Abstract—In the context of development of cognitive linguistics, the concept “reindeer breeding” must be regarded more extensive, namely, as a basic category of being for most indigenous peoples of the North, Siberia, and Russian Far East. Using the cognitive approach, its conceptual content must be addressed. Since conceptual, evaluative, and figurative components of the concept depend on specific feature of a particular linguoculture, it is important to investigate the concept in terms of linguoculturology, including inquiries into related languages, such as Even and Evenki.

The mechanism of cognitive perception of space and time is complex, actively structuring our sensations, forming sensory images according to their objective prototypes and psycho-physiological characteristics of the human sensory apparatus as well as intellectual, emotional, and worldview background of the subject.

The present study is devoted to studying categories of space and time of the concept “reindeer breeding” as a universal basic concept, serving as a key to comprehending perception, understanding of the world, and the worldview of the Even and the Evenki, representation of the linguistic picture of the world of Northern nomads.


The subject of research are the categories of space and time (locality and temporality), field arrangement of the concept “reindeer breeding” in Even and Evenki.

The category of locality is a complex of means at various levels that are arranged as a field. It reflect certain variants of location in language: event-situational, event-dynamic, object-relative, subject-relative, and parametric. The category of locality is some arranged, i.e. linguistic units are included in the field of locality based on the archeseme “place, space”. Locative meanings are graded in language: the core with the seme of space (place), the close periphery with the seme of locality (space statics), the far periphery with the seme of parametrics (shape, size, dimension, extent, distance).

Categories of Space and Time of the Concept “Reindeer Breeding” (in Even and Evenki)

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Space denotations and relations are differentiated and interact in linguistic representation.

The category of locality is closely related to the category of temporality in the linguistic picture of the world as space and time as opposite universal categories of being are characterized as a dialectical unity in their interrelation. Temporality is a category that defines implementation of time relations in language.

In linguistics, the category of temporality is investigated in grammar (traditionally), synsemantic, cognitive branch of linguistics, communicative and functional grammar.

Keywords—concept, reindeer breeding, locality, temporality, Even, Evenki

I. INTRODUCTION

Cognitive linguistics and linguoculturology has shown growing interest in studying languages of indigenous peoples of the North, Siberia, and Russian Far East. However, in fact, problems of cognitive and linguocultural studies of concepts in language and culture of northern ethnic groups have not been taken into consideration. Universal and idioethnic characteristics involved into semantics of linguistic units in the concept “reindeer breeding” of Even and Evenki have not been adequately explored from the perspective of comparative studies. The comparative study allows considering laws of the origin of language, consciousness, and culture from a new perspective as well as novel aspects of interaction between cognitive linguistics and culturology, linguistic culturology, philosophy and psychology.

Key concepts are units of the picture of the world, cultural constants relevant for both each speaker and linguocