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IDENTIFYING AND DESCRIBING PSYCHOLINGUISTIC MEANINGS OF TOPONYMS (OUTCOMES OF PSYCHOLINGUISTIC EXPERIMENTS)

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Abstract

The paper reveals ways to define and describe the psycholinguistic meanings of lexical units (on the example of the toponym “Dagestan”). Psycholinguistic meaning is one of the types of values along with such a traditional kind as lexicographic meaning. The lexicographic meaning consists of a small set of logically meaningful (essential) features that reflect the essence of the described phenomenon. Lexicographic meaning is presented in classical explanatory dictionaries. It is formulated on the basis of the reductionism principle (minimization of features included in the meaning). Psycholinguistic meaning is a meaning that actually functions in the minds of native speakers. This kind of meaning is presented in dictionaries of a new type – psycholinguistic dictionaries. Psycholinguistic meaning is revealed by various methods. An effective method for identifying and describing psycholinguistic meanings is a psycholinguistic experiment, in particular, an associative experiment that involves working with native speakers. Association experiments are carried out by representatives of Russian Voronezh Theoretical and Linguistic School on the territory of the Russian Federation. The outcomes of the semantic interpretation of associative reactions to the stimulus “Dagestan”, obtained during the experiments, are presented in the article. The toponym associative fields are described. The semantic components of the toponym are revealed. The psycholinguistic meaning of the toponym “Dagestan” is formulated in two regional variants. A comparative analysis of the values is carried out according to the scale of similarities and differences used by representatives of Russian Voronezh Theoretical and Linguistic School.

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Keywords: Associative field, associative experiment, psycholinguistic meaning, toponym

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1. Introduction

The anthropometric approach to the study of linguistic phenomena is becoming crucial at the current stage of Russian linguistics evolution.

The term "linguistic consciousness" is actively applied by domestic linguists in the framework of the anthropocentric approach.

The concept definition of linguistic consciousness as a set of mental mechanisms for the generation and interpretation of speech acts, as well as the storage of language in the mind, is accepted in Russian Voronezh Theoretical and Linguistic School.

Linguistic consciousness is a multiplicity of mental mechanisms for ensuring the speech activity process.

It is possible to build both simple and complex models of linguistic consciousness.

A simple model of linguistic consciousness is an associative field of lexical units, which is an ordered set of verbal reactions (R), received to verbal stimuli (S) in the course of a linguistic associative experiment and arranged in associative dictionary entries in descending the frequency order (Rn).

A complex model of linguistic consciousness is the psycholinguistic meaning of lexical units as:

> An ordered unity of all semantic components that actualize an isolated word in the minds of native speakers, in a unity of more and less vivid, nuclear and peripheral, all of which are really connected with a given sound shell (lexeme) (Sternin, 2011, p. 8).

The system method, which implies the study of linguistic phenomena within the language system, is used in compiling dictionaries (within the established paradigms).

The result of such work is the formulation of lexicographic meanings of words, compiled on the basis of essential semantic components reflecting the main content.

The psycholinguistic method, which allows giving a more voluminous (complex) description of the semantics of lexical units (considering additional, non-essential semantic components) and obtaining psychologically relevant meanings of lexical units (Leontiev, 1969) – psycholinguistic meanings, is an alternative to the system method.

A psycholinguistic meaning is a meaning that is represented in the minds of native speakers (as opposed to the lexicographic meaning represented in dictionaries).

2. Problem Statement

The system method for the study of the language semantics does not allow us to identify many semantic components and meanings that are relevant for native speakers.

The psycholinguistic description of semantics admits revealing numerous semantic components (both denotative and connotative) that are not given in dictionaries, but are relevant to native speakers to one degree or another.

Thus, the psycholinguistic meaning presents the content of words as some kind of psychological reality.

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The discovery of psycholinguistic meaning contributes to the solution of one of the most crucial methodological problems of lexicography – methods and ways of complex interpretation of the lexical unit's semantics, considering the mental factor, that is, the language analysis in its close connection with a person thinking, and the experience of his spiritual and practical activities.

The identification and description of psycholinguistic meanings involves an appeal to the linguistic consciousness of native speakers.

