



## Overview of the Appeal and Development of Technical Terminology in the Albanian Areal<sup>a</sup>

Gani PLLANA<sup>1</sup>

Sadete PLLANA<sup>1</sup>

Manuscript information:

Received: April 29, 2019

Accepted: May 29, 2019

### Abstract

The history of appearance and development of technical terminologies in the Albanian area sheds light on the relationships they have entered into with social factors indicating what kinds of factors have prevailed in their appearance and development. Thus, for instance, at the end of the 19th century, a number of knowledge fields were stipulated by political factors, cultural and linguistic factors that are inextricably linked to our nation's efforts to arouse national consciousness through the growth of educational and cultural level of the people. Some sciences, through their fundamental special fields probably would be one of those factors that would accomplish this objective. Other factors were the opening of schools and the drafting of relevant textbooks thereby their accomplishment is to be achieved by means of written language. Therefore the first fundamental knowledge fields were embodied with them, such as mathematics, linguistics, geography. So the conceptual systems of the knowledge fields in their genesis arose on the basis of concepts, created directly and particularly for these areas. In the fields to come, other areas are appeared and developed, one part on the basis of the existing fields from their differentiation such as mathematics: algebra-geometry-stereometry, from physics: mechanics-electricity-optics, another part on the basis of human practical activity fields such as agronomy, veterinarian, forestry etc.

### Author 1

Dr., University of Prishtina  
"Hasan Prishtina" Prishtina  
Faculty of Mechanical  
Engineering  
Republic of Kosova  
E-mail: [gani.pllana@uni-pr.edu](mailto:gani.pllana@uni-pr.edu)

### Author 2

Asst. Prof. Dr., University of  
Prishtina "Hasan Prishtina"  
Faculty of Economy  
Republic of Kosova  
E-mail: [sadete.pllana@uni-pr.edu](mailto:sadete.pllana@uni-pr.edu)

**Keywords:** Albanian language, Albanian area, technical terminology, standardization.

*Cite as:*

Pllana, G. & Pllana, S.. (2019). Overview of the Appeal and Development of Technical Terminology in the Albanian Areal. *European Journal of Educational and Social Sciences*, 4 (1), 38 – 46.

<sup>a</sup> This study was presented during Eurasian Conference on Language & Social Sciences, 24-27 June 2018, Riga, Latvia.

## **Zusammenfassung**

### **Ein Überblick über die Entstehung und Entwicklung der Fachterminologie im albanischen Raum**

Die Geschichte der Entstehung und Entwicklung technischer Terminologien im albanischen Raum wirft ein Licht auf die Beziehungen, die sie mit sozialen Faktoren eingegangen sind, woaus hervorgeht, welche Arten von Faktoren in ihrem Auftreten und ihrer Entwicklung vorherrschten. So wurden beispielsweise am Ende des 19. Jahrhunderts eine Reihe von Wissensfeldern durch politische, kulturelle und sprachliche Faktoren festgelegt, die untrennbar mit den Bemühungen unserer Nation verbunden sind, das nationale Bewusstsein der Menschen durch das Wachstum des Bildungs- und kulturellen Niveaus zu wecken. Einige Wissenschaften waren wahrscheinlich einer der Faktoren, die dieses Ziel durch ihre grundlegenden Spezialgebiete erreichen würden. Weitere Faktoren waren die Eröffnung von Schulen und die Ausarbeitung der entsprechenden Lehrbücher, wodurch ihre Leistung durch die schriftliche Sprache erzielt werden sollte. Daher wurden die ersten grundlegenden Wissensfelder wie Mathematik, Linguistik, Geographie mit ihnen verkörpert. So entstanden die begrifflichen Systeme der Wissensfelder in ihrer Genese auf der Grundlage von Konzepten, die direkt und speziell für diese Bereiche erstellt wurden. In den kommenden Feldern erschienen und entwickelten sich andere Bereiche, wobei ein Teil auf der Grundlage der bestehenden Bereiche aus ihrer Differenzierung wie Mathematik: Algebra-Geometrie-Stereometrie, aus der Physik: Mechanik-Elektrizität-Optik, ein anderer Teil auf der Grundlage der menschlichen praktischen Tätigkeitsbereiche wie Agronomie, Tiermedizin, Forstwirtschaft usw.

