

On Terminology and Its Role in the Science of Language



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The introduction to a particular science begins with its terminology. Terminology is a means which serves to develop a definite branch of science (Khlghatyan 1976:2).

Kondiliac stated that every science is a well-worked out language, whereas Gerbert considered the whole philosophy of science to be an accurately thought out system of denominations. In 1936 a Spanish physicist Cabrera stated that the science of the 20th century needs the whole existing terminology to be revised and Gazenburg added that the language of science is terribly behind with new inventions in different spheres of the science itself (Budagov 1967:216-217).

By the end of the 20th century the progressive developments in the science and technology focused the attention of the linguists on various aspects of terminology. Today dictionaries and encyclopedias of linguistic terms, on the one hand, and those of various branches of science, on the other hand, have become more numerous than ever. Since the publication of J. Marouzeau's "Lexique de terminologie linguistique" in 1993 some 50 dictionaries of linguistics and philological terms have come out. It goes without saying that proliferation of metalinguistic lexicography should go hand in hand with unprecedented increase in terminological research. It is a well-known fact that terminology is a specific branch of lexicology. In this respect we use the word "specific" because it is concerned with conventional semiotic systems and not "ordinary" language which has come into being due to the needs of natural human communication (Akhmanova 1977:4).

It is also assumed that terms are words and word-combinations used to express metalinguistic concepts and categories, but what we are mainly concerned with is that sometimes it is very difficult to tell a term from a non-term or from a word which belongs to everyday language. It should be added in this connection that unfortunately there is every reason to believe that in spite of the existence of a large number of books and articles on terminology, the methodology of research in this domain has not been properly worked out yet (Gasparyan, Knyazyan 2002:159).

The following examples come to demonstrate some difficulties connected with the proper definition of the word "term". When, for instance, we speak of chemistry we often use or may hear such words as: "soda", "sugar", "soap", etc., which are known to the general users of the language and form part of their everyday experience. At the same time we may come across such words as "sodium carbonate", "lactose", "ethane", etc.,

which are specific for theoretical chemistry. Finally, there are the chemical formulae which are widely used in chemistry.

Thus, it can be stated that a term is not merely a word or a word-combination of a special technical language, being created, borrowed or adopted for the exact expression of this or that concept of certain science and the denotation of its special objects. It is a word or a word-combination which, possessing all the above qualities, becomes a term only on condition that those who normally use it have established a one-to-one correspondence between the more compact denotation of the object by means of the term and its more developed extended definition. But with words such as “2- chlorbutadiene” it is not at all necessary to use the criterion of definability. It is obvious that it is a term and it has one scientific definition only (Minayeva 1982:11).

Terms do not exist in the void. Terminology becomes a science only if the terminologist knows where, how, and by whom this or that particular unit is actually used for scientific communication.

N. Gvishiani states that “consubstantial” terms which coincide in their material form with words of the general language (non-terms) are particularly difficult. For example, the word *utterance* as a unit of the general language is defined as “a way of speaking: a clear /defective/ very rapid utterance”. Being a non-term, *utterance* acquires an abstract meaning and is used only in the singular. As a linguistic term *utterance* is defined as a unit of communication which is grammatically and semantically complete and is capable of being understood in a given linguistic context (Gvishiani 1993:38).

The problem of terminology becomes even more complicated in respect with the fact that the terminologists have to classify the whole system of terms due to different branches of science such as linguistics, chemistry, physics, medicine, etc. As far as the linguistic terminology is concerned one can think of quite a number of absolutely unambiguous cases as follows:

1. the names of languages and dialects,
2. the names of the different writing systems and of the letters in them,
3. the names of very special particular facts of one particular language or dialect,
4. the names of the different linguistic schools and directions,
5. the names of machines and other appliances used in experimental-phonetics laboratories, of which more and more new specimens are daily coming into use (Akhmanova 1977:45-47).

As far as linguistic terminology as a branch of the Humanities is concerned it has its specific essential properties. If in “pure” sciences one can easily think of terms which conceptually would be clearly the same in different languages, in linguistics (as well as in other Humanities) it is not merely a question of using another national language to denote certain phenomena. This is actually a question of how one can establish sufficiently durable and clear analogies across different world-outlooks, different or even incompatible methodological positions, approaches and frames of reference.

Terminological vocabulary is widely used in Scientific Prose Style which is found in scientific texts. Texts of scientific style are necessarily distinguished by certain layers

of vocabulary specific for them.

The vocabulary of a scientific text consists of 3 unequal parts: words for everyday use, general scientific vocabulary, which forms the core of Scientific Prose Style, terms and terminological phrases.

It should be stated that the inclusion of the linguistic units into one level or another is not static: depending on this or that functional style of speech, the units of one layer can be found in the others.

