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Methodological Principles of Investigating Semantic Structure of Ukrainian Axionomens of the Danube Region

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Abstract: The article is dedicated to the description of the procedure of axionomens' formalized analysis. Matrix method of investigating words denoting spiritual values in the modern Ukrainian language is proposed. Matrix is defined to be a two-dimensional structure which replaces oversimplified notation systems used in componential analysis. Matrix enables a researcher to study all the interconnections between the related meanings of different lexical units as well as between different meanings of a specific lexical unit. It consists of two axes – a vertical one indicates a lexical stock and a horizontal one means a seme stock of the collected language material. The application of matrix method in practice proves that the structural organization of axio vocabulary considerably becomes complicated; internal mechanisms and dynamics of semantic cooperations of axionomens are revealed under the influence of extra-linguistic factors. Matrix presentation of non-material values gives an opportunity to describe in detail the structure of axionouns' lexical meanings which are not in chaotic order, but clearly organized, to distinguish the degree of their related semantics, to expose the functional character of semes forming definite structures within the framework of analyzed words. The proposed methodology of researching the relations between lexico-semantic groups is considered to be perspective in studying all lexical sub-systems of the value paradigms of the English and French language societies.

Keywords: axionomen; formalized analysis; matrix; generalized seme

1. Introduction

Many Ukrainian linguists and research scholars from all over the world hold the opinion that nowadays lexical semantics is regarded as the most productive basis for detailed studying linguistic content without which the definite language system can't be adequately presented in general. Thus, re-orientation of linguistic investigations toward the semantic foundation is logical and scientifically determined. It is explained by an irrefutable fact concerning a statement about primacy of linguistic content and lexical property in a word over its form and the possibility of using semantic approach to study all language levels as well.

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2. Current Semantic Methodology

2.1. American Ethnosemantics

The representatives of American structuralism Eugene Nida, Ward Goodenough and Floyd Lounsbury were influenced by the view of Leonard Bloomfield who claimed that the meaning of a linguistic form is something in extralinguistic reality. They were interested in the relation between the language and the culture of the community and distinguished between “linguemes” (features of meaning based on the linguistic context) and “ethnosemes” (features based on the ethnological and cultural context). The semantic components which they obtained by the method of componential analysis (CA) represented the closest analogy with the phonological distinctive features of N.S. Trubetskoy.

2.2. European Structuralist Semantics

Danish linguist Louis Hjelmslev formulated the notion of “content figure” and analyzed the meaning in the form of distinctive oppositions, e.g. *boy* as “he-child” and *girl* as “she-child”. His ideas were fully developed by Bernard Pottier and Eugenio Coseriu in 1960s. Pottier described the field of furniture terms in French and stated the superordinate class to which a concrete term belongs and the specific characteristics that differentiate this term from the other terms (members) of the class. Coseriu admitted only fields that consisted of lexical units exhibiting clear oppositions (e.g., young-old; day-night, etc.), i.e. lexical units which excluded each other. Coseriu’s work was extended and improved by John Lyons who defined the meaning of the word as the set of meaning relations in which it participates.

2.3. Katzian (Generativist) Semantics

Jerrold Katz and Jerry Fodor introduced CA into generative grammar. Their model is a combination of structuralist, formalist and mentalist systems of syntagmatic analysis by which dictionary entries, their word forms, word classes as well as their semantic components – markers (systematic parts of the meaning) and distinguishers (idiosyncratic features of the meaning) are described. Jerrold Katz and Jerry Fodor’s model also consists of projection rules which are responsible for the combination of the lexical meanings of individual words in a sentence.

2.4. Dictionary Definition

Dictionary definition is an informal CA, in which each part of the definition is component. Each meaning of a lexical unit in a dictionary has a definition expressed by a set of semantic components.

Weinreich (1962, p. 78) argues that the words used in definitions of terms are no different in principle from the words defined. According to him the circularity of the dictionary is unavoidable but a semantic analysis should reduce the circularity as far as possible.

2.5. Matrix as a Way of a Componential Notation

Matrix is a two-dimensional structure which replaces oversimplified notation systems used in CA so far. Matrix enables a researcher to study all the interconnections between the related meanings of different lexical units as well as between different meanings of a specific lexical unit (Fabian 1998: 19). As the contemporary CA to semantic structure requires open multidimensional structures, the problem with two-dimensionality will be overcome by a computer-readable database and a multidimensional matrix in near future.

3. Procedure of the Ukrainian Axionomens Formalized Analysis

The vocabulary of the Ukrainian language is examined as a system, i.e. an integral organization with interconnected and interdependent sectors which, in their turn, have specific qualities. However, these sectors are the subject to laws existence of the whole entirety.

Both the structure and the system of the Ukrainian language are naturally and volumetrically submitted by explanatory dictionaries, where phonology, morphology and word formation are fixed in the complex form of expressing the content of lexical units.

Lexicographical practice of compiling explanatory dictionaries was aiming researchers at studying semantic structure of a word not as an isolated but an integrally-linked element of a language system. Thus, explanatory dictionaries with complete databanks allow realizing the analysis of linguistic means of word-stock manifestations in the terms of semantic components.

Any dictionary entry is considered to be a group of strictly-organized formal indications. The quantity of them depends upon the degree of a word polysemy, i.e. the rich polysemy the more reasons for diversifying an entry formal indications. Since a dictionary entry comes out the instrument of word's lexical meaning interpretation, its intersection with others but distinctive indications affords opportunity to describe the correlation of lexical meanings in a language system by means of formalized analysis procedure.

For the first time the formalized principles of semantic classification of the Ukrainian vocabulary were formulated and based by scientific employees of the department of structurally-mathematic linguistics of O.O. Potebnia Institute of Linguistics of the National Academy of Sciences of Ukraine. Just from this institution various up-to-date investigations in theoretical and applied linguistics on the material of lexicographical sources have been spread. The Ukrainian eminent scholar M. Peschak was the author of this methodology. She could with her followers throw light on the problem of differentiating language and speech and also achieve a clear presentation of lexical meanings as linguistic facts. Among the

representatives of M. Peschak's scientific school one should name such Professors as M. Fabian, A. Luchik, G. Yarun.

The research material of the present article includes the arrangements of Ukrainian Danube regional axionomens qualified as determined linguistic units denoting spiritual values taken from the lexicographical interpretative sources [CYM]. Each of the axionomens is characterized as a dialectical unity of form and content.

For choosing material of investigating systematically-structural peculiarities of axionomens' lexical semantics of the modern Ukrainian language we put formal but exclusively linguistic criterion into operation, i.e. referring the analyzed words only to nouns. This approach gives an opportunity to define and to describe semantics of words with the help of such steps: a) matrix analysis of axionomens' seme structure on the first stage of research material classification; b) description and complex analysis of axionomens' correlations, their connections and peculiarities; c) typological comparison of axionomens' semantics in Ukrainian and other foreign lexical systems. Matrix method of presenting semantic relations between Ukrainian axionouns serves as metalanguage for description of analyzed objects in our investigation, whereas matrix on the one hand occurs as a model of system of semantic connections, on the other hand it occurs as semantic structure of axiolexis. This model fixes semantic connections between the words denoting Ukrainian spiritual values in the form of columns and lines of equal length, inside of which the axionomens' correlation (a lexical stock) and their meanings ration (i.e. a seme stock) are marked by the symbol +. The places of axionomens in matrix are strongly-fixed: words of the highest and average degrees of polysemy are located in deeply-filled parts but monosemantic ones can be met rarely. At the same time all matrix cells have functional loading, likewise distances between words and directions of their location. In comparison with explanatory dictionaries matrix is formally simple for demonstrating lexical semantics of the Ukrainian language. Its topographical way of placing filled cells practically substitutes verbal expression of interpretative parts of words.

Since a lexeme is considered as an outer word representation, its inner side is characterized by a sememe, which is, in its turn, regarded as the smallest unit of lexico-semantic level and an equipollent to a separate word meaning. In paradigmatic aspect a sememe is not considered as the simplest and indivisible one because it has its own structure and contains some constituents.

All the meanings of lexical units are formed by a hierarchical structure of semantic constituents – theoretical constructs or conceptual building blocks – which semantically characterize the vocabulary of any language. Terms like *semantic feature* (A. Ufimtseva), *semantic component* (L. Vasilyev, A. Zholkovskiy) and *semantic marker* (J. Katz, J. Fodor) are often used interchangeably in the present linguistics; they are of various level of abstraction and determine the semantically-syntactic environment of the word. In our investigation we introduce the term a

generalized seme (GS), which is understood as a semantically-derived feature having briefly-generalized content which is logically removed from the initial sememe and used in modeling the horizontal axis of the matrix.

Structuring modern Ukrainian axio-vocabulary provide the separation of its word-stock and inner organization. As a result of this structuring the division of analyzed vocabulary into lexico-semantic groups and establishing connections between them take place.

The procedure of collecting axionomens and selecting their seme-stock are subdivided into such consecutive stages:

1) the axionomens having in their lexical meanings both explicit and implicit indications on forms and means of expressing axiological knowledge are taken from the up-to-date Ukrainian explanatory dictionaries by means of entire data choosing method and in consequence the card-file of linguistic material are made. One should point out that firstly a preliminary list of lexemes considered as conventional values of the Ukrainian Danube community is formed, e.g., *життя, порядок, воля, природа, честь, дух, право, час, розум, слава, мова, щастя, мир, любов, культура, закон, добро, доля, свобода, праця*. Afterwards the step-identification method (in the terms of E. Kuznetsova) is applied for the proposed list of words. This method helps “to determine a lexico-semantic group as a set of units interpreted through the same word identifiers” (the quote after Z. Popova 1984: 107), e.g., *правда, істина, душа, пам'ять, мрія, простір, логіка, віра, свідомість, історія, врода, блаженство, наука, ініціатива, гордість, повага, освіта, стиль, мудрість, справедливість, аскетизм, талант, благоговіння, співчуття, достоїнство, мужність, держава, краса, гармонія, совість, творчість, Бог, людина, мораль, побратимство, довершеність, чуйність, благородство, злагода, успіх, Батьківщина, толерантність, здоров'я, добродієність, майстерність, соборність, гуманізм, раціоналізм, рівність, знання, надія, дипломатія, дружба, симпатія, авторитет, уважність, доброта, благодать, благо, мистецтво, удача, грація, благочестя, правосуддя, щирість, чесність, сміливість, вихованість, святість, гостинність, милосердя, пристойність, благополуччя, користь, терпіння, суверенітет, солідарність, вітальність, прогрес, оптимізм, відповідальність, опікування, безпека, порядність, дисциплінованість, турботливість, компетентність, ретельність, старанність, працьовитість, плюралізм, професіоналізм, незалежність, людяність, надійність, недоторканість, статус, обов'язок, ментальність, гідність, демократія, самовладання, легітимність, альтруїзм, вдячність, конституція, патріотизм.*

The step-identification method as a means of finding verbal manifestations of semantic components consists in consecutive reducing words through typical identifiers till those ones of maximum generalized character. This procedure will

be carried out until the situation of cross-identification arises in contrasted interpretations. Thus, the ultimate identifiers are accepted as lexico-semantic units denoting values which contain stable complexes of semantic components existing in other axionomens;

2) the obtained card-file of axionomens gives an opportunity to analyze their quantitative stock and qualitative peculiarities as well as semantic properties;

3) on the basis of studying lexicographic definitions a special matrix is modeled where a list of axionomens (a lexical stock) is arranged on the vertical axis and the horizontal one indicates a seme stock (GSs) of the collected language material (see Figure 1). At the same time inside a matrix cell only one word is disposed. The presence of a common lexical meaning is marked by the symbol +.

