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**ON THE PROBLEM OF CATEGORIZATION OF ARTIFACTS  
IN THE RUSSIAN LINGUISTIC WORLDVIEW**

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*Abstract*

The article emphasizes the necessity of studying the categories of linguistic consciousness by taking into consideration the three-component structure of the categorial system put forward by philosophers (instead of the previously proposed two-component model): the essence of the world, the essence of consciousness and the essence of the relationship between consciousness and matter. In this regard, special emphasis is given to artifact categories which represent such linguo-mental phenomena, which are created directly by human consciousness under the influence of continuously emerging knowledge, and which organize the world of objects surrounding man in accordance with these categories created by consciousness. For example, the linguo-mental phenomenon of TOY gives us an opportunity to analyze the substantive, structural and functional specificity of some artifact categories. The word association experiment held among native Russian speakers aged from 4 to 65, reveals the cognitive-propositional structure of the categories under study. By introducing the concept of framework categories, preserving the general characteristics but changing their specific content and the reference area under the influence of subjective factors (such as age, psychological factors, etc.) it is possible to show the essence, specificity of the content structure, and the dynamic nature of framework categories.

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**Keywords:** Cognitive linguistics, categorization, artifact categories.



## 1. Introduction

The study of categorization of reality in linguistic consciousness is one of the urgent issues of modern linguo-cognitology – the science about cognitive abilities of the human being (see the works of such scholars as: A. Arppe1, D. Divjak, C.J. Fillmore, S. Kalyan, W. Labov, G. Lakoff, G. Lepper, B. B. Lloyd, N. Mashal, C. B. Mervis, R. Pustet, T. Regier, E. Rosch, J. R. Taylor, A. Wierzbicka; N. D. Arutyunova, A. P. Babushkin, A. N. Baranov, N. N. Boldyrev, O. O. Boriskina, V. A. Vinogradov, V. Z. Dem'yankov, D. O. Dobrovol'skiy, A. A. Kibrik, A. A. Kretov, E. S. Kubryakova, Z. D. Popova, L. A. Sergeeva, Yu. S. Stepanov, I. A. Sternin, R. M. Frumkina, A. P. Chudinov, A. L. Sharandin, A. S. Shcherbak, etc.). Cognitive exploration of the structure and content of linguo-cognitive categories has a wide practical significance, first of all, in the field of lexicography: it facilitates specification of the volume of the semantic structure of the lexical units existing in the minds of the language users, compilation of ideographical dictionaries used in practical foreign languages teaching, etc.

## 2. Problem Statement

Modern philosophers among others emphasize the necessity to study the categories of human consciousness. V.V. Orlov stresses that modern Russian philosophy, having departed from the study of categorial systems, has been developing in the wrong direction for over several decades. G.W.F. Hegel (and later F. Engels) identified the pivotal issue of philosophy as the interrelationship between two spheres: ontology (being) and gnoseology (cognition of the being by human consciousness), which determined the subsequent research interest in ontological (natural) and psychological categories. Nevertheless, the modern philosophers insist on inclusion of the third level into this system. To their mind, the basic question of philosophy should include three components: the essence of the world, the essence of consciousness and the essence of the relationship between consciousness and matter (Orlov, 2011, pp. 184 – 197; 8). This philosophical approach to the study of categorial systems makes it possible to include into the field of research ARTIFACT CATEGORIES which represent such linguo-mental phenomena, which are created directly by human consciousness under the influence of continuously emerging knowledge, and which organize the world of objects surrounding man in accordance with these categories created by consciousness (Dziuba, 2012; 2015a; 2015b; 2015c; 2016). Thus, we should agree with the following conclusion: as long as categories are linguo-mental phenomena (abstract thinking operates, among other things, verbal means of expression, and the units of cognition are fixed in language), the study of categorization processes should unite the efforts of philosophers, psychologists and linguists.

## 3. Research Questions

The range of research questions includes analysis of the factors and mechanisms of formation of linguo-cognitive categories, investigation of the boundaries and semantic structure of the categories of linguistic consciousness and evaluation of the significance of the categorization theory achievements for applied spheres of scientific knowledge.

#### 4. Purpose of the Study

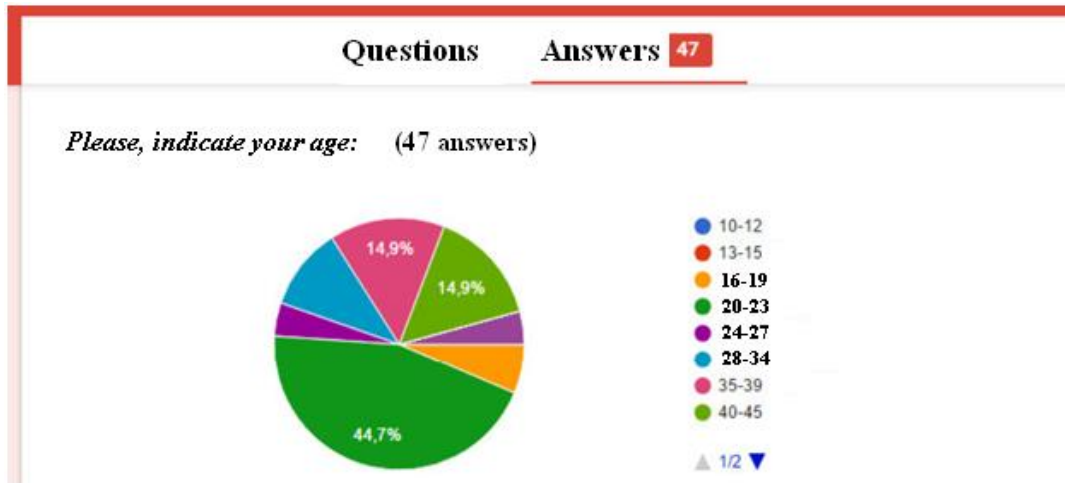
The formation of the categories of the human mental world is subject to influence of a number of factors: type of worldview (scientific, professional, or naïve worldview), specificity of the subject and object of cognition, categorization features significant for a certain sphere of knowledge, intralinguistic nomination laws, etc. Quite naturally, the process of categorization is to a large extent subconscious; the categories are formed in human mind spontaneously under the influence of many subjective parameters: individual experience of the subject of cognition, their background knowledge, social and professional environment, place of residence, mass-cultural information space in which the person lives, gender, age, sphere of interests, and other psycho-physiological factors. The category of TOYS is illustrative in this sense as it might be called a **FRAMEWORK CATEGORY preserving the general features, but changing its concrete content and sphere of reference depending on the influence of certain subjective factors**. Thus, the aim of the given research is to reveal the specificity and regularities of formation of framework categories in the minds of the Russian language speakers on the example of the linguo-cognitive category TOYS.

#### 5. Research Methods

The theoretical-methodological foundations of the work are determined by the fact that taking into account the abovementioned philosophical triad and using the psycholinguistic methods (specifically, the word association method; in more detail see: Deese, 1965; Leont'ev A. N., 1983; Leont'ev A. A., 2003; Luriya, 1979; Ushakova, 2000, etc.) and the method of categorial prototypical analysis (Berlin & Kay, 1969; Kay, 1999; Rosch, 1973, 1975, 1976, 1978, 1983) it becomes possible to draw the boundaries of linguo-cognitive categories and to define their actual content.

#### 6. Findings

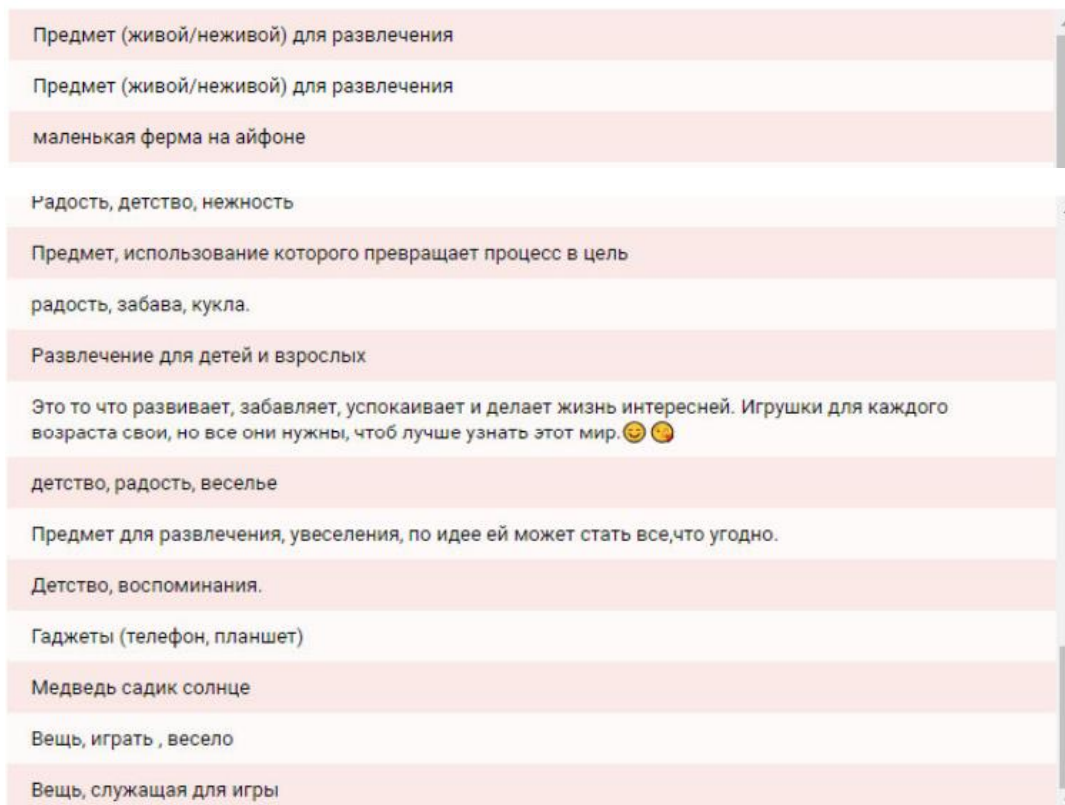
The content of the category TOYS may be revealed by the method of psycho-linguistic experiment which presupposes questionnaire of the Russian language speakers of various ages. To define the specificity of the category TOYS the respondents were offered two variants of the task. The first variant was for children between the ages of 4 and 6 years (the task ran as follows: *Draw the toys*). The second variant of the task was meant for the respondents from 6 to 65 years of age (the participants aged 10-45 years filled the questionnaire online, those under 6 and over 45 used paper forms); the task was formulated in the following way: *Complete the sentence "A toy (toys) is (are) --- "*). The total of 80 people participated in the experiment (e.g. see Screenshot 1, showing the percentage of people aged 10-45 divided into various age groups who answered the questions online; there were 47 people out of the total of 80 in this age range).



**Figure 1.** Percentage of participants of online questionnaire according to age groups (within the range of 10-45 years)

The following answers were obtained in the course of the questionnaire (see Figure 2).

