

Terminological Process in the Nomination of Computer and Internet Terms

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Abstract. *This article focuses on the unique role of nomination in the formation of terminological systems in studies in the field of Uzbek linguistics. When investigating terms related to computer and internet topics, it is necessary to establish the theoretical foundations of the terms. Therefore, the analysis of their nominative characteristics examined well-known views on terminology, term systems, primary and secondary nominative phenomena.*

Key words: *linguistics, terminology, term, terminological system, thematic groups, nomination, theory, lexis, computer, internet, special language, literary language.*

INTRODUCTION. The development of science, without a doubt, necessitates the emergence of special terminology to represent the object being studied. The evolution of technology, culture, art, and social-political life generates its own specialized vocabulary. Indeed, the role and importance of «special words» or terms, in science are increasingly rising. Currently, rapidly developing fields such as computing and the internet require the nomination of new terms and concepts.

In Uzbek linguistics, the unique role of nomination in the formation of terminological systems has been acknowledged to some extent in studies conducted in the field of terminology. However, it cannot be said that the nomination of terms in Uzbek linguistics has been sufficiently covered.

During the period of scientific-technical advancement, the relationship between the lexical aspect of language and the activities of society becomes evident. Terminology, like other areas of linguistics, deals with the research of the most pressing issues present in the language. In most works related to terminology, it is noted that a term signifies specific concepts related to a certain field and primarily performs the function of nomination in the language. Terminological vocabulary gradually integrates into the literary language, simultaneously occurring with the process of general vocabulary becoming specialized. According to G. Vinokur, «...the characteristic feature of terms is that they do not arise spontaneously in the language, but are created only when their necessity is understood».

The necessity of studying internet terminology is substantiated by its significant importance in the social life of nations and peoples around the world, as well as its practical implications. Various scientific research in the world of linguistics has been conducted in the fields of terms and terminology theory; analyzing the definitions and descriptions of concepts presented in those studies

is important for establishing the theoretical foundations of computer and internet-related terms and illuminating the peculiarities in the principles of their formation.

MAIN PART. In linguistics, the naming of concepts adheres to specific laws. First of all, the given name must correspond to the characteristics of the object being named and must stabilize in the linguistic sign concerning that particular thing or phenomenon. This phenomenon is called nomination in linguistics.

In the study of computer and internet terms, it is essential to establish the theoretical foundations of these terms. For this reason, we analyzed the existing views on the terminological system, primary and secondary nomination phenomena when examining their nominative characteristics.

As noted above, it is necessary to analyze the descriptions and principles from previously conducted research to establish the theoretical foundations of the terms in the field we are investigating. The application of new methods in linguistics when studying field-specific terminology indicates the necessity of establishing its theoretical foundations when researching computer and internet terms as well. It is worth mentioning that the primary factors distinguishing the fundamental difference between a term and a word, as presented by scholars, express the systematic linguistic attributes of the elements that either transition words into a term system or vice versa, while a term is used in a specialized field, sharing similar qualities with words. A term names a concept related to a specific field. Like a word, it also has a phonetic shell, is graphically formed, can be simple or compound in structure, and may be derived or borrowed, possessing lexical and grammatical meaning. In this respect, it does not differ from general vocabulary. The main characteristic of a term is its ability to name special concepts; that is, similar to the approach of several scholars, its nominative function is prioritized. To conceive of a term as a sign indicative of a specific concept in a certain knowledge area, it is necessary to cite A. Khayutin: «highlighting the sign character of a term seems promising, but if the sign character is accepted as their main feature, we may begin to regard terms and signs as exactly the same». That is, we may overly exaggerate the external, visible aspects of terms; on the other hand, such an approach could lead us to detach the form (the formal designation of the term) from its content, as the meaning of a term consists of the concept it denotes. It is known that changes in social life are primarily reflected in the lexicon of the language. Today, the dynamic and active layer of the language system is constituted by terms pertaining to the computer and internet fields; linguistically speaking, the existing terms in each language's technical field form one of the terminological systems of that language. In particular, computer and internet terms also fall under the scientific-technical terminological system of every language and are considered as terms from the latest evolving sectors. Indeed, the rapid developments in the technical domain and its comprehensive integration into human activity have led to great changes in language as well. In linguistics, the emergence of a new field of terminology has laid the groundwork for the emergence of a new discipline known as computer linguistics.

Although it is recognized by most scientists that the terminology of the fields has a systematic character, there are different interpretations regarding the essence of the matter. According to Y. Tolikina scientists understand the system of terms in three different ways: «In the opinion of some authors, the systematic nature of terms is related to their classification, according to other authors, the systematic nature of terms is first of all manifested in their formation».

The terminological system formally expresses the internal structural image with the help of specific semantic symbols through the terminological elements integrated into its composition. This theoretical view can be explained as follows:

- a) semantic aspect of the term that forms certain terminological groups;
- b) the process of word formation and derivational structure, which affects the mutual relationship of terms in the formation of the terminological system;
- c) lexical-semantic process, which is the basis for the formation of phenomena of polysemy, synonymy, antonymy, homonymy in the terminological system.

After all, terminological dictionaries are viewed by scholars as a representative of existing concepts in a certain field, they try to reflect all the signs of the concept in the explanation of the term, and show the main signs specific to the concept in the definition and explanation of the term. However, they almost ignore the linguistic signs specific to the word.

Terminologization is the process of converting a word or phrase from a general literary language into a term that represents a concept in the language for special purposes.

In order to define the terminology, reterminology and transterminology as precisely as possible, in the research, we referred to scientific works of terminologists and explanatory dictionaries in this field. After all, the common feature that unites common words and terms is that they are born on the basis of natural language. This, in our opinion, is the unifying feature of these two classes of lexicon. The main distinguishing feature is the presence of a definition that describes a special concept in terms. This definition may not be in common lexical words, it is not necessary for the definition to define a specific concept. After all, there is a constant exchange between the general and terminological lexicon, as a result of which the determination of the special lexicon, the terminization and transterminization of the general lexicon, that is, the transition of the lexical unit from one term system to another occurs. To a large extent, the terminological system is updated and replenished due to these processes.

DIRECTIONS AND RESULTS. The process of the emergence of new terms in terminology shows that it occurs based on linguistic and extralinguistic factors. Therefore, «Terminological word formation has always been a conscious process». The formation of the computer and internet terminology is carried out based on the language of information technology. However, the particular role of the internet today is evident, which indicates the development of differentiation processes along with the specific characteristics of the field and linguistic data, as well as the specialization within computer sub-language and the emergence of a separate conceptual and terminological system of the internet.

The layer of terminological units related to the topic is understood as a system of terms that ensures the nomination of concepts related to a specific field of knowledge and a field of activity, linked by logical-semantic relationships. In the nomination process, i.e., the process of naming (terms) in this field, the logical-semantic relationships within the terminology of computers and the internet play an important role. These relationships help establish connections between terms and clarify their meanings in the context of this field of knowledge. For example, they may include relationships such as synonymy, antonymy, and others. These relationships assist in clarifying and regulating terminology in the field, which in turn ensures clearer and more precise communication in the realms of computers and the internet.

Our analyses show that, like in other languages, terms in both English and Uzbek are chosen based on the internal possibilities of the language. These terms can be grouped as follows: root terms, terms formed by the method of affixation, terms formed by the method of conversion, compound, abbreviated, and combined terms. Borrowed terms are based on external sources. It is known that the composition of lexical-semantic groups featuring expressions related to the nomination characteristic of various language types is unique. For instance, terms relating to parts, documents, websites, blogs, objects, internet symbols, etc.

Terminological primary nominations may be expressed in the following forms: 1) independent word; 2) word combination (complex form); 3) multi-element combination of words (compound form). From a derivational perspective, terms are divided into the following main groups:

- a) Groups of term-lexemes: root terms, derivative terms, compound terms, abbreviated terms (abbreviations);
- b) Compound terms;
- c) Symbol-terms.

Word formation methods of terminological nomination include semantic, morphological and syntactic methods.

Computer and Internet terms, which are derived from common lexemes using the semantic method, are products of the same second nomination process. After all, the nomination is a product of the communicative function of the language. This, in turn, helps the emergence of the mechanism of term formation from common lexemes by changing their semantics.

Primary nomination traditionally means giving a name to an object that does not have its own name, in other words, it means cases where an object that is waiting for its name is given a name that the native speaker perceives as initial. Primary nominative results are considered ineffective, which can only be determined by historical or etymological analysis. Primary nomination is a very rare phenomenon in the modern realities of language activity. New words appear only when new objects are invented (laser, nylon) or created in human activity, as well as when previously unknown things are discovered.

Secondary nominalization is «the process of giving a name to an object that has a name, that is, using nominative devices already present in the language in new naming functions for them». In fact, in modern realities, the nominative component of the language is filled mainly through appropriation and secondary nominative, in other words, due to the use of an already existing unit.

Thus, we can conclude that nomination is the process of linking nominal units with named objects and their reflection of reality. The language system includes primary and secondary names. The first appearance of a phenomenon in the language is a primary nomination. Through the secondary nomination, the phenomena of the surrounding reality are revised, showing the attitude to the world using language tools, connecting the direct meaning of the language unit with the set of information about the world and it will be possible to cross-link.

Table 1: Formation of Computer and Internet Terms Based on Internal Sources

Types of Terms	Quantity		Percentage	
	In English	In Uzbek	In English	In Uzbek
Simple terms	250	200	24%	20%
Compound terms	130	180	13%	18%
Complex terms	170	150	17%	15%
Affixial terms	80	170	8%	16%
Abbreviational terms	370	300	37%	30%
TOTAL		1000	100 %	

In the analyzed terminological system, the following word formation methods were identified: affixation, compounding, and abbreviation. Derived terms are classified according to the methods of word formation.

In computer and internet terminology, more derived terms were observed to be created through suffixation, prefixation and circumfixation. In the formation of terms using the suffix method, sometimes the root itself is also considered as a term.

This situation is often observed in the formation of terms from borrowed words in the Uzbek language. For example, *proyektlash* (projecting), *butunlik* (integrity), *jurnal* (journal), etc.

The formation of computer and internet terms through derivation method using suffixes is considered as one of the most productive methods.

In English, affixes such as –ing, –er, –ity, and –ant are effective in creating terms: for instance, the term «*sloaking*» is a derived from internet term created with the –ing suffix; however, it has entered to Uzbek language as «*kloaking*,» meaning in its root term form. This term expresses a method by which a web server shows different content to the user and a different content to the information-seeking robot.

The English suffix –er corresponds to the productive suffix –chi in Uzbek, which forms personal nouns. This addition is attached to verbs in English and creates terms that express a subject or person completing a specific action, which is more often observed in computer terminology: dasturlovchi (programmer), tozalovchi (cleaner), saqlovchi (saver), blogger (adj) (a person who creates or manages a web blog), etc.

The term «cracker» is a derived term formed by adding the –er suffix to the word «crack» but it has entered the Uzbek language as a root term, meaning «kreker» (referring to a high-class hacker).

At the same time, it was established that the formation of computer and internet terms through the suffixes –ation and –tion is productive in English.

Table 2:

–ation:	
<i>vocalization</i>	<i>vokalizatsiya</i>
<i>verification</i>	<i>tekshirish, tasdiqlash</i>
<i>transaction</i>	<i>tranzakssiya, bitim</i>
<i>transcription</i>	<i>ma'lumotlarni qayd etish</i>
<i>termination</i>	<i>tugatish, to'xtatib qo'yish, tamomlash</i>
<i>actuation</i>	<i>harakatga keltirish</i>
<i>penetration</i>	<i>ichiga kirib borish</i>
<i>clarification</i>	<i>aniqlashtirish</i>
–tion:	
<i>substitution</i>	<i>almashtirish,</i>
<i>deflection</i>	<i>chetlanish, buzish</i>
<i>caption</i>	<i>sarlavha, imzo, ekrandagi yozuv</i>
<i>conjunction</i>	<i>bog'lash</i>
<i>repetition</i>	<i>takrorlash</i>
<i>saturation</i>	<i>to'yinganlik</i>
<i>instruction</i>	<i>ko'rsatma, yo'riqnoma</i>
<i>condition</i>	<i>holat, shart, status</i>
<i>resolution</i>	<i>rezolyutsiya, qaror</i>
<i>transition</i>	<i>o'tish</i>

As we can see, these suffixes in the English language correspond to the suffixes - ish, - lik in the Uzbek language.

As a result of the analysis of Internet terms widely used in the English language, it can be concluded that there is a common basic type of paradigmatic relationship between the elements of the term, which represents the fundamental relationship in its organization. These relationships are successfully revealed in the process of analyzing the frame structure of terminology, because the involvement of cognitive structures in the study of the semantics of lexical units allows for a deeper analysis of their meanings.

Based on this we may conclude that terminology is the verbal result of the cognitive activity of a specialist related to explaining and mastering the world on the basis of scientific analysis. The term system of a specific field of knowledge performs the function of a specific linguistic «reflection» of how a specialist perceives and classifies the surrounding reality, as well as which elements belong to him.

The terms of the Internet in the English language are represented by terms that have certain systematic relationships between them. By entering into grammatical, syntactic and general relations with other terminological units, it is a carrier of information about special knowledge within a certain terminological system and forms a single space of the terminological character of terms.

The selection of these basic concepts fully covers the conceptual representation of the implementation of all necessary aspects of interaction with technical equipment. It should be noted that a certain number of terminological units were identified in the process of choosing the main concepts of the frame of computer and Internet terms. Studying the conceptual and linguistic structure of computer and Internet terms in the English language makes it possible to develop the concept of this field of science, to categorize them, to distinguish complementary concepts that are considered as subframes of basic concepts. The frame interaction theory developed by M. Minsky can be given as follows:

Concepts supporting the main concept Computer and Internet (374 items):

Table 3:

No	Supporting concept	Number of terms	Number of terms representing the concept % of general terms related to the main concept %
1.	Programs, technologies and methods	110	47%
2.	Technical actions	118	26,2%
3.	Management, transmission and storage of information	75	12%
4.	Documents and standards	41	10,9%
5.	Technical devices providing communication	43	8,8%
6.	Communicating with other users	41	8,2%
7.	Rights and obligations of the user	92	4,2%

Actions, methods, templates, patterns, obligations, types of communication, etc., which indicate the main concepts of the computer and Internet sphere, given in this table, showed that there is an integral relationship in the performance of actions of terminological units at a certain level during the analysis of the basic concepts representing the frame. A linguistic-cognitive approach allows us to consider the English language terminology of the Internet as a linguistic reflection of the professional worldview of a programmer, which is part of a subsystem or scientific worldview. In the category of computer and Internet terms, terminological derivation is related to the analysis of the use of terms that reflect specific contexts and peculiarities in the use of terminology. As illustrative material in the derivational nomination of terms, we selected all the terms listed in ready-made dictionaries of computer and Internet terminology posted on Internet resources. The total number of selected terms was 3750. The method of structural analysis of word formation showed the following forms of terms: 1291, 982 with two components, 590 with three components and 597 with four components. Along with naming, terms also have a defining feature. All lexical-semantic processes occurring in colloquial speech are characteristic of terms. Terminological nomenclature covers a wide range of problems and allows to divide it into a separate category of knowledge. All terms related to the field have a nominative function, and in the process of naming, the terms related to the Internet serve to express abstract and concrete concepts, animate and inanimate objects, countable and uncountable objects.

Due to the fact that the phenomenon of nomination is multifaceted in content, it has aroused interest and research among linguists, and its methods and tasks have been developed. The existence of different theoretical approaches in this regard depends on the following factors: it can be explained by different goals of research, different spheres of interest, the spirit of the times, and subjective views found in science and it has already been proven in science that the denomination of field terms appears before its denomination. Primary nominative traditionally refers to giving a name to an object that does not have its own name, in other words, it refers to cases where an object that is waiting for its name is given a name that the native speaker perceives as initial. Primary nominative results are ineffective, which can only be determined by historical or etymological analysis. Primary nomination is a very rare phenomenon in the modern realities of language activity.

Computer and Internet terms are also products of the second nominative process, as well as terms formed by the semantic method from common lexemes. The nomination is a product of the communicative function of the language. This, in turn, helps the emergence of the mechanism of term formation from common lexemes by changing their semantics. Another classification of nominations, such as primary and secondary nominations, has been shown by scientists, nominations are artificial and natural, and the first nomination is giving a name to an object from reality through a lexical unit. It can be concluded that there is an integral connection between the primary and secondary denominations in the formation of computer and Internet terms. It can be concluded that in the process of primary and secondary nomination, the choice of the properties and signs of the object, as well as the method of naming and the nominative means used, is sufficiently arbitrary and free.

As the concept refers to a specific field of knowledge, the term is also an element of a fixed sublingual language and is used as a term only within the boundaries of this sublingual language (when used for stylistic purposes in works of art, it does not denote a concept, its main feature loses and determines).

Transterminiologization - can occur due to the need to name a large number of objects using limited words in the formation of terms. In addition, the emergence of various scientific and technical fields is the basis for the emergence of transterminologization.

The process of reterminologizing is the transfer of ready-made terms from the terminology of one science or field to another, and this phenomenon should be considered primarily as an interaction of two separately developing systems.

CONCLUSION. Thus, while the development of computer and Internet technologies affects the emergence of new lexical units in the language, like the development of other areas related to human activity, the separation of structures in the conceptual space of the computer and the Internet leads to the emergence of new concepts. It means that it is necessary to pay special attention to the fact that it can be reflected in the meanings of existing language units or lead to the formation of new terms, and the emergence of metaphorical and metonymic terms in this term system can be explained by the speed of the process of term creation. When considering terminology, it is important to consider that each term is part of a larger system of terms, and its meaning must be considered in the context of that system. The introduction of new scientific approaches creates additional opportunities for revising the processes of concept formation and categorization in the world, creating different knowledge structures and ways of expressing them in language, as well as the interaction of linguistic and non-linguistic content in mental activity.

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