It is a well-known fact that the language is not a monolithic phenomenon and its development is a constant and continuous process. Thus, it goes without saying that in the scientific language the vocabulary layers are likely to be in constant interaction.

The current importance of this branch of linguistics is obvious: neither the already obtained knowledge nor the knowledge that people are trying to obtain can be described as passed on or developed unless the researchers have at their command fully developed and efficient semiotic systems.

The language of science, governed by the functional style of scientific prose comes to prove the hypothesis, to create new concepts, to disclose the internal laws of existence, development, relations between different phenomena and in this respect a good knowledge of terminology is very important as well.

Scientific knowledge is acquired and used through the realization of the following inevitable steps, which actually are certain means worked out by O. Akhmanova and R. Idzelis. They are as follows:

1. prospect, outlook;
2. acquiring knowledge;
3. organization and systematization of the material;
4. checking up;
5. making conclusions;
6. passing on knowledge.

The first and the most noticeable feature of this style is the logical sequence of utterances with clear indication, their interrelations and interdependence.

The second important feature, and the most conspicuous one, is the use of terms specific to each branch of science. No other field of human activity is so prolific in coining new words as science. There they are born, there they may develop new terminological meanings, and there they die. The necessity to penetrate deeper into the essence of things and phenomena gives rise to concepts, which require new words to name them.

As it has already been pointed out a term makes a more direct reference to something than a descriptive explanation, a non-term. Due to the rapid dissemination of scientific and technical ideas, particularly in the sphere of the so called exact sciences, the process of "de-terminization" sometimes takes place, that is, some scientific and technical terms begin to circulate outside the narrow field they belong to and eventually begin to develop new meanings. But the overwhelming majority of terms do not undergo this process of de-terminization and retain the property of scientific prose.

Further, the general vocabulary employed in scientific prose bears its direct referential meaning, that is, words used in scientific prose will always tend to be used in their primary logical meaning. Terms do not acquire contextual meaning; the possibility of ambiguity is avoided. In the following examples the underlined words are terms which are used in their primary logical meaning:

1. *Accounting* is a collection of principles and rules that govern the transformation of data into the information used in *management* processes.
2. Systems can also be viewed as combinations of elements that include all or the following: *objectives, inputs, outputs, etc.*
3. Accounting systems deliver financial and managerial information, prepared in a known way, about *revenues, expenses, assets, liabilities, and equity.*

Terms are also coined so as to be self-explanatory to the greatest possible degree, for example:

1. The *preventive element* is determined before the process takes place.
2. The *feedback element* consists of measuring the actual value of the variable chosen as the basis for the preventive element and comparing it with the expected value.
3. The *follow-up element consists of* deciding whether the control objective was achieved.
4. *Control* is the ability to regulate. (Galperin 1981:307-309)

Thus, the role of terminology, particularly in the language of science, is indispensable as it does not only “feed and nourish” the language, but also strikes the reader’s eye and helps to distinguish the scientific style from other styles. It is also crucially important to mention the property of terms to serve as a special system within the system of the language and raise its productivity, i.e. the informativeness of the language in terms of its communicative function. It must be stated that the above mentioned ideas come to prove that the use of terms is also one of the means of language optimization. This, in its turn, is of great help to the solution of the problem of language globalization which will, actually, result in using English as a lingua franca in communicative contexts.

References:

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Տերմինաբանություն և նրա դերը լեզվագիտության մեջ

Յուրաքանչյուր գիտության հետ ծանոթությունը սկսվում է նրա տերմինաբանությունից: Միասնական, մշակված տերմինաբանությունը արդյունավետ միջոց է, որն ապահովում է տվյալ ճյուղի զարգացումը:

Հայտնի է, որ տերմինների մասին գիտությունը բառագիտության առանձնահատուկ ճյուղ է՝ «առանձնահատուկ» քանի որ այն առնչվում է պայմանական նշանային համակարգի գաղափարին, այլ ոչ թե՝ «սովորական» լեզվին: Ակնհայտ է, որ տերմիններն այն բառերն ու բառակապակցություններն են, որոնք արտահայտում են արտալեզվական հասկացություններ և կատեգորիաներ:

Գոյություն ունեն տերմինների բազմաթիվ ու բազմաբովանդակ սահմանումներ, որոնք ելնում են գիտության այս կամ այն ոլորտում դրա կիրառման յուրահատկություններից:

Տերմինների և տերմինաբանական կապակցությունների կիրառությունը էլ ավելի է կարևորվում մասնավորապես վերջին տարիներին գիտության տարբեր ոլորտների վերընթաց զարգացման պայմաններում, երբ գիտական հաղորդակցումն առավել լայն ընդգրկում է ձեռք բերել: