REPUBLIC OF AZERBAIJAN

On the rights of the manuscript

ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

THE PROCESS OF FORMATION OF DEFINITIVE TERMS IN THE AZERBAIJANI LANGUAGE

Specialty: 5706.01 – Azerbaijani language

Field of science: Philology – Linguistics

Applicant: Gulnara Alekper Zeynalova

Baku - 2022

The dissertation work was carried out at the Department of Terminology of Linguistics Institute named after Nasimi, Azerbaijan National Academy of Sciences.

Scientific consultant:

Doctor of Philological Sciences, professor

Savali Allahverdi Sadigova

Official opponents:

Doctor of Philological Sciences, professor

Sanubar Alovsat Abduliaveva

Doctor of Philological Sciences, professor Hajar Emin Huseynova

doc. Doctor of Philosophy in Philology Habib Adil Mirzayev

Dissertation council ED 1.06 of Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at the Institute of Linguistics named after Nasimi of Azerbaijan National Academy of Sciences

Chairman of t

Dissertation.

Doctor of Philological Sciences, Professor

Nadir Balaoghlan Mammadli

Scientific sec Dissertation

Doctor of Philosophy on Philology, Associate Professor

Sevini Yusif Mammadova

Chairman of the scientific seminar:

Doctor of Philological Sciences, Professor

Nadir Balaoghlan Mammadli

INTRODUCTION

Actuality of the topic and the degree of the development. In modern times, relating to the development of technology and fields of science, terminology in the Azerbaijani language is enriched. In the 30s and 50s of the 20th century, nuclear physics, in the 50s and 60s, the chemistry of synthetic fibers, theory of computer science, cybernetics, biophysics, etc. fields of science have emerged. Changes in social society, cultural, economic and scientific-technical spheres lead to the emergence of new terms. Theoretical knowledge is expressed in new concepts and terms, and the basic form of thinking realized through understanding. Therefore, the level development of all sciences is determined by the development of concepts and terms. There are constant changes in the development of sciences, new terms enter the field, the basic concepts of sciences go through comprehension again, and as a result, terminology develops. New fields of science suh as informatics, cybernetics, bionics, etc. also form their own terminological systems. The system of terms of each science field develops with new terms in content and form. Changes in social society and public life in modern times also lead to the emergence of new terms in language. All developing fields form new terms and functional features of their new types nominative (significative), informative, communicative, regulative, system-forming, definitive functions. Each innovation requires the formation of new terms. The requirement is not only the use of the term, but also defining of the main features of its content and form. Such a presentation conditions a new type of term, the most important of these is the precise designation of their explanation and naming them.

Terms are a unit of language and terminological system related to scientific thinking. Terms name numerous concepts. In science, terms are used to provide as much accuracy, objectivity, and laconic expression of concept as possible. In addition to the plan of content in the language of terms, there is also a plan of expression. These expressive plans are concentrated in the features notions, as well as in the form of the term. The designation of these features, i.e. defining them, is carried out by the definitive designation of the concept. In the process of being a term, the most important necessary and sufficient feature of the concept is represented. Lexical meaning appears in the expression of the concept in terms, and its main feature is reflected in the structure of various terms. Many linguistic, especially logical-linguistic problems of terminology in the Azerbaijani language have not been solved. One of the issues to be resolved, which is to some extent extralinguistic, is not determined a single definition of many basic concepts of science. In order to determine the essence of terms in the Azerbaijani language, it is necessary to study it in the background of the concept of definitiveness. This allows to designate of existing terminology, also the formation of the field scientific language, as well as the compliance of terminological processes with the requirements of scientific knowledge. The term has a number of designating objects. From this point of view, the main features of the term are defined. The relevance of such research is that the meaning boundaries of terms are designated by notion. Standardization is also based on the conditions of unification and optimization in scientific and technical terminology. From this point of view, it is necessary to clarify the definitive function and structural-semantic features of scientific and technical terms. The semantic models of each term existing in explanation appear. The optimal structure of the concept is determined and studied in terminology as a system. On the other hand, it is necessary that the concepts of the terms be expressed accurately and in accordance with their essence. Designating of these conditions allows linguistic analysis and unification of terminology, determining of features of standardization. All of these show that the study of the perfect, well-founded designation, definitive norm and mechanism inherent in the terms is one of the most important issues. In general, the essence of definitiveness, the typical features of directions of development of the term formation process and the study of its regularities are among the problems to be solved in linguistics. The solution of all these problems substantiates the

actuality of the issue.

Object of the research. The object of research is the terms included in the terminological system of the Azerbaijani language and interpreting the content of scientific concepts, defining its boundaries.

Subject of the research. The subject of the research is the systematic study of the logical-linguistic bases of definitive terms in the terminological system of the Azerbaijani language, the process of their formation, as well as defining of norms of standardization of such terms.

The goal and objectives of the research. The main purpose of the research is to study the process of formation of the definitive type of the term and other regularities. In order to achieve these goals, in the dissertation the following tasks are determined:

- to define the nominative, informative, communicative, regulative, system-forming, definitive functions of the term;
- to reveal different features of the indicated functions of the term, to clarify the content and mechanism of the definitive function;
- to reveal the main essence of the definitive term, to define the terms of that type, to reveal typical reflective, descriptive features;
- to clarify the mechanism of the process of formation of definitive terms on the basis of logical-linguistic requirements;
- to define the optimal structure (arbitrariness, arbitrary context, etc.) of the definitive term;
- to define the semantics of the definitive term, the semantic models that designate it;
 - to define the structure of the term in the semiotic aspect;
- to define the regularity of ways of standardization of scientific and technical terms;
- to interpret system-forming and word-forming models of definitive terms;
- to show the boundaries between the formats of definitive terms;
 - to define the logical-linguistic basis of definitive terms;
 - to designate the system-structure of definitive type terms;

- to specify the standard (most accurate size) of the definitive type in the terminological system.

Main provisions put forward for defense: The provisions presented for defense as a result of conducted research are as follows:

- There are specific logical-linguistic bases of definitive terms in the Azerbaijani language;
- The unity and connection of content and form in definitive terms arises from the relationship between meaning and notion;
- Explanation and its types of interpretation, as well as lexical semantic and structural features conditions syntagmatic and associative relations;
 - Definitiveness is formed in the terminological field;
- Sources of emergence of definitive terms are internal possibilities of language and borrowings;
- Definitive context defines the measures of explanation, existing forms of definition and the process of standardization.

Scientific novelty of the research. For the first time in the dissertation the logical-linguistic bases of the process of being definitiveness of concepts in the terminological system of the Azerbaijani language are determined. Problems such as the process of being definitiveness of concepts, their logical designation, the essence of definitive terms, ways of formation, mechanism of forming, functional features, optimal structural-semantic models, classification, possibilities of standardization, being normativeness have been studied for the first time in a complex way. The research examines the structure, designating functions and standard degrees of definitive types of terms in Azerbaijani linguistics on the basis of rich factual materials. In general, designating of definitive type terms, comprehensive disclosure of the mechanism of definitive function, their structure and semantics, clarification of semantic and interpretation unification of these terms standardization issues and their reflection problems in terminological dictionaries have been studied.

Theoretical and practical significance of the research. The

dissertation analyzes the logical-linguistic content of definitive terms used in the Azerbaijani language. It is clarified that theoretically, in the study of actual problems of modeling, standardization etc. in the terminological system, functional layer and typological arena, definitive terms also have their place and position. The results of the research are useful in the regulation of term creativity issue in terminology, in being directed correctly, in the improvement of methods of creating terms, in solving the problems of unification and standardization.

From the scientific considerations and theoretical ideas reflected in the dissertation can be used in the works to be written on terminology, in the writing of textbooks, in the preparation of terminological and philological dictionaries related to various fields of science and technology.

Research methods. The dissertation is studied synchronously using traditional research methods of linguistics - descriptive, comparative methods.

Approbation and applying of the research. The main provisions of the research are reflected in the reports of international and national conferences. Articles on the subject have been published in collections recommended by the SAC.

Name of the organization where the dissertation work has been performed. The dissertation has been performed in the Department of Terminology of the Linguistics Institute named after Nasimi of ANAS.

Volume of the structural sections of the dissertation separately and total volume of the dissertation with characters. Introduction 5 pages, Chapter I 44 pages, Chapter II 34 pages, Chapter III 45 pages, Conclusion 3 pages, Bibliography 25 pages. The dissertation consists of 158 pages, 234, 954 characters in total.

BASIC CONTENTS OF THE RESEARCH WORK

In the **Introduction** part of the dissertation the relevance of the topic, the degree of usage is substantiated, the object and subject, the goals and objectives, the methods, the main provisions for the defense of the research is determined, the scientific novelty, theoretical and practical significance, approbation and applying of the research, information on the name of the organization where the dissertation work is performed, the volume of the structural units of the dissertation separately and the total volume with characters is provided.

The first chapter of the dissertation, entitled "Logical-linguistic bases of definitive terms in the Azerbaijani language" consists of 5 sections. The first section is called "The concept of definitiveness in terminology". Terms that exist in language are the names of things, processes, objective realities, phenomena, and concepts about them. Being defined them functionally, their logical designation is the basis for the formation of a structured concept. Systematic study of the process of definiteness gives impetus to the correct designation and naming of terms, the development of terminology in the field of science. Therefore, the study of definitive terms is positively evaluated in research papers. Definitiveness is one of the most actual problems in linguistics that requires a broad scientific interpretation. For the first time, B. Chobanzade clarified the problem of definitiveness in Turkic languages, and approached the category of definitiveness from the general linguistics aspect.

S.Mayzel clarified this problem in the analysis of the syntactic structure of the Turkish language in his monograph "Izafet in the Turkish language", which studied the category of definitiveness. P.B. Veselov, dealing with such terms, writes that for the first time D.S. Lotte gave information about the definitive type of the term and

-

¹ Майзель, С.С. Изафет в турецком языке / С.С. Майзель. — Москва-Ленинград: Изд-во Акад. Наук СССР, — 1957. — 187 с.

explained its formation system. ²

Any term, for example, in physics, the notion of "wave", "force", "molecule" require their definition in this field, as in any other field, and the collection of differential phenomena draws the boundaries of these concepts. Thus, "A quantity that characterizes the effect of one object on another is called a force"; "The process of spreading dances in the environment is called a wave"; "A particle formed by the combination of atoms of a limited number of different chemical elements in groups is called molecule". The definition of each of these terms designated its boundaries and fully expressed the concept. That is, the definition according to internal form of the word means "being defined and delimitation of borders" - de + finis. The Latin word definito = definiio means to border"³.

In the process of definiteness, the concept of definition occupies one of the main places. In his book "Course in General Linguistics", Ferdinand de Saussure considers definition to be essential for the life of language and discusses about it separately, showing that it is conditioned by syntagmatic and associative relations⁴.

Terminological units are also directly compatible with the system of scientific concepts, the term formed on the basis of real experience, interprets the content of scientific notions to gain a definitive definition, defines its boundaries. The issue of connection with the text have a certain a role in characterizing the term. In other words, it is important to be sensitive to the relationship between the text and the term. But only after the term has a explanation, that is, after the word and word combination have a special designation, being a term, the dependence on the text disappears. In the process of formation and explanation, the term still depends on the context-text. That is, the quantitative increase and multiplication of the usage frequency of ordinary words, as well as word combinations in the

_

² Məmmədov, A. Mətn yaranmasında formal əlaqə vasitələrinin sistemi / A.Məmmədov. – Bakı: Elm, – 2001. s.15

³ Веселов, П.В. К вопросу о типологии терминов //СПЯНТИ, -1971.- с. 3.

⁴ Sössür, F.Ümumi dilçilik kursu / F.Sössür. — Bakı: BDU nəşri, - 2003. — s.230-232

text in the same meaning, helps to specialize, clarify a certain meaning in the field of semantics and form a definitive definition around it. So, an ordinary word, word combination, its specialization in meaning, acquiring special designation in any field, i.e. at the stage of its formation as a term is closely connected with the text. In this process, the context (text) first plays an important role. Then it is observed that the term is free from dependence within the text and acquires system independence, the phenomenon of special terminological meaning.

The concept is considered the starting point in the terminological system. In addition to the structure, the importance of considering the main features of the notion is taken into account in the formation and precise designation of terminological lexicon. The main aspect of the concept is the way to the aspect of meaning. The feature of designating, designation is considered the meaning of the term. The uncertainty of the designation manifests itself as a factor that indicates that the term is also unknown. The concept is in fact a logical term, characterized by logic as an idea that reflects the general and basic properties and characteristics of things and phenomena.

S. Sadigova gives such a definition to the definitive term: "Terms that contain an object with a meaning and content structure, the most important, necessary and sufficient features of any concept, and have a short logical designation are called definitive terms" ⁵.

As can be seen, in naming a term, designation of concept the feature of its definitiveness must be taken as a basis. Designating of the term is one of the lexical-semantic definitiveness of the concept. Lexical-semantic definitiveness expresses a broad concept. Both nominative and nominative-definitive language units are reflected here. That is, definitiveness is the main characteristic feature of terms that reflect different concepts and convey a scientific nature.

The second section, entitled "The connection between content and

⁵ Sadıqova, S.A. Azərbaycan dilində definitiv terminlər $\,/\,$ S.A.Sadıqova. — Bakı: Örnək, — 1994. — s.25

form, the relation between meaning and concept in definitive terms", states that in the terminological system, the term has both content and form. The content is related to the essence of the terminological unit and is understood and described from a certain point of view. The content of the term can occur only within a certain form. The unity of form and content is also one of the necessary conditions for the terminological unit.

Definitive term is a functional concept. A successful solution to this problem allows to clarify the nature of the concepts of "content" and "form" reflected in the whole language unit.

Definitive terms form and express scientific concepts. Therefore, these terms can be considered as semiotics of scientific concepts. In order to clarify the essence, the logical-linguistic basis of the definitive terms, first of all, it is necessary to refer to the unit of language that expresses the general concept - the word. The word is also the basic unit of language. A word or word combination denoting a concept becomes a term in the fields of science through the specialization of an object, phenomenon, a reality through scientific thinking. It finds a definitive definition of denotation in the traditional terminological concept system through the intellectual scientific thinking. For example, acceleration – is a vector quantity that characterizes the change in value and direction of the velocity of a material point according to time. Thus, definitiveness reflects the most important features of any concept. However, the term is specialized only after it has an explanation, i.e., after the word and word combination get special designation, i.e. after becoming a term.

Since the logical aspect of definitive terms is being main, most of them are the same for all languages. In this case, it is not difficult to translate the conceptual aspects of the term, it is easier to find the equivalent of its material-logical meaning. From the study of definitive terms, it is clear that the concept is a basic category of linguistics, along with logic. The term is related to the object only in terms of meaning. Therefore, the sound structure of the term is considered an artificial or conventional sign. Because the sound structure of any term is associated with meaning in the process of

historical development of language. For this reason, meaning is taken as a basis in definitive terms. As in all objects of reality, it is natural for content and form to be united in definitive terms that have a special place in the lexical-semantic system of language. That is, in definitive terms, content is not separate from the form. Definitive terms observed in different forms refer to concepts in different fields of reality. In definitive terms, too, meaning and concept are in internal unity.

The third section, entitled "Term in the terminological system and its functions" characterizes the functions of terms. The development of science and technology in modern times allows the enrichment of the terminological system. The general features that unite the terms and make up the terminological system are designated in different ways. All terms in the vocabulary of the Azerbaijani language can be divided into two groups according to the dependence of relation between language and concept and their function: 1. Nominative function of the term; 2. Definitive function of the term; From this point of view, the terms that form the basis of the fields of science should be approached as a system due to their function that they convey. Because being differentiated various fields of science from each other is carried out on the basis of the terms that make them up. Within the field, the main function of the term, which reflects the same concept, is to name it. In naming process, the associative connection between the concept and the term should be taken as a basis, and the features that characterize it should be defined.

Nominative and definitive functions in terms complement each other. In fact, they are inseparable from each other. That is, to name the concepts of science, technology, art, phenomena belonging to nature, production processes also means to distinguish them.

When saying the nominative function of the term is meant to name the real beings relating to science and technology - objects, phenomena and processes. It is true that "the nominative function is the basis in common words. At the same time, the main difference of the terminological unit from the common word is that it has a

definitive function"6.

In being defined the typological features of terms, their nominative and definitive functions are taken into account. As a result of typological difference, it is important to define the generality of the features of the terms. It has been concluded that definitiveness is the main, most important, designating it and defining feature of a term. Definitiveness is a kind of distinguishing mark of the term.

The fourth section, entitled "Explanation and its types of interpretation", shows that explanation is given according to the main features that distinguish one concept from other concepts. In the process of becoming a term, the distinguishing features must be chosen correctly in designating of the concept. Being defined the explanation of a term taken as an object is a stage in itself.

Belonging concrete and abstract beings to a concept is determined on the basis of the features in the explanation. However, at some points, this set of features does not sufficiently reflect the inclusion of the objects of being in the field to which they belong. At this point, new features of the concepts appear, and according to the new features, the explanation (interpretation) is given to a concept again, and the given definitions do not become mutually exclusive.

In each definition given of the term-concept, the main feature of meaning, sufficient and necessary features are in the foreground. The current definition of these terms is reflected in dictionaries, textbooks, teaching aids and scientific sources. Research based on explanatory dictionaries shows that the definition and interpretation of the same term in different types of sources differ. Due to these differences in definitions and interpretation, the explanation can be divided into several groups: In the first explanation, the concept is fully interpreted and conveys encyclopedic, as well as serious character. In the second explanation, only the details of the concept

⁶ Комарова, З.И. Семантические проблемы русской отраслевой терминографии: /автореферат дис. ... кандидата филологических наук / – Екатеринбург, 1991

are explained.

The elucidation and interpretation of the explanation has its own characteristics. This is closely related, first of all, revealing of the concept, defining of its semantics, substantiating of the logical meaning, and then its visualization. Thus, the characteristic features of the types of elucidation and interpretation of the explanation show that revealing the most important features of the term-concept and giving definition to it leads to the laying of the foundation of the nature of language units. In this case, the concept is visualized and understood.

In the fifth section, entitled "Lexical-semantic and structural features of definitive terms", the lexical-semantic features of words and terms are defined in order to understand the essence of definitive terms.

The term is the most important lexical unit that makes language develop and designates concepts in the field of science. Designation of concepts is concretely defining of the definitive type terms and being expressed their semantic properties in terms. Meaning presents the various properties of a term of this or that definitive type at different levels and models by abstracting. Thus, in the semantics of the term its main qualities, its features that are directly related to human thinking are taken into account. Differential features appear in determining the definitiveness of the term. Differential features are associated with giving of various definitions. Due to the predominance of precise designation of definitive terms, the sound cover, which is its form of expression, is also organically connected with it, and its terminological function is determined. From the first period of the society's existence, the terms have undergone a certain stage of development and formed a stable terminological system.

Definitive terms preserve the most important features of the concept and notion in itself. Giving analysis in terms of linguistic of terms existing in our language, scientific interpretation of their semantic and syntactic features, as well as structure is one of the important issues. It is possible to study the structural types of terms

first at the level of lexical units of the language.

In modern times, if new fields of science emerge at the junction of existing sciences, new concepts also appear at the intersection point of existing concepts, and only a single distinguishing feature is not enough in their nomination. As a result, based on structural features, according to several features, motivating - the formation of compound terms or terminological combinations occurs.

Compound terminological combinations differ from simple terminological combinations only in the number of components and breadth of meaning. In such terms, the nomination must be carried out at a high level, there must be an attitude to the lexical and phonetic criteria of the language. This reveals the issue of correcting multicomponent terms in the definition of definitive terms.

Along with two-component compound definitive terms, multicomponent terminological combinations in terminology also differ in their functionality. For example, "coefficient of performance", "attributive word combination", "subject subordinate clause" and so on.

Definitive terms, like other terms, are different in structure and sources of formation. Definitive terms by being simple, derivative and compound in the Azerbaijani language can be divided into three groups according to their structure: simple definitive terms consisting of one word; derivative definitive terms consisting of root and suffix; compound definitive terms consisting of three or more words.

The second chapter, entitled "Sources of formation of definitive terms in the Azerbaijani language", consists of four sections. The first section is entitled "The internal capabilities of language as a source of formation of definitive terms". In the basis of the formation of definitive terms that reflect, preserve the necessary and sufficient features of the concept is becoming a term of national words of the language, borrowing the terms from other languages, calqueing from other languages and term-forming by grammatical methods.

Definitive terms formed due to the internal capabilities of the

Azerbaijani language were created in connection with the formation of the national thinking of the people. Initially, definitive terms, which were common words, were formed at certain times, especially at a time when the sciences were seperated and becoming independent, and gained a special attributive feature. From this point of view, when forming terms for the expression of new concepts emerging in various fields of science and technology, it is necessary to first look at the vocabulary of the native language, to effectively use its internal capabilities.

Many methods are used in the formation of definitive terms in the Azerbaijani language. In the terminology of modern literary languages, changing the meaning of words i.e. the semantic method is widely used. These changes in meaning actually lead to the development of the meaning of the word, the term. Definitive terms formed in this way acquire new content. Syntactically formation of definitive terms is distinguished by its breadth in terms of the history of language development. Because historically only words have been complicated by a syntactic way. Syntactically formed definitive terms enter into a syntactic relationship in the context of the text, form a linguistic unit in the form of word combinations that express new meaning through the combination. Thus, many definitive terms are formed using the syntactic method. The structure of definitive terms formed in this way is mainly in the form of word combinations. For example, adverbial modifier of manner, adverbial modifier of time, adverbial modifier of place, etc.

The calque method also occupies a certain position in the creativity of definitive terms. The language's own material attends in the formation of the definitive term by the calque method. That is, the structure and meaning belonging to another language are transferred into Azerbaijani. Let's take the term "havaölçən" used in our language. That term is calqued from the Russian word "воздухомер". The compound-structured model-parts hava-vozdux, ölçən-mer have been retained as they are. In mathematics, also the terms "әугіхәтli" ("криволинейный"), "bucaqölçən" ("угломер") etc. belonging to the Azerbaijani language can be considered this

kind. In our language, the definitive term taken from another language during calqueing plays as a model role for the unit that formed at the expense of internal resources of our language. Thus, the rich sources of terminology in the Azerbaijani language reflect the broad capabilities of lexicon in this area.

The second section of the second chapter is entitled "Definitive terms formed on the basis of borrowings".

Since our country gained independence and direct relations with foreign countries, the flow of definitive terms of an international nature into the vocabulary of our language has intensified. Most of these terms of European origin in connection with computer science and communication processes are used in our language as they are.

For many centuries, the Azerbaijani language first borrowed words and terms from Eastern and then (from the beginning of the 19th century) Western languages. Researchers have mentioned that a significant part of the terms transferred from Arabic and Persian to the Turkic languages are definitive character in the general terminological fund.

In scientific terminology, definitive terms of European - Western origin are distinguished by their predominance. Terms of definitive type of European origin in the features of their application to the regularities of our language. Thus, the functionalization of terms related to science and technology, cybernetics, nuclear physics, electronic computing, space and space technology in the modern Azerbaijani language justifies the development of this language as almost all cultural languages of the world. The Western context, which is the main source for the terminology of the Azerbaijani language in modern conditions, is an undeniable fact. This source enriches the vocabulary and terminology of scientific language in all fields of science.

In the third section, entitled "Definitive field concept and definitiveness in field terminology", definitive terms are grouped according to the fields to which they belong. The influence of scientific, technical and social progress occuring in the world is very strong in the growth of terms and terminological units in Azerbaijani

linguistics, and thus in the enrichment of our terminology, revealing its potential possibilities. From this point of view, each field of terminology has its own definitiveness. For example, economic terms occupy an important place in the terminological lexicon of the Azerbaijani language and develop as a separate field of science. The definitiveness of field terminology reflects the characteristics of that field. Also, the traditional methods and regularities of the formation of terms on different fields of science and technology, their scientific interpretation is a necessary field of research in terminology. At the same time, it is important to pay attention to the extent to which these terms are used in accordance with their meaning that they convey and to the extent that they reflect the main content.

Definitiveness in the field terminology of Azerbaijani linguistics is different according to the following various features. The concept of definitive terms in linguistics differ from each other in terms of structure. For example, an explanation giving to the simple sentence; an explanation giving to the composite sentence. The concept of definitive terms in linguistics differs from each other due to its structural-semantic completeness. Unlike scientific and technical terms, socio-political terms give a descriptive explanation instead of an exact definition of the concept, and this ideological content is formed under the influence of the socio-political text. Therefore, explanations prevail in socio-political terminology.

It is clear that to what field terms belonging, requires to give additional information and transmission. According to researchers, definitiveness justifies the fact that the word denoting the concept being a term, and there is no doubt. This allows to define the definitive features of a number of field terms. In giving a definition of terms in various fields of science should also take into account the field in which they are used. Designating of a term is, first of all, connected with the concept of a field, and a term related to that field can't form out of the field. Field terms begin to form in the process of designating its basic concepts and increase with the further development of the field. As the field is constantly evolving, its boundaries are also wide. As the field is not closed, the

terminological system belonging to it, is also developing. In the process of clarifying the concepts related to the field, there may occur a change of the term and forming of new variants.

The mentioned conditions cover the definitiveness of the sphere of the terminological system in the field of terminology. These points show that in addition to a concise, main definition of the term, its defining features should also be included in the field of science.

The fourth section, entitled "Semantic spheres of definitive terms" examines the semantic field of terms. The semantic field exists in the fields of science to which the term-word concept belongs, and as a result of extralinguistic influences for this field, means of expression forms in language. Of course, the semantics of each term, its inclusion in any semantic field, is its designation, the place where it is designated. If the designation is unknown, it is unknown to which field the term belongs. For example, words such as "reality", "nature", "human", "beauty", "good", "action", "world", etc., are also included among the basic concepts of philosophy. However, when these words became specialized, they left the word's sphere, becoming definitive, turning into philosophical terms, and expressed different concept-meaning features. Being definitiveness of the term occurs within a certain system, sphere. This system also includes the semantic aspect. The sphere is a complete, unified field. This field by creating a system of terms forms the fields of science. It can be concluded that the system of terms on each science has the power to reflect its semantic spheres. The place, methodology, basic concepts and theory of each field of science in the knowledge system have been able to form a rich set of terms in our time. This comprehensive, broad terminological layer forms not only a concept, but also a system of science. Along with the lexical-semantic analysis of definitive terms, their functional-semantic features should be taken as a basis in the formation of terms. By an anthropocentric approach to language, functional-semantic features of terms are designated. The relationship between language and concept determines the associative connections between the terms that have

become their expression. When the terms are approached through this prism, a cognitive chain is obtained. This chain is related to the semantics of the formation and understanding of the term. In the process of forming terms in any field of science, the features of the term must be taken into account. As A.A. Reformatsky noted, "the features of the term - abstraction, conceptuality, stylistic neutrality, precise nomination, full motivation of meaning, national-linguistic identity, independence from the context, systematicity must be taken into account" ⁷.

From this point of view, the terminological units belonging to the fields of science are united in many semantic spheres. For example, many terms have formed in the sphere of the concept of "being". The concept of being is an eternal issue that forms the basis of philosophical science and is one of the key terms that make up the philosophical system. In the sphere of this concept, a number of terms have arised in philosophy: existence, ontology, truth, lie, good, evil, and so on. As relating to the philosophical category of being, terms such as "possible beings", "necessary being", "eternal being", "transient being", "material being", "human being", "finite and infinite being", "existence of the world", "ideal being" etc. are formed. Based on the semantic sphere, the term "being" itself is interpreted in two ways. Being in the broadest meaning - not all real beings, it can be both material and spiritual. From this point of view, new terms are formed taking this semantics as a basis in being definitiveness of the term. This process must be taken into account in the formation of the terms of each field.

