

## **Matrix Representation of Ukrainian Axionomens Used in the Danube Area**

**Tetyana Soroka<sup>1</sup>**

**Abstract:** The article is dedicated to the investigation of the nouns denoting national values in their formalized representation on the material of the Ukrainian language. Matrix representation of non-material values gives an opportunity to describe in detail the structure of lexical meanings of axionouns, to distinguish the degree of their related semantics, to expose the functional character of semes forming definite structures within the framework of analyzed words, as well as the axionouns do the same in the lexico-semantic fields.

**Keywords:** axionomen; formalized analysis; lexical meaning

### **1. Introduction**

Lexical semantics of nowadays is in the permanent development state and has attracted a great deal of scientists' attention. The published scientific works and their analysis convince that any researcher can't adequately present the description of lexico-semantic system of a language or contrasted ones without accounting the system-defined relationships and hierarchical series on all the levels of analysis, without using the achievements of other branches of knowledge as well as taking notice to language facts of nationally-cultural character.

### **2. Current Semantic Methodology**

#### **2.1. Semantic Components**

All the meanings of lexical units are formed by a hierarchical structure of semantic components – theoretical constructs or conceptual building blocks – which semantically characterize the vocabulary of any language. Terms like semantic feature (G. 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 semantic-

---

<sup>1</sup> PhD, Associate Professor, Izmail State Liberal Arts University, Ukraine, Address: 12, Repin St., Izmail, Odesa oblast, Ukraine, 68600, Tel.: +380930455577, Corresponding author: magpie3f@mail.ru.

syntactic environment of the word. In applying componential analysis to set of related meanings, it is essential to distinguish between three types of semantic components (Nida 1975b: 112): common components, diagnostic components, supplementary components. Common components define the whole group as they are common to all the meanings in it. They identify the semantic fields to which words belong. It is very useful to restrict a set of common components and define essential differences on their basis at the very beginning of the semantic analysis. Diagnostic components distinguish between the various meanings of the given words and supplementary components are additional ones which can be important for an extensive definition.

## **2.2. Componential Analysis**

Componential analysis (CA) is one of the main methodologies of structural semantics and by its application individual meanings of lexical units with different componential structure are decomposed into semantic components. A semantic description based on semantic components or factors is valuable, if: a) all the words of a language can be naturally described with their help, and b) this description is economical.

Lexical units are studied on the paradigmatic level, i.e. in their relationships with other words of the lexico-semantic field. CA is founded on the semantic contrast – lexical units are assumed to contrast simultaneously on different dimensions of meaning or within different semantic systems. Semantic components are in fact contrastive elements essential for the identification of meaning relations. F. Lounsbury (1956: 193) claims that CA presupposes the necessity to look at a set of words in a carefully delineated area which have basic semantic features in common “but whose meanings contrast with each other by virtue of one or more differences in respect to several other features”.

CA is often used in the process of studying the semantic structure of synonyms. There is always a certain component of meaning which makes one member of the synonymic set different, which cannot be found in any other member of this set. In some cases, however, this semantic component is only felt by native speakers and can be hardly defined. CA is not very often applied to the different meanings of a single lexical unit because they are so diverse that it is difficult to find some common semantic components. The different meanings of single lexical units are far more separate in semantic space than the related meanings of different lexical units (Nida 1975a: 103).

CA accounts for the data in a way that is compatible with speakers' intuitions. People differ from one another in their judgements and so, on the semantic level of a language, differences will be observed and structures will be in the process of change. If in a semantic analysis of a lexical meaning a large number of components are necessary, it is because the speaker knows many things about the

concepts and objects represented by the words (Lehrer 1974: 72). When it comes to characterizing the language picture of the world of people, an optimal set of semantic components for one language need not be an optimal set for other languages.

**2.3. 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). It consists of two axes – a vertical one indicates a lexical stock and the horizontal one a seme stock of the collected language material (see Figure 1). 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.

