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Semantic Field of Biological Constituent of Deviation in English

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Abstract

The deviation category is primarily formed by words with the root *devia-* in English. The semantics of these words may be seen more detailed by considering their contextual interconnections with lexical units that are the representatives of the concepts within deviation. These concepts define levels of semantic category under analysis. The author considers the term "subcategory" for more abstract components of deviation category; they are higher in the hierarchy "category – concept". The focus of this paper is to show the linguistic peculiarities of semantic field of biological constituent of deviation category in English.

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1. Introduction

Categories as the terms that classify the results of human cognitive activity are under study from the position of philosophy since ancient times. They are *quality*, *quantity*, *time* and *space*, *genesis* and *consciousness*, *reason* and *effect*, *necessity*, *chance*, etc. In XIX-XX centuries, the researchers began to notice the interconnection between categories that are the objects of philosophy and language.

In the first stage, the notional categories were considered as extralinguistic ontological structures behind the structures of grammar. Nowadays the categories that are expressed not only by grammar but also by other means of language (lexemes, phrasiological units, sayings, proverbs, etc) are studied.

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Notional categories are also called ontological, cognitive, cogitative, semantic ones, etc. The term *notional or semantic categories* is used as the same one with various degrees of rank. In other words, notional or semantic categories can be more general or more specific (Bondarko, 2013).

At present major research about reconstruction of worldview as the system of categories of different rank and status (supercategories, basic categories, subcategories), reflecting principles of world conceptualization, is being carried out.

The base of notional categories is found in extralinguistic reality that is reflected in mentality of people. It does not exclude but suppose phenomena of “adverse effect” on language, its categories and forms on thinking. Thus, the principle of ontologism is key one in defining the semantic categories.

Categories are expressive means of consciousness norms in language, the element that links language components with general line of human reasoning (Meshchaninov, 1967).

It means recognition of determination of categories by means of perception in social reality, and striving of linguistic theory in finding the forms of existence of semantic categories in real processes of cogitative and speech activities (second aspect is closely connected with the first one) (Bondarko, 2013).

The problem of studying the notional category of deviation is connected with definition of this or that fact as deviant one. Evaluation standards are debatable because the above-mentioned facts can be referred to the sphere of deviation or can be considered as normal actions.

2. Semantic Structure and Means of Expression of Biological Constituent of Deviation Category in English

Being the notions of meta-level, categories form the system of links and relations with other categories. In the meantime, the categories have their own complex semantic organization (Petrenko, 1988). For example, deviation category, as the majority of categories, is presented in the form of level system. The highest, basic and lowest levels of categorization are distinguished in such formation. The semantic analysis of lexis that forms the core of semantic category, the so-called “highest level of deviation” allowed to define the field of lexemes representing deviation category by analyzing its broadest meaning. All the lexical units are classified in accordance with their belonging to biological component; the main resources of information are the dictionaries of various types and visual thesaurus. They are lexical units with the component *devia-* and synonyms. The key level is in the middle of taxonomic hierarchy. E. Rosch notes that the members of the category are identified at the basic level quicker, the most natural and common names for category members are used. These elements form the basis of lexis; major part of our knowledge is structured at the basic level (Rosch, 1976). Third level consists of specific components of main concept.

Notional categories in language are usually characterized by field structure with a core (center) and periphery in the boundaries of a certain semantic field.

Semantic fields are usually called notional categories considered with the complex of split-level means of their expression in a certain language; these categories interact because of commonness of their semantic functions. Thus, the term of semantic field is connected with an image about a certain nominal space of language means and functions requiring the definition of its central and periphery components. The papers dedicated to notional categories point out two main structural types of semantic fields: 1) monocentric and 2) polycentric. Polycentric fields are characterized by division into several spheres, each of which has its own centre and periphery components (Bondarko, 2013).

The core of deviation category system of three elements can be called polycentric one. Each component has further division. For instance, the mental constituent of subcategory of *inferiority* within deviation category includes three elements. First component of the core is presented by medical terms of various mental disorders. Second component is expressed by words of neutral bookish style expressing the idea of the lack of mental abilities among people. Third element is formed by means of words of bookish neutral style defining various types of psychological aberrations.

