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## A Linguosemiotic Study of Nominations of Northern Lights in Russian and German\*

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**Abstract.** The article studies lexical designations of the natural phenomenon of the Northern lights in scientific, literary, journalistic and advertising texts of German- and Russian-speaking authors. The purpose is to compare and contrast their implementation in German and Russian Arctic discourses. The study of semantics, syntactics and pragmatics of lexical designations of the phenomenon allows authors to comprehensively assess the views of German and Russian scientists, writers, poets, journalists, representatives of tourism and advertising business on the northern lights. A comparative study of lexical designations of the northern Lights in the focus of German and Russian Arctic discourses shows the similarity in the presentation of the lexical categories under consideration according to the existing universal (scientific) world picture and the differences in the implementation of lexical designations of northern lights, explained by the national world picture of the representatives of two compared linguistic cultures.

**Keywords:** *northern lights, Arctic discourse, linguo-semiotics, language sign, speech sign*

### Introduction

The purpose of the present study is a comparative analysis of the lexical designations of the natural phenomenon of the northern lights in the German-speaking and Russian-speaking Arctic discourses from the standpoint of linguosemiotics.

The main research methods used are the continuous sampling method, the definitional analysis method, the component analysis method, the distributive analysis method, the cognitive-discursive analysis method, contextual analysis, the method of linguistic description, which

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includes observation, comparison, systematization and generalization techniques, as well as the verification method.

The complex of standard techniques and methods of research made it possible to comprehensively approach the description of the unique natural phenomenon of the northern lights in relationship of its types, forms, sources of origin with a description of a person's attitude to it. Using the method of continuous sampling, the authors of the study ensured the creation of a corpus of studied units, indicating the variability in the use of lexical designations of the northern lights. Due to the continuous sampling method, representative reliable data on the semantics, syntactics and pragmatics of language signs were obtained, reflecting the real picture of the distribution of linguistic text units of the Arctic content, as well as data on the act of reference, the indication of this atmospheric natural phenomenon by the sender of the studied language and speech signs. Component analysis has allowed to present, on the material of two languages (Russian and German), in diachrony and synchrony, the semantic evolution of the development of the prototypical nominations "Northern / polar lights" and "Nordlicht / Polarlicht" by decomposing their meanings into constituent elementary parts, the combination of which gives a complete picture of the use of the relevant terms and lexical designations. Based on the method of component analysis, this study defines the paradigmatics and syntagmatics of lexemes, combinations of lexemes and their individual meanings, which have a common integral semantic feature – a reference to the nomination of the northern lights. As differential features, this study describes the assignment to different functional styles (scientific, publicist, literary) and traces the history of the nomination in different time periods. With the help of definitional and component analysis, the statement that the most general categorical semantic features have universal significance is proved. Of particular importance is the fact that the general categorical features of the designations of the northern lights can be presented differently in Russian and German languages and the corresponding lexicographic sources (dictionaries and glossaries).

The distributive analysis used in the study allowed us to discover a number of patterns in the functioning of words in speech: the rules of selection restrictions, the rules for adding lexical meanings, and the rules for semantic agreement of the studied speech signs. The study of the environment of linguistic units acting as a signifier to the signified — the northern lights — made it possible to comment on these designations in a syntagmatic perspective. Syntagmatic relations that are similar for the two studied languages within a certain genre of text (for example, scientific) demonstrate a difference in style register within a particular language. Such a language description "from the inside" from the perspective of linguosemiotics made it possible to focus on linguistic phenomena with regularly recurring features. In this turn, unlike the distributive method, which makes it possible to study only the structure of the expression plan (texture of speech signs) in abstraction from the content plan, the method of cognitive discourse analysis contributed to the description of the cognitive and communicative properties of the studied nominations of the northern lights and the possibility of extracting textual and non-textual information about the

Arctic discursive situation. This method also provided an understanding of the Arctic discourse from the perspective of linguocultural studies.

The pragmatically important understanding of the generation and comprehension of meaning in the context as a factor in the generation and transformation of meanings served as the cognitive basis for the interpretation of semiosis. The combination of traditional (communicative-pragmatic) and cognitive-discursive theories of the study of precedent names allows us to analyze the lexical nominations of the northern lights as representatives of precedent concepts, to comment on their place in the general continuum of precedence. Discursive analysis, being an equal component of the theory of language, complements the cognitive approach, which belongs to the class of functional ones.

The finding of linguistic conditions and means that draw boundaries between individual lexical and semantic variants of the nomination of the northern lights is also relevant for this study. Propositional, intentional, evaluative, emotional, modal and occasional types of meaning are clearly visible only in the context. The contextual analysis used in the process of research makes it possible to define the context as a coherent linguistic whole that determines the meaning (grammatical, lexical, phraseological) of a separately included word, phrase, or segment of an Arctic-oriented text. The contextual analysis used in the present study makes it possible to study the functional specifics of words, phrases, sentences and superphrasal units that nominate the phenomenon of the northern lights, to reveal the usual and occasional meanings of the studied linguistic units, to trace the dependence of the development of a specific meaning of a word on a multi-genre context: in a scientific text, in publicist texts style (in an essay, in an advertising text), as well as in different types of artistic text (in fairy tales, in novels, in poetry). The validity of the obtained scientific results is ensured by the verification method in the work. The main goal of verification in this study is the irrefutability of the asserted factuality, commenting on both linguistic factors (the linguistic status of the units that make up the corpus of examples, in particular, the stylistic register, phonetic and grammatical refractions, changes, increment of meaning), and extralinguistic data: the historical background of the study of this phenomena in diachronic and synchronic aspects.

The method of linguistic description of the nominations of the northern lights used in the course of work on the language material consists in identifying specific linguistic units and describing their functioning in different genres and styles, taking into account their integral and differential properties, features and rules of embodiment in an Arctic-oriented text.

### ***Theoretical background***

As the theoretical prerequisites for the present study, one can consider the scientific works of domestic and foreign scientists on the sign theory of language — linguosemiotics, the main purpose of which is to study the sign nature of language. Exploring the phenomenon of the northern lights through the prism of its lexical nomination, it is important to turn to the semiotic

aspect of the study of the lexical designations of this natural phenomenon, since it is the linguosemiotic theory that makes it possible to establish a connection between the sign system of a language and social and natural semiotics.