**Schlüsselwörter:** albanische Sprache, albanischer Raum, Fachterminologie, Standardisierung.

## INTRODUCTION

Starting from the state of research to date, where, as mentioned above, there are no observing studies of the terminology in the realm of the history of their formation, it would be useful to precisely undertake a study on a monographic level for the research and study of this area of terminology. On the other hand, this problem could be linked in a particular way with the formation in the course of the times, of the technical terminology built on the basis of words of the native language, which are raised to the level of terms for the nomination of specialized concepts of this field. Thus, for example, a range of words can be brought forward, which we come across as early as in Buzuk's creation "Meshari" ("Missal") (1555), which today are used as terms also, not only directly in today's technical fields, like: *fuqi*, *forcë*, *bosht*, *rrotë*, *rrotullohet* (*rrotulluem*), (Engl. power, strength, axle, wheel, spinning (spinned) etc. As is evident, on this basis primarily Albanian terminology formations are created, alongside formations originating from foreign languages, as well as those built on the basis of authentic Albanian and of word formative models and types (term formative) thereof: *boshtor*, *i rrotullueshëm* (Engl. axial, rotating) etc. (Pllana, 2017:282).

Most of the terms are motivational in their conceptual content, which means that each term has a base from which it originates and just in the way the base is developed, so it developed as well it is content. However, one part of terms derive from *common words* and enter a knowledge field according to the quality of the term, while maintaining the conceptual content, ie. its content as a word or as a term is more or less the same. Here we are dealing with same concepts that pass from a *low conceptual level* (as a word) to a *higher conceptual level* (as a term). Thus, for example, can be considered a number of terms in the field of construction as *derë* (*door*), *prag* (*sill*), *kat* (*level*), *dritare* (*window (const.)*), *gërmim* (*excavation*), *shirje* (*threshing*), *korrije* (*harvesting (agric.)*). It should be noted here that each of them develop further as *dritare* (*ndërtese*), and *dritare* (*fryrjeje*), *derë* (*ndërtese*) dhe *derë* (*furre*); Engl: *window* (*building*), and *window* (*air-control*) *door* (*building*) and *door* (*oven*) (Pllana, 2017:283).

The creation of basic areas of knowledge with the conceptual systems of these fields corresponded to the relevant terminology in the form of simple systems, however, the potential abilities for further development under the influence of all extra-linguistic and intra-linguistic factors led to the expansion of the bases of these fields and relevant terminologies as well as on the emergence and development of their fields and terminologies (Duro, 2009:20).

### The impact of different extra-linguistic and intra-linguistic factors

The stages the different extra-linguistic and intra-linguistic have passed through in a way have highlighted as well the stages the development of these fields and the relevant terminologies would have passed. As far as cultural factors concern, they were embodied in the three basic stages of the development of educational system of our country, in the low stage, in the middle and in the high stage. These factors stipulated the stages and levels achieved in the stages of the respective fields of knowledge and terminology. Thus, those fields and their respective terminologies have passed through three main stages until they reached their current state and level of their highest development.

1) At the low level stage, which more or less included the end of the XIX century until the proclamation of the independence of the country (in 1912), the emergence and development of basic areas of knowledge with relevant terminology was conditioned by the spreading of low primary Albanian schools in the most part of our country, and later on of the ones up to the seven class, in which the subjects related to basic fields of knowledge were introduced, such as arithmetic, geometry, language, algebra, physics. Certainly, the respective textbooks were also drafted, in which textbooks for the first time in addition to the ordinary lexicon, the first special words were entered, the terms, which constituted the basis of the scientific information of the relevant fields of knowledge. The merit of those who created these special words (terms) was very immense because, first of all, they have been created without having any hereditary basis from the past. However their creators leaned on their own knowledge background, on conceptual systems learnt in main schools abroad through the foreign languages they possessed, utilizing all the potential of the Albanian language to create they commanded, by using all possible potential capacities of Albanian language in order to creating corresponding lexical units that responded to the respective concepts as well as by using the corresponding substance of Albanian language to raise its usual words at the level of special words, those of terms. One part of the special lexicon, built on these two bases, on new creations and on existing language substance, lies in the foundations of the terminology of the main areas of knowledge even today such as: *number, summation, division* (arithmetic); *angle, triangle, sides, circle, radius* (geometry); *noun, adjective, verb* (linguistics); *letter, root, power* (algebra); *force, size* (physics) etc.

2) The middle level stage includes mainly areas of knowledge with relevant terminologies, which were developed in the framework of the creation of secondary education. This stage marks two main phenomena: first, the expansion of conceptual component units of the basic fields, which led to the expansion in quantity and quality of lexical units (terms) and secondly the creation of a range of new knowledge fields on different bases. Thus, new lexical units of basic fields, such as arithmetic, geometry, linguistics, were expanded and enriched with new units; while on the other hand, a range of other core areas were created such as chemistry, psychology, pedagogy, economics, trade, law, anatomy, physiology. The creation of these fields was conditioned by the new political, economic and cultural conditions in the country as well as the need to introduce them to the school as separate teaching disciplines for the preparation of lower and middle level specialists in the branches of education, economy, medicine, agriculture (such as teachers, economists, doctors' assistants, middle agronomists, veterinarians, etc.

At this stage, two large fields of knowledge may be arranged: fields related to theory and fields related to practical activity (technique, technology). Both fields began to be differentiated later in other fields, in which both theoretical (theory) and the practical aspects get closely linked with one another, such as, for example, science and technique (technology) in the fields of chemistry, agronomy, veterinary, etc.

3) High level stage (in the field of science and technique (technology).) It is conditioned by the levels of modern development of society. Economic factors, (admission of new technologies), cultural (higher education, contacts with the world through foreign literature) are of great impact.

## Terminology arrangement in the Albanian area

In Albania and Kosovo, arranged work with terminology has begun several decades later (after World War II) comparing other Western European countries, to some extent the ones of Eastern Europe. This work is mainly focused on the drafting of terminology dictionaries, based on the terminology created in different fields of knowledge in Albanian language, under the influence of contacts with the scientific-technical literature of foreign languages (mainly of Russian language), as well as the consequence of introducing modern technologies in Albania in all spheres of human activity, as in any other country of the world (Pllana, 2017:1529).

In Kosovo, the work in the field of Albanian terminology, within the framework of Federation of Yugoslavia, was limited mostly in the reproduction of terminological dictionaries, drafted in Albania, supplemented by terms from the Serbian language (Pllana, 2017:1529).

It should be noted that in the focus of the study, terminologists presented problems mainly of the terminology of the extensive fields within Albanian language framework. It can be asserted that to date no study on Albanian terminology has been undertaken for any particular field of knowledge in the broadly wide-ranging approach with any foreign language. Therefore, it would be necessary to address a narrow field of knowledge, especially of that field, which is of special interest in regard of its problematic point of view, taking into account its level of approach with a foreign language (or with other languages), which serve as a language standardization sample. As it is admitted up to date, the first place among these languages is English language, which language nowadays has gained the right of a language spread widely and internationally all over the world. Undoubtedly in this occasion the likeness terminology of this language with one of Albanian terminologies (or its terminology in general) would shed some light on many problems of Albanian terminology. In particular in the likeness domain with English language could be solved the problems concerning foreign terms and the terms translated so far.

Up to this date in the language literature of Albanian, as far as terminology lexicons problems concern, the terminology of mechanics has become a prime subject of study in monographic work, presented as a topic of dissertation, as well as being elaborated in many scientific articles. In addition, this terminology is elaborated as a lexicon of specific subfields in technical standards and is also presented in separate fragments in technical magazines (Pllana, 2017:1530).

## The standardization of Albanian technical terminology

The implementation standard issues of technical terminology should be chosen in relation of two main semantic phenomena, such as synonymy and polysemy (homonymy). Both these semantic phenomena in the field of technical terminology should be considered at in terms of the features of their appearance, unlike the general language. As far as its appearing characteristics as a semantic phenomenon in terminology, the synonyms appear as doublet (pair or series of units that mark the same concept as: *pre-act- opposite link - feedback*), or as pseudo-synonym (pair or series of units conceptually different but accepted as the same: *density -*

*density* - *density*), while polysemy as homonym (compare the same units as forms, but conceptually distant: *wing* (crane) → *wing* (airplane)).

When compiling technical terminologies, in order to establish a uniform standard, the aim is to be evaded synonyms and refract the homonymy by creating for each homonymous unit, accordingly, a new sign, such as: *saw<sub>1</sub>* (the tool) and *saw<sub>2</sub>* (sawing- machine). These processes are prime, especially when working on textbook compilation, compilation of bilingual dictionaries, etc., whilst new creations load the terminology with synonyms (doublet), turning the process of synonyms into a very harmful phenomenon (Thomai, 2009: 63-72). As noted above, the effort to minimize polysemy (homonymy) leads to the creation of as successful as unsuccessful terms, increasing the load of language sign volume, nevertheless, synonymy as well as homonymy sustains selection and re-evaluation of existing terms, to enter the best, the most appropriate terms that correspond to the respective concepts.