Chapter III of the dissertation, consisting of four sections, is entitled "Standardization of definitive terms in the Azerbaijani language". This section defines of the characteristics of "Definitive context" and the features of being defined of the term.

According to T. R. Kiyaki, a large number of terms can take

⁷ Реформатский, А.А. Термин как член лексической системы языка // Проблемы структурной лингвистики, – Москва: Наука, – 1967, с.34

part in a definitive context, and only one of these terminological units can get its determination, i.e. can find its definitive definitiveness. Numerous terms must also be corresponded with the requirement of the new definitive context. This correspondence creates conditions for the sequence of determining the transformation of this or that lexical unit into a term and conditions the need to use of a systematic definitive context⁸. "Context" is the main tool in the correct determining of a notion, its transformation into a term. This requires a new designation so that the definitive functions of mentioned terms can also be indicated.

Being designated terminological concepts means defined their content. The definition is given to the term-concept during registering. When definition is given to a concept, it is necessary to select and distinguish a set of features that can define it. When definition is given to a term-concept, sufficient and necessary features (these are the decisive features) are selected. These features, on the one hand, determine the closeness of the this concept with other concepts, on the other hand, distinguish and separate this concept from those close to it.

It is clear that belonging to what field the terms requires to give additional information and transmission. According to G.V. Kolshansky, "in order to designate of the term, it is necessary to look for the existing features within the context. That context, by its nature, should have a holistic effect and fully reflect the explanation"⁹.

According to the researcher, there is no doubt that a word that expresses a basic concept in a definitive context is a term. Designating of the term is, first of all, is related to the concept of field, a number of conditions of this must also be taken into account.

⁸ Кияк, Т.Р. Внутренняя форма, дефиниция, мотированность терминологической и общеупотребительной лексики // Терминологические обеспечение научно-технического прогресса, — Омск: Изд-во ОПИ и ОТИ, — 1988. — с. 69.

⁹ Колшанский, Г.В. Контекстная семантик / Г.В.Колшанский. — Москва: Наука, — 1980. с.27

The second section of the third chapter is called "Forms of definition in the systematization of definitive terms". This section characterizes designating of a concept and giving the definition to the term. It is noted that many forms of definition are due to the fact that it is impossible to define all concepts in the same type of definition. Therefore, different forms of definition are used. Origin features of terms are taken as a basis in genetic definition. This type of definition is most commonly used in physics and geometry. Thus, taking as a basis the formation of the object, the mechanism of construction and the method of forming, the defition is given to it. For example, if how created a cylinder, a cube, and a function, the definition are given to them as the same way as they are created. Close concepts are not used in the genetic definition; In the classical definition, gender and species characteristics are used. The semantic definition is based on the content of the concept, it is defined by describing the object. As a process, gender and gender-specific traits consider key;

Definition is the concept of the science of logic. Any scientific definition created in the human mind is realized through language. Here the laws of thinking and the laws of language intersect. No concept can be defined without a logical analysis of the concept. Because the definition must have a scientific basis and a logical side. When to want giving a definition to any linguistic category, it is necessary to choose its general and specific features. That is, the differential and integral features of the concept must be the basis of the linguistic definition. This is possible entirely on the basis of the laws of logic 10.

It is clear from the science of logic that the definition should fully cover the main features, qualities, internal content, functional nature of the term. It is determined only the main features belonging to the concepts should be covered in definitions. Therefore, it is expedient to use definitive texts to give a true definition and interpretation of

10 Babayev, A. Dilçiliyə giriş / A.Babayev. – Bakı: Maarif, – 1992. s.17.

concepts and terms relating to various fields.

The third section of the third chapter is called "Criteria of explanation in the process of formation of terms". This section analyzes the criteria of explanation that define terms in the process of their formation. It is defined that the following explanation criteria should be taken into account in the formation of terms: Criterion of completeness; Criterion of information; Statistical criterion; Criterion of logical theorems; Criterion of distributiveness;

In the criterion of conceptual completeness, preservation of terminological meaning as a result of the division of the word combination into components is taken as a basis. To do this, being replaced the components with other words, changed the word order, added an additional word to the word combination, and so on methods are used. In the statistical criterion, when the components that make up a term-word combination combined with each other is examined in terms of taking into account the number of parts in term-forming. In the criterion of logical connection, in designating of the concept features, the connection between them takes as a basis.

In the process of term forming, explanations of concepts may be certain and unclear. That is, "Explanations can be definite and indefinite. In indefinite or axiometic explanations, definitiveness is "circular" because the initial terms define each other in them. Definite definitions can be nominal in relation to objects (realities) when they bring real and new signs to the language, when clarifying already existing ones" 11.

In this case, the criterion of distributiveness should be taken as a basis. In the process of researching specific concepts of language in different fields of science, its derivatives should also be the object of analysis in the texts belonging to each field. For example, **abdominal** (abdominalis) – means related to the abdominal cavity. If we choose the words used in the term "abdominal" (in medicine), we get approximately the following line: abdominal actinomycosis,

¹¹ Городецкий, Б.Ю. К проблеме семантической типологии / Б.Ю.Городецкий. – Москва: Изд. Московского Университета, – 1969. – с.5.

abdominal epilepsy, abdominal-epileptic seizures, abdominal migraine, abdominal puncture, abdominal syndrome. The distributive limitation in the use of these lexemes with other words reflects the interrelationship of those words. Therefore, there creates necessity to check being a definitive term of these combinations, as well as it's drawn conclusions about it. Also, the process of being definitive the concept is defined according to logical considerations. These considerations are determined by the criteria of logical theorems. Based on these criteria, the explanation designates what the term is called on the basis of the characteristics of that concept, the meaning of the word becomes clear when it acquires the character of the term.

The fourth section of the third chapter of the dissertation analyzes "The process of standardization of definitive terms". Standardization is the unification of the terminological system. In this case, the regulation is carried out in a certain system and sequence. In this sequence, the selection, grouping, division and designating of definitions of concepts occupy one of the main places. Belonging concepts to the field itself or to close fields are designated.

Concepts are designated between selected categories and their subgroups. In the standardization process, terms-concepts are selected and differentiated based on these categories. M.Ismayilova writes: "In the process of standardization of terminology, the scientific basis of terminology should be followed. In order for the standardization to be based on the principle of a single classification, first of all, the issues of classification of terminology, terms according to certain features should be clarified, the main features should be selected in order to designate the units included in the relevant category¹². The organization of standardization itself requires the unification of terms. As a result of unification, the formation of terminological units is put into a single system, the correct and accurate explanations of terms are designated.

¹² İsmayılova, M. Azərbaycan dili terminologiyasının linqvistik təhlili / M.İsmayılova. – Bakı: Ozan, – 1997. – s.222.

Standardization of definitive terms is based on the linguistic regularity of the given interpretations. Definitive terms reflect a synthesis of concept and linguistic meaning.

In definitive terms explanation and definition, of course, act as different concepts. The definition essentially explains and interprets the concept in a more precise and concise way. Therefore, the term definition should be used in relevant terminological dictionaries. In the standardization process, fully designating of terms, or concepts that do not have a complete explanation are also defined. These concepts are defined by additional explanations.

Standardization of scientific and technical terminology conveys both unifying and optimizing character. In this sense, standardized definitive terms must not only meet linguistic requirements, but also logical criteria. This is because the sufficient and necessary features given to definitive terms may differ from each other. These differences, in our opinion, are the effect of subjective factors. In order to eliminate the influence of such factors, in the standardization of terminological units, the definition most often used in explanatory dictionaries or terminological dictionaries, scientific-teaching should be preferred.

In modern times when science and technology is evolving, naming the products that produced, their standardization is one of the most important problems. Dividing the products into groups, subgroups, types and subtypes realized by production facilities-enterprises in the amount of several million names requires a lot of mental effort. In this regard, standard variants of terms of definitive type must meet the following requirements: linguistic accuracy; conceptual compatibility and precision; differentiality; separation and specialization in the designation and determination of sufficient and necessary features; systematicity, comprehensibility, degree of mastering in language, etc.

Thus, it is demand of time to form a list of standardized definitive terms belonging to each field of science, regulatory documents that designate the sufficient and necessary features. This directs more in-depth research and teaching of that field. The

standard list of definitive terminological units also includes information on their definition. Being given the definition of the term is mandatory in the standard document. The term becomes already definitive in the definition part of standard. The accuracy and completeness of the definition is of special importance in dictionary articles aimed at standardization in terminological dictionaries. Here occurs two types of explanation — explanation of term and of concept, and the analogy case for them is that they overlap.

The results obtained during the research process can be summarized as follows:

- 1. The study of definitive terms shows that they are studied at the junction of both sciences, as a category belonging to both logic and linguistics. Thus, if a concept is a generalized reflection of an object in the human mind, the sound structure of the word reflects that object. The term is related to the concept in terms of meaning and content. Because the sound structure of any term is related to the meaning that acquired in the process of historical development of the language. For this reason, meaning is taken as a basis in definitive terms.
- 2. On the basis of the formation of definitive terms reflecting the necessary and sufficient features of the concept, having a structure that preserving them in it, stands important conditions such as becoming semantic term on the basis of the language's own words, borrowing the terms, calqueing from other languages and term-forming by grammatical methods. The process of emergence, formation of definitive terms in the Azerbaijani language is related to certain regularities. This regularity is characterized by being able to find the exact status of the concept. Research shows that in order to designate the definitive features of the term, it is necessary to take into account the following main features: the term expresses a specific concept; the term is used in specific areas; the definition given to the concept in the term should not contradict the rules.
- 3. The feature of explanation of the term is absolute. The totality of necessary features of an object named in the definitive size, can find its expression in the term. Necessary and sufficient

features are defined within these features and manifest in the phonetic layer of the terminological unit.

- 4. Like all objects of reality, it is natural that definitive terms, which have a special place in the lexical-semantic system of language, consist of a unity of content and form. That is, in definitive terms, content is not imagined separately from the form. Definitive terms observed in different forms express concepts relating to different fields of reality.
- 5. Definitive terms in the fields they covering correspond to the lexical-grammatical criteria of the language, expressing logically-linguistically specific concepts that precisely formed. In this case, the following features have been identified in connection with the explanation of the term: the definitive aspect of the term is related to the concept it expresses; the term contains the most necessary and sufficient features of the concept; a new aspect manifesting itself in definitive terms is realized in its logical sems; the semantics of the term are concisely reflected in its definition.
- 6. Due to the explanation of the concept, there may happen a change in the semantics of the terminological unit. The change of meaning here is due to the change of explanation. Definitive terms are distinguished in the terminological system by their accuracy, and in such terms the feature of denoting specialized meaning is stronger.
- 7. Results relating to the definitive definition of the term must meet a number of requirements. These are determined as follows: The most important features that distinguish the concept from other notions should be selected; Definitions that designating concept should be concrete; The definition should be systematic, i.e. it should allow to determine the place of the concept in the system of field concepts; Repetition should not be allowed in the definition; Notions and non-standard words and terms should not be used in the definition; The definition must meet the norms of the language; The definition should not be replaced by a descriptive explanation.
- 8. Terms provide an interpretation of the content of the relevant concepts in order to gain a definition in direct agreement with the system of concepts expressed in the process of

definitiveness, and fix it within a certain framework. Therefore, taking a special designation, terms that having explanation are free from dependence on the text.