Lexical stock	Seme stock														
	In phrases	In plural	Figurative meaning	That which...	Science	Art	Place, stay	Freedom from	Quietness, tranquility, peace, calmness	Sport	Absence of	Repose, relief, release from	Vigour, strength, power, energy	Biblical, religious use	Quality, attribute, trait
<b>Rest</b>	+	+	+	+	+	+	+	+	+	+	+	+	+		
<b>Love</b>	+	+	+	+		+				+				+	+
<b>Fortune</b>	+	+	+	+	+										+
<b>Relief</b>	+		+	+	+	+									

**Figure 1. A Fragment of the Matrix of Lexico-Semantic Field of the Nouns Denoting Happiness in English**

### 3. Formalized Representation of Ukrainian Axionomens Used in the Danube Area

No general idea about what forms the polysemantic word's structure has so far been accepted by modern linguists. It is possible to distinguish three basic points of view, delimiting them conditionally according to that parameter which provides a unity to the word: "a) semantics of a word with the set of interrelated lexical meanings forms a hierarchy where the top is occupied by the basic (primary) meaning. The secondary (denotational or connotational) meanings submit to the basic one; b) the semantic shades of the polysemantic word do not form a hierarchy because they are equivalents. The division of shades into primary and secondary meanings is inexpedient; c) the kind of semantic structuring inside the polysemantic word can vary depending on different factors: in certain cases its meanings are equal, but in the other cases – not" (the quote after Fabian 1998: 24). Thus, the investigation of the semantic structure of an axiological word concerned as a system of lexical meanings which are not in chaotic order, but definitely organized is a question of urgent importance.

The goal of the article is to explore the semantic structure of the Ukrainian axionomens which are characterized as nouns denoting values and used in the Danube ethnolinguocultural area.

This goal is concretized in the following tasks: 1) to set the same structure of words denoting values by means of matrix as an innovative way of a componential notation; 2) to analyse the axionomens' multiple correlation.

The research is based on the data collected from lexicographic sources (СУМ). Each lexicographic meaning of any Ukrainian axionomen as a polysemantic lexical unit has a definition expressed by a set of semantic components. Thus a dictionary definition is an informal material and used in matrix formalized analysis. Uriel Weinreich (1962: 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.

The nouns *благоговіння* (*veneration*)<sup>1</sup> and *співчуття* (*commiseration*) are combined with the lexical meanings "the feeling of kindness" and "respectful attitude towards someone, something". The words *благоговіння* and *достойнство* (*virtue*) are united by means of the joint indication of "surface politeness"; whereas the latter with the word *мужність* (*courage*) are interpreted as "positive quality". Besides the mentioned common characteristics, all the submitted axionomens have additional semantization, explaining "the greatest respect", "deep goodwill to smb.", "piety, devoutness" (*благоговіння*); "the feeling

<sup>1</sup> In brackets a near English equivalent is given.

of sadness, grief associated with loss, bereavement”, “the outward (oral or written) expression of grief or sadness”, “support, approval”, “delicacy” (*співчуття*); “respect for oneself”, “dignity”, “in honour of”, “title, rank as obsolete word” (*достойнство*); “courage, bravery”, “resoluteness”, “hardiness, composure”, “rarely the same as virility”, “maturity, puberty” (*мужність*).

The word *справедливість* (*justice*) is also referred to the group of lexical units denoting values. It is defined as “unbiased attitude to (towards) smb./smth.”, “human relations, activities”, “moral ideal”, “good actions, consequences, results”. The analyzed noun in the meaning of “characteristic/quality of” acts as a semantically close one to the word *мудрість* (*wisdom*), which is, in its turn, can be described as “good sense shown in a way of thinking, judgment, or action”, “accumulated knowledge of life or of a sphere of activity that has been gained through experience”, “an opinion that almost everyone seems to share or express”, “ancient teachings or sayings”.

The group of the investigated language material numbers eight words – *совість* (*conscience*), *людина* (*person*), *мораль* (*morality*), *побратимство* (*brotherhood*), *довершеність* (*perfection*), *чуйність* (*delicacy*), *благородство* (*nobleness*), *злагода* (*accord*) – with five lexical meanings each. It is certain that some semantic intersections can be observed between them. So, the lexical meaning “individual(s)” is common to axionomens *совість*, *людина*, *побратимство*, *довершеність*. It characterizes a human being as “the most honest and responsible representative of a certain group (team, staff, society)” (*совість*), “embodiment of high intellectual faculties” (*людина*), “a person with special moral value” (*довершеність*), or represents “a group of people united in mutual interests, aims, experiences, activities” (*побратимство*).

Each of the examined nouns combines in pairs with another axionomen of the same group by virtue of a positive content meaning. Thus, lexical units *совість* and *мораль* contain the seme “moral principles, convictions”, but the words *совість* and *благородство* – “embodiment of honesty, respectability”. The latter axionomen is semantically near to the word *довершеність* in the semes “positive feature”, “high quality” and “degree of perfection”. Lexical units *побратимство* and *злагода* coincide with the interpretation of the semantic component “relations, connections”, actualizing “friendly relationship” (*побратимство*) and “peaceful coexistence” (*злагода*). Two lexical meanings “friendly behaviour with sympathy for other people” and “attentiveness and warm-hearted attitude to people” are specified by means of the common seme “treatment (of)” for axionomens *побратимство* and *чуйність*.