Lexical stock	Seme stock														
	in phrases	quality	treatment	relationship	happiness	calm	power, authority	consent, assent	generally recognized meaning	external manifestation of respect	occupation, work	in science	human being	abstract noun	condition, state
Щирість		+	+	+											
Чесність		+	+												
Милосер- дя			+												
Благопо- луччя					+	+									

Figure 1. A fragment of the matrix of lexico-semantic group of the nouns denoting Ukrainian values

4) lists of words and GSs in matrix are grouped in a descending line depending on a quantitative stock. It is conducted to maximum concentration of axionomens in

one matrix angle and contrasting it to an alternate angle placed diagonally as the least completed one;

5) the vocabulary fragment under study is subdivided into lexico-semantic groups due to the total amount of lexical meanings (i.e from axionomens of the highest and average degrees of polysemy till monosemantic ones: *ввічливість, вірність, гречність, інтелігентність, лагідність, підприємливість, поміркованість, смиренність, стриманість, цивілізованість, щедрість, довіра, акуратність, духовність, лояльність, наполегливість, неупередженість, об'єктивність, родинність, унітарність, консенсус, державність, цілеспрямованість, естетичність, православність, релігійність, самовідданість, трудолюбство, громадянськість, колективізм*) and its seme stock is divided into sets according to the frequency of GSs' usage distinguished in lexical meanings of words with the different degree of polysemy;

6) in accordance with matrix the degree of axionomens' polysemy and the character of their interconnections are presented enough completely; it helps to bring into axionomens' proper correlation within lexico-semantic groups;

7) the obtained lexico-semantic groups of axionomens are studied as independent systematically-structural unities of words.

The presented methodological principles of investigating semantic structure of Ukrainian axionomens of the Danube region is combined with the selection of such methods and procedures of lexicological analysis as: descriptive, typological and statistic methods as well as componental and statistical analysis.

4. Concluding Remarks

The application of matrix method in practice proves that the structural organization of axiovocabulary considerably becomes complicated; internal mechanisms and dynamics of semantic cooperations of axionomens are revealed under the influence of extra-linguistic factors. Matrix presentation of non-material values gives an opportunity to describe in detail the structure of axionouns' lexical meanings which are not in chaotic order, but clearly organized, to distinguish the degree of their related semantics, to expose the functional character of semes forming definite structures within the framework of analyzed words. The proposed methodology of researching the relations between lexico-semantic groups is considered to be perspective in studying all lexical sub-systems of the value paradigms of the English and French language societies.

5. References

Fabian, Miroslava (1998). *Етикетна лексика в українській, англійській та угорській мовах: [монографія] / Vocabulary Etiquettes in Ukrainian, English and Hungarian languages: [monograph]*. Ужгород: Інформаційно-видавниче агентство "ІВА".

Kuznetsova, E. (1973). Ступенчатая идентификация как средство описания семантических связей слов / The identification in steps as a means of describing the semantic relationships of words. *Вопросы металингвистики / Metalinguistics Questions*. Л.: Ленинградский гос. ун-т им. А.А.Жданова. – С. 84 – 95.

Lounsbury, F. (1956). *A semantic analysis of the Pawnee kinship usage*. *Language* 37.

Nida, Eugene Albert (1975a). *Componential Analysis of Meaning: An Introduction to Semantic Structures (Approaches to Semiotics)*. Mouton.

Nida, Eugene Albert (1975b). *Language structure and translation [essays]*. Stranford: Stranford University Press.

Peschak, Maria (1982). *Формалізовані основи семантичної класифікації лексики / Formal basics of semantic classification of vocabulary*. Н. Ф. Клименко, М. М. Пешак, І. Ф. Савченко. – К. : Наукова думка.

Ророва, Zinaida (1984). *Лексическая система языка / Lexical system*. З. Д. Попова, И. А. Стернин. – Воронеж : Изд-во Воронеж. ун-та.

Weinreich, Uriel (1962). Lexicographic definition in descriptive semantics. [In:] *Problems in lexicography*. Bloomington. Householder and Saporta.

***(1970-1980). *СУМ – Словник української мови: у 11-ти т. / MSA - Ukrainian Dictionary* [І. К. Білодід та ін.]. – К.: Наукова думка. – Т. 1 – 11.