The distinguished components of deviation category allow to present this phenomenon as a complex of its three elements: 1) connected with technology and biology, 2) with law, 3) with morality and ethics. Biological component is under analysis in this paper.

This component of the category defines deviation as 1) defect in normal development of an organ within the middle stage of forming, 2) abnormality in mental development of a person. Thus, biological component of deviation corresponds to “illness.”

Near periphery includes the lexis of informal style and distant periphery consists of phrases of evaluative type and function as euphemisms. All these components consider deviation in negative sense. Positive deviations are intentionally omitted in this research.

Biological constituent expresses the notion about pathology from the point of view of everyday personal or social experience.

Personal and social definitions of biological constituent consider three levels: highest level that is presented by lexemes with root *devia-* (deviation, deviance, deviational, etc.); second level is based on lexis with the meaning of *pathology* (abnormality, disease, error, failure, pathology, pathobiology, injury, etc.) (Fox, 2003). Further concretization defines the lowest level of category (inborn pathology, harelip, etc.) (Charlton, 2007; Joseph, 1994; Fox, 2003).

Concepts of biological constituent are demonstrated by the corresponding lexis not only in special literature, but also in literary and journalistic texts. Various types of pathologies can be expressed by set phrases, for instance: rivalry strife, dislocation fracture, inborn pathology, hidden trauma, eating disorder, congenial heart disease, caffeine-related disorder, delirium, delusional disorder, dementia, factitious disorder, masochism, etc.

3. Semantic Analysis of Bio-Constituent in Notional Category of Deviation in English

Semantic analysis shows that lexis of biological constituent is not polysemous. The following meaning may be pointed out: deviation from the point of view of physiology or psyche (BNC, 2015):

It was therefore recognized that there might well be some *dementia sufferers* who could not be helped by this project because their needs would be so great that they would be more expensive to meet in the community than in an institution.

In this context the lexeme *dementia* within the phrase *dementia sufferers* is presented by the meaning “a syndrome associated with a progressive loss of memory.”

Masochism is congenital; that is to say, you must have inherited it.

In this example the meaning of the lexeme *masochism* is “a mental disorder in which a person obtains sexual satisfaction through pain or humiliation inflicted by the self or by another person.”

Others have suffered *paranoia* or severe *delusional states*.

The semantics of the lexeme *paranoia* refers to “a form of mental disorder characterised by fixed delusions” which defines the third level of categorization. The phrase *delusional state* is the element of basic layer of deviation category.

There are many forms of *depression* and a connection between abnormal body clocks and three types of depression have been suspected: *rapidly cycling manic-depression*, some forms of *endogenous depression* and *seasonal affective disorder*.

The phrases reflect the semantics of basic and third levels of deviation category. The lexemes *depression* and *disorder* stand as the means of mental units with broaden semantics that can be considered as the components with its own structure or as the elements in the system of deviation category.

Special considerations: the medical evidence was that the appellant was not suffering from *mental illness* or *mental impairment*, and was not suffering from *psychopathic disorder*.

Types of brain deviations are in the focus of this example. The phrase *psychopathic disorder* defines psychological problems; the phrases *mental illness* or *mental impairment* reflect the semantics of mental deviations. The set phrases can reflect the semantics of basic level of categorization or might be considered as the independent elements with its own structure. For instance, the set phrase *mental disorder* can be taken the primary means of the set – *mental deviations*.

In June 1940, Dean Pollard had reported to the committee that an infant, Margaret C., who had been born at St. Peter's, and who had a *double harelip* and *cleft palate*, had been referred to the Children's Hospital, Great Ormond Street.

The lexemes *harelip* and *palate* in the set phrases *double harelip* and *cleft palate* state the third level of this semantic field.

Epilepsy may be due to a *medical condition* or *injury* that affects the brain, or the cause may be unknown (idiopathic). Common causes of epilepsy include: *stroke or transient ischemic attack (TIA)*, *dementia*, such as *Alzheimer's disease*, *traumatic brain injury*, *infections*, including *brain abscess*, *meningitis*, *encephalitis*, and *AIDS*, *brain problems* that are present at birth (*congenital brain defect*), *brain injury* that occurs during or near birth, *metabolism disorders* present at birth (such as *phenylketonuria*), *brain tumor*, *abnormal blood vessels in the brain*, other illness that damage or destroy brain tissue (NYT, 2015).

The set phrase *medical condition* stands as the representative of the basic level, the phrases *brain injury*, *metabolism disorder* are considered as the forms of concrete categorization and abstraction.

Mental disorder shall not be construed as covering *promiscuity*, *sexual deviancy* or *dependence on alcohol or drugs* (BNC, 2015).

The set phrase *sexual deviancy* defines the highest level of categorization, the phrase *mental disorder* is presented by the meaning reflecting the middle level in this notional category, lexeme *promiscuity* and the phrase *dependence on alcohol or drugs* form the third level of categorization. The subcategory *mental disorder* might be seen as an independent element out of deviation category. In this sense, it can be considered as the primary element with its own hierarchy.

4. Conclusion

Thus, the whole structure of the subcategories in the category of deviation can be shown in the following way: deviation – pathology – inborn pathology – harelip, etc. This structure is functional one, it helps to analyze most of the mental units of the levels “category” and “subcategory.” This type of the system was demonstrated in the study “Subcategory of Evolution within Deviation Category in the English Language.” The semantics of the lexemes with the root *devia-* demonstrates the highest level in the boundaries of biological constituent of this notional category. This level is the *category*, *subcategory* stands as the means in the middle of hierarchy between category and concept, third level represents concrete constituents – concepts.

The semantic field of biological constituent of this notional category are the lexical units of the type: deviation, pathology, inborn pathology, injury, double harelip, etc (Ptashkin, 2014a).

The peculiarities of the structure can be seen in the contextual meanings of the lexis showing all the levels of the category. The semantic field of biological constituent has the core, near periphery, distant periphery. All that structural features are reflected in the examples showed.

Semantic analysis helps to reconstruct the whole system of biological constituent of deviation and shows the specifications of its functioning (Ptashkin, 2014b; Ptashkin, 2015).

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References

- BNC (2015). *British National Corpus*. <http://www.natcorp.ox.ac.uk/>.
- Bondarko, A. V. (2013). *Teorija funkcional'noj grammatiki: Vvedenie, Aspektual'nost', Vremennaja lokalizovannost', Taxis* [Theory of Functional Grammar: Introduction, Aspectuality, Time Localization, Taxis]. Moscow: LIBROKOM.
- Charlton, G. (2007). *Merriam-Webster's Dictionary*. Springfield: The New American Library.
- Fox, Ch. (2003). *Longman Dictionary of Contemporary English*. Harlow: Longman.
- Joseph, L. E. (1994). *The New Encyclopedia Britannica*: 30 V. Vol. 10. Chicago: Encyclopedia Britannica.
- Meshchaninov, I. I. (1967). *Sootnoshenie logicheskikh i grammaticheskikh kategorij* [Ratio of Logical and Grammar Categories]. Moscow: Nauka.
- NYT (2015). *New York Times. Health Guide. Epilepsy*. <http://www.nytimes.com/health/guides/disease/epilepsy/overview.html>.
- Petrenko, V. F. (1988). *Psihosemantika soznaniya* [Psychosemantics of Consciousness]. Moscow: Moscow University Publishing.

- Ptashkin, A. S. (2014). The Concepts of "Beauty" and "Pathology" within the Biological Component of Deviation Category (in the English Language). *Xlinguae: European Scientific Language Journal*, 7(1), 21-28.
- Ptashkin, A. S. (2014b). Subcategory of Evolution within Deviation Category in the English Language. *Mediterranean Journal of Social Sciences*, 5 (20), 2327-2331.
- Ptashkin, A. S. (2015). Euphemisms as the Means of Inferiority Category Expression in the English Language. *Mediterranean Journal of Social Sciences*, 6(3), S2, 446-450.
- Rosch, E. (1976). Structural bases of typicality effects. *Journal of Experimental Psychology: Human Perception and Performance*, 2, 491–502.