When conducting a linguosemiotic study of the nominations of the northern lights, one should proceed from two forms of verbal signs used for communication purposes: linguistic (units of linguistic consciousness of communicants) and speech (signs implemented in discourse). At the same time, it should be borne in mind that linguistic and speech signs are inextricably linked to each other. Speaking about the semantics of the lexical designations of the northern lights as one of the aspects of semiotics, we will proceed from the fact that these nominations, as linguistic signs, express a certain meaning, indicate the usual component of their content plan. In the process of communication, in our case — in the texts of the Arctic orientation, these nominations as speech signs receive a very specific meaning, which, in contrast to the usual meaning of a linguistic unit, associated with an objective reflection of the system of connections and relationships, can be interpreted as “the individual meaning of the word”. It should be agreed that “individual meaning” makes it possible to identify subjective aspects that “are relevant to this moment and to this situation” [1, Trofimova N.A., p. 8].

When studying the lexical nominations of the northern lights from the perspective of semantics, it is really important to distinguish between the meaning as “the most stable part of the sign's semantics, associated with the reflection of the socially significant experience of a given ethno-linguistic community” and the meaning as a variable part of the sign's semantics, “associated with the discursive interpretation and actualization of one of the aspects of the linguistic values” [2, Alefirenko N.F., p. 95].

If the semantics of the lexical designations of the northern lights as linguistic signs can be studied by using the definitions presented in lexicographic sources, then the meaning of these lexical nominations in the Arctic discourse as speech signs can be revealed only by analyzing the semantic components in the relevant specific texts. It is necessary to agree that the lexical designation of the northern lights, like any other linguistic sign, “represents a socially established interpretation of the content accepted in a given linguocultural community” [3, Pisanova T.V., p. 105]. This explains the possibility of revealing the significative meaning of a linguistic sign. A comparative study of the lexical designations of the northern lights as linguistic signs allows us to trace whether there is a difference between the interpretation of the northern lights in German and Russian linguistic cultures.

We will research the syntax of the studied linguistic and speech signs by studying their relations with other signs. It is advisable to distinguish two types of relations within syntactic: paradigmatic (existing between linguistic signs, for example, synonymy) and syntagmatic (observed in the compatibility of speech signs with each other) [4, Krongauz M.A., p. 22]. Due to the identification of the former, it is possible to establish the variability in the use of lexical designations that reflect the essence of the natural phenomenon of the northern lights, and the

study of the second type allows us to trace combinatorial possibilities of lexical nominations of northern lights closely.

When studying the pragmatic aspect of the use of lexical designations of the northern lights in the German-speaking and Russian-speaking Arctic discourses, it is important to take into account that the language or speech sign does not name and point to the natural phenomenon of the northern lights. The act of reference is carried out by the sender of this sign through the choice and use of one or another lexical designation of the northern lights. The lexical designation of the northern lights, chosen in a certain situation in order to achieve very specific goals, as a speech sign informs, within the framework of the Arctic discourse, about the attitude of the author of the Arctic-oriented text to the recipient of the text, to the situation of communication and to the most natural phenomenon of the northern lights. By pragmatics we mean, following R. Finkbeiner, not only the choice of one or another language sign and its use, but also “the generation and comprehension of meaning in the context” [5, Finkbeiner R., p. 7].

### Overview

The study reveals that there is no single definition of the northern lights (aurora borealis) either in Russian or in German. The existing definitions can be conditionally divided into two groups: 1) definitions based on the scientific ideas of their time, and 2) definitions based on everyday ideas, often external signs of a phenomenon. At the same time, it can be stated that the boundary between these types of definitions is very conventional. The definitions of the first type (natural-scientific nature) are approximately the same, they contain indications of the causes and nature of the phenomenon: “Aurora borealis is the glow of the upper layers of the atmosphere observed in the polar regions, which is caused by the action of particle flows invading the atmosphere from space”; “Aurora Borealis is a sporadic phenomenon in the ionosphere, expressed in the luminescence (glow) of rarefied air at altitudes from several tens (sometimes from 60) to several hundred (sometimes over 1000) kilometers”; Polarlichter sind Leuchterscheinungen am Himmel, die hauptsächlich in polaren Gegenden beobachtet werden. Am Nordpol heißen sie Nordlicht (aurora borealis). Polarlichter entstehen in 70 bis 800 km Höhe durch elektrisch geladene Teilchen (meist Elektronen oder Protonen) des Sonnenwindes. Diese werden durch das Magnetfeld der Erde zu den Polen hin abgelenkt. Dort dringen sie in die Erdatmosphäre ein und regen je nach Höhe unterschiedliche Atom-/Molekülarten an, Licht einer bestimmten Wellenlänge zu emittieren”<sup>1</sup>.

As a comprehensive analysis of the linguistic material has shown, in the definitions of the second type (in our case, linguistic) there are, as a rule, external features: “Polar or northern lights is a phenomenon observed in the polar countries, beginning with the fact that a bright arc appears on the northern part of the horizon, from which columns of white light rise, constantly worrying,

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<sup>1</sup> Deutscher Wetterdienst. Wetterlexikon. URL: <https://www.dwd.de/DE/service/lexikon/Functions/glossar.html?lv2=101996&lv3=102084> (accessed 23 July 2020).

changing colours”; “Polarlicht, das — in den Polargebieten zu beobachtendes, nächtliches Leuchten in der hohen Erdatmosphäre”<sup>2</sup>.

If we turn to the history of the origin of the terms for the northern lights, then the German dictionaries of the 18th–19th centuries list the words “Nordflut”, “Nordschein”, “Nordscheinlicht” as synonyms to “Nordlicht”. In Russian, the word “pazori” used to denote the northern lights, the meaning and use of which is commented on by the Russian writer, publicist and ethnographer P.I. Melnikov-Pecherskiy in his novel “In the Forests”. He notes that “pazori is a folk designation, in contrast to the artificial, invented by Lomonosov, phrase “northern lights” — a literal translation from the German Nordlicht”. The work of P.I. Melnikov-Pecherskiy is unique in reference to the rich nuance of the lexical meanings of the radiance by the natives (otbel — the beginning of the phenomenon / bel — continuation / zori — takes on a pink hue / zorniki — gradually turns purple / rays — spreads across the sky in milky streaks / rainbow pillars — rainbow coloured streaks / bagrets — increasingly red / playing pillars — bands converge and separate / sporch — pillars with a rolling thunder crackle)<sup>3</sup>.

Further, it was found that the lexical designations of the polar (northern) lights / Polarlicht (Nordlicht) are used both in scientific terms and in a more ordinary sense. In the studied scientific texts of the Arctic orientation, there are no differences between the content of the linguistic sign and its representation in speech, since the differences between the denotative and significative meaning of the term, in principle, cannot be identified. The characteristics of the aurora given in strictly scientific definitions are visibility (Sichtbarkeit), frequency (Häufigkeit), brightness (Helligkeit), intensity (Intensität), direction (Richtung), color (Farbe), shape: rays, stripes, crown, curtain, arc (Form: Strahlen; Streifen / Bänder, Krone / Corona, Vorhang, Bogen) — can be considered as components of the scientific concept “aurora borealis”. In modern Russian-language scientific texts of the Arctic orientation, the terms “polar lights” (combining the northern and southern lights), “northern lights”, as well as the Latin term Aurora Borealis, sometimes in Russian transliteration — “Aurora Borealis / Aurora” are used. In German arctic-oriented scientific texts, the terms Polarlicht, Nordlicht, Aurora Borealis, Aurora are used. This shows the similarity of the studied lexical designations in the scientific Arctic discourse of the linguistic cultures under consideration. There is a certain parallelism in the use of the singular and plural forms of the analogous terms under consideration. The singular forms are used to denote both the phenomenon itself in general terms and its specific manifestations; plural forms — to refer to specific phenomena. According to our assumptions, plural forms are used more often in German texts. In German, compound words are used to refer to various aspects of the natural phenomenon under consideration: Polarlichthelle Nordlichtbogen, Nordlichtkrone, Nordlichtschein, Nordlichthäufigkeit, Lichtschimmer, nordlicherhell. In Russian they usually

<sup>2</sup> Duden. URL: <https://archiv.duden.de/node/698061/revisions/698066/view> (accessed 23 July 2020).

<sup>3</sup> Melnikov-Pecherskiy P.I. V lesakh [In the Forests]. URL: <https://www.litmir.me/br/?b=134601&p=53> (accessed 23 July 2020).

correspond to the following word combinations: aurora borealis brightness, arc-shaped arch, corona (of northern lights), aurora borealis oval, aurora borealis frequency, illuminated by northern lights etc. Modern scientific texts use the adjective “auroral”: auroral flare, auroral arc, auroral oval.

The aurora borealis became a subject of scientific description quite early. A special stage in the study of this phenomenon is associated with the Swiss scientist Hermann Fritz (1830–1893), who summarized the materials of studies of the aurora for the period from 1700 to 1870 in the second half of the 19th century. [6, Fritz H., p. 188]. Herman Fritz, followed by the American geophysicist and meteorologist E.H. Vestine, established, on the basis of a large number of observations in the Arctic, the geographical patterns of the occurrence of auroras, characterized their relative frequency at each specific point as the average number of days of their occurrence per year. H. Fritz uses purely scientific terminology in his scientific work “Das Polarlicht” to refer to the northern lights, avoiding any figurative expressions. Most often, for the scientific description of this natural phenomenon, the term “Polarlicht” is implemented. In this book one can also find the terms “Nordlicht” and “Aurora borealis”. Since the above German-language scientific work explores the nature and functioning of the northern lights, scientists describe in detail such characteristics of the aurora as Sichtbarkeit (visibility), Häufigkeit (frequency), Intensität (intensity), Richtung (direction), Farbe (color), Fluoreszenz (radiation), Geräusch (sound/noise), Geruch (smell), and related natural phenomena: Erdmagnetismus (terrestrial magnetism/geomagnetism), Sonnenflecke (sun spots), synodischer Mondumlauf (synodic rotation of the moon), Elektrizität der Luft und der Erde (air and earth electricity). H. Fritz introduced the term “isochasm” (Isochasmie) into scientific use to designate a line on a geographical map connecting points with the same frequency of polar lights (Kurve gleicher Polarlichthäufigkeit).

In Russian science, the earliest description of the northern lights is most often associated with the name of M.V. Lomonosov, with his unfinished monograph “Testing the cause of the northern lights and other similar phenomena”, written, presumably, between the end of 1763 and May 1764 and first published in 1869. Lomonosov was interested in the northern lights from a young age; he began to carry out scientific observations systematically since 1743. In this scientific work, Lomonosov uses the term “northern lights” in the plural, most likely by analogy with the German term “Nordlichter”. In addition, to designate the studied natural phenomenon, he uses the words “arc”, “flashes”, “pillars”, “rays”. Color names are used to describe the external properties of a natural phenomenon <sup>4</sup>.

In the Russian-language scientific texts of the Arctic at the end of the 19th – beginning of the 20th centuries, the Latin term “aurora borealis”, as well as the terms “polar lights” and “northern lights” and simply “aurora” are used to designate the natural phenomenon under study,

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<sup>4</sup> Lomonosov M.V. Ispytanie prichiny severnogo siyaniya i drugikh podobnykh yavleniy [Testing the cause of the northern lights and other similar phenomena]. URL: <http://lomonosov.niv.ru/lomonosov/nauka/po-fizike-i-himii-1753-1765/science-28.htm> (accessed 27 July 2020).

the results of observations and specific aspects of the considered phenomenon are described, in particular: (arc) shape, position, luminous intensity, color, direction of movement of the rays [7, Byalynitsky-Birulya B.A., pp. 1–2]. The terms for the designation of the northern lights are used in this case for the purpose of examination and argumentation.

The Scot V. Brus, whose work was published in Russian, describes his observations on *Aurora Borealis*, referring to H. Fritz and other authors. In contrast, he uses not only scientific terminology, but also describes the northern lights metaphorically as “a fantastic ballet in the sky, where the figures are in unusually fast movement, and where one row of dancers intertwines with another, and rows of sparkling lights of unusual colors quickly pass through sequined muslin drapery” [8, Brus V., pp. 73-76]. The scientist notes that the most frequent form of the northern lights is a low arch of more or less elliptical shape, rising a few degrees above the horizon. The scientist uses the term “corona” in his book, considering the phenomenon of an optical effect. Following A. Humboldt, he proceeds from the fact that there is a relationship between the magnetic force and the northern lights [8, Brus V., pp. 73–76].

A.A. Zhilinskiy, a researcher of the European North and a northerner himself, in his book “The Far North of European Russia. Arkhangelsk Province”, written on the basis of a scientific analysis of the literature and based on the results of the author’s long-term observations, along with the terms “polar lights”, “northern lights”, mentions the English terms “Northern light”, “Streamers”, the French version of the terminological phrase “aurore boreale”, as well as the popular expression “flashlights”, used, according to the scientist, by the population of the Arkhangelsk province. Since the book is a popular scientific text, the northern lights are quite reasonably called by the researcher a “majestic phenomenon” [9, Zhilinskiy A.A., p. 100]. The scientist describes various hypotheses of the appearance of the northern lights, in particular about its electrical origin, a theory that was substantiated and developed in the second half of the 19th century. A.A. Zhilinskiy’s nomination of northern lights is used in this case not so much for registration and argumentation, but for the purpose of problematization, “examination” of the term [9, Zhilinskiy A.A., p. 100].

The scientific nomination of the natural phenomenon of the northern lights differs significantly from its nomination in a literary text, in particular, in lyrics. The literary representation of the phenomenon of the northern lights is replete with images of a metaphorical, metonymic, periphrastic and clearly expressed anthropomorphic character. Everything is evaluated and presented from the point of view of a person, in terms of their assessment and emotions. The person is presented as an author admiring the beauty of a natural phenomenon, as a scientist distinguished by perspicacity, as a native of the north, who, despite the harsh nature, has mastered the Arctic region for living. The authors comment on the heterogeneous ethnic group of the indigenous northern peoples. In Eulalia Lyudmila Bodnya, one can find both general references (“the Aryan clan that took the cold into the local house” / “sons of a long winter” / “a man with a secret squint” / “everyone living in radiance”), and a well-rhymed enumeration of

tribes and the peoples of the Far North (“Koryaks, Komi, Nganasans, Yakuts, Chukchis and Dolgans, Evenks, Nenets, Eskimos, Khanty, Mansi, Itelmans — everyone living in the north”)<sup>5</sup>.

Only in a literary text does a contrasting picture of the greatness of a natural phenomenon appear before the smallness of the significance of the human personality itself. In the lyrics, a person (an author, sometimes a reader, a scientist, an interlocutor) is explicated as an observer of the unique phenomenon of the northern lights according to the principle of contrast: a person is negligible compared to the greatness of a natural phenomenon. M.V. Lomonosov emphasizes this in his “Evening Meditation” with a dimensional opposition: “There is no number for the stars, there is no bottom for the abyss”<sup>6</sup>. The man is described periphrastically in images of contrasting opposition, repeated three times in different pictures: a grain of sand is opposed to sea waves; spark to eternal ice; thin dust to a strong whirlwind. Thanks to the selection of several rows of contextual antonymous pairs, a large-scale complex picture emerges with an emphasis on the greatness and mystery of the phenomenon of the northern lights.

A literary text, especially a poetic work, reflects in the described phenomenon what is relevant to human perception: the unusual manifestation, the beauty of a natural phenomenon. The description is dominated by the picture of multiple presence. There is a lot of light, color, and secret in the northern lights, which means, as a conclusion: a lot of vivid emotions when it is perceived. With E.L. Bodnya the seme of “multitude” is embodied not as with M.V. Lomonosov, as a synonym for the word “many” (“There are many different lights, uncountable suns burning there”), but as the seme of “organised multitude”, as the melody of a song, the melody of an organ, consisting of notes, breaking up into its component notes (“The organ plays above me, a great secret song sings. And the sound, disintegrating over the earth, like arrows, enters the snow and ice”). The carriers of the seme of the set are the most unexpected words, in which this seme is not even a supporting semantic, but rather potential and even hidden (“field of light” / “field of rainbows”). E.L. Bodnya multiplies the expression of the verse, endowing the words with a new contextual environment similar to the stylistic device of catachresis. Violation of the usual combination of words (“the phenomenon of beauty sings”), the creation of words through epidigmatic word formation (“beams”) are interesting author's solutions that create a complex characteristic of a radiant, luminous, igniting natural phenomenon. With enviable regularity, there are lexemes in the text that have the semes 'light' and 'see' as a supporting seme (“star / radiance / radiates / candle / fire / ignite / solar / ray”), as potential or secretive (“seeing / heavenly / open your eyes”). As a result of such a complex “attack” of the light-emitting action, an idea arises of the power of brightness and beauty of this natural phenomenon. Let us show a similar principle of reflecting the light range of the northern lights for the purpose of comparison in German lyrics

<sup>5</sup> Bodnya Ye.L. Pesn' o severnom siyanii [Song of the Northern Lights]. URL: <https://www.youtube.com/watch?v=xKITS8tE2Gc> (accessed 23 July 2020).

<sup>6</sup> Lomonosov M.V. Večernee razmyshlenie o Bozhiem velichestve [Evening reflection on God's majesty at the occasion of the great northern lights]. URL: <https://www.culture.ru/poems/37587/vechernee-razmyshlenie-o-bozhiem-velichestve> (accessed 23 July 2020).

using the example of Heidi Schmitt-Lermann's poem "Nordlicht": a special light (ein über Ländern im hohen Norden oft leuchtendes besond'res Licht); color-breaking light (Farben brechendes Licht); phosphorescent green light (wogendes phosphoreszierendes Grün); magical mysterious light (magisch' lichter Geisterschein); light dancing in the sky (am Himmel tanzendes Licht <sup>7</sup>).

Comparison of the nomination series of the natural phenomenon of the northern lights in the Russian and German lyrics emphasizes the relevant characteristics of the northern lights: the dynamics of movement, the color register, the color palette and the speed of saturation change turns into an appeal to the divine, secret, mysterious, fabulous. It appears in the same poem by Heidi Schmitt-Lerman as a fairy tale, an unreal fantasy, a light sent by an angel to help travelers: "vom Engel auf die Reise geschicktes Licht / wie im Märchen keine echte Fantasie" <sup>8</sup>. The authors of poetic works richly use the expression of contextual antonyms, echoing the contrast of the night and the light of the northern lights (hell is a charge of beautiful forms as opposed to death and life / the night sky is a field of rainbows / God is a man). The idea of the eternity of the phenomenon of the northern lights, which has been exciting human curiosity for centuries, the idea of the victorious mastering of the laws of the universe by man is embodied in the life-affirming final lines of the poetic work of E.L. Bodnya.

M.V. Lomonosov, in his poem "Evening Reflection", admires the colors of the northern lights in contrast to the night, which he specifically describes as a dark background, acting as a master of total expression, using both the expression of paraphrase and personification ("The day hides its face / The dark night covered the fields / Ascended to the mountains have a black shadow / Rays leaned away from us"). To describe the blackness of the night and to emphasize the beauty of the northern lights then, the author uses synesthesia, combining the actual synesthetic image (moral plan and color (gloomy night)) and personification (gloomy night, cf.: gloomy person). In the following lines, M.V. Lomonosov, reflecting on the nature of the occurrence of this phenomenon, makes an unscientific assumption, stating by paraphrase and a metaphor that the sun sets its throne in the North. In fact, the scientist gives real scientific messages that directly explain the emergence and manifestation of the northern lights: the northern lights are associated with the state and activity of the sun. The fabric of the poem is woven with the most advanced theories at that time about the occurrence of the northern lights (in the penultimate stanza, M.V. Lomonosov's own hypothesis about the electrical nature of the phenomenon: "waves hit the ether").

The accentuation of the cosmic nature of this phenomenon is common to all Russian and German poetic descriptions of the northern lights: a stream born in the stars somewhere by E.L. Bodney; "fatal games of cosmic forces" by Victoria Serdyukova <sup>9</sup>. From author to author, the idea of the royalty of the northern lights is repeated, metaphorically veiled: "a crown for the Queen in

<sup>7</sup> Schmitt-Lerman H. Nordlicht. URL: <https://www.e-stories.de/gedichte-lesen.phtml?163096> (accessed 23 July 2020).

<sup>8</sup> Ibid.

<sup>9</sup> Serdyukova V. Severnoye siyaniye [Northern Lights]. URL: <https://yablor.ru/blogs/severnoe-siyaniye/514775> (accessed 23 July 2020).

the sky” by Galina Smolenkova<sup>10</sup>, “the throne of the sun” by M.V. Lomonosov<sup>11</sup>. The most frequent comparison is an appeal to the image of paints, frost, to a palette of colors: “a shining orange stroke / a slightly greenish shining brushstroke moving to the east / frost paints with lilac paint” by Galina Smolenkova; “the sky painted like flowers / a green-red-blue flash rushing over the earth / a play of colors that cuts the darkness” by Galina Sotnikova<sup>12</sup>; “Farben brechendes Licht (light of refracting colors) / wogendes phosphoreszierendes Grün” (phosphorescent green) by Heidi Schmit-Lerman<sup>13</sup>. A more rare metaphorical designation is a comparison with a theater, a theatrical performance: “the swaying curtain of the theater of the Universe / a drama that replaced the tragedy of the Worlds and the Galaxy” by Victoria Serdyukova; metaphorical-synaesthetic representation of the northern lights in the form of musical instruments: the organ by E.L. Bodnya: “an organ that sounds between heaven and earth / an organ plays over me / an organ sings a song of great mystery”; “As if a multi-colored accordion, The three-row furs parted” by G. Smolenkova. Only E.L. Bodnya meets the metaphorical designation of the northern lights with the lexemes “field”, “field of light”: “field of light from the night sky / field of light in the night sky / field of rainbows in the night sky”<sup>14</sup>. Universal, but metaphorically commented in different ways, is the description of the vector movement of the flow of light of the northern lights: “it flies up, then it pours down, then it disappears like a whim!” by Galina Sotnikova; “leads a strip from top to bottom” / repeating both in breadth and along the length of the “stripe” by Galina Smolenkova; “am Himmel tanzendes Licht (light dancing in the sky) / schwelgende, raunende, hinterm Wald verschanzte Farben” (smoldering, iridescent colors hiding behind the forest) by Heidi Schmit-Lerman<sup>15</sup>.

A universal characteristic of the northern lights for all the authors of the studied poetic works is its mysteriousness and uniqueness: “action, the comprehension of which is beyond the limit” by Victoria Serdyukova; “im magisch' lichten Geisterschein (in the magical light of ghosts / nur schöne Fantasie (only a beautiful fantasy) / So wie im Märchen ist sie nicht (she is not real, just like in a fairy tale)”; by Heidi Schmit-Lerman; “eternal riddle” by Galina Smolenkova, “the phenomenon of miracle-beauty / nature's wondrous phenomenon / wonderful pillars” by E.L. Bodnya.

The linguosemiotic reflection of the amazing phenomenon of the northern lights through the metaphorical representation of the signified is widely used in other genres of literary text: in

<sup>10</sup> Smolenkova G. Severnoye siyaniye (zapolyarnaya skazka) [Northern lights (polar fairy tale)]. URL: <https://stihi.ru/2011/11/28/11150> (accessed 23 July 2020).

<sup>11</sup> Lomonosov M.V. Večernee razmyshlenie o Bozhiem velichestve [Evening reflection on God's majesty at the occasion of the great northern lights]. URL: <https://www.culture.ru/poems/37587/vechernee-razmyshlenie-o-bozhiem-velichestve> (accessed 23 July 2020).

<sup>12</sup> Sotnikova G. Severnoye siyaniye [Northern Lights]. URL: <http://parnasse.ru/poetry/lyrics/landscape/severnoe-sijanie.html> (accessed 23 July 2020).

<sup>13</sup> Schmitt-Lerman H. Nordlicht. URL: <https://www.e-stories.de/gedichte-lesen.phtml?163096> (accessed 23 July 2020).

<sup>14</sup> Bodnya Ye.L. Pesn' o severnom siyanii [Song of the Northern Lights]. URL: <https://www.youtube.com/watch?v=xKITS8tE2Gc> (accessed 23 July 2020).

<sup>15</sup> Schmitt-Lerman H. Nordlicht. URL: <https://www.e-stories.de/gedichte-lesen.phtml?163096> (accessed 23 July 2020).

fairy tales, myths, legends. It is noteworthy that fairy tales on the theme of the northern lights are not presented in German literature, which is explained by the geographical remoteness of the German-speaking countries from the Arctic region. Fairy tales make a natural attempt to explain this phenomenon. From generation to generation, storytellers represent the northern lights as amazing, beautiful, formidable, inexplicable, and therefore use personification, endowing a natural phenomenon with anthropomorphic features. In the Russian-language version of the legends of the Finno-Ugric peoples about the origin of the northern lights, this phenomenon is explained by the merger of a girl named Vecherina with a white deer she saved. The party calls on the deer, touches its horns, illuminating the entire sky with “bright, vibrant colors of the northern lights”<sup>16</sup>.

Keeping in mind the parable “a lie lies in a tale, but there is a hint in it”, it can be said with confidence that fairy tales in their own way, metaphorically paraphrasing, reflect the real signs of the signified. So, the reflections of the northern lights are, according to the legend of the inhabitants of the tundra, a fire that an eagle lit to help his grandfather and grandson when searching for a dog that had disappeared while hunting. The storytellers did not escape the attention of the fact that the northern lights have a synesthetic basis, that is, they are accompanied by a sound, a hum that has a strange effect on some people. The northern tribes have long noticed – when the sky is painted with colorful lights, some people begin to behave strangely: they talk to non-existent interlocutors, they can move like sleepwalkers, they completely renounce the outside world. In myths, fairy tales and legends of the indigenous peoples of the North, this phenomenon is referred to as the call of the ancestors. During the northern lights, sounds are made that form low-frequency electromagnetic waves, similar to the alpha and beta rhythms of the brain. From time immemorial, people inhabiting our planet, not being able to explain any natural phenomenon, called it the features of a creature that brings evil and punishment. We observe such a blind taboo of the formidable element of the northern lights in Russian-language fairy tales, northern legends, myths about the northern lights, which in them appears like a fiery snake or a fiery river. In Russian fairy tales, the Serpent Gorynych or the serpent-fighter Hero is often mentioned. The fire-breathing serpent is Veles, and the bogatyr, Volkh Vseslavovich, was born from the serpent and Princess Marfa Vseslavievna<sup>17</sup>. Here, the seme “burning” is important for understanding the image. Everything inexplicable is subject to taboo, linguo-semiotic paraphrasing and, as a behavioral line, to veneration. The sky with the different colors of the northern lights, due to the misunderstanding of the phenomenon and the remoteness of the heavens, is automatically understood as another world, from which the living must hide. In Northern Eurasia, a belief still persists: children need to be hidden as soon as

<sup>16</sup> Otkuda severnoye siyaniye poshlo [Where did the northern lights come from]. URL: [http://www.finnougoria.ru/logos/child\\_lit/1379/13703/](http://www.finnougoria.ru/logos/child_lit/1379/13703/) (accessed 23 July 2020).

<sup>17</sup> Alekseeva L.M. Polyarnyye siyaniya v mifologii slavyan: tema Zmeya i Zmeyebortsa [Polar lights in the mythology of the Slavs: the theme of the serpent and the snake fighter]. URL: <http://www.delphis.ru/journal/article/polyarnyye-siyaniya-v-mifologii-slavyan-tema-zmeya-i-zmeyebortsa> (accessed 23 July 2020).

possible, as soon as the radiance begins<sup>18</sup>. To a large extent, this understanding of the natural phenomenon is facilitated by the visual picture of the phenomenon, which really echoes the image of a fire-breathing snake.

The linguosemiotic representation of the properties of the signified northern lights can be conveniently traced in the genre of the author's fairy tale, also known as the "artificial fairy tale". The authors of fairy tales emphasize in an individual manner the signs of the signified phenomenon. The signifier for the northern lights, according to Boris Shergin, is, for example, the rapidity of the appearance, renewal and disappearance of the northern lights [10, Shergin B.]. As evidence of the renewal of the form of the phenomenon, B. Shergin uses verbs and verbal phrases "renew", "get up", "start to fall", "bow", "flow like a river", "stand", "curl up"; the substantive lexemes "pillars", "wall", "blue river", "scroll" as signifiers determine, in addition to the verbal description, the possibility of northern lights to acquire different forms.

Contemporary authors of fairy tales are not burdened with painful gloomy associations implicated with the inexplicability of the phenomenon. The feeling of anxiety, fear of the phenomenon of the northern lights is replaced by the desire to present it as a harmless, simply beautiful, desirable event. Therefore, according to Ivan Danilov, a well-known northern bell ringer and storyteller, the northern lights are the "queen of lights", which "crosses the sky and runs between the huts and bath-houses". The local people are "fond of her". She even flirts with the locals. Describing the episode when one of the young men tried to touch her, but she rolled away and became a laughing stock for the local people, reflects the real relationship between people, between a young man and a girl who rejects her groom<sup>19</sup>.

The degree of departure of reality from the narrative is most of all observed in the fairy tales by Stepan Pisakhov. The characters of his tales treat the northern lights quite frivolously. They "dry" it, "pull it up" (gather it by pulling it down), "knit it in bundles", "hang it up on a mat", let it dry out so that it doesn't spoil (literally: so that it doesn't die), "light it", using it as candles. Fantasizing about the practical application of northern lights, Stepan Pisakhov follows everyday logic. In the harsh northern land everything must help a man. Logically, albeit with a clearly evident fantasy element, the author notes in fairy-tale style that one can collect northern lights only in the initial phase of their appearance, while they "are not shining high". The apogee of the description of fantasy applications of northern lights in everyday life is the author's idea that northerners "wear radiance in their braids, braid stars from the radiance and put it on their foreheads"<sup>20</sup>.

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<sup>18</sup> Alekseeva L.M. Polyarnyye siyaniya v mifologii slavyan: tema Zmeya i Zmeyebortsa [Polar lights in the mythology of the Slavs: the theme of the serpent and the snake fighter]. URL: <http://www.delphis.ru/journal/article/polyarnye-siyaniya-v-mifologii-slavyan-tema-zmeya-i-zmeyebortsa> (accessed 23 July 2020).

<sup>19</sup> Danilov I.V. Spolokhi. Skazka [Flashes. Fairy tale]. URL: <http://ekb.aonb.ru/index.php?id=2662> (accessed 23 July 2020).

<sup>20</sup> Pisakhov S. Severno siyanie [Northern lights]. URL: <https://skazki.rustih.ru/stepan-pisaxov-severno-ciyanie/> (accessed 23 July 2020).

Publicistic texts reflect the signs of the northern lights in a more thorough and formal way. In her essay “Spolokh above Kholmogory”, published in the collection “Polar Circle”, Lilia Mikhailovna Alekseeva actively uses the techniques of publicistic style: she argues, resorting to quoting the Norwegian scientist Fridtjof Nansen, the national cosmonaut G.M. Grechko [11, Alekseeva L.M.]. Both famous figures describe “an absolutely amazing sight”, which seems to Nansen as “a bright flame”, and G.M. Grechko as “lights of a thousand searchlights”. Following the logic of the journalistic style to reflect phenomena in diachrony, L.M. Alexeeva compares and analyses the perception and understanding of northern lights from ancient times to the present, with special emphasis on the opinions of famous scientists such as Aristotle and M.V. Lomonosov. Thanks to the author's detailed description, one can see the northern lights as a “silent fire of the heavens”, “polar lights”, “sparks”, “a game of fireballs”. Moving in diachrony of designations of northern lights and stopping at the nominations of natural phenomenon in the Middle Ages, L.M. Alexeeva correlates appropriate signs of the signifier with predicative signifiers, names it, remaining faithful to the style of previous centuries: “a sign of heaven”, “fiery fingers”, “fiery crosses”, “fire swords”, “fire glow”, “cold flame of heaven” [11, Alekseeva L.M.]. One wants to believe the facts about northern lights because it is described with a variety of dynamics: both as an “instant portrait” and in a recurring long time span.

Texts on the theme of the northern lights in Russian and German-language journalism reveal a lot in common. They are characterized by the input of scientific data, followed by dictation and removal of the complexity of understanding the scientific term. For L.M. Alekseeva, such a lexeme is, for example, “substorm”. Markus Bütikofer, the author of a diary traveling to the aurora, has such terms as Elektrometeor (electrometeor), Sonneneruptionen (solar flares), Magnetfeld (magnetic field), die freigesetzte Energie (released energy) [12, Bütikofer M.]. The synonymic rows of predicating lexemes make it possible to emphasize the specific features of the described natural phenomenon and the relationship of a person to it. For Markus Butikofer, the northern lights are ein lange schon gehegter Traum (a long-awaited dream); eine einmalige Gelegenheit (one-of-a-kind opportunity to comprehend the world); Nordlicht (Northern Lights); Polarlicht (polar lights); Aurora Borealis (scientifically: northern lights); kein Südlicht / kein Aurora australis (not the southern lights); eine Leuchterscheinung (light phenomenon); ein Elektrometeor (a meteor charged with electrical particles). Markus Bütikofer supports the reader's interest with a message of incredible factuality, arguing about the power of the beauty of the northern lights, contemplating which people who do not believe in higher powers begin to join faith in God [12, Bütikofer M.].

Thanks to the unique natural phenomenon of the northern lights, the Arctic region has recently become an object of increased attention in the field of tourism, which is reflected in the Internet advertising discourse. At the same time, the ways of presenting relevant information in advertising texts and the peculiarities of nominating the phenomenon of the aurora borealis are relevant in terms of linguistic research. In this aspect, a curious example of the Russian-speaking

Arctic discourse can be the advertising text “Northern Lights Hunting Tour”, posted on the website of one of the Russian travel companies<sup>21</sup>. It is characteristic that already in its name, the nomination “Northern Lights”, highlighted at the graphic level in capital letters in each of its components, acquires a contextual figurative meaning and begins to referentially correlate with some active, fast moving living creature that can be hunted. As a result, this title becomes a means of creating a certain linguo-pragmatic effect, which consists in stimulating the “waiting mode”, thrills and vivid emotional experiences from the advertised trip in the potential consumer of travel services. In the advertising text, the phrase “Northern Lights” functions as a key meaning-generating lexeme, contributing to the structuring of all textual information.

Along with the traditional use of this language unit in the global singular in the tour advertisement, the plural form “Northern Lights” is also found, which emphasizes the diversity and periodicity of the magnificent natural phenomenon: “The appearance of the Northern Lights is monitored by us on special resources ... Get the most accurate indicators we were taught by scientists from the Lovozero Geophysical Observatory, the only station in Russia that studies the Northern Lights!”; “The best places for observing and filming the Northern Lights are selected by our guide, a professional photographer with many years of experience...”<sup>22</sup>. In the closing sections of the ad copy, subtitled “How to Dress for the Glitter Hunt?” and “What are the chances of seeing the radiance?”, there is a change in the lexical designation of the implied phenomenon, i.e. reduction of the key nomination as a result of replacing the phrase “Northern Lights” with one basic lexeme “radiance”, which can be explained by the pragmatic redundancy of the definition at this stage of information presentation: “The hunt for the radiance occurs in winter, autumn or spring ...”; “Most often our guests see the radiance...”; “Aurora has infrared radiation in its composition”<sup>23</sup>. For a similar reason, this lexeme is used in one of these sections in the plural with the key phrase: “In order to improve the accuracy of predictions of the appearance of the Northern Lights for our guests in March 2015, we received advice from scientists ... who study the nature of the aurora”<sup>24</sup>. It should be noted that the text of the article uses the only color designation “red (radiance)”, which has a referential correlation with the described natural phenomenon, which occurs quite rarely in this form: usually, in the polar sky, a person can observe green or, sometimes, purple glow without special technical means. The commentary on this circumstance is given by the compilers of the advertising text from a scientific point of view in order to warn the reader about the extremely low degree of probability of contemplating the red radiance: “The radiance contains infrared radiation. The digital camera sees it better than the human eye. But the human eye sees ultraviolet color better. Thus, we will see the red light only when it is strong enough”<sup>25</sup>.

<sup>21</sup> Northern Lights Hunting Tour. URL: <https://nordtours.ru/tur-ohota-za-severnym-siyaniem> (accessed 20 May 2020).

<sup>22</sup> Northern Lights Hunting Tour. URL: <https://nordtours.ru/tur-ohota-za-severnym-siyaniem> (accessed 20 May 2020).

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

A different linguistic picture is observed in the German-language advertising discourse in the Arctic, an example of which is, in particular, the advertising text of the German travel company “Hurtigruten”, which offers potential consumers of its services to enjoy the spectacle of the northern lights as part of tours to Norway and Svalbard<sup>26</sup>. The title of this advertisement contains the plural noun “Nordlichter” to accentuate the fact of the variety of forms of manifestation of radiance, and then throughout the text, numerous poetic paraphrases of the original nomination, which are its contextual synonyms, function as key lexemes. A direct semantic parallel between the usual nomination and its individual author's lexical designation appears already in the second sentence, which is the subtitle of this text. The expressiveness of the implied paraphrase is emphasized by the superlative degree of participle I “beeindruckend” (impressive) and the composite, which combines the meaning-forming component “Licht” and the popular Anglicism show in the subtitle of the advertising text: “Erfahren Sie alles über die beeindruckendste Lichtshow der Natur – die Nordlichter!”<sup>27</sup> (Learn all about the most impressive light show, the Northern Lights!). Increased figurativeness is also inherent in the beginning of the advertising text, which can be considered as a kind of “lyrical intermezzo”, focused not on the transfer of business information, but on the direct immersion of a fictitious reader, explicated by the pronoun “Sie”, into the fabulous atmosphere of a quiet polar night with the northern sky emerging in the dark sky shining: “Es ist dunkel, Sie sind draußen und es herrscht Stille. Plötzlich erregt ein flackerndes Licht am Himmel Ihre Aufmerksamkeit. Zunächst blaß und zaghaft, doch schon bald intensiv und strahlend verwandelt es den dunklen Himmel in eine Leinwand für die unglaublichen Mächte der Natur. Es ist so hypnotisch, dass Sie sich nicht abwenden können. Eines ist aber besonders seltsam: Es herrscht völlige Stille, während das grüne und gelbe, violette und rote Feuerwerk in ruhiger Harmonie über den Himmel tanzt. Die Bewegungen wirken wie ein großartiges symphonisches Ballett ohne Ton”<sup>28</sup> (It is dark, you are outside, there is silence. Suddenly, a light flickering in the sky catches your attention. Pale and timid at first, but soon intense and radiant, it turns the dark sky into a canvas for incredible powers nature. It's so mesmerizing that you can't turn your back. But one thing is especially strange: there is complete silence while green and yellow, purple and red fireworks dance across the sky in calm harmony. The movements look like a grand symphonic ballet without sound).

