

Experimental Methods for Identifying Psycholinguistic Meanings of Toponyms

M. R. Makhaev^{1,2} ^a, Kh. E. Mamalova³ and B. R. Zakrailova³

¹Moscow International University, Nazran, Russia

²Kh. Ibragimov Complex Institute of the Russian Academy of Sciences, Grozny, Russia

³Chechen State University, Grozny, Russia

Keywords: Psycholinguistic Meaning, Semantics, Associative Experiment, Semantics.

Abstract: The article is devoted to the problem of semantics of lexical units. Presently in linguistics there are different points of view on the nature of the semantics of lexemes. This article states the discovery of a new kind of meaning of proper names – psycholinguistic. A differential empirical model of the description and lexicographic fixation of the psycholinguistic meaning of a proper name is proposed. This concept is based on the use of experimental methods for studying the meanings of words, which involves appealing to the consciousness of native speakers. We conducted psycholinguistic experiments in Grozny. The subjects are 300 students of various faculties, specialties. Experiments were conducted in lecture halls in written form. The method of free and directed associative experiment was used. The subjects performed two tasks: the first task was connected with free associations, and the second task was aimed at identifying knowledge. Various toponyms were used as stimulus material. The subjects filled out experimental forms on their own. According to the results of the experiments, numerous associative reactions were obtained. Then the semantic interpretation of associative reactions was carried out, which consists in understanding the reactions as linguistic representations of certain signs of denotation – semantic components.

1 INTRODUCTION

The anthropocentric paradigm is one of the central ones in modern linguistics

The origins of this paradigm go back to the works of V. von Humboldt, G. Steinthal, A. Potebnya et al.

V. von Humboldt noted that language is an intermediary (a special world) between the inner world of man, on the one hand, and the world of things, on the other.

Language acts as a means of forming his worldview and developing spiritual forces. Moreover, "a person becomes a person only through a language in which the creative primordial forces of a person, his deep capabilities, operate. Language is the unified spiritual energy of the people" (Humboldt, 1984).


E. Benveniste, emphasizing the indissoluble connection between man and language, noted that "in the world there is only a person with a language, a person speaking to another person, and language,

therefore, necessarily belongs to the very definition of a person" (Benveniste, 2002).

E. Benveniste, emphasizing the indissoluble connection between man and language, noted that "in the world there is only a person with a language, a person speaking to another person, and language, therefore, necessarily belongs to the very definition of a person" (Benveniste, 2002).

Developing Benveniste's ideas, Yu. Stepanov noted that "the language was created by the measure of a person, this scale is imprinted in the very organization of the language; in accordance with it, the language should be studied. Therefore, in its main trunk, linguistics will always be the science of language in man and of man in language" (Benveniste, 1974).

R. Pavelenis wrote that a person is not a passive referent of language utterances, only a simple native speaker; he is an active interpreter, a carrier of conceptual systems that allow him to learn and

 <https://orcid.org/0000-0003-4238-3663>

understand the language, the world, and also to communicate with other people (Pavelenis, 1983).

Lexicographers a priori proceed from the fact that the meaning of a word described in dictionaries exists in the language in the semantic volume that is presented in the dictionary definition, and in the same volume this lexeme is understood and used in speech.

However, psycholinguistic experiments allow us to identify numerous semantic components in the meanings of words that are not fixed in the definitions of explanatory dictionaries and are not revealed by the results of the analysis of usage contexts, but are relevant for native speakers.

The results of our psycholinguistic experiments (Makhaev, 2019; Makhaev, 2020) show that it is the experiment that gives access to the volumetric and deep semantics of lexical units.

The experimental description of the semantics of toponyms makes it possible to present their content as some kind of psychological reality, to identify such semantic components that are not fixed by other, traditional methods and techniques of semantic analysis.

The results of the experiments revealed a new kind of word meaning – a psycholinguistic meaning that exists in the language along with the traditional dictionary meaning (Sterin, 2011; Sterin, 2017).

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

2 MATERIALS AND METHODS

The general algorithm for identifying and analyzing psycholinguistic meanings consists of 4 main stages, which include:

- 1) conducting a psycholinguistic experiment with the words studied as stimuli;
- 2) processing of the received associative reactions and construction of associative fields of words;
- 3) semantic interpretation of associative fields and identification of semantic components (semes);
- 4) sememic attribution of semes and identification of psycholinguistic meanings
- 5) comparative analysis of psycholinguistic and dictionary meanings.

During 2019, psycholinguistic experiments were conducted in Grozny.

The experiments were conducted in the lecture halls of Grozny universities in writing.

The subjects are students of both sexes, students of various faculties and courses in the number of 300 people.

Stimulus material is a list of 10 toponyms arranged in experimental forms in alphabetical order.

Before starting the experiment, the subjects received experimental forms with two tasks.

In the first task, the subjects had to answer with the first word that comes to mind after reading the toponyms from the corresponding list.

The task was to identify the free associations that the subjects had with a particular city or republic.

In the second task, the subjects had to answer two questions: what are the cities or republics represented in the list known and famous for and where are they located.

Thus, the second task involved the identification of current knowledge about cities and republics in the subjects.

The experiment began after the experimenter introduced the subjects to the instruction.

The time of filling out the forms was not limited. In general, the experiment was completed within 15-20 minutes.

3 RESULTS AND DISCUSSION

According to the results of the experiments, numerous associative reactions to each word were obtained.

All associative reactions to each word were distributed in descending frequency within the corresponding associative dictionaries.

As an example, let's give an associative dictionary entry with the toponym "Vladikavkaz".

The structure of the dictionary entry is as follows: 1) stimulus (the word "Vladikavkaz") 2) the number of subjects in the experiment – the number after the stimulus (for example, Vladikavkaz 300) 3) associative reactions (for example, "mountains") 4) the frequency of associative reactions is the number after the stimulus (for example, "mountains 38"). 5) refusals – absence of verbal reactions – the figure at the end of the article (for example, "refusals – 33" means that 33 participants of the experiment did not complete the first task). 6) unprocessed reactions – reactions that have not been processed for various reasons (for example, due to unclear handwriting).

The associative field of the toponym "Vladikavkaz" based on the results of the first task.

Vladikavkaz 300 – mountain 38, Ossetia 23, Ossetian pies 22, the Caucasus 16, Beslan 14, hospital 14, Alanya, 11, fortress 5, medicine 5, Ossetians 4,

Vlad 3, Vladik 3, Ossete 3, water 2, city 2, medical university 2, landscape 2, Ossetian pie 2 pies 2, nature 2, family 2, neighbors 2, the capital of Ossetia 2, bus station 1, Adinyaev E. D. 1, airport, 1, Magas airport 1, large river 1, beard 1, former classmate 1, delicious food 1, Vladimir 1, Vladikavkaz 1, Vladik (abbreviated name) 1, to possess the Caucasus 3, water 2, Essentuki water 1, Georgian military highway 1, the doctors 1, this is unlikely to be 1, the city in the Caucasus 1, the city of military glory 4, city in the South of Russia 1, there are mountains 1, mount Elbrus 1, Gorsky SAU 1, the border with Georgia 1, road 1, friends 1, cultured people 1, culture 1, beautiful places 1, conflict 1, beautiful mosque 1, camps 1, Linda 1, Magas airport 1, the memorial of Glory 1, Marat Balaev 1, mineral water 1, medical academy 1, medical institute 1, Mukhtarov mosque 1, MiyaGi & Endshpil 1, our neighbors 1, Nalchik 1, uncertainty 1, father, 1, rest 1, Ossetian water 1, weather forecast 1, monument 1, 15 region 1, order 1, walk 1, train 1, pie 1, boring 1, neighbor's Republic 1, and neighbors in the Caucasus 1, S. S. Cherchesov 1, Stavropol 1, capital 1, North healing 1, North Ossetia 1, North Ossetia-Alania 1, capital of the Republic Alania, 1, shopping center "Capital" 1, custom 1, Targim 1, point 1, hackathon 1, good hospitals 1, good city 1, healing springs 1, cheburek 1, Chechnya 1, Elbrus (mountain) 1, South 1.

Refusals – 33

Unprocessed reactions – 2 (a word smeared with a corrector and an incomplete word – "oseti").

Associative field of the toponym "Vladikavkaz" based on the results of the second task.

Vladikavkaz - what is it famous for? 300
Ossetian pies 15, Mukhtarov mosque 11, Ossetian pies 10, Table Mountain 10, mountains 9, the city of military glory 7, mountains 6, medicine 5, nothing 5, Prospekt Mira 5, hospitals 4, a fortress on the Georgian military road 4, museums 4, theatres 4, culture 3, monuments 3, monument to Issa Pliev 3, pies 3, nature 3, Terek river 3, mountains 3, theatres 3, delicious Ossetian pies 2, Cathedral 2, beautiful nature 2, medical university 2, museums 2, health centers 2, Ossetian pie 2, monuments 2, Prospekt Mira 2, capital 2, good doctors 2, mineral springs 2, is a city of military glory 2, bright past 2, airport 1, Alan Dzageev 1, Alans 1, hospital 1, hospitals 1, the former capital of the mountain Republic 1, delicious cakes 1, water 1, a city in southern Russia 1, hospitality 1, border with Georgia 1, a city with a history 1, Alania 1, ancient history 1, the Palace of Baron Steingel 1, friendly people 1, the road to Georgia 1, the title of city of military glory 1, Dzageev Alan 1, Alan Dzageev 1, strength 1, culture

