so that after the establishment of an independent state, it could start to function successfully in a short time in record keeping and in education becoming the language of instruction both at the technical faculties of the UL and in secondary technical education. This was ensured both by the contribution made by technical specialists of the previous generations and by a large number of Latvian engineers from various fields. The majority of these engineers were RP / RPI students or graduates who also worked at RLS [38].

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SOURCES OF ILLUSTRATIONS

Figure 1. Latvijas Nacionālā bibliotēka (turpmāk – LNB).

Figure 2. LNB.

Figure 3. LNB.

Figure 4. LNB.

Figure 5. LNB.

Figure 6. LNB.



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Contribution of Latvian Technical Intelligentsia to Development of Terminology until the Establishment of the Republic of Latvia

Māris Baltiņš

Latviešu tehniskās inteligēnces veikums terminoloģijas jomā līdz Latvijas Republikas izveidei

Rakstā apcerēta tehniskās terminoloģijas attīstība latviešu valodā līdz neatkarīgās valsts – Latvijas Republikas – proklamēšanai 1918. gadā. Par pirmajiem tehniskās terminoloģijas veidotājiem kļuva Tautiskās atmodas darbinieki, apcerot tolaik aktuālus tehniskus jaunievedumus (piemēram, Juris Alunāns (1832–1864) par telegrāfu 1860. gadā). Pārliecinoši vajadzības pēc tehniskiem terminiem kļuva redzamas pēc Otrās Baltijas lauksaimniecības izstādes, kad radās grūtības latviešu valodā aprakstīt izstādāmos eksponātus. Būtiski soļi terminoloģijas izveidē bija Rīgas Politehnikuma (RP) studentu Mikus Skruzīša (arī Skruzīšu Mikus; 1861–1905) iniciatīvai vākt tautā lietotos dažādu vienkāršu ierīču detaļu nosaukumus un Nikolaja Puriņa (arī Puriņu Klāvs; 1858–1935) ierosmei izdot pašizglītības līdzekļus celtniecībā («Būvskola») un mašīnbūvē («Mašīnu būvskola»). Pieaugot rūpniecībā nodarbināto latviešu īpatsvaram un tehnisko izglītību ieguvušo personu skaitam, palielinājās nepieciešamība veidot biedrības, kas rūpētos gan par tehnisko izglītību latviešu valodā, gan par nepieciešamajiem terminiem. Īpaši izceļama Baltijas Tehniskā biedrība (1906) un Latviešu izglītības biedrība (1908), kas izveidoja savas terminoloģijas komisijas. Būtiska nozīme terminoloģijas sistematizēšanai bija arī enciklopēdiskajām vārdnīcām, it īpaši Rīgas Latviešu biedrības Zinību komisijas izdotajai konversācijas vārdnīcai (1903–1921). Pētījums veikts Latvijas Zinātnes padomes valsts pētījumu programmas projektā «Mūsdienu latviešu valodas lietojums un attīstība» (Nr. VPP-LETONIKA-2022/1-0001).

Atslēgvārdi: latviešu valoda, tehniskā terminoloģija, Tautiskā atmoda, Rīgas Politehniskais institūts, konversācijas vārdnīcas.