Obviously, in this text fragment, the nature of the lexical content of the paraphrases of the key nomination reflects the intensity of the described process: the flickering light (ein flackerndes Licht), at first pale (blaß) and timid (zaghaft), quickly turns into a shining embodiment of “incredible natural forces” (die unglaublichen Mächte der Natur). The play of green, yellow, purple and red colors contributes to the formation of another nominative unit – “das Feuerwerk” (fireworks), which functions as personification, since this fireworks harmoniously “dances” in the

<sup>26</sup> Nordlichter. URL: <https://www.hurtigruten.de/inspiration/erlebnisse/nordlicht/> (accessed 20 May 2020).

<sup>27</sup> Nordlichter. URL: <https://www.hurtigruten.de/inspiration/erlebnisse/nordlicht/> (accessed 20 May 2020).

<sup>28</sup> Ibid.

night sky. The next lexical designation of the northern lights, which completes the transition from the introduction to the purely informational space of the advertising text, is the metaphorical phrase “ein großartiges symphonisches Ballett ohne Ton” (a grandiose symphonic ballet without sound) used in the form of comparison. In the links accompanying the thematic sections of the analyzed advertising text, there is a nomination of the northern lights, which is strictly terminological in nature: we are talking about the Latin name “die Aurora / die Aurora Borealis”, which should confirm the scientific validity of the information presented and at the same time contribute to the lexical diversity of the text structure. In the section “Wie entstehen die Nordlichter?”, advertisers use the philosophical paraphrase “eine Konstante unserer Welt” (the constant of our world) to emphasize the enduring nature of the northern lights, which are an organic component of the nature of the Arctic region.

### **Conclusion**

The main results of the study include the semantic, syntactic and communicative-pragmatic parameters of the semiotics of the northern lights lexical designations in the German-speaking and Russian-speaking Arctic discourses identified by comparison. A comparative study of the semantics of the considered lexical nominations allows us to state that, when distinguishing between the scientific and ordinary worldviews in German and Russian linguistic cultures, there is a coincidence of scientific ideas of scientists and meteorologists about the northern lights, and a discrepancy between everyday ideas of the carriers of German and Russian cultures about this natural phenomenon. While the scientists of Germany and Russia have similar ideas about the atmospheric natural phenomenon of the northern lights, other representatives of Russia as an Arctic state, especially the inhabitants of the north, who describe the northern lights in folk art, invest in the semantics of the lexical designations of this natural phenomenon a variety of meanings, depending on style, type and genre of the text of the Arctic orientation. In Russian linguistic culture, there is a deeper and more nuanced view of the phenomenon of the northern lights. Ordinary representatives of Germany, as a non-Arctic state, do not have a clear idea of the northern lights, since this natural phenomenon is not observed in their latitudes. This fact is reflected in the implementation of a very limited number of lexical nominations for the northern lights.

As for the syntax of the lexical designations of the northern lights in the Russian Arctic discourse, in contrast to the German Arctic discourse, there are more active paradigmatic connections of the lexical nominations of the northern lights as linguistic signs (in particular, synonymy) and extensive syntagmatic connections of the studied lexical designations with others speech marks. Combinatorics of lexical nominations of the northern lights in Russian-language fiction, journalistic and advertising texts of the Arctic orientation, due to their great creative potential, seems to be almost limitless.

A comparative study of the pragmatic parameters of the implementation of the lexical designations of the northern lights in the German-speaking and Russian-speaking Arctic discourses made it possible to identify a number of similar communicative and pragmatic schemes for the implementation of the studied lexical nominations in the compared types and genres of texts of the Arctic orientation. So, in Russian-language and German-language scientific texts, the terms for designating the northern lights are implemented for the purpose of registration, argumentation. In publicist texts in Russian and German languages, the lexical designations of the northern lights are used to clarify and supplement the previous content, as well as for the purpose of approximation. In poetic and advertising texts, which more clearly reflect the everyday picture of the world, both simplification and complication of the process of decoding information for hedonistic and aesthetic purposes are realized. In the legends and fairy tales, related to the Russian-speaking Arctic discourse, the implementation of such communicative and pragmatic schemes as symbolization and warning is observed. The use of this pragmatic setting in the description of the northern lights represents the specifics of the Russian Arctic discourse.

The obtained scientific results show the prospects of linguosemiotic consideration of lexical nominations in texts focused on a particular event. They provide an opportunity to look at the Arctic discourse as a fragment of the linguocultural reality of a particular language community. For further research of the Arctic discourse, other natural phenomena that are characteristic of the Arctic region (white nights, white haze, ice sky, etc.) and play an important role in the life of the peoples of the North are of interest. The results obtained are important for understanding the similarities and differences in the views of representatives of different cultural communities regarding the same phenomena and events. Comparative studies of a linguosemiotic nature help to understand the mechanisms of formation of lexical nominations in a language and take a closer look at the specifics of the use of speech signs in a text, depending on its type and genre. It should be emphasized that the study of the linguosemiotic aspects of the lexical designations of the northern lights can make a certain contribution to the study of the Arctic discourse, since it is they that allow us to see and describe in the texts of the Arctic orientation both objectively existing ideas about the northern lights in two different linguistic cultures, and subjective factors affecting the choice of one or another lexical designation of a given natural phenomenon in a text of a certain style.

The results of the study contribute to the development of both theoretical and practical discourse studies, to the study of aspects of the Arctic identity and natural phenomena observed in the Arctic region, allows constructing the Arctic space through a semiotic (sign) rather than a noematic (purely mental) algorithm of human actions. The results obtained contribute to the testing of the linguosemiotic model of comparative consideration of lexical nomination, and therefore, they can show the prospects for the use of linguosemiotics both for applied purposes and for the further development of lexical semantics. The limited volume of the article does not permit to cover a number of issues concerning the ontology and classification of northern lights

and the relationship of linguosemiotics with natural and social semiotics, which makes it possible to obtain a more complete semiotic picture of the lexical designations of the northern lights in two nationally oriented Arctic discourses.

The research presented in this article may contribute to increasing interest in the study of the Arctic discourse from comparative, linguo-semiotic and linguo-culturological positions. The interdisciplinarity of the scientific approach to the description of linguistic and speech phenomena related to the Arctic enables us to show the similarities and differences in communication associated with social and natural semiotics, helps to look at the relationship between the picture of the world and the linguistic picture of the world and the cognitive aspects of communication between representatives of different cultures regarding vital natural conditions of their existence.

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