Experimental research methods – psycholinguistic experiments are often applied to reveal psycholinguistic meanings (Khlopova, 2018; Makhaev, Selmurzaeva et al., 2019; Tall, 2011; Tarasenko & Krasnoperova, 2018).

3. Research Questions

The research question is the psycholinguistic meaning.

4. Purpose of the Study

The purpose of the paper is to reveal ways for identifying and describing psycholinguistic meanings (based on the outcomes of psycholinguistic experiments).

5. Research Methods

Experimental research methods (Makhaev, Sternin et al., 2019) – psycholinguistic experiments are used in order to most adequately and fully represent the content and structure of psycholinguistic meaning in the semantic components unity of the core and periphery.

The psycholinguistic experiment allows reconstructing various connections of linguistic units in the mind and reveal the nature of their interaction in diverse processes of comprehending, storing and generating speech works (Sternin, 2002; Sternin, 2011).

Students of Grozny (Grozny subjects) and Voronezh (Voronezh subjects) universities of different courses and specialties – 300 and 350 subjects, respectively, took part in our experiments.

The experiments were carried out in lecture halls of universities in writing.

The subjects gained forms with three experimental tasks in each one.

The first task assumed the answer with the first word that came to mind after reading one or another stimulus word (according to the method of free associations). A total of 10 stimulus words were proposed, namely, toponyms ("Vladikavkaz", "Voronezh", "Volgograd", "Dagestan", "Derbent", "Ingushetia", and etc.), placed in alphabetical order in the form.

The list of stimulus words was formed by random sampling.

The second task assumed the answer to the question – "What are the known (famous) geographical objects designated by these stimulus words?", and the third task – the answer to the question "Where are they located?"

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The method of directed associative experiment with ongoing response (the number of reactions was not limited, in contrast to the first task, in which only first reactions were processed) was used in the second and third tasks.

The task completion time was not limited.

The briefing of the participants in the experiment included an explanation of the upcoming experiment goals, as well as the particular actions required from every subject.

In most cases, the subjects completed filling out the forms within 10-15 minutes from the briefing moment.

There was only one criterion for the correct performance of tasks – any verbal reaction to each stimulus in accordance with the formulated tasks.

An example of an incorrectly completed task is, for example, the reactions “Republic of Ingushetia”, “I’m also interested”, “unknown” to the stimulus “Ingushetia” in the third task. Such reactions were not processed.

6. Findings

Associative fields were built for each toponym based on the results of the experiments.

The following data obtained for the “Dagestan” stimulus is given as a sample.

The structure of the dictionary entry: 1) stimulus (the word "Dagestan") 2) the number of subjects in the experiment – the number after the stimulus (for example, Dagestan 330) 3) associative reactions (for example, Priora) 4) the frequency of associative reactions – the number after the stimulus (for example, Priora – 19). 5) refusals – the absence of verbal reactions – the figure at the end of the paper (for example, “refusals – 38” means that 38 participants in the experiment did not complete the first task). 6) unprocessed reactions – reactions that were not processed for various reasons (for example, due to illegible handwriting).

The associative field of the toponym “Dagestan” according to the first task outcomes – the Voronezh subjects (associations with a frequency of at least 2 are given).

Dagestan – 330: Priora – 19; lezginka – 18; mountains – 17; Caucasus – 12; war – 9; Dagestanis – 6; fight; wrestlers; Makhachkala; dancing – 5; Islam; south – 4; wine; East; the Caucasians; corruption; moccasins; danger; republic; fruits; hachi; shawarma – 3; machine; Anzhi; beard; dagi; undersized Priora; cognac; not Russian; weapon; Priors; the country; shooting; dance; Tatarstan; Chechnya; chocks – 2; Refusals – 38

The associative field of the toponym “Dagestan” according to the second task outcomes – the Voronezh subjects (associations with a frequency of at least 2 are given).

