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Metaphorical nomination in term formation (based on medical terms)

In the article the issue of main peculiarities of metaphorical term functioning is presented. The authors study the principles of nomination of term-metaphors in medical terminology and sources of metaphorisation. Productive metaphorical models based on principles of consistency and anthropocentricity, proving metaphoricity of specialists' thinking are presented. A particular emphasis is given to mechanisms of metaphorical nomination of medical terms. It is noted that the metaphoric nomination represents a stable mechanism of replenishment of the investigated term system. On the basis of the analysis it is established that anatomical terminology is characterized by the wide use of the whole package of metaphorical models. The most typical models confirm the consistency of this method and the generality nature of the metaphor. It is inferred that the metaphorisation proceeds most actively in those subject groups which are characterized by positive dynamics of emergence and interpretation of new knowledge.

Keywords: metaphor, metaphorisation, metaphorical nomination, medical terminology.

The development of the terminological system of medicine at the present stage of its existence is a reflection of the accelerating progress, specialization of medical science, creating the need for a significant number of new terms. One of the most effective mechanisms for the creation of terminological units necessary for the linguistic fixation of new, previously non-existent in medicine realities, processes and concepts, as well as the rethinking of previously accepted terms, was and remains a metaphorical nomination.

The study of metaphors in the framework of cognitive linguistics, psycholinguistics, and cultural studies showed that in science, in general, and in linguistics, in particular, metaphor often plays a key role. The content of metaphor theories reflects the need for general scientific knowledge in solving the problems of interaction of the cognitive process, empirical experience, professional heritage of man and his linguistic competence. Metaphor serves as a complex phenomenon, which includes figurative and cognitive instrumental potential for expressing knowledge about the world using language models. The essence of the metaphor lies in the mechanism of associative identification, which makes it possible to correlate through the nominative act the phenomena of different subject areas. The key point in understanding the essence of the metaphor is that «the conceptual system in which a person thinks and acts is metaphorical in nature, metaphors permeate our entire life and are manifested not only in language, but also in thinking and action» [1; 238].

At present, we can say with full confidence that the metaphor in modern Humanities is understood as an integral part of scientific thinking and, accordingly, scientific discourse. N.D. Arutyunova writes: «the key was seen in the metaphor to understanding the foundations thinking and processes to create not only a specific vision of the world, but its universal image. The metaphor thus strengthened the connection with logic, on one hand, and mythology on another» [2; 14]. In the scientific discourse, it is the metaphor that contributes to the creation of new hypotheses and ideas about the world, allows you to take a different look at the familiar object.

In cognitive linguistics metaphor is considered as an integral part of the conceptual system of man, an important property of his thinking and an effective means of vocabulary replenishment. According to V.N. Telia, «metaphor is a process that creates a new meaning of language expressions in the course of their reinterpretation, and a way of creating a linguistic picture of the world that arises as a result of cognitive manipulation of the already existing values in the language in order to create new concepts, especially for those areas of reflection of reality that are not given in the direct sense» [3; 93].

Metaphorical nominations retain the consistency inherent in the terminology in its construction and based on the existing in this field of knowledge classifications, as well as bring to the terminological system its consistency based on metaphorical models and conceptual conditionality of metaphors. They contribute to the acquisition of terms of such an important quality as implementation, commonality, and use.

Metaphor as a linguistic phenomenon is one of the universals of natural languages and can not be removed from the terminology, which, despite the tendency to order and unambiguity of the individual ele-

ments of the term system, remains a product of the development of natural language. Being a productive way of forming medical terms, it acts as a link between scientific and everyday speech, because in terms of metaphors both speech layers are used. The contradiction between the tendency to imagery and expressiveness inherent in metaphors and the requirement of complete absence of expressiveness imposed on terms is removed in the process of terminologization.

Metaphorization in the language of science is a semantic process of choosing a name based on the subject, characteristic or functional similarity of two heterogeneous objects. The scientific metaphor has a contradictory character, which consists in the fact that in the process of terminological metaphorization is actualized as a certain similarity between referents, since the metaphor must be understood, and at the same time dissimilarity, since a new meaning is generated, and the degree of similarity and dissimilarity determines the role of metaphor in the creation of the term. In the metaphor, universality and specificity coexist, since, on the one hand, it is an instrument of thinking and cognition, on another, it is based on the national-cultural worldview, reflecting both fundamental cultural values and individual value systems coordinated with them within a certain subculture [4; 153].

Metaphor reflects in terminology a certain linguistic picture of the world, and since the system of medical terminology is dynamic, it retains archaic fragments, reflects the latest phenomena of synchronous time slice, there is a change of sources of metaphorization. In this regard, close attention is paid to the study of the metaphorical component of medical terminology. Sharing the point of view of many scientists that metaphorization is a natural quality of terminological systems in the field of medicine, we believe that the anthropocentrism of modern linguistics, its focus on human intelligence allows us to take a fresh look at some aspects of the metaphorization of medical terminology.

Existing medicine in a large amount of terminatory transfer mechanism of knowledge of people in the past, the image of their thoughts and associations and form a special class of psycholinguistic phenomena. According to B.N. Velichkovsky, and for them the essential singularity generated structures, often leaving an incomplete impression of realism. The essence of this kind of metaphor is to correlate abstract knowledge with body sensations. The main source of comparisons and analogies for lexical semantics are ontological categories and direct body-sensory experience, and metaphor in scientific discourse plays an important role in fixing new scientific results. In the process of using the metaphor-term, there is an activation of the meaning reflecting the cultural and social ties in the consciousness and subconscious of the individual within the framework of professional knowledge [5; 169].

Medical terminology is characterized by a variety of metaphorical models. It presents both universal patterns of perception of the world, and its national, social and professional characteristics. It is possible to speak about the existence of a special metaphorical picture of the world of medical terminology. High productivity of metaphorization in medical terminology is due to a number of properties of metaphor as a linguistic phenomenon: inherent nestery metaphor clarity, which is convenient in practical terms, including in the learning process; the ability to form associative pairs, rows and fields in the consciousness of the addressee, providing reliable, including subconscious, fixation of information, which is especially necessary in medical practice, where the effectiveness of the doctor's actions is determined by a combination of knowledge, automatic skills and intuition, i.e. both conscious and unconscious factors; the ability to briefly and clearly duplicate and explain foreign language equivalents, making their perception more accessible.

The specificity of the metaphorical picture of the world of medical terminology is largely due to extralinguistic factors. Each area of medical knowledge is characterized by its inherent set of individualizing features (object of study, methods of treatment, the possibility of direct sensory perception of the object, the history of the formation of the medical knowledge industry), in accordance with which highly specialized terminological nominations are created.

Metaphors are classified primarily on the basis that the similarity between objects and phenomena, on the basis of which it becomes possible to «name» one object to call another, i.e. to create a metaphor, is the most diverse. Objects or phenomena may be similar in form, location, function, role, nature of manifestation, nature of the impression made on our senses, degree of manifestation of any one property or quality, etc. As sources of metaphorization in medical terminology, the most active is the subject sphere (artifacts, objects of inanimate nature), the biomorphic sphere (anthroponyms, zoonyms, floral metaphor), and the social sphere.

There is no doubt that the main trend of the metaphorical formation of terms in the field of medicine is anthroponymical — assimilation of special common concepts related to man, with all his physical, mental and social life. Comprehending the features of metaphorical term formation, the researchers note that the

phenomena and objects it touches and the carrier of professional language can cause him psychological association, due to the generality of the previously known and newly knowable not only in the field of their profession. The use of language forms for naming new subjects and situations corresponds to the fundamental feature of the human psyche, which consists in the fact that a person is able to perceive new information on the basis of some information already available. The former name, associated with the already known concepts, is the bridge that throws the human consciousness from the known to the unknown. As rightly pointed out Zalevskaya, a medical metaphor, performs a role comparable to «the role of a laser beam when reading a hologram»: it «performs a certain conditionally discrete fragment of a continuum and multidimensional individual picture of the world» [6; 434]. Therefore, a metaphor is, first of all, a way to capture the individuality of a particular object or phenomenon.

Anthropomorphic metaphors are formed on the basis of analogies with parts of the human body, its physical and intellectual abilities. The main reason for the existence of this type of metaphor is the fact that we do not get anything in the study of nature without the initial anthropologization of the subject of research. Anthropomorphic metaphor is represented by a small number of examples, usually in resemblance: the back of the saddle, the neck of the thigh, the leg of the brain, etc.

Among the zoomorphic metaphors nomination parts of the bodies of animals, birds, insects (*the tail of the pancreas, cock crest, cleft lip*) are often found. It should be noted that this group is dominated by lexemes denoting specific projections that significantly change the silhouette of the object and are not characteristic of the external structure of the human body: horn, crest, tail, wing. In addition, this group can be distinguished: metaphor–totemism (*barking cough, horse fever, mumps*); metaphors–geochemistry (*SARS, Chinese flu, Crimean hemorrhagic fever*); metaphors–biosemisms (*thrush, hay fever, hives*).

Floral metaphor presented in separate categories of plants and their organs (*the kind weeping willow*), and widespread categories basic parts of a plant (*the root of the tongue, the cortex of the lens, the branch of the aorta*). Such a «complex» transfer allows us to talk about the conceptualization of the human body as part of nature, Biosystems.

The social sphere is represented in metaphorical nominations, formed on the basis of social realities of different eras — from antiquity to the present day (*killer cells, cesarean section, Gladiator pose, Legionnaires' disease*).

The most productive source of metaphORIZATION is the semantic field of artifacts. This field is represented by the following series:

- a) tools and household items (*blood vessel, small spit, chest*);
- b) clothing, footwear and components (*subcutaneous bag, articular pocket of the packing tape*);
- c) weapons and equipment (*stapes nerve, Turkish saddle*);
- d) buildings and elements of buildings (*mastoid wall of the auditory tube; the water of the canaliculus of the cochlea*);
- e) musical instruments (*drum sound, vocal lip*).

Sometimes the term–metaphor can be attributed to two groups at once, as it contains in its semantics two comparative features relating to different objects. In this case, the term *Adam's Apple* is of interest. The etymology of this term goes back to the legend of the Apple stuck in Adam's throat. Thus, this term is based simultaneously on the similarity of form (with the shape of an Apple), and on the similarity of location (Adam's throat), and refers to two thematic groups — Botanical and anthropomorphic metaphors.

It should be noted that the metaphorical system of medical terminology is dynamic, which is manifested in the metaphORIZATION of newly emerging artifacts and developing social relations, in the inclusion in the metaphorical field of the results of the development of science (both medical and other branches of knowledge). The traditional metaphorical system of medical terminology is evidenced by the metaphORIZATION of attributes of different eras, the archaic nature of many objects: *Coulter, saber-shaped Shin, Turkish saddle, thyroid, crossbow incision, dagger abdominal pain*.

In general, medical terminology is characterized by the dominance of the naturalistic subsystem, which is a natural consequence of the close connection of medicine with natural scientific (primarily biological) concepts, anthropocentric medical terminology, as the focus of medicine is a man as a physical and mental being. The activity of nominations of artifacts in the formation of terms–metaphors also fits into the mainstream of anthropocentric paradigm of modern scientific knowledge. This is due to the essence of artifacts as objects created by man in the framework of purposeful activity and used in everyday life.

Thus, in the semantic space of medical terminology there is a special metaphorical picture of the world. It is widespread the terms are metaphors that form a unified system of metaphorical term formation, present

as a metaphorical body with its patterns, typological characteristics and models. As the analysis of the main metaphorization models has shown, a characteristic feature of medical terminology is a vast anthropometric Fund of terms-metaphors. The very choice of the basis for the metaphor is associated with the ability of metaphor to measure new phenomena and concepts for a person in his image and likeness.

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Терминжасаудағы метафоралық номинация (медициналық терминдер материалында)

Мақалада метафоралық терминдер қызметінің негізгі ерекшеліктері туралы мәселе қарастырылды. Авторлар медициналық терминологиядағы метафоралық терминдердің номинациялық принциптерін, метафоралау көздерін зерттейді. Жүйелі, антропоцентристік принциптерге құрылған және мамандардың ойлау метафоралығын растайтын нәтижелі метафоралық модельдер ұсынылған. Медициналық терминдердің метафоралық номинациясы механизмдеріне ерекше көңіл бөлінді. Метафоралық номинация зерттелетін терминжүйені толықтырудың тұрақты механизмі болып табылады. Талдау негізінде анатомиялық терминология метафоралық үлгілердің тұтас корпусын кеңінен пайдаланумен сипатталады. Осы тәсілдің жүйелілігін және метафораның әмбебап сипатын растайтын ең типтік модельдер ұсынылған. Авторлар метафоралар жаңа білімнің пайда болуы мен интерпретациясының оң динамикасымен сипатталатын үш тақырыптық топта белсенді түрде өтеді деген қорытындыға келтірді.

Кілт сөздер: метафора, метафоралау, метафоралық номинация, медициналық терминология.

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Метафорическая номинация в терминообразовании (на материале медицинских терминов)

В статье рассмотрен вопрос об основных особенностях функционирования метафорических терминов. Авторами исследованы принципы номинации терминов-метафор в медицинской терминологии, источники метафоризации. Представлены продуктивные метафорические модели, построенные на принципах системности, антропоцентричности и подтверждающие метафоричность мышления специалистов. Особое внимание уделено механизмам метафорической номинации медицинских терминов. Отмечено, что метафорическая номинация представляет собой устойчивый механизм пополнения исследуемой терминосистемы. На основе анализа установлено, что анатомическая терминология характеризуется широким использованием целого корпуса метафорических моделей. Наиболее типичные модели подтверждают системность данного способа и универсальный характер метафоры. Авторами сделан вывод о том, что метафоризация наиболее активно протекает в тех тематических группах, которые характеризуются положительной динамикой появления и интерпретации новых знаний.

Ключевые слова: метафора, метафоризация, метафорическая номинация, медицинская терминология.

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