Игрушка - ... (47 ответов)



**Figure 2.** Samples of questionnaire answers

The results of the experiment can be presented in the following way (the answers are given in descending order: from the more frequent to the less frequent ones): 4-6 years of age (*animal toys (pony, bear, dog, etc.), war games, cartoons, doll, princess, mermaid, toy car, cat (as a domestic animal), robot, transformer, superheroes*); 6-10 years of age (*computer games, Lego, animal toys (bear, hair, cat, dog, little horse, etc.), war games, spinners, cartoons, doll, princess, mermaid, toy car, transformer, robot, superheroes*); 10-12 years of age (*computer games (“Battle City”, “Counter-Strike”, “Dota”, Dress Up Games for Girls), telephone with applications, toy car, doll, Lego constructor, spinners*); 13-15 years of age (*telephone with applications, entertainment for children and adults, need, joy, kind of entertainment, fooling around, carelessness, soft toys, table and active games*); 16-18 years of age (*telephone with applications; teddy bear; a person who can be manipulated; radio-controlled car; something to occupy the child with; thing, childhood*); 19-23 years of age (*telephone with applications; an object for entertainment (more often for children); an episode/symbol of childhood, doll, something meant for entertainment: doll, ball, heart of a lover, a means of world cognition; man/woman; merriment, parents ...*); 24-27 years of age (*telephone with applications, computer, an object (animate/inanimate) to play with; computer program designed for entertainment, causing excitement, fear, pleasure; a means to imagine new reality or enact the existing one*); 28-34 years of age (*telephone with applications, computer; dolls with which children/daughters play; a distraction; an object which is manipulated by children for entertainment and education*); 35-39 years of life (*telephone with applications, computer, gadgets, tablet; daughters’ dolls; childhood, friends, entertainment, fooling around, recreation; something that pleases the child, entertains and develops him*); 40-45 years of age (*telephone with applications, computer, gadgets, tablet; doll, game, hobby, good home appliances (machine, dough mixer, combine), recreation, childhood, entertainment, pleasure*); 46-55 years of age (*telephone with applications, teddy bear, something that entertains, childhood, method of development*); 56-60 years of age (*telephone with applications, childhood, tenderness, joy; “it is something that develops, enjoys, calms and makes life more interesting”*); 60-65 years of age (*computer, gadgets, telephone; dolls, toy cars, vegetable garden, crosswords, grandchildren*).

It was found in the course of the experiment results processing that the category TOYS is unlimited in its reference potential. Practically any object of the surrounding world (real or imaginary) can function as a toy for a person; the boundaries of object reference are determined by age-related features of the speakers. Studying the prototypical structure of the category TOY, A. Wierzbicka notes that “*ball and doll* are among the “central members” of the category ‘toy’, just as *robin and sparrow* are among the “peripheral members” of the category *bird*. Consequently, just as one cannot say whether chickens and ducks (and bats) are birds or not-birds, one cannot say whether swings and skates are toys or not-toys. All one can say is that they are toys to a certain degree (less than balls or dolls)” (Wierzbicka, 1996). The questionnaire results show that the doll remains to be one of the “best” samples of the category TOYS for the age groups of children only; the ball is not found among the answers at all. The sample GADGETS (telephone, computer, table, computer game, etc.) not identified before, turns out to be the most popular kind of toy for all age groups with the exception of the youngest one (4-6 years of age). It becomes the central member, which is closest to the prototype of the given category.

## 7. Conclusion

Our work has led us to conclude that there are framework categories in linguistic consciousness the structure of which is formed on the basis of the significant features of categorization (*herein*: an object for entertainment, recreation, pleasant pastime, development and/or the action of entertainment itself) and is changed according to the principle of kaleidoscope (i.e. the “best” and “worst” members can not only move along the scale “central – peripheral” members in the structure of the category in the mind of language speakers of various ages). What is more, framework categories can change their content altogether. This change is substantiated by various factors: objective (for example, the impact of socio-technological progress) and subjective (for example, the influence of age, gender and other individual and/or socio-cultural features of the subjects of cognition). The “framework” nature and the dynamic character are the most specific features of artifact categories forming in the consciousness of language speakers.

The data obtained about the boundaries and members of the category TOYS may be used in applied linguistics (for compiling ideographical dictionaries), in linguo-didactics (for defining the specificity of teaching the vocabulary of a foreign language) and even in commerce (for organizing sales of goods).

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