Dagestan – 330. What is it famous for? Mountains – 11; Dagestanis – 8; corruption – 7; wrestlers; mountains, Priors – 4; Derbent; lezginka – 3; fight; guests; dagi; undersized Priors; cognac; people; Makhachkala; oil; Ramzan Kadyrov; residents – 2; Refusals – 152

Not processed reactions (illegible handwriting) – 8

The associative field of the toponym “Dagestan” according to the third task outcomes – the Voronezh subjects (associations with a frequency of at least 2 are given)

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Dagestan – 330. Where is it located? South – 35; Caucasus – 32; south of Russia – 23; North Caucasus – 16; in the mountains – 8; Russia – 6; RF – 5; next to Chechnya; North Caucasian Federal District; southern part of Russia – 3; East; near Chechnya; the Republic of Dagestan; near the Caspian Sea; Chechnya; south of the Russian Federation; Caucasus – 2; Refusals – 131

The associative field of the toponym "Dagestan" according to the first task outcomes – the Grozny subjects (associations with a frequency of at least 2 are given).

Dagestan – 330. the Caspian Sea 33, sea 32, Khabib 22, Khabib Nurmagomedov 16, Makhachkala 14, Khasavyurt 12, mountains 6, Khasav-Yurt 5, Caspian 5, Shamil 5, multinationality 4, wrestling 3, bazaar 3, Derbent 3, Green Bazaar 3, Izberbash 3, multinational 3, trash 3, Nurmagomedov 3, eagle 3, market 3, sport 3, accent 2, Avars 2, wrestlers 2, Muslim brothers 2, brothers 2, Manas 2, the Caspian Sea 2, Priora 2, neighbors 2, country of mountains 2, toning 2, dancing 2, central Juma – mosque 2, language 2; Refusals –23.

Not processed reactions – 1 (illegible handwriting).

The associative field of the toponym "Dagestan" according to the second task outcomes – the Grozny subjects (associations with a frequency of at least 2 are given).

Dagestan – What is it famous for? 300 – the Caspian Sea 30, the Caspian Sea 14, Kubachi gold 14, Khabib Nurmagomedov 12, sea 11, sea 9, imam Shamil 8, art crafts 6, folk crafts 5, fighters 4, mountains 4, Naryn-Kala 4, Khabib 4, fortress Naryn-Kala 3, nature 3, folk crafts 3, its art crafts 3 wrestling 2, mountains 2, Gimry tower 2, Derbent 2, gold 2, resorts 2, culture 2, Makhachkala 2, multinationality 2, places for rest 2 , nature 2, the first to convert to Islam 2, beautiful mountainous country 2, republic of mountains 2, market 2, athletes 2, athletes 2, traditions 2; Refusals – 79.

Not processed reactions – 4 (illegible handwriting).

The associative field of the toponym "Dagestan" according to the third task outcomes – the Grozny subjects (associations with a frequency of at least 2 are given).

Dagestan – Where is it located? 300 – In Russia 35, in the Caucasus 25, North Caucasus 22, in the North Caucasus 21, RF 12, in RF 10, in the eastern part of the Caucasus District 8, Russia 6, North Caucasus Federal District 6, in the North Caucasus Federal District 5, in the south of the European part of Russia 5, Caucasus 4, near Chechnya 4, North Caucasian Federal District 4, in Dagestan 3, in the south 3, in the very south of the Russian Federation 3, the Republic of Dagestan 3, the south of Russia 3, in Ingushetia 2, in Khasav-Yurt 2, in Makhachkala 2, in the eastern Caspian part of the North Caucasus 2, Derbent 2, near the Chechen Republic 2, in the North Caucasus 2, in the east of the North Caucasus 2, in the south of Russia 2, the southern Caucasus 2; Refusals – 76

The next stage was carried out by the method of semantic interpretation of associative fields; semantic components were identified; they formulated the definition of the toponym "Dagestan" in the Voronezh (Vrz) and Grozny (Grz) regional variants.

Semantic interpretation is a procedure for generalizing reactions-synonyms.

Various word forms are also generalized: for instance, the reactions "by sea" 11 and "sea" 9 are generalized as a semantic component "there is a sea", and their frequency is summarized (11+9=20).

All obtained semantic components are distributed according to the scale of field belonging: core and periphery (near, far, last) depending on their brightness indices, which are calculated by the formula

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r/R, where r is the number of actualizations of the semantic components, and R is the total number of subjects. For example, the brightness index of the semantic component “there are mountains” in Grz is 0.06 (18/300).