1, the root of "Caucasus", resorts 1, resort area 1, cultural-historical objects 1, Liana 1, Luana 1, best hospital 1, treatment 1, best hospital 1, medicine 1, the memorial of Glory 1, Medical North Ossetian Academy 1, mineral waters 1, location 1, Glory memorial 1, memorials 1, places 1, vacation places 1, for many things 1, the Fiagdon male monastery 1, music 1, Museum of the history of Vladikavkaz 1, title 1, unusual places, filled with various animals 1, strained relations with Ingushetia 1, the national museum 1, from Vladikavkaz originates Georgian military highway 1, one of the most beautiful cities of the North Caucasus 1, eagle 1, about 250 buildings and structures 1, education (medical) 1, the coast of the Terek river 1, monuments of history and architecture 1, the title of city of military glory 1, a monument to General Pliev 1, monument to V.I. Lenin 1, monuments to the participants of the Great Patriotic War 1, pies 1, prospekt Mira 1, nature 1, professionalism of physicians 1, rhinoplasty 1, Rusteli 1, the capital of the Republic of North Ossetia-Alania 1, the village of Dzauga 1, distillery 1, sanatoriums 1, for its nature 1, the capital of the Republic of North Ossetia 1, SOGMA 1, the capital of Ossetia 1, Stolitsa shopping center 1, there are beautiful fabrics 1, there was a Hackathon 1, a football academy in the North Caucasus 1, well known 1, healing springs 1, Chechnya 1, clean waters and fresh breath 1, chebureks 1, I just love this city 1.

Refusals – 87

Unprocessed reactions – 4 (illegible handwriting and a completely crossed out sentence).

Associative field of the toponym "Vladikavkaz" based on the results of the third task.

Vladikavkaz – where is it located? 300 – in South Ossetia 26, in Russia 21, in the South of Russia 19, North Ossetia 19, in the Caucasus 16, North Caucasus 16, in the North Caucasus 15, in the Central part of the North Caucasus 12, in the Russian Federation 11, North Ossetia-Alania 11, North Caucasus Federal district 8, North Ossetia-Alania 7, Republic of North Ossetia-Alania 6, RF 6, Ossetia 5, in southern Russia 4, city in the South of Russia 4, the Caucasus 4, on both banks of the river Terek 4, on the banks of the Terek river 3, near Ingushetia 3, near 3, Alanya 2, in the North Ossetia 2, in the Russian Federation 2, in the Central part of the North Caucasus 2, in the South 2, the Republic of North Ossetia 2, Russia 2, the capital of Ossetia 2, south of Russia 2, in North Ossetia-Alania 1, in Vladikavkaz 1, in the Republic of North Ossetia - Alania 1, in Kabardino - Balkaria 1, part of the North Caucasus Federal district 1, in Moscow 1, in the North Caucasus Federal district 1, in the Central part, near

the Caucasus 1, in North Ossetia Alania 1, in the Republic of North Ossetia 1, is part of the RF 1, Vladikavkaz city 1, a city in the South 1, Kabardino-Balkaria 1, on the border with Ingushetia 1, on planet Earth, facing the moon 1, near 1, in the south of the Russian Federation 1, on Pliev square in the city of Vladikavkaz 1, North Caucasus Federal district 1, capital of the Republic of North Ossetia 1, capital of the Republic Ossetia 1, capital of the Republic of North Ossetia – Alania 1, the country of Russia 1, where it used to be 1, the central part of the North Caucasus 1, the south of the Caucasus 1.

Refusals -53

Unprocessed reactions – 2 (illegible handwriting).

At the next stage, semantic components were identified by the method of semantic interpretation of associative fields, from which the definition of the toponym "Vladikavkaz" was formulated.

The structure of the dictionary entry with a description of the psycholinguistic meaning: the left part of the definition is the capital word, highlighted in bold; after the capital word, semantic components are listed, ordered according to the principle "integral first, then differential senses";

Here is a preliminary version of the psycholinguistic meaning of the toponym "Vladikavkaz".

Vladikavkaz is a city in Ossetia in the Russian Federation, in the Caucasus, where there are mountains, the city of Beslan, Ossetian pies.

This value is relevant for native speakers.

4 CONCLUSION

Thus, in this article, the method of identifying psycholinguistic meanings was demonstrated.

Psycholinguistic meanings make it possible to identify the real content of proper names, i.e. such content that is actually represented in the minds of native speakers.

These values can be compared with lexicographic values.

REFERENCES

- Humboldt, V., 1984. *Selected works on Linguistics*, Progress.
- Benveniste, E., 2002. *General Linguistics*.
- Benveniste, E., 1974. *General Linguistics*.
- Pavelenis R., 1983. *The problem of meaning: modern logical and philosophical analysis of language*.

Makhaev, M.R., Sternin, I.A., Ibragimov, D.K., 2019. Regional Specificity Of Toponym Semantics: Psycholinguistic Study. *The European Proceedings of Social & Behavioural Sciences*, LVIII.

Makhaev, M.R., Ireziev, S.Kh.S.E., Abdulazimova, T. K., Selmurzaeva, Kh.R., Navrazova, K.B., 2020. An Integrated Approach to the Study of Semantics of Proper Names. *The European Proceedings of Social & Behavioural Sciences*. 92.

Sternin, I.A., Rudakova, A.V., 2017. *Dictionary Definitions and Semantic Analysis*.

Sternin, I.A., Rudakova, A.V. 2011. *Psycholinguistic Meaning of the Word and its Description*.