

*The Problem of Defining Configuration of Semantic Frame*



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### Introduction

Cognitive science as the research project of human cognition is actual and significant, however, some reproofs were constantly heard about it:

A. Cognitivism has switched from the problem of "meaning" to the problem of "information". It always should be kept in mind that ``meaning`` and ``information are completely different things. Even non-informative message possesses meaning. For the information processing system it`s completely insignificant, whether it processes the sonnet by Shakespeare`s or the matrix of numbers. The only significant fact is informativeness of the message. The message is informative even in case if it contrasts with alternative signs, in other words, if it located in the predefined code;

B. It`s impossible to reduce everything humane to the pure information, since the essential marker of human intelligence is the will. Intellect =Cognition + Will.

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Manipulating only with symbols, cognitive science neglects intention, will;

Another determinant factor of the actuality of the research is the following fact: the depth and completeness of the analysis concerning peculiarities of human representation in the language should embrace axiological aspect of the research, because the set of values shared by people and society at a particular time and in a particular space is molded according to the axiological aspect. Presumably, this very aspect is to be the logic way of further development of anthropocentric principle. Unfortunately, axiological phraseology has not yet become a vector of phraseological research and consequently, it remains the less-studied field of cognitive linguistics.

The purpose of the work is to determine configuration of the semantic frame of "crime and punishment" in modern English language.

Research stages that serve to achieve set goals are:

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1. Search and analysis of special literature;
2. Identification of the concepts relevant to the thematic space of crime and punishment;
3. Identification of lingual objectivators of the concepts;
4. Construction of phraseological fields of “Crime and Punishment” in modern English language;
5. Construction of semantic frame of “Crime and Punishment” in modern English language;
6. Drawing theoretical conclusions based on frame analysis.

The mentioned stages imply the following issues:

1. Identification of those large-scale elements that represent the set of fundamental principles and ideas about the world relevant to the definite time and space;
2. Analysis of the concepts in terms of existence/absence of different layers in their structure.
3. Classification of concepts:

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- A. As unique concepts determined by specificity of certain culture;
  - B. As universal concepts that lack cultural specificity.
4. Defining the principles and ideas that are compulsory and sufficient for adequate interpretation of a concrete frame;
  5. Recording the shifts that usually cause modification of the picture of the universe and generate new standards for adequate explanation of the phenomenon of the world;
  6. Discussion the sum of ideas about the world that occur within the premises of certain traditions.
  7. Analysis of the frame with the view of its non-dynamism /dynamism, openness / closeness.

Hypothesis of the work sounds as the following: Presumably, determinant factor of the specificity of the frame configuration is the existence of slots with different degree of abstractness in the frame. Supposedly, “correctness” for a specific situation does not represent the crucial criterion for the validity of frame configuration,

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because if configurator is “invalid” it can't occur in the diapason of conceptual validity.

Peculiarity of the applied methodology is determined by the content of the following statement: The essence of theoretical knowledge lies not only in the description and explanation of diverse facts and regulations, but in revealing the harmony of the world as well.

Applied methodology includes the following approaches to the research phenomenon: systemic approach; inter-paradigmatic approach; projecting method that defines research stages; forms of general scientific analysis: analysis, synthesis, analogizing, contrasting and modeling.

Applied Methods have been developed within the premises of immanent and non-immanent approaches to language.

Scientific novelty of the work is to define conceptual sphere of "crime and punishment" in the modern English language.

Practical significance of the work is determined by the validity of the obtained material and research outcomes not

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only for cognitive linguistics and structural linguistics, but for English language lexicology courses as well.

The most significant component of the theoretical value of the work represents the research methodology comprising the three main aspects:

1. Inter-paradigmatic methodology that is centered on both structural and cognitive linguistics;
2. Interdisciplinary methodology - the methodology equally based both on the data of linguistics and cultural studies, and being linguistically centered as well.
3. The research methodology is based not only on the linguistically centered Inter-disciplinarity, but also the principle of research which is especially significant for any field of humanitarian reasoning, in other words, the research methodology is based on the principle of paradigmatic synthesis.

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4. Combination of concepts and methods associated with some modern stages of evolvement of linguistic thought are applied in the research.

The research material is derived from bilingual and explanatory dictionaries, as well as from Berkeley's frame network.

The structure of the work comprises the introduction, chapters, sub-chapters, conclusions and bibliography.

Actuality and scientific novelty of the research topic are outlined in the introduction. Research goals and tasks requisite to achieve set goals, theoretical and practical values of the thesis, as well as research methodology are defined.

In the first chapter – „Frame - Conceptual Model of Organizing Human Memory” - the theory of frames, as the result of the research concerning modeling human thinking, is discussed; The frame system is analyzed in the context of interpretational field; Semantic-cognitive direction of the research is defined as the result of synthesis of semantic and cognitive processes.



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The second chapter - "Lexical-Semantic and Conceptual Spaces" - is dedicated to the identification of lexical-semantic field of "crime" in modern English language; The same chapter is dedicated to the analysis of the repertoire of semantic frame of "crime" in modern English language.

In the third chapter – "Forms of Crime and Associative Space of the Concept of "Crime" - nominative fields of linguistic representatives relevant to the research concept are presented; Specificity of the temporal transformation of the lingual representatives of the concept of "punishment" is revealed.

Research outcomes are summarized and generalized in the conclusive part.

### Chapter I. Frame - Conceptual Model of Organizing Human Memory

Frame theory represents the result of a long-standing research in the field of modeling human thinking. Frame is a conceptual model of organizing human memory. Frame is

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considered to be an abstract image requisite to represent stereotypical perception.

The model of frame is universal. It enables to depict the whole diversity of the knowledge about the universe.

The process of selecting maximally adequate frame for real situation from the entire arsenal of frames existing in the human memory is the basis for human`s adequate perception of reality. Frame is "adjusted" to the reality if it is integrated into a broader frame.

### Chapter II. Lexical-Semantic and Conceptual Spaces

Composition of the constructed lexical-semantic field of "crime" is presented by phraseological units.

Graphically depiction of the frame of "crime" is possible in the shape of network consisting of slots and links existing between them.

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Each slot represents a certain concept, which can be specified by means of bringing it into compliance with the concrete situation of the given frame.

The result of defining the frame of “crime” is developing some “orientational generalizations”.

Thinking model based on integrative and explanatory principles is molded by means of the mentioned “orientational generalizations”.

### Chapter III. Forms of Crime and Associative Space of the Concept of "Crime"

Analysis of the associative space revealed the following regularities:

1. Associative space of the concepts of “crime and punishment” consists of the following slots: a. Crime; b. Punishment; c. Justice; d. Law.
2. Each slot is double-leveled - comprises segments of upper and lower levels;

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3. The segment of upper level is considered to be the interpreter of the essence of the phenomenon and gives answers to the following questions: a. what is crime? b. What is punishment?

Naturally, interpretation is valid only within specific time and space.

The segment of lower level includes the following specifications: 1. Crime category; 2. ``Topos`` - place (country); ``Chronos`` - time (epoch); 4. Axiological field - viewpoints, ideals, opinions, principles; 5. The type of punishment; 6. ``Topos`` - place (country); 7. ``Chronos`` - time (epoch); 8. Axiological field.

### Conclusion

Any frame, regardless of its thematic definability, consists of several subsections, any frame represents a combination of interactive elements, subsections, in which the following types of relations are evidenced:

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1. Functional relation - each subsection performs some kind of function within the premises of a certain frame;
2. Informative relation - subsections exchange the information with each other.
3. External relation - some subsections interact with external frame (with the frame possessing different thematic definability).

Basic marks of the frame configuration are:

Volatility - transferring the construct from the existing condition to any desired condition;

Complexity - existence of various factors conditioning diversity of structuring perspectives.

In the work, frames are constructed by using a spiral model, which implies gradual expansion of space and basically relies on analysis and synthesis. The shape of each spiral serves formation of the fragment versions of the frame.

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Frame is a discrete dynamic system; Its relations belong to the model of fixed data. Data model can be defined as a system, which consists of the sets and relations existing among them.

The use of data processing relative model led us to a complex semantic problem, the problems of modeling semantics are implied. Their complexity is mainly determined by the complexity of the frame reconstruction (renewal) procedures, by way of verification of the validity of static and dynamic restrictions.

Restrictions reflect general, abstract qualities of data relations, more precisely, frame semantics, in other words, multiplicity of required, sufficient, and permissible set of data. This combination creates a static scheme of the data. Moving from one state to another, in other words, being subject to relative volatility, this combination describes a certain trajectory of the data in the model. Each subsequent condition

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may depend on its previous condition. Relations between these conditions are described by the dynamic limitations of integrity, which creates the so-called dynamic scheme of database.

On the basis of knowledge of integrity, functional relations being one of the most important parts of it, modeling of reality (subject area) is implemented. The data scheme, being the finite combination of the mentioned relations, is molded.

Frame is a conceptual model of organizing human memory. It's considered to be a needed abstract image for representation of stereotypical perception, in which the existing relations among the concepts are marked by pragmatics of external world.

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Combination of existing frame slots creates the basis for “understanding” the situation represented by the frame. “Understanding” is fulfilled by specifying terminals and by bringing them in compliance with existing condition of the real world.

Collective consciousness represents the most significant configurator of the semantic frame, which is considered in the work to be the slot of vital importance for functioning of semantic frame, while semantic frame is regarded as a composition of ideas, beliefs and feelings relevant to collective consciousness. Its validity is based on the general regularities identified as a result of analyzing relevant ideas, beliefs and feelings. From this point of view semantic frame can be considered to be an ideal determined by specific markers of time and space.



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The process of constructing semantic frame implies detailed analysis of the correlation of objective/subjective factors. The mentioned types of analysis makes the research of social determination of individual psychology possible.

Semantic frame can be considered to be a type of construct of “moral order”. Moral order is an order characterized by fragility, volatility, unexpected emptiness; It demands permanent renewal.

The process of molding semantic framenet can be considered to be a kind of form for “ritual interaction”, which implies the process of transforming individual knowledge and experience into collective knowledge and experience.

The research of the continuum of semantic frame implies analysis of “occurrences” and “interpretations” in order to identify general regularities. Regularities

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represent inter-subjective force of organizing elements of semantic frame. This is the very power that transforms individual plan of semantic frame into an over-individual one.

Validity of the continuum is determined by specificity of the frame rules relevant to the semantic frame possessing certain thematic definability. Oftentimes, substantial and ceremonial rules functioning within the premises of semantic frame emerge in the form of expectations.

The results of the thesis:

The results of the thesis were published in the scientific journal "Scripta Manent" and presented in May 2017 at the International Conference held at the University of Georgia.

The article deals with the problem of semantic frame.

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Semantic frame is based on the postulate of the dominance of knowledge types and values.

The article highlights the two approaches to the constructing of semantic frame: structural and objective approach. Attention was also focused on the structure of knowledge representation.

The issues related to knowledge pyramid, construction, decomposition, extensional, intensional were relevant to the research.

The topic also emphasized the possibility of depicting the diversity of the complete knowledge about the universe.

Publications and Conferences:

1. ``Semantic Frame - the Structure of Knowledge Representation`` Multilingual International Scientific Journal ``Scripta Manent`` N 1 (29) 2016.

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2. ``Defining Lingual Objectivators of Concepts, Multilingual International Scientific Magazine ``Scripta Manent``N 4 (36), 2017.
3. ``Structural Characteristics of Semantic Frame``The University of Georgia 7 th annual conference, the school of Arts and Humanities, 2015.
4. ``The Process of Constructing Semantic Frame``The University of Georgia 8 th annual conference, the school of Arts and Humanities, 2016.
5. ``On the problem of Segmenting Content-based Unit``. The University of Georgia. International Conference: ``Language, Culture and World View`` 21.09.1016.
6. "Dramaturgy of mental models". The University of Georgia 9 th annual conference, the school of Arts and Humanities, 26.05.2017.