Semantic components with brightness indices of 0.12 and higher are included in the core of the field.

The near periphery includes semantic components with brightness indices from 0.04 to 0.11, the far periphery – from 0.02 to 0.03, and the last periphery – 0.01 and below.

The structure of the dictionary entry and the psycholinguistic definition rules are as follows:

1) left part of the dictionary entry is the heading word, the number of subjects in the experiment (number after the heading word) and linguistic consciousness (Vrz – Voronezh, Grz – Grozny).

2) right part of the dictionary entry is a definition compiled according to the following rule: the integral seme (“republic”) is given at the beginning, without fail, then the orientational semantic components expressing information about the object location (for example, “in Russia”), and then – all other semantic components, which are arranged in descending order of their brightness indices.

Definitions formulated from the semantic components of the core and the near periphery are given.

Dagestan 330 (Vrz) – “republic” 0.006, “in Russia” 0.07, “in the south of the country” 0.11, “in the Caucasus” 0.13, “in its northern part” 0.04, “there are mountains” 0.09, “they dance lezginka” 0.07, “they drive Lada Priora” 0.06, “Dagestanis live there” 0.04.

Dagestan 300 (Grz) – “republic” 0.01, “in Russia” 0.21, “in the south of the country” 0.06, “in the Caucasus” 0.09, “in its northern part” 0.16, “as part of the North Caucasian Federal District” 0.07, “there is the Caspian Sea” 0.43, “Nurmagomedov lives there” 0.19, “there are mountains” 0.06, “the city of Khasavyurt” 0.05, “the city of Makhachkala” 0.05, “known for Kubachi gold” 0.05, “imam Shamil” 0.04, “folk and artistic crafts” 0.04, “by wrestlers” 0.04.

Comparative analysis of regional variants of meanings includes identification of matching and non-matching semantic components.

Table 1. Matching semantic components

Vrz	Grz
republic 0.006	republic 0.01
in Russia 0.07	in Russia 0.21
in the south of the country 0.11	in the south of the country 0.06
in the Caucasus 0.13	in the Caucasus 0.09
in its northern part 0.04	in its northern part 0.16
there are mountains 0.09	there are mountains 0.06

Table 2. Non-matching semantic components

Vrz	Grz
they dance lezginka 0.07	as part of the North Caucasian Federal District 0.07
they drive Lada Priora 0.06	there is the Caspian Sea 0.43
Dagestanis live there 0.04	Nurmagomedov lives there 0.19
	the city of Khasavyurt 0.05
	the city of Makhachkala 0.05
	known for Kubachi gold 0.05
	imam Shamil 0.04

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Matching semantic components are compared according to the degree of difference between their brightness indices.

A comparative analysis is carried out according to the following scale of similarities/differences.

0 no differences

1– 4 % non-essential level

5–10 % low level

11–25 % noticeable level

26–50 % substantial level

51–70 % high level

0.71 % and above very high level

The given scale is used to assess the significance of similarities and differences in the regional variants semantics of the studied words.

Only two semantic components “in Russia” (0.07/0.21) and “in the northern part of the North Caucasus” (0.04/0.16) have a noticeable level of differences.

All other matching semantic components do not have any noticeable and significant differences in brightness.

It should also be noted that the Grozny meaning contains more semantic components than the Voronezh meaning.

Moreover, the Grozny meaning has more semantic components included in the core (4 versus 1 Voronezh).

Generally, the core of the “Grozny” meaning is more pronounced.

7. Conclusion

Therefore, the psycholinguistic meanings of toponyms were revealed based on the outcomes of psycholinguistic experiments.

Data on the toponym “Dagestan” were given in the article.

First, the associative fields of the toponym “Dagestan” (three fields), consisting of reactions ordered in descending shape, were constructed.

Then a semantic interpretation of associative fields was carried out, which resulted in the semantic components of the meaning and brightness of each of them and their distribution over the core and periphery.

The toponym psycholinguistic meanings were compiled from these semantic components in two regional variants.

The obtained data make it possible to comprehend the significance of certain semantic features for linguistic consciousness.

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