

ABSTRACTS

COGNITIVE MODELS AND CONCEPTS

P. 7. *Gyngazova Lyudmila G.*, Tomsk State University. METAPHORICAL WORLD MODELING IN THE DISCOURSE OF THE LANGUAGE PERSONALITY OF A DIALECT SPEAKER. In the article the author describes metaphor as a cognitive phenomenon that reflects the mental pattern of perception and modelling of the reality. The subject of world modelling is the language personality of a traditional culture bearer.

The analysis of metaphorical units that function in individual discourses is aimed at interpreting the world image with cultural sets of peasant society.

The spheres of metaphorical modelling of the reality in the discourse of the language personality are people in their physical, emotional, intellectual and social existence, wildlife and inorganic world, space and time. Simultaneously, they are the sources of metaphor creation. The character of interaction between the source-sphere and the target-sphere is resourceful to design abstract model types: human → human, human → world, world → human, world → world.

The results of these models description lead to the conclusion that most recently a human being is both the subject and the object of metaphor creation. A human is the reference point in comprehending the diversity of the spatial-temporal continuum, other spheres are less important for him.

The conclusion of the article is that the world perception of the language personality is mythological, 'body-oriented', with the concrete prevailing over the abstract. The most developed reference spheres of metaphor functioning are given.

Keywords: language personality, *world picture, world modelling, metaphor.*

P. 7. *Katunin Dmitry A., Antonova Maria K.*, Tomsk State University. METAPHORICAL REPRESENTATION OF TIME AS WATER / LIQUID IN RUSSIAN LINGUISTIC PICTURE OF THE WORLD. The anthropocentric paradigm of modern linguistics at the new stage of development caused the necessity for researchers not only to record language facts as dependent on human activity, but also to learn the underlying mechanisms of mind, which form the base of language tools functioning. Within this paradigm, metaphor is considered as a mechanism that reflects one of the basic ways of human thinking, not as a result of reconsidering the word meaning. Thus, metaphor is interpreted as the main principle of world modelling; and metaphorisation mechanism is regarded as the leading interpretation principle for a set of linguo-cognitive phenomena.

In the article these ideas are applied to describe the model of time perception in Russian linguistic picture of the world (RLPW). The Russian language contains a broad stratum of metaphorical vocabulary that expresses predicative features of time; for time, among other abstract categories, is chiefly described metaphorically. So, analysing metaphorical nominations that characterise certain aspects of time seems to be most efficient for describing time as an element of RLWP.

Time in RLPW can metaphorically be represented by various source images: human beings (*время идёт, бежит – 'time goes, runs'*), animals (*время летит, ползёт – 'time flies, crawls'*), wealth (*потратить, израсходовать время – 'waste, spend time'*), etc. Water / liquid is another regular source sphere for time metaphors; its use reflects an immanent feature of time – motion. Time can be characterised as liquid (*время течёт, льётся – 'time flows, pours'*) or as an object moving in water (*дни проплывают – 'days float'*).

Indirectly the source image of liquid can describe the end of a space of time (*время тает – 'time thaws'*). In such interpretation when time is compared with the liquid state of the matter, it means total lack of time for solving tasks; time is enough, if it is compared with the solid state of liquid.

Axiologically, the analysed combinations correspond to the general assessment principles of language models of time in RLPW. Slow motion of time means negative assessment of the situation, whereas fast suggests positive estimation. Expressions *река времени унесла / умчала ('river of time carried / whirled away')* are axiologically monosemantic, for they reflect the destructive changes of the environment, hence being elements of the relevant metaphorical models of time in RLPW. Metaphors that describe the end of a space of time (*время тает, испаряется – 'time thaws, evaporates'*) express negative assessment of events due to the lack of time, which is also a dominant of quantitative models of time (*тратить, расходовать время – 'waste, spend time'*).