## CONCLUSION

Given the present state of the Albanian technical terminology, characterized by intensive developments, but unchecked, a focused institutional guidance by a Central Commission appears to be necessary, where the operation with it as a linguistic activity, needs to be on these levels: national, *nationwide* and *international*. Upon this basis issues of the absolute synonymy (binaries) which overload the terminology need to be resolved also, and issues of the relative synonymy (of the quasi-synonyms and pseudo-synonyms), creating confusion in scientific and technical communication and reduce its quality.

The methodological scientific guidance will be performed by linguists, terminologist linguists, terminology specialists and computer scientists specializing in the field of computational linguistics (language engineering).

For the future they should be seen as specific tasks:

- The drafting of some Polytechnic dictionaries, a Foreign Language - Albanian (for major languages, and two-three languages for small countries, mainly Albanian-Greek and Serbian-Albanian).
  - a) Polytechnic Dictionary Italian - English (about 80,000 terms),
  - b) Polytechnic Dictionary German - English (about 80,000 terms),
  - c) Polytechnic Dictionary Greek - English (about 50,000 terms),
  - d) Polytechnic Dictionary Serbian - English (about 50,000 terms).
- The drafting of a relatively large Albanian-English Dictionary (and later also in other languages) (On the foundation of the existing English-Albanian Dictionary).
- *The Basic Dictionary of the basic technical fields* for the drafting needs of technical standards, which has served so far as a pilot dictionary (consisting of 7,000 terms), published for the Directorate of Standardization (O. Zarshati, A. Duro) and to expand

further to up to 10,000-15,000 terms. The enterprise of this work will be a great help for the drafting of technical standards and shall serve as a cooperation linking bridge of terminologists (linguists) with specialists.

- *The Technical Dictionary for each technical macro-field* (mech., Agric., Electro., Met., Geol. Etc.), they must be containing 40.000-50.000 terms each. In Albanian language to date, in our country three dictionaries were compiled and published in these fields: Agriculture (20,000 terms), Geology (10,000 terms) Mechanics (8000 terms). A further expansion of some of such dictionaries published until now is set as a task for the future (Mech., Agriculturalists., Geol.), and the drafting of dictionaries of such magnitude for fields made significant like electrical engineering, agriculture etc.
- As a short term mission, which would require coordination of scientific powers of Albania, Kosovo and Macedonia, would be the drafting of a *Technical terminology dictionary* upon the basis of terms already fixed and which have earned the right of use, which could be called "*Basic Dictionary of Science and Technology*" with about 10,000-15,000 fundamental terms of the basic fields of knowledge (perhaps also with systemic type definitions).

Finally, the drafting of a coordinated plan seems necessary, for the technical terminology with the three basic Centers dealing with terminology in Tirana, Pristina and Skopje, as well as International Terminology Centers (Infoterm, Vienna, etc.).

## REFERENCES

- [ 1] Bejta, M.: "*Fjalët e huaja dhe mundësitë për zëvendësimin e tyre me terma të shqipes*" në "STUDIME MBI LEKSIKUN DHE MBI FORMIMIN E FJALËVE NË GJUHËN SHQIPE III", ASHSH, Tiranë, 1989.
- [ 2] Berani, Sh: "*Gjendja e terminologjië shqipe në Jugosllavi*" në "GJENDJA E TERMINOLOGJISË SHQIPE NË JUGOSLLAVI"- Punim nga Sesioni shkencor i mbajtur në Prishtinë më 28 dhe 29 janar 1988, Prishtinë, 1988.
- [ 3] Dodbiba, L.: "*Zhvillimi i terminologjisë gjuhësore shqipe nga Rilindja e deri sot*" në "KONFERENCA E PARË E STUDIMEVE ALBANOLOGJIKE", f. 183-191, Tiranë, 1965.
- [ 4] Duro, A.: "*Termi dhe fjala në gjuhën shqipe (në rrafshin e formës dhe të përmbajtjes)*" QSA IGJL, Tiranë, 2009.
- [ 5] Duro, A.: "*Fjala shqipe në terminologjinë e mekanikës*", në "STUDIME FILOLOGJIKE", nr.4, Tiranë, 1984.
- [ 6] Duro, A.: "*Minimizing the negative effects of homonymy in language for special purposes*", University of Vienna, 1995.