The word-stock of the investigated group also includes axionomens denoting spiritually-cultural values with four lexical meanings each. The meaning of a specific property in such words as *надія* (*hope*), *дипломатія* (*diplomacy*), *симпатія* (*sympathy*), *авторитет* (*authority*) is a particular realization of a

semantic sign “*individual(s)*”, which is concretized in each special case as: “*a person in which expectations are centered*” (**надія**), “*diplomatic representatives of a definite state*” (**дипломатія**), “*favourite, minion; darling, beloved*” (**симпатія**), “*a person with extensive or specialized knowledge about a subject*” (**авторитет**).

Semantics of the nouns **доброта** (*kindness*), **гуманізм** (*humanism*), **уважність** (*attentiveness*) is revealed by referring to “*a positive concern with the needs, well-being, and interests of people*”. The lexical meaning “*sense of benevolence, goodwill, favour*” is inherent to the axionouns **симпатія**, **уважність**, **доброта**.

The form of explanation “*in science*” unities the words **гуманізм** (*humanism*), **раціоналізм** (*rationalism*), **знання** (*knowledge*), **толерантність** (*tolerance*), **рівність** (*equality*), whereas the first three of them designate scientific studies: **гуманізм** – “*a cultural movement of the Renaissance, based on human values, abilities, dignity and freedom*”; **раціоналізм** – “*the philosophical doctrine that reason alone is a source of knowledge*”; **знання** – “*in Philosophy – familiarity or understanding gained through experience or study*”, but the last two axionouns – **толерантність**, **рівність** – are the scientific terms of different branches of knowledge: **толерантність** – “*in Medicine – physiological resistance to a poison*” and “*in Engineering – an allowance made for something to deviate in size from a standard*”, **рівність** – “*in Mathematics – a symbolic expression of the fact that two quantities are equal*”.

Different pair-wise interactions by a common lexical meaning are also relevant for this type of axionouns. Thus, nouns **благодать** (*bliss*) and **благо** (*weal*) coincide with the reference to common semantic components “*good, happiness*”, “*welfare*”, whereas lexical units **авторитет** and **гуманізм** are characterized by “*generally recognized importance*”.

The words **дипломатія**, **мистецтво** (*art*) contain the same “*occupation, work*”, determining “*the practice of conducting international relations, as in negotiating alliances, treaties, and agreements*” and “*creative activity resulting in the production of paintings, drawings, or sculpture*”. Moreover, it is observed the interrelation of **дипломатія** and **дружба** (*friendship*) in accordance with the semantic feature “*relations, connections*”, which is the basis of “*mutual favour, trust, devotion, friendly solidarity, spiritual similarity, community of interests*” on the intergovernmental or interpersonal levels. The axionouns **мистецтво** й **майстерність** (*workmanship*) agree with common semantic component “*adroitness, skilfulness*”.

#### **4. Concluding Remarks**

The complex componential analysis represents an attempt to break down a lexical meaning of words into minimal semantic features and defines economically and precisely relations between lexical units. It reveals which components of meaning interconnect and which differentiate the words under study. Speakers are able to categorize, classify and organize words into lexico-semantic fields in many ways, and so the componential analyses can be done in more than one way, too. The complex formalized analysis with elements of componential one of the nouns denoting values used in the Danube ethnolinguocultural area is carried out in the form of matrix representation. It shows that the semantic structure of any axionomen is regarded as a system of lexical meanings organized under certain rules.

#### **5. References**

- Білодід, І. К. та ін. (1970-1980). *СУМ – Словник української мови/Ukrainian Dictionary*. К.: Наукова думка/Scientific Thought.
- Fabian, Miroslava (1998). *Етикетна лексика в українській, англійській та угорській мовах/Etiquette Vocabulary in Ukrainian, English and Hungarian Languages*. [монографія]/Monography. Ужгород: Інформаційно-видавниче агентство ІВА/Information and Publishing Agency.
- Lehrer, A. (1974). *Semantic Fields and Lexical Structure*. Amsterdam: North-Holland Publishing Company.
- 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.
- Weinreich, Uriel (1962). Lexicographic Definition in Descriptive Semantics. *Problems in Lexicography*. Bloomington: Householder and Saporta.