- 9. Terminological unit specializes in the terminology of a certain field. There can be no term out of the terminology of that field. The context which gives the term's designation is its explanation. Explanation can be established on the basis of eludication, and interpretation on the basis of concepts of the field. Explanation does not only designate the concept one-sidedly. Explanation also defines the boundaries between concepts.
- 10. In naming and designating terms, their characteristic features, explanation are determined on the basis of accepted criteria. The explanation attracts attention with its versatility in exact and social sciences. Definitiveness is being designated of the content and essence of a concept. These criteria condition to being accepted of the main features of the term in differentiating the concept. Explanation and definition in definitive terms, of course, act as different concepts. Definition manifests itself as a type of explanation. The definition essentially explains and interprets the concept in a more precise and concise way.
- 11. It is clear from the research that the standard variants of definitive terms should meet such requirements as accuracy, compatibility of concept and precision, differentiality, designating and defining of sufficient and necessary features, separation and specialization, systematicity, comprehensibility etc. In connection with the definitive terms, realizing in depth the issues of adaptation of the terminology of the Azerbaijani language to the standards can determine the development of the relevant field of science. There is a need to increase research on the unification and standardization of definitive terms on different fields of science, which creates conditions for a comprehensive study of the definitive type of terminological units.
- 12. Forming a list of standardized and normalized definitive terms for each field of science, regulatory documents defining sufficient and necessary features is important to regulate

terminology. In the process of standardization, the accuracy and completeness of the explanation of the term must be clarified. The accuracy and completeness of the explanation should convey particular importance in dictionary articles conveying with the aim of standardization in terminological dictionaries.

The main content and provisions of the dissertation are reflected in the following scientific articles of the author:

- 1. Definitiv terminlərdə forma və məzmun // Terminologiya məsələləri, Bakı: Elm, 2004, s. 146-150.
- 2. Definitiv terminlərin struktur təhlili // Elmi axtarışlar, 2006. XXVII, s. 92-94.
- 3. İqtisadi terminologiyada definitivlik // Terminologiya məsələləri, Bakı: Elm, 2007, s. 186-190.
- 4. Azərbaycan dilində definitiv terminlər standartlaşdırma obyekti kimi // Terminologiya məsələləri, Bakı: Elm, 2008, s. 171-178.
- 5. Terminin funksiyaları və definitiv kontekst məsələləri // Elmi axtarışlar, −2008. № 1 (02), − s. 95-100.
- 6. Definisiya və onun tipləri // Dil və ədəbiyyat, 2008. №2 (62), s. 35-38.
- 7. Azərbaycan dilində definitiv terminlərin yaranma mənbələri və üsulları // Dil və ədəbiyyat, − 2008. №4 (64), − s. 18-20.
- 8. Azərbaycan dilində definitiv terminlərdə məna və məfhum arasında münasibət // Terminologiya məsələləri, Bakı: Elm, 2009, s. 146-149.
- 9. Definitiv terimlerin kavramla ilişkisi // TURAN. Stratejik Araştırmalar Merkezi. Uluslararası Bilimsel Hakemli Mevsimlik Dergi, 2009. Sayı: 2. İlkbahar Dönemi, s. 54-58.
- 10. Terminlərin yaranma prosesində definisiya kriteriyaları // Terminologiya məsələləri, −2016. № 2, − s. 126-133.
- 11. Definitiv sahə anlayışı. Sahə terminologiyasında definitivlik // "Müasir türkologiya: dünən, bu gün, sabah (problemlər və perspektivlər)". I Türkoloji Qurultayın 90 illik yubileyinə həsr olunmuş Respublika elmi konfransının materialları, Bakı: 28 dekabr, 2016, s. 116-118.

- 12. Разъяснение особенностей дефинитивных терминов // Мова і культура, 2017. Вып. 20. Том I (186), с. 214-218.
- 13. Формы определения в систематизации дефинитивных терминов // Філологічні науки: сучасні тенденції та фактори розвитку». Міжнародна науково-практична конференція, Одеса: 24-25 січня 2020, с.92-94
- 14. Definitiv terminlərin semantik sferaları. Azərbaycan Respublikası Təhsil Nazirliyi. Sumqayıt Dövlət Universiteti. Türkiyə Cümhuriyyəti Hacettepe Universiteti. TÜRK DİLLƏRİNİN və ƏDƏBİYYATININ TƏDQİQİ və TƏDRİSİNİN AKTUAL PROBLEMLƏRİ. Beynəlxalq konfrans (20-21 may 2021-ci il). Birinci Türkoloji Qurultayın 95 illik yubileyinə həsr edilir. Sumqayıt 2021. Təşkilat komitəsi

The defense will be held on the <u>28 june</u> 2022 in 13⁰⁰ at the meeting of the Dissertation council – ED 1.06 of Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at Azerbaijan National Academy of Sciences, the Institute of Linguistics named after Nasimi.

Address: Baku, AZ 1143, The avenue H. Javid 115, V floor, ANAS, The Institute of Linguistics named after Nasimi.

Dissertation is accessible at the Library of Azerbaijan National Academy of Sciences, The Institute of Linguistics named after Nasimi.

Electronic versions of dissertation and its abstract are available on the official website of the Institute of Linguistics named after Nasimi, Azerbaijan National Academy of Sciences.

Abstract was sent to the required addresses on 27 may in 2022

Signed for print: 25.05.2022
Paper format: 60x84.16\1
Volume: 45 429
Number of hard copies: 20