- [ 7] Duro, A.: *"Terminologjia si sistem"*, "Panteon", Tiranë 2001.
- [ 8] Duro, A; Pllana, G.: *"Marrëdhëniet logjike ndërmjet shenjave njëfjalëshe e togfjalëshe në terminologji"* në KONFERENCA SHKENCORE JAVA E ALBANOLOGJISË IAP 6/2015, 15-19 qershor 2015, Prishtinë, 2015.
- [ 9] Felber, H.: *"Terminology manual"*, UNESCO and Infoterm, Paris, 1984.
- [10] *"Fjalor i termave themelorë të mekanikës"*, Tiranë, 2002.
- [11] Kole, J.: *"Mbi ndërkombëtarizmat në gjuhën shqipe"* në "STUDIME FILOLOGJIKE", nr.3, Tiranë,1984.
- [12] Kostallari, A.: *"Baza popullore e gjuhës shqipe dhe i ashtuquajturit purizëm"* në "STUDIME FILOLOGJIKE", nr.2, Tiranë, 1990. *të gjuhës letrare shqipe të kohës sonë"*, në "STUDIME FILOLOGJIKE", nr. 2, Tiranë, 1970.
- [13] Leka, F. *"Udhëzues për përpunimin e terminologjisë tekniko-shkencore"*, Tiranë, 1983.
- [14] Leka, F.: *"Terminologjia tekniko-shkencore dhe gjuha e sotme letrare shqipe"* në **STUDIME MBI LEKSIKUN DHE MBI FORMIMIN E FJALËVE NË GJUHËN SHQIPE III, ASHSH, Tiranë, 1989.**
- [15] Leka, F.: *"Termet dhe terminologjia shkencore"* në "SHKENCA DHE JETA" nr. 6, Tiranë, 1980.
- [16] Pllana, G.: *"Observations on antonyms in the field of thermodynamics"* në 2015 4rd International Conference on Language, Medias and Culture ICLMC 2015, April 09-10, 2015, Kyoto, Japan, 2015.
- [17] Pllana, G.: *"The study of mechanics terminology in Albanian language (In comprehensive terminology and in a special subfield)"* në SLATE 2015 The Asian Conference on Second Language Acquisition and Teacher Education August 2-4, 2015, Hiroshima, 2015.
- [18] Pllana, G.; Pllana, S.: *"A conceptual connections on a word and term level in the terminology of Theoretical Mechanics (in Albanian and English)"* në 'trans&MOTOAUTO'12 20<sup>th</sup> International scientific and technical Conference on transport, road-building, agricultural, hoisting & hauling and military technics and Technologies 27.-29.06.2012, p. 3-4, Bullgari, Varna, 2012.
- [19] Pllana, G.; Pllana, S.: *"Group word terms in the terminology of the theory of mechanics in Albanian and English"*, Journal of Education Culture and Society, No. 2\_2013, Wroclaw, 2013.
- [20] Pllana, S.: *"Terminologjia bazë e mekanikës në gjuhët shqipe dhe angleze"*, QSA, Tiranë, 2014.
- [21] Pllana, G.: *"Formimi i terminologjive teknike mbi bazën e leksikut të përgjithshëm"*, QSA, Tiranë, 2017.
- [22] Pllana, G.: *"Objectives of the Standardisation of Techical Terminology Nowadays in Albanian"*, WASET, June 11-12, 2017, Copenhagen Denmark, 2017.



- [23] Sager, J.: *“A practical course in terminology processing”*, Amsterdam, 1990.
- [24] Shehu, H.: *“Rreth fjalëve angleze ose me prejardhje nga anglishtja në gjuhën e sotme shqipe”* në **“SEMINARI NDËRKOMBËTAR PËR GJUHËN, LETËRSINË DHE KULTURËN SHQIPTARE”**, Prishtinë, 2001.
- [25] Shumeli, A.: *“Formimi dhe funksionimi i terminologjisë së agromekanikës në shqipe në përfaqje me anglishten”*, dis. QSA Tiranë, 2013.
- [26] Thomai, J.: *“Fjala, termi dhe norma gjuhësore”*, në **“GJENDJA DHE ZHVILLIMI I TERMINOLOGJISE SHQIPE-PROBLEMEE DETYRA”**, Tiranë, 2009.