

Processes of Local Transition of Ukraine's Economy and Processes of Global Transition of the World Economy: Contemporary Changes in the Language Space

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Abstract: The article is devoted to revealing the phenomenon of contemporary changes in the language space, in accordance with the processes of transition that take place in the economy of Ukraine in the context of knowledge representation, neuro-modeling and artificial intelligence. The relevance and expediency of the study are due to the uncertainty to some extent of innovative processes occurring in the development of the contemporary Ukrainian language in connection with the transitional processes in the economy. The relevance of the study is determined by: 1) the importance for contemporary linguistics of identifying and describing the structural and typological features of the “dominant” lexical and semantic subsystems of the contemporary Ukrainian language, reflecting the most significant concepts of contemporary Ukrainian conceptosphere; 2) the importance of the lexical subsystem of public administration not only for the contemporary Ukrainian language and contemporary Ukrainian national consciousness, but also for the effective economic policy of the state; 3) a lack of special generalizing research on the problems of formation, development and current state of the Ukrainian vocabulary of state regulation of the economy; 4) the need to clarify and improve the methodology of complex analysis of lexical and semantic systems in the Ukrainian language, methods and techniques of describing lexical units in synchronous and diachronic aspects. 5) current needs in the use of artificial intelligence, based on the principles of neuro-modeling in the representation of knowledge in the conditions of transition economy of Ukraine.

Keywords: *Artificial intelligence, foreign ergonomics and pragmonimia, fashion for foreign, foreign companies, foreign cars, system approach, language phenomena.*

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Introduction

Transition processes are characteristic of different types of social systems. This applies in particular to the economy. These processes are expressed in the emergence and rooting of lexical and semantic innovations. The study is complicated by the fact that they occur simultaneously as processes of local transition of Ukraine's economy and processes of global transition of the world economy.

The hypothesis of the study is that the emergence of a large number of LSI-substitutes can be explained by the influence of foreign ergonomics and pragmonimia, and by the efforts of business owners to give names more advertising potential, and by the lack of language material experienced by contemporary nominators that are unfamiliar with the onomastic laws of the Ukrainian language, and finally, it can be explained by "fashion for foreign". If substitutes denote foreign realities that operate on the territory of Ukraine (foreign companies, foreign cars, foreign household appliances, etc.), then they, in our opinion, are appropriate and systematic, if substitutes are used to denote the actual Ukrainian realities, they should be considered as a non-systemic phenomenon. Systematic, non-random existence accompanies the word from the moment of its appearance in the lexical structure of the language. Arising as a result of the social need to name some important fact of reality, it immediately falls into an already well-organized structure and must, without significantly violating it, take a certain place in it, properly correlating with other components of its own and other language levels. A systematic approach to the study of proprietary units is a necessary and obligatory condition for the contemporary research of linguistic phenomena. Thus, the extraordinary variety of proprietary units that make up the onomastic space, the fact that they are studied unevenly, and they debatable belonging to the onomastics of some categories of names caused instability and undeveloped terminology for certain groups and subgroups of PN, which, of course, negatively affects their description and research. The use of an artificial neural network to model the ontological and associative relations of the language space provides opportunities to make these processes more understandable and definite. This provides opportunities for their use in processes both as a representation of the existing knowledge and acquiring new one.

The purpose of the study is to reveal how the processes of transition characteristic of the contemporary economy of Ukraine are expressed in the emergence of lexical and semantic innovations in its language space and features of their stratification, etc. To achieve this

purpose, it is shown how the phenomena of transition in the economy, combined with the peculiarities of language development in Ukraine determine a characteristic range of relevant research objectives. Among which the following can be highlighted:

The research **method** is determined by the purposes and objectives of the research and is developed using several tools, such as methods of lexical-semantic field research, linguistic observation and description, component, comparative and lexicographic analysis, principles of artificial intelligence development and neuro-modeling in philological research.

The practical and theoretical significance of the obtained research **results** lies in improving the understanding of the relevant processes that take place in the contemporary language space of the Ukrainian language in accordance with the processes of economic transition.

Research objectives. To achieve this purpose, it is shown how the phenomena of transition in the economy, combined with the peculiarities of language development in Ukraine determine a characteristic range of relevant research objectives.

1. To determine the essence of the processes of stratification of lexical and semantic innovations in the conditions of transition of the economy of Ukraine;

2. Disclosure of different types of associative and ontological relations between the concepts that emerged as innovations in the transition economy of Ukraine;

3. To determine and substantiate the possibilities of using artificial intelligence and the principles of neuro-modeling in the study of innovations in the language space, which arose in the conditions of transition economy of Ukraine.

The study of lexical-semantic innovations in transition economies in the processes of neuro-modelling and the acquisition of new knowledge

The terminological basis of the economy has had a significant impact on the formation of lexical and semantic innovations in current conditions of Ukraine's transition economy. Semantic innovations, on the one hand, enrich the language space. On the other hand, they can hide the meaning of certain categories and processes. This can be observed in the process of analyzing the terminological basis of contemporary literature on economics, business education, business literature and their terminological basis (Tropina, 2015).

The use of contemporary opportunities for the study of language space with the help of artificial intelligence in philological models provides opportunities to improve understanding of the processes of implementation of semantic innovations and determine their place in the process of obtaining knowledge, both purely subjective and philological.

Studies of lexical and semantic innovations related to various socio-economic and political processes, as well as natural processes of interpenetration of different linguistic spaces are also widely presented in modern foreign literature. Problems of evolution of the language environment, its main factors and dynamics are revealed by Borgerhoff et al. (2006), Brown et al. (2008), Goebel (2003), Nunn et al. (2010), Mace & Jordan (2011). Cowlishaw and Mace (1996), Currie et al. (2010), Greenhill et al. (2009), Jordan and Shennan (2003), Munroe et al. (1996) show the influence of cross-cultural dynamics on the peculiarities of the development of language spaces. Helbig (2006) reveals the influence of the factor of increasing knowledge on the change of language environment.

In addition, the problem of language diffusion is often raised in foreign sources. It is analyzed by Britain (2002), Holman et al. (2015), revealing the processes of language interpenetration and their short-term and long-term consequences in changing language spaces. The phenomenon of language "spreads" is also considered, for example in the work of Lowenberg (as cited in Eastman, 1989).

MacKenzie (2014) directly analyzes the problems of language innovation.

Based on the use of lexical-semantic field theory, ontological and associative relations between concepts are established, which allows to use the study of lexical-semantic innovations in transition economies in the processes of neuro-modelling and the acquisition of new knowledge, etc (Berbets et al., 2021; Demchenko et al., 2021; Karasievykh et al., 2021; Kosholap et al., 2021; Sarancha et al., 2021; Prots et al., 2021).

According to Klepalchenko, the establishment of relations between concepts can be carried out with the help of intralexical and extralexical properties of the language. The author concludes that linguistic and terminological approaches to the representation of knowledge can be formalized due to systemic similarity, which is based on associative links in the functioning of the human brain, neural networks used in the development of artificial intelligence (Klepalchenko, 2018).

The use of foreign language units to name objective realities is a productive way of nominating. This is indicated by Podolskaya (1978, p. 43), who considers borrowing to be one of the three main processes, along with

onimization and transonimization, that lead to the emergence of new PN. Moreover, the researcher understands borrowing as “direct borrowing, tracing and hybridization, as a result of which a PN-hybrid consisting of elements of two or more languages arises”.

The intensive process of foreign words borrowing is typical for the current state of the Ukrainian language. Well-known historical events that took place in our country in the 80-90s of the twentieth century significantly intensified this process. Certain groups of foreign words became more noticeable, namely: socio-political and economic vocabulary, different types of social languages, especially youth jargon, etc. This phenomenon is reflected in ergonomics and pragmonimia: the streets of contemporary cities are full of foreign language signboards, and the number of appliances, both household and automotive, which has foreign names, is generally unlimited.

A significant part of foreign names-ergonomics is, according to the classification of Krysin (1968, p. 47), the so-called “foreign language inclusions”. In his thorough work “Foreign words in current Russian” the researcher identifies three types of borrowings: borrowed vocabulary, exoticism and foreign language inclusions, the difference between which “lies in their correlation with the system of the recipient language”.

According to Krysin (1968, p. 47), foreign-language inclusions are open groups of words, the use of which is due to the degree of acquaintance of the speaker with a foreign language, some stylistic or genre features of speech.

As the main feature of such borrowings, most researchers recognize their non-assimilation, non-inclusion in a recipient language. Thus, Shanskiy (1972, p. 137) notes that barbarisms “should be understood as such foreign words that have not yet been transliterated and retain all the properties inherent in the source language. Quite often they are transmitted... by the alphabet of the source language”.

Gorpynych (1990, pp. 94-95) uses the term *substitutes* to denote non-assimilated borrowings in the Ukrainian language. Substitutes, according to the researcher’s description, 1) are designed to lingualize foreign reality, 2) are part of the lexical system of language, 3) partially or completely mastered by the grammatical system of language, 4) mainly retain the sound structure of form of the source language, 5) do not allow structures of some additional morphemes or lexemes, 6) function in the literary sphere.

As we can see, researchers use different terms for cognition of this phenomenon: Krysin (1968) - foreign-language inclusions, Shansky (1972) - barbarism, a substitute, others - ozone prevention, foreign language inclusions, exoticism-impregnations etc.

In our opinion, it is advisable to use the term *substitute* to denote such borrowings. Under this term element we mean the replacement of one by another - the domestic name by borrowing.

Proper names are most easily borrowed from one language to another, which is a consequence of their special status in the language system. "Borrowed names fall into different subsystems of the recipient language. Cultural borrowings (Rome, Paris, England) usually penetrate into the literary language, borrowings that are adopted from previous peoples who inhabited the area - in local dialects and regional onymic systems, special borrowings (names of foreign companies, newspapers, etc.) - in corresponding lexical subsystems of the recipient language" (Superanskaya et al., 1986, pp. 132-133).

A word borrowed from another language may be transformed in some way, or may not change at all. It depends partly on the specifics of the languages involved in this process, partly on the period of borrowing, because today many things are not as they were in the past, and finally, the nature of transformations is defined by the very specifics of borrowed units. It is possible to identify such key components of stratification systems as: a) social processes, as a result of which certain types of resources become valuable and in demand; b) rules (laws) of placement, which distribute these resources at different levels when dividing work (e.g., a banker, a doctor, a peasant, etc.); c) mobility mechanisms that connect people to occupations and thus cause unequal control over highly valued resources.