Keywords: cognitive linguistics, structural semantics, metaphor, world modelling, time, water

P. 17. *Novitskaya Irina V.*, Tomsk State University. PHILOSOPHIC INTERPRETATION OF ABSTRACTEDNESS AS A BASIS FOR LINGUISTIC ANALYSIS OF ABSTRACT NOUNS AND NOMINALISATIONS IN THE OLD GERMANIC LANGUAGES. The object of research in the present article is a specific thematic group of lexical units – nouns that are traditionally defined as abstract ones in linguistics. A complex analysis of the old Germanic nouns classified, in terms of modern perception, as abstract ones requires, among other things, cognitive interpretation of their derivational types and the whole range of derivational means so it highlighted the urgency to work out some reliable criteria to be used to sort those nouns out. Thus, the mission is doomed without considering the concepts of “abstract” and “concrete” in philosophy.

Abstract nouns representing one of the subsystems of the lexicon are organized in a hierarchy in which all lexical units are sorted out in accordance with some patterns of cognitive processing and categorizing. The philosophic theory of levels and types of abstractedness explains the existence of the polar classes of nouns – abstract and concrete, as well as of the two types of images – “primary, sensory, rational images” and “secondary mental images” on the other hand. Unlike the concrete nouns that have some primary images in the lexical system, the abstract nouns bear the secondary images that help reflect the content of a concept from the mental sphere in an indirect and associative way. However, the salient feature of abstract nouns is their “thing connotation” which enables abstract nouns to acquire some perceptual characteristics.

The hierarchical approach to the lexicon allows singling out not only the polar types of nouns (abstract and concrete) but also some units of the intermediate level. The latter are termed nominalizations in linguistics and are argued to have some common features with both of the above-mentioned subclasses.

In the old Germanic languages the lexical-grammatical class of undifferentiated abstract nouns and nominalizations consists of lexical units that denote concepts from the mental sphere alone, that do not have their own primary images but that are provided with some perceptual images due to the “thing connotation”. In the old Germanic languages an abstract notion is realized by means of the inner form of a word that is derivationally marked and shaped. Thus, primary selection of abstract nouns on the basis of their semantics should be mandatory accompanied by a subsequent analysis of their derivational design and paradigmatic attachment.

Keywords: abstraction, abstract nouns, concrete nouns, old Germanic abstract nouns.

P. 26. *Rezanova Zoya I.*, Tomsk State University. METAPHORICAL SEGMENT OF RUSSIAN LINGUISTIC PICTURE OF THE WORLD: IDEAS, METHODS, SOLUTIONS. The author discusses theoretical approaches, methodology of researching the metaphorical segment of Russian linguistic picture of the world developed by the research group “Metaphorical segment of Russian linguistic picture of the world”. This group consists of professors, associate professors, and postgraduate students of the Department of General, Slavic-Russian Linguistics and Classical Philology of Tomsk State University and other Tomsk universities.

The methodological solutions, procedures of analysis of linguistic, text and discourse pictures of the world done on the theoretical base of cognitive-linguistic school of contemporary linguistics are grounded. This school interprets language not as an isolated system but as an open system whose features are defined by general processes of conceptualisation connected with different spheres of human knowledge.

The author reveals modifications of research programmes, which are differentiated by the object sphere and the purpose. Metaphorical segments of linguistic (literary, dialect)/ text/ discourse pictures of the world and the analysis of metaphorical modelling through the primary / metaphorical meaning are considered to be basic positions.

Metaphor is represented as the basic linguo-cognitive mechanism of formation and linguistic expression of abstract categories of time, thinking, emotions, feelings, social relations, the source of their cognitive modelling being perceptive and motional experience of the person. The author presents basic results of identifying cognitive models of perception and interpretation of categories of time, space, sound, movement in physical space, human emotions and feelings in figurative linguistic nominations.

The article is specifically focused on two aspects: firstly, the role of metaphorical modelling of the world in text and discourse activities, secondly, the correlation of basic linguistic and key text metaphorical models.

Keywords: metaphor, linguistic picture of the world, world modelling, metaphorical model, key text metaphor, key discourse metaphor

P. 44. *Ulanovich Oksana I.*, M. Tank Belarusian State Pedagogical University. LANGUAGE AWARENESS: PECULIARITIES OF STRUCTURE IN BILINGUALISM. Complex study of the human is impossible without considering the problems of language and speech as key elements, which determine psychological and social development of the person. Discovering the peculiarities of individual representation and functioning of linguistic knowledge in the speaker's mind is the key to explaining success / failure of speech communication, and, in case of different language systems interconnection in person's mind, of cross-cultural communication.

Learning language units (words, phrases, grammatical structures, syntactic models) is followed by the formation of individual psychological filling of these units in the learner's mind. The contents of psychological filling of a language unit are determined by the context of its functioning and the context in which it was learned by the speaker: emotional, figurative, semantic, cultural and historical. Verbal units together with their psychological representations in human's mind become basic sense structures of verbal thinking and form verbal-sense construct of human's consciousness. The latter represents the declarative verbal knowledge block of human's mind, which determines thinking, attitude, and communication. The procedural block of human's mind includes programs of how to use declarative data for speech production and speech reception.

It would be a mistake to consider that in case of bilingualism and multilingualism the second, third, etc. language is learned and mastered by means of integration of new language units into the verbal-sense construct, already formed on the native language basis, through semantic comparison of words, forms, structures of different languages. Foreign language learning presupposes formation of autonomous mental block of declarative verbal knowledge through mental representation of verbal units and their integration with contextual emotions and images, which constitute psychological filling of verbal units in human's mind.

Bilingual people, learning a foreign language in an artificial language atmosphere, develop subordinate functioning of foreign language mechanisms. It is manifested in inner verbal actions realization through the medium of the native language, which controls all the processes of foreign speech producing and understanding. Coordinate foreign language knowing implies formation in human's mind of an autonomous system of operation procedures, which constitute the work of foreign language mechanism. The latter in its turn composes a separately functioning procedural block, which provides foreign language communication.

Keywords: verbal-sense construct of mind, sense unit, declarative verbal data, speech mechanism.

COGNITION AND DISCOURSES

P. 52. *Zyubin Vladimir Ye.* Novosibirsk State University. HUMAN-ORIENTED PROGRAMMING. The present work is based on the presupposition that programming is a branch of human activity, where human beings create programs exclusively for human beings and use computers for it at several stages of the process only. So, while programming we need to use not only computer science approaches, but also knowledge obtained within psychology.

Historically, computer science has its roots in mathematics, so it is considered as the so-called *exact science*. Students specializing in computer science have no courses on the fundamentals of psychology yet. On the other hand, psychology is rather considered as a part of the humanities and is not interested in the domain of strict formalisms. So, interdisciplinary researches on psychology problems in programming will help us to improve software lifecycle processes, especially in the field of formal programming languages, and modelling process as the main part of program development as well.

The known researches on structure of human memory, which have been conducted by G.A. Miller, K.A. Ericsson, W. Kintsch, T.R. Green, B. Shneiderman, show human limits for processing information.

Human memory consists of two main parts (although they have no strict boundary and are not connected with real objects or some parts of the human brain, but rather reflect the conceptual level). These parts are *short-term memory* and *long-term memory*. The short-term memory demands no effort to load, but limits operation time and quantity of the operands. The long-term memory has no such limit but it demands hard efforts to load information. These memories can effectively operate jointly only. So, the main idea of this research is to consider any modelling process as a predetermined issue of the limits on human capacity for processing information about a complex object.

There are three ways to increase the complexity level: education process, metaphors use, and the original problem decomposition into loosely connected parts. The last can be obtained by either re-

moving inessential details, or extracting semantically encapsulated entities, or dividing into loosely connected aspects, or hierarchy construction.