Stratification of lexical-semantic innovations is closely related to the social stratification. Depending on essential features, approaches to stratification can be divided into functionalist and structuralist. Proponents of the functionalist approach differentiate population by income level, prestige, power and other characteristics, taking their quantitative indicators as self-sufficient and omitting their sources. In this case, each individual occupying a particular status position, acts as an autonomous unit: it is their personal success, etc. The whole tradition of American individualism works on this approach. There are people who "made" themselves - winners and there are losers. Social stratification appears in the form of a mountain, to the top of which creep solo climbers; some reached the top, others got stuck close to the foot, others fell. The key to success of some and to failure of others are only in their personal qualities. From this logic of analysis, obviously, emerge strata, which are determined only by quantitative comparisons: higher, average, lower, and more fractional.

The structuralist approach to stratification considers the relationships of elements of social structure, i.e., social groups. Social

stratification is perceived not as a result of differentiation of abilities of individuals, but as a consequence of the hierarchical arrangement of the society: it always has a top and a bottom; the higher, the fewer vacancies.

A variety of types of ontological and associative relations between concepts that reflect economic reality are reflected in the syntagmatic relations of the relevant terms or in their combinations in the form of texts. These associative relations can be considered as isomorphic or identical. Terms that, accordingly, arise in the linguistic space, due to the processes of economic transition, are included in paradigmatic, i.e., hierarchical or synonymous relations.

The associative relations between the new economic terminology in both traditional and applied linguistics need further study along with hyponymic (hierarchical) or synonymous relations. Associative relations between economic concepts express both declarative knowledge (knowledge of objects and phenomena, mostly descriptive) and so-called procedural knowledge (knowledge that should be stored in the memory of the intelligent system and are used in presenting information on how to solve problems within the problem area or special methods or instructions, etc.).

An intelligent system is able to interpret a task when it contains knowledge of various kinds. The presentation of information can be based on various terminological data banks that are able to structurally organize information. One of the main forms of data presentation for their formalized processing is one of the main types of models for the presentation of declarative knowledge - semantic networks, which are formed under the influence of direct associative relations (Helbig, 2006).

When using semantic networks, the meanings of some words are determined by their corresponding relationship to other words. Klepalchenko identifies three main stages in the analysis of associative relations. 1. Inventory of the main, characteristic of a particular industry ontological relationships and associative relationships that determine these relationships. 2. Establishing a nomenclature of associative relations for each paradigmatic vertical structure that belongs to the subject area. 3. Establishing the stability of these relationships, reflecting the ontological relationship between concepts (Klepalchenko, 2018, pp. 18-24).

Semantic and functional aspects of intensification of lexical and semantic substitutes

The factual material analyzed by us allows identifying of *complete* and *partial substitutes*. By complete substitutes we mean a word or phrase, designed by graphic means of the source language without any changes:

"Baby" (private enterprise), "Beer" (restaurant), "Bitte" (shop), "Collektion" (shop), "Elephant" (trade center), "Lan" (private enterprise), "Nivea" (firm), "Silf" (cafe), "Sony shop" (shop), "Sun Group" (firm), "V & V" (firm), "Vicotec" (firm). Researchers consider such names to be systemic if they indicate the specialization of the enterprise or belong to joint ventures; otherwise, they violate the Ukrainian system of ergonomic names.

In our opinion, complete substitutes can be divided into several subgroups:

1. Names of world-famous companies: "Adidas" (shop), "Oriflame" (firm), "Nivea" (firm), "Sony" (shop), "Samsung" (shop), "TJ" (shop).

Such names do not require "translation" and explanation. Everyone knows that "Adidas" is a manufacturer of sporting goods, "Oriflame" is a manufacturer of cosmetics, and "Samsung" is a manufacturer of home appliances. The world fame of such names determines their sufficient informativeness.

2. Names of world-famous companies based on the name of the owner or founder: "Gino Rossi" (shop), "Karlo Pazolini" (shop), "Yves Rocher" (shop), "Nina Ricci" (shop), "Rosa Graf" (shop).

A foreign language anthroponym most often indicates the characteristics of the nominated object. For example, the name of the brand store "Karlo Pazolini" guesses the Italian proper name, and therefore guesses the specialization - the sale of Italian goods, including shoes. Similar names are created by multi-stage transonymization: *Karlo Pazolini* (anthroponym) → "Karlo Pazolini" - the name of an Italian company → "Karlo Pazolini" - the name of a shop in Ukraine.

3. Names of world-famous cities: "Barcelona" (restaurant), "Paris" (restaurant), "Milano" (restaurant), "San-Remo" (restaurant).

The names of the capitals of some countries, popular resorts, the names of world-famous people are involved in the orbit of ergonomics and pragmonyms based on the intellectual associations of the recipient of the nomination. The informativeness of such proper names is determined by the social significance of certain realities that served as the basis for their creation and for giving them certain associations.

Substitutes of the subgroups defined by us are created by metonymic transonymization, which consists in transferring the name from one onym to another (anthroponym → ergonim, ergonim → ergonim) by contiguity.

4. Borrowed names-substitutes: "Auto Star" (shop), "Baby" (private enterprise), "Collection" (shop), "Elephant" (shopping center), "Forte" (firm), "Silf" (cafe), "Solli plus" (limited liability company), "Sony shop" (shop).

Such names require that the addressee of the nomination would be able to understand a foreign language, although, of course, they attract attention with their foreign language design.

To *partial* substitutes we attribute words or phrases that are assimilated in the Ukrainian language to some extent. These can be substitutes designed with Ukrainian graphics: *Baby (shop)*, *Vidershtal (firm)*, *Gold Line Trade (publishing house)*, *Deltvanteez (private enterprise)*, *J-o-ze (hairstylist)*, *Kraft (firm)*, *Crossroad (firm)*, *La Fourchette (shop)*, *Okey (private enterprise)*, *Price and Z (firm)*, *Pronto (firm)*, *Tekila House (restaurant)*, *White hall (firm)*, *Fiesta (firm)*.

Most of suchlike substitute names are perceived by native speakers of the Ukrainian language as foreign and incomprehensible. Some elements are recognizable due to frequent use, but still remain foreign, as they have Ukrainian equivalents: trade (torgivlya), shop (magazyn). Most of the words of a foreign language, as already emphasized, are usually perceived by sound, their meaning is clear only to those who know a foreign language.

We consider it possible to attribute to partial substitutes those words and phrases that have in their structure Ukrainian words (or lexical borrowings) and substitutes, i.e., by definition that is given by N. Podolskaya (1990), hybrid proper names: *Genres style (private enterprise)*, *Kraft Jacobs Sushard Ukraina (joint-stock company)*, *Noyosvit (limited liability company)*, *(joint venture) - Sumyfoods*, *Tornado copy & talant (firm)*, *Free fly Ternopil (firm)*, *Chate do haty (shop)*.

The selection of words that do not contain difficult-to-pronounce sounds that are characteristic of only one language, contribute to the formation of hybrid proper names, which have the basics on different languages. The almost unlimited possibilities of combining the most diverse bases or words in one word or phrase allow to create an original name: *Neusvit (limited liability company, construction works)* → neu ← German word for «new» + *svit* (*svit* – in Ukrainian language means world) = name that provides positive associations with the “new world” which will be created in the apartment by the company’s employees; “*Sumyfoods*” (joint venture) → *Sumy* (city) + *food* = name of the Ukrainian-Canadian joint venture for the production of quick-frozen semi-finished products (the name indicates the specialization of the enterprise).

The expansion of foreign vocabulary has manifested itself in the excessive use, even abuse, of foreign personal names as a function of proper names. Most often these are female names: “*Adele*” (*shop*), “*Valencia*” (*hairstylist*), “*Gabriela*” (*shop*), “*Helen*” (*hairstylist*), “*Emilia*” (*private enterprise*), “*Esperanza*” (*private enterprise*), “*Jacqueline*” (*limited liability company*), “*Isabel*” (*shop*), “*Irma*” (*commercial firm*), “*Kelly*” (*shop*), “*Laura*” (*shop*), “*Michelle*” (*hairstylist*); quite common and male names: “*Allan*” (*private enterprise*), “*Peter*” (*cafe*),

“Mark” (advertising agency), “Leon” (limited liability company), “Diego” (limited liability company) responsibility), “Kate” (commercial firm), “Claude” (private enterprise). Quite often, such names do not indicate the names of the owners or family ties. Foreign personal names are displayed on the signboard as a beautiful, advertising, and fashionable, from the point of view of the nominator, model.

According to V. Nikonov's observations (1974, p. 67), foreign names are characterized by two obligatory features - complete loss of etymological meaning and clearly foreign phonetic features: a large number of sonorous, non-iotated at the beginning of the word, unusual combinations of sounds (two vowels in a row, “p” or “l” before consonants, doubling consonants). It is these exotic features that attract nominators.

Thus, the emergence of a large number of LSI-substitutes can be explained by the influence of foreign ergonomics and pragmonimia, and the efforts of business owners to give names more publicity, and the lack of language material that is experienced by contemporary nominators, who are unfamiliar with the onomastic laws of the Ukrainian language, and, finally, it can be explained by “fashion for foreign”.

If substitutes denote foreign realities that are functioning on the territory of Ukraine (foreign firms, foreign cars, foreign household appliances, etc.), then they, in our opinion, are appropriate and systematic, if substitutes are used to denote the actual Ukrainian realities, then they should be considered as nonsystemic phenomenon.

Stratification of lexical and semantic innovations of transition economy in the Ukrainian language

The concept of systematicity, put forward by de Saussure (1971), is leading in contemporary linguistics. Systematicity, non-accidence of existence accompanies the word since its appearance in the lexical structure of the language. Arising as a result of the public need to name some important fact of reality, it immediately falls into an already well-organized structure and must, without significantly violating it, take a certain place in it, properly correlating with other components of its own and other language levels. A systematic approach to the study of proprial units is a necessary and obligatory condition for the contemporary research of linguistic phenomena.

Podolskaya (1990, p. 99) calls the onomastic system “a certain internally organized set of onomastic (onymic) models of a certain ethnic group for a certain period of time”. The meaning of this term, taking into account the specifics of some classes of onyms, is specified by Belenkay

(1969), Karpenko (1992), Nerubasska, Palshkov, & Maksymchuk (2020), Nerubasska and Maksymchuk (2020), Onishchuk et al. (2020) and other researchers.

We share the view of the authors of the collective monograph “Theory and methodology of onomastic research”, who believe that onymic vocabulary is a giant macro system or system of systems that combines numerical systems and subsystems of names belonging to all sectors of onomastic space (Superanskaya et al., 1986, p. 50). By the onomastic space, the authors of the monograph understand “the sum of proper names used in the language of a given people to name real, hypothetical and fantastic objects. It is determined by the model of the world that exists in the imagination of the people at the present stage, but it always retains elements of previous epochs” (Superanskaya et al., 1986, p. 9). Inside the onomastic space, onomastic fields stand out. “The names included in each field are a system (or a set of systems), each member of which is connected with others by a set of indicators: territory, time, topic, type of object, etc.” (Superanskaya et al., 1986, p. 12).

According to Podolskaya’s definition (1978, p. 103), “onomastic field is a part of onomastic space that contains onyms of a certain type”, i.e., anthroponyms, toponyms, zoonyms, phytonyms, ethnonyms, etc.

The most studied today are anthroponymy, toponymy and cosmonomy. They are the most important sections of onomastics. Thorough studies of these categories of onyms belong Belenkay (1969), Karpenko (1992), Nikonov (1974), Podolskaya (1978), Ruth (1992) and others.

Onomastic space is an open system, due to which the number of onomastic fields is constantly increasing. This can be represented by a diagram where the dashed line shows the openness of the peripheral classes of onyms.

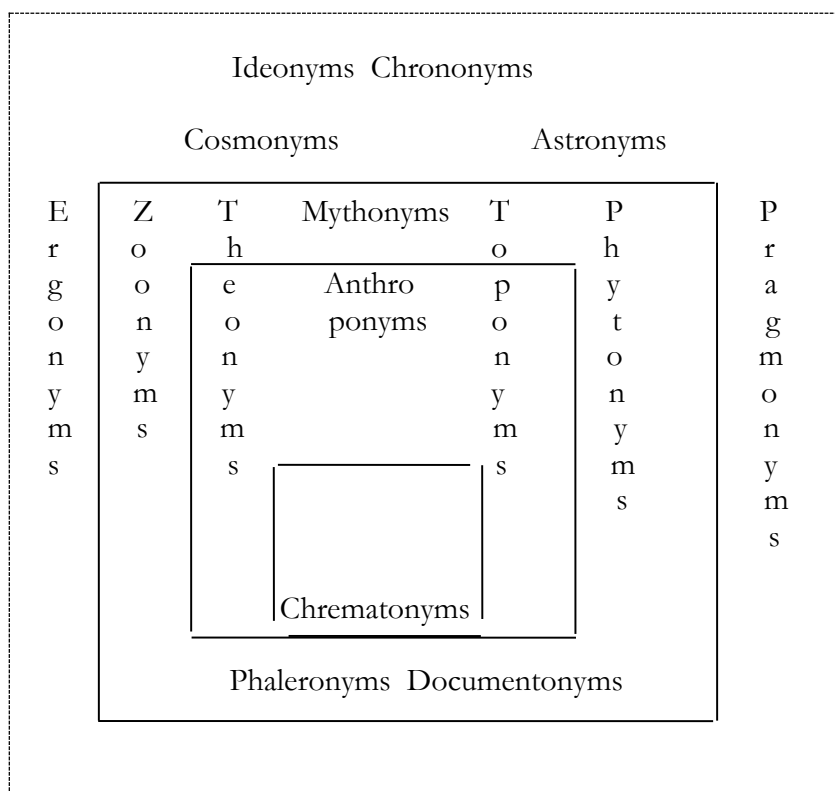


Fig.1. Onomastic space
Source: the authors' own conception

The expansion of the boundaries of onomastic space is influenced mainly by extralinguistic factors. Thus, the economic transformations of our society in the post-Soviet period have led to a significant increase in the number of enterprises of various forms of ownership and activities, as well as, accordingly, to an increase in the number of goods they produce. Huge classes of vocabulary - the names of newly created enterprises and manufactured goods - must take their rightful place in the system of nomination of proper names.

In the 80-90s of the twentieth century onomatologists discover new aspects of research, master the white spots of onomastic space. One of such topical areas is the study of new types of onyms, namely: *ergonomics* – proper names of business associations of people and *pragmonyms* – proper names to indicate a variety, brand, and trademark. The study of these groups of words is of interest because both ergonomics and pragmonyms are directly

related to the solution of some important issues of onomastics - about the specifics of onyms, the degree of its expression in different types of proper names, the onomastic center and periphery, the transition of borrowed names to proper names and vice versa.

Ergonim, - according to Podolskaya's definition (1978, p. 166), is the category of onym, the proper name of a business association of people, including union, organization, institution, corporation, enterprise, society, study group. For example: the United Nations (UN), the Academy of Sciences (AS), Moscow State University (MSU), the "Pravda" plant, the "Spartak" sports association.

The names of associations of people by field of activity were singled out by linguists in a separate group before the publication of the first edition of the "Dictionary of Russian onomastic terminology" in 1978. Thus, Superanskaya (1973) in her classification of onyms singles out the names of institutions and partnerships. Schetinin (1968) drew attention to the names of cinemas, cafes, hotels, workshops and sports facilities, etc., to a clear tendency to assign beautiful names to various companies. Koporskiy (1969) studied the names of cinemas, Morozova (1973) - the names of cultural and domestic institutions, enterprises, institutions and organizations.

Karpenko (1988, p. 8) proposed the term ergonism to denote such names: "Among onomastic historicisms there are many ergonisms. How many names of organizations and enterprises have glimpsed and disappeared"? Thus, there are two options in linguistics for naming business associations of people on the present day: ergonyms and ergonisms. In our opinion, the term *ergonym* is more acceptable: 1) this term, having in its composition the second term element "onym", clearly indicates the affiliation of this category of names to proper names; the term is constructed according to a precisely defined terminological model (the basis of any term should be Greekisms and Latinisms + the element onym) and therefore is organically included in a number of notations generally accepted in onomastics (cf. anthroponym, toponym, cosmonium, etc.). The term *ergonism*, proposed by Karpenko (1988), differs in semantics and method of creation from the above categories of onyms, as a result of which it is not used in contemporary onomastics.

Morozova (1973) proposes to use the term urbonym (from the Latin *urbs* – "city") to denote cultural and household institutions, because this term is fixed in the onomastic literature to denote urban objects. However, Podolskaya (1978) defines an urbonym as the proper name of any urban topographic object, including an agoronym, a hodonym, etc. Ergonomics are

an independent group of proper names, which only partially intersects with urbonyms.

Bondaletov (1983, p. 214) uses the term *ktematonym* to denote the names of business associations of people. *Ktematonyms* – are, according to the scientist's opinion, the names of historical events, holidays, the press, publishers, works of literature and art, steamships, trains, theaters, shops. Vasilevskiy (1984) was also suggesting this term, combining under it trademarks, varietal and brand designations, names of enterprises. But too broad an understanding of the term could lead to the assignment of different types of objects, which have specific lexical-semantic, grammatical features, to one class of proper names.

Superanskaya (1973, p. 26) in the article “Appellative-onom” refers *ergonyms* to one of the types of *pragmatonyms*. Thus, for the names of hotels, workshops, restaurants, firms, the researcher uses the term *pragmatonym*, but at the same time uses the term *ergonym* as a doublet: “The term *ergonym* is appropriate for this category of names, because enterprises, institutions and companies are created primarily for a particular activity”.

The parallel use of the terms *ergonym* and *pragmatonym*, in our opinion, is inappropriate, because they denote completely different phenomena: *ergonyms* - single objects, and *pragmatonyms*, or *pragmonyms* - a series of similar objects.

Belei (2000, p. 4) considers it expedient to use the term *ergonym* as an integral, common term to denote all known associations of people. The term *ergonym* cannot replace the need for special terms that would emphasize significant differences between types of different human associations and reflect the structuredness and hierarchy of the term “proper name of a human association”. In our opinion, the most apt term to denote “the proper name of a commercial and industrial association of people” is the term “*firmonym*, which is formed from the *firm* + *onym* on the model of established terms *anthroponym*, *toponym*, *zoonym*, etc.” Within the category of Ukrainian ergonomics, the researcher distinguishes the following ergonomic classes: “proper names of industrial and commercial enterprises, proper names of political and ideological institutions, state and administrative institutions, religious, artistic and intellectual clubs, fellowships, associations, etc.” (Belei, 2000, p. 4), but terminologically does not denote any class, except the first.

In our work, like Podolskaya (1978), we use the term *ergonym* to denote a business association of people, because this term allows us to unite within the class a significant number of categories of newly created names: names of shops (S), cafes (C), restaurants (R), bars (BR), hotels (H), studios

(S), hairdressers (H), pharmacies, publishing houses (PH), banks (B), commercial firms (CF), private enterprises (PE), production / research and production enterprises (PE / RPE), commercial, small, joint ventures (respectively CV, SV, JV), subsidiaries (S), limited liability companies (LLC), closed / open joint-stock companies (CJSC, OJSC), joint-stock insurance companies (JSIC), real estate agencies (REA), advertising agencies (AA), private educational institutions, health facilities, etc.

Another important but unexplored group of proper names are pragmatonyms, or pragmonyms (from the Greek *pragma* - object, thing). The term pragmatonym Podolskaya uses “to denote a variety, brand, and trademark”. Ex.: chrysanthemum variety “Full Moon”, wine brands “Cabernet”, “Riesling”, car brands “Zhiguli”, “Volga” (Podolskaya, 1978, p. 113).

There is no established term in onomastics to denote series of the same type of product. Some researchers use the term *pragmonym* (Bespalova & Lysachenko, 1997; Goryaev, 2000), others - *verbal trademark* (hereinafter VTM) (Belyikh, 1997), still others – *tovaronyms* (*commodity names*) (Kryukova, 1993), *ktematonyms* (Vasilevskiy, 1984).

From various groups of proper names, such as toponyms, anthroponyms, astronoms and others, there is a wide but little-studied group of proper names of goods, which are called trademarks or verbal trademarks, for example: Russia is a trademark of the watch.... Distinguishing these proper names into a separate group of onomastics, we propose for them the term “pragmonyms”, created from the Greek words *pragma* - thing, commodity and *onoma* – name.

Some linguists, in particular Superanskaya (1973, p. 24), deny the necessity of the term *pragmatonym*. The term *pragmatonym*, as the researcher notes, is sometimes used instead of the term *trademark*. However, such a name a priori includes trademarks in the number of proper names, which is not entirely correct. After all, each trademark denotes a category infima species. If within such a category the individual naming of certain objects begins, it will be chrematonyms. Thus, the term pragmatonym in this application is unnecessary: where the names are serial – it's trademarks, where there is an individual use of names within the named series – it's chrematonyms.

It should also be added that Superanskaya (1973, p. 23) includes to contemporary trademarks not only trade names of goods, including branded, but also the names of hotels, restaurants, workshops, firms. According to some indications, trademarks are indeed similar to ergonyms, but these two classes cannot be regarded as identical. The difference between them is

clearly manifested in their denotative correlation, in relation to the concept of onoma (ergonym individualizes a specific object, and pragmonym - a significant number of similar objects) and in relation to borrowed names (pragmonyms are semantically closer to borrowed names and have a strong tendency to appeal).

Trademarks, as pointed out by Moskovich (1969, p. 251), is a designation by which companies label their goods and services in order to distinguish them from goods and services of the same type that are provided by other companies, and have make it easier for the buyer to choose a product or service.

Podolskaya (1978, p. 134) understands trademarks as “verbal (or other) designation of a brand of goods or household services of a given master or enterprise, which is protected by law. Ex.: “Meri”, “Pomorin”, “Natasha” (toothpaste), “Chayka”, “Lada” (cars). Verbal trademarks, according to the researcher, “differ from the nouns that science and technology deal with; *trademarks* denote trade items that reach the consumer; they also differ from chrematonyms - proper names, which denote a single object in its kind, individualizing it; trademark does not perform such a function, it applies to each subject of this type of product; the law strictly protects the form of writing of registered verbal trademarks and prohibits the use of alike.” (Podolskaya, 1978, p. 135).

Not all researchers recognize the appropriateness of use of the term *verbal trademark* to denote serial goods. The term *verbal trademark* is, according to Kryukova (1993, p. 10), unacceptable, because: 1) to denote onomastic categories, preference is given to one-word terms; 2) an important principle is also the construction of the term according to a certain model, taking into account the systematic structures of onomastic terms. To denote this category, the researcher suggests the term *tovaronym* (товар) – Russian word for commodity), but ignores one of the main requirements for the construction of onomastic terms: the term should be based on Greekisms and Latinisms, which are used to achieve an international understanding of the term (even with its national design), and to eliminate side associations that are unnecessary in terminology.

Goryaev (2000, p. 9) proposes to differentiate the terms *pragmonyms* and *verbal trademarks*. “The main difference, which actually led to the introduction of a separate term pragmonym, - says Goryaev (2000, p. 9), - is that they perform an individualizing function not only and not so much in relation to a particular product, but rather its manufacturer”.

In our opinion, there is no need to differentiate verbal trademarks from pragmonyms, as they are similar in object correlation, in scope of

operation, in commonality of the addressee, by type of nomination (belong to the field of artificial nomination), by guidelines (trademarks, as well as pragmonyms, are created, chosen and put into use by the same people. The similarity of the conditions of the nominative situation implies the similarity of motives, guidelines, intentions of the subject in creating the nomination.

In our opinion, to denote a series of similar products, it is advisable to use the term *pragmonym*, which is organically included in the system of Ukrainian onomastic terminology and allows us to combine within the class the following groups of words: 1) the name of household appliances, 2) the name of automotive equipment, 3) the name of food and beverages (candy(cd), cookies (c), wine (w), water (vt), beer (br), cognac (cgc), vodka (v), champagne (chp), tincture (t), drink (dr), chocolate (chc), balm (blm), waffles (wfl), coffee (cf), marmalade (mrm), jam (j), marshmallow (mrsh), cake (ck), cracker (krck), ketchup (ktch), liqueur (lk), mayonnaise (mn), 4) name of household chemicals (soap (s), washing powder (wp), cleaning agent (ca), 5) names of other subjects of human activity, in particular flowers (lily (l), tulip (t), clematis (k) and furniture (frnt).

Along with the general term *pragmonym* in the study, we use the term *poreyonym* (from the Greek poreion - means of transportation) to name road, rail, water, air transport. According to the dictionary of Podolskaya (1978), a *poreyonym* is the proper name of a certain specimen of any type of transport. We consider it possible to use the term *poreyonym* for the names of both single and serial types of transport, as over the past ten years the number of names of vehicles has grown significantly and there is a need to allocate them to a separate group within pragmonyms and designate a special term.

Other special terms are used in work, in particular *phytonym* to denote an artificially created variety of plants, in particular flowers.

Thus, the extraordinary variety of proprial units that make up the onomastic space, their uneven study and debatable belonging to the onomastics of some categories of names have caused instability and undeveloped terminology for certain groups and subgroups of proper names, which, of course, negatively affects their description and research.

Neuro-modeling of lexical-semantic innovations of the transition stage of Ukraine's economy

It is known that there are a number of ontological, associative relations between certain concepts. This is, accordingly, true for the phenomenon of lexical and semantic innovations of Ukraine's transition economy. Syntagmatic relations of the corresponding terms evolve, they are also combined in special types of texts. Most of these associative

relationships can be described as isomorphic or identical. This means a similar relationship characteristic of all terms that are established in paradigmatic (both hierarchical and synonymous) relationships. In the theory and practice of linguistics, these relationships are studied less than hyponymic or hierarchical and synonymous. This is manifested in the peculiarities of the development of information and documentation processing.

At the same time, the associative relations are directly related to the reproduction of declarative knowledge about objects and phenomena of the surrounding world of a descriptive nature. Besides the associative relationship of terms associated with procedural knowledge that can be stored in the memory of an artificial intelligence system. The procedural knowledge can be used to present information about research methods in a particular problem area. In this case, it concerns the lexical and semantic innovations of Ukraine's transition economy, which set a special discourse and research strategies.

The condition for interpretation of certain tasks by an artificial intellectual system is organization of formalized accumulation of various types of knowledge. Terminological data banks, in this case, serve as a means of structural organization of information. The most important aspects of transforming knowledge into a form that a computer can operate with are terminological data banks. They are directly related to presentation of declarative knowledge. Models in the form of so-called semantic networks can be used to present declarative knowledge, which are largely determined by associative relations (Helbig, 2006, p. 80). In this case, the meanings of words are determined by their relationship to other words.

According to Klepalchenko (2018), in the analysis of associative relations the following stages of work can be identified: inventory of the main typical for this subject area ontological and associative relations that represent these relations; determination of the nomenclature of associative relations for each paradigmatic vertical structure belonging to this subject area; establishing the stability of these relationships, reflecting the ontological relationships between concepts (Klepalchenko, 2018, pp. 18-24).

Among the ways to formalize associative relations in the subject area a complete list of all possible relationships between ontological categories and subcategories can be made. Semantic classification of terms allows to select certain subcategories.

The nomenclature of associative relations for each paradigmatic vertical structure, within the relevant subject area, can be established by combining terms in similar texts. This requires processing of large amounts

of textual information and implementation of expertise to verify the real existence of certain types of relationships. Since this process presents certain difficulties, this method can be used to further confirm the decisions obtained by other methods.

Much more effective is the use of the method of extracting and further generalizing information about associative relations from special texts.

Modeling of declarative can be done by developing a model of semantic space, limited in the scope of micro-terminology or a fragment of terminology with the possibility of its further increase.

In this study, a group of terms was chosen that refer to a small but relatively independent field of lexical and semantic innovations that emerged in the transition economy of Ukraine. They show the relationship between different economic actors and processes, as well as the activities with which they are associated.

This is achieved by removing terms denoting such activities from a certain amount of scientific and educational literature, as well as analyzing business information. This lexical-semantic field is quite convenient for modeling due to its relative independence and the fact that it can be separated; the size of the field is not more than 200 terms; the semantic field is objective in nature and, accordingly, can be processed and analyzed relatively simply; has a relatively homogeneous nature; is an integral part of contemporary life of Ukrainian society.

It can be assumed that there are three main classes of ontological categories, namely objects, processes (including states) and properties (Grinev, 1994, p. 8). From here it is possible to limit scores of possible communications between objects by indicating three basic types of relations: between objects and processes, between objects and properties, and also between objects and other objects.

In the course of the study, it was found that the connections between objects (in this case the processes of economic transition) within the chosen lexical-semantic field are distributed according to the three above-mentioned main types.

First of all, the relationships between objects and processes were analyzed. 26 terms were defined to denote the types of processes associated with economic transition. Quantitative differences in terms may reflect a relative importance of the above relationships. A number of groups can be divided into subgroups. To determine stability of relationships, one can use the indicator of the frequency of compatibility of terms in texts or the result

of the analysis of relationships characteristic of the most members of the hierarchical paradigm.

In addition, the contexts of associative relations in syntactic relations in terminological phrases and word-forming structures of terms are revealed. Since the relationship between the concepts are formally reflected in the language, in order to establish the most important relationships and their stability, we can offer the use of such linguistic properties as intralexical. This property of language expresses the relationship between terminological components in structurally motivated derivatives and compound words. In addition, one can use extralexical properties of language, meaning a limited number of lexical units with which the term has a strong attributive, nominative and copulative relationship, thus forming terminological phraseological units.

However, in the case of the semantic field of lexical-semantic innovations of economic transition there is a systemic similarity of different types of associative connections, based on the specific features of functioning of the human brain, neural networks used in the development of artificial intelligence to study the lexical-semantic field.

The use of diachronic analysis of the system of terms, as well as trends in new terms and the growth of relations in terminological lexical and semantic fields, can lead to the establishment of special properties of development of such cognitive systems in different languages and universal properties of cognitive systems ontogenesis. Thus, linguistic and terminological approaches to the study of knowledge representation will help to identify some features of human thinking in relation to the language environment.

Conclusions

Lexical and semantic innovations caused by the processes of transition of the Ukrainian economy set a special subject discourse, determine research strategies and, thereby, contribute to the formation of a certain economic culture. Studies of lexical and semantic innovations using neuro-modeling methods are useful both in the practice of reflexive adjustment of economic thinking and in improving the economic culture of Ukrainian society.

In the process of the study an inventory of the associative relations was accomplished, which were characteristic of the lexical and semantic innovations, emerging in the conditions of transition Ukrainian economy, in addition a list of relationships between the ontological categories and

subcategories was made. For this end a method of extraction and further generalization of information about these relationships was used.

This provides an opportunity to determine a certain basis for the modeling of declarative knowledge of the transition economy, which should begin with the formation of a certain semantic space, with a small scope of micro terminology within contemporary innovations with the possibility of further expansion.

In determining stability of relationships an indicator of the frequency of compatibility of terms in the texts was used and the result of the analysis of relationships that exist between most members of the hierarchical paradigm. Most terms are present in all or almost all analyzed sources.

Traces of the associative connections in the syntactic relations of terminological phrases and word-forming constructs of terms were also identified.

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