So, we can formulate information complexity hypothesis based on the above-mentioned remarks:

- Mental operations, which assume concurrent manipulation with a large number of semantic entities, are impossible for human being;
- Dynamic mental operations with a complex information entity demand a model building, which must guarantee compliance with Miller's law;
- Pragmatics characteristics of both the constructed model and the model description language we use ensue from interaction of the end user's short-term and long-term memories.

This set of domain free principles has been called information complexity hypothesis (ICH).

ICH creates compact and powerful conceptual framework for considering programming language features and other pragmatics issues.

Brief overview of such problems as graphic versus textual programming languages problem and the challenges within the aspect oriented programming show that the ICH principles are applicable at various stages of program lifecycle and new programming language design.

Keywords: human-oriented programming; information complexity hypothesis; pragmatics estimation

P. 60. *Mitina Olga V., Yevdokimenko Alexandr S.*, Lomonosov Moscow State University, Russian Scientific Centre "Kurchatovsky Institute". FORMAL METHODS OF TEXT RESEARCH: TECHNICAL DOCUMENTS ANALYSIS APPLICATION. We consider text analysis as a method when a researcher does not measure or observe anything, but analyses results of subject's activity (diary, products of professional activity or studying). Among all the variety of methods related to text analysis we should single out content analysis as possessing several important advantages that let solve diverse research problems. In this article content analysis is used as a method of documental texts research, it transfers text information into quantitative indices, which can be analysed statistically. Content analysis allows revealing implicit content of communication and social processes. The article describes the results of content analysis of foreign and analogical Russian technical documentation on human factor engineering. The goal of the study was to compare Russian and western approach to human factor engineering at nuclear power plants (NPP). Text analysis was conducted using Content Analyzer v 0.52 software. As a result, the analysis exposed principal difference in the approaches to human factor engineering: orientation on tasks' fulfilling in western documents and orientation on personal responsibility in Russian documents. These results, along with the analysis of style of NPP management and functioning in Russia, show that western tradition of human factor engineering can be applied restrictedly in our country.

Keywords: quantitative analysis, content analysis, human factor, nuclear power plant documents.

P. 70. *Mishankina Natalya A.*, Tomsk State University. SCIENTIFIC COMMUNICATION IN LINGUO-COGNITIVE MODELLING. This article describes the role of metaphorical modelling in scientific communication. The phenomenon of communication is understood as a condition for development and existence of human mind. Scientific communication creates a holistic scientific discourse, which differs from other types of discourses in a range of parameters. However, scientific discourse is formed on the basis of universal gnoseological mechanisms, the fundamental of which is analogy – the foundation of metaphorical conceptualisation. The role of metaphor in scientific knowledge is one of the most pressing issues to deal with in a number of fields. Metaphor in this case is understood as a concept, a cognitive mechanism that finds expression in linguistic statements. The author notes the heuristic force of scientific metaphors, associated with the peculiar properties of metaphorical modelling: synthesis of the rational and the irrational, coding of large volumes of information into minimum text units, interactional nature. Scientific metaphor is divided into two subtypes according to its functional role: transmitting (used in educational communication) and basic (forming mental space of science) metaphors. The basic metaphor is created according to the general language models and simultaneously it forms the mental space of science on different levels: special simulation of science activities, modelling of scientific phenomena, modelling of the object of a scientific description in a single scientific field and in interdiscourse space. Regardless of how a scientific metaphorical model is qualified by the user – as the transmitting or as the base one – in the process of research and understanding of the scientific object, either of the metaphorical models are inherently communicative, as it is used for transformation and presentation of the sub-

jective thinking representation in the form of the objective elements of the sign system that unite the mind of the cogniser with some objective knowledge common to the entire speaking community.

Keywords: scientific communication, scientific discourse, metaphorical model, scientific metaphor, mental modelling of science space.

P. 80. *Tubalova Inna V.*, Tomsk State University. OFFICIAL-BUSINESS DISCOURSE AS PROTOTEXT ENVIRONMENT OF EVERYDAY DIALECT TEXT. In the article the specific of official-business discourse polyphonic inclusions functioning in everyday dialect text as a sphere of realisation of "external", socially specified discourse practice of the native dialect speaker is considered.

The chosen approach is based on a theoretical proposition about the parity importance of horizontal and vertical expansion of the speech stream, i.e. that the native language speaker's speech stream is formed not only (and not so much) as a result of linear designing of language system units, but also as a polyquotation phenomenon. Such an approach to the text's internal structure analysis allows considering it as a polyphonic structure – a way of text information organisation when its production and perception in the communicative process is carried out by referring to the semantic content of sets of speech fragments, which were created and semantically loaded before their concrete-situational realisation of the text. Thus, the speech stream possesses the property of non-linearity.

The polyphonic inclusion is a unit of this structure. It is a speech fragment loaded with some "before-the-text" information, "inherent" of previous texts, irrespective of the realised / unrealised nature of its precedent character both by the author of the given text and by its addressee.

The text space of official-business discourse in most cases is defined on the basis of its realisation in the form of official functional style.

The research reveals the factors that influence the content of cognitive mechanisms and strategic decisions on speech use of polyphonic inclusions of official-business discourse in the dialect text: (1) the social-cultural environment of personal formation of authors of the result text; (2) specifically-discursive conditions of its fixing; (3) the specificity of the prototext source with its basic regulative function. Thus, reference to official-business discourse is carried out to create the effect of reliability of narration, to transfer the events of official-business character, to assess a situation from the point of official norm. The considered polyphonic inclusions are used in the dialect text within the strategy of reproduction of the "correct" way of speaking about a subject and the strategy of making everyday narration official.

As a result, the conclusion is made that polyphonic inclusions of official-business discourse realise the model of "correct", "harmonious" social existence in everyday result text.

Keywords: official-business discourse, everyday discourse, cognitive model, polyphonic inclusion.

P. 91. *Emer Yulia A.*, Tomsk State University. FOLKLORE CONCEPT: GENRE-DISCURSIVE ASPECT. This article describes folk concept as a discursive realization of the culture concept and shows its discursive and genre specified features.

The author of the article understands concept as a cognitive unit that represents integral knowledge (with no firm structures) about extralinguistic phenomena valuable and significant for culture/subculture/individual. Communicative, discursive and genre requirements make the concept show its different features, emphasize certain components.

Folklore concept (as a variation of the culture concept) differs from the concept of other discourses in the specific content rooted in the collective sets of folk society. Reflecting collective values, folklore discourse in the form of art presents general view on stereotype everyday and existence situations, with attention focused on significant events.

Folklore concept is first of all different from other discourse-oriented variants of the culture concept in the content stability. With collective knowledge, axiological ethnic sets, folklore concept is the link, the foundation of national picture of the world. However, in spite of its inherent stability, folklore concept possesses chronologically and genre determined dynamic components. Its changes are connected with revision of social and, consequently, folklore consciousness, system of values of the society. Folklore consciousness change shows in the transformation of the concept's conceptual content, in emphasising and forming new concepts that were previously atypical for folklore discourse.

Every folklore concept realizes in a peculiar way in a folklore genre, as its realization is determined not only by discursive, but also by genre requirements. The same concept realizes its different elements in different genres. To prove this thesis the analysis of the frame “death” (concept “war”) in songs and chastooshkas is given in the article. It is not the situation of death itself that is in the focus of attention in these genres, but the situation of living through death by different social groups (mother, beloved, commander, soldiers). The concept “war” in folklore songs is a social and personal event, where interpersonal relations, standards of behaviour in extreme situations are significant.

Keywords: concept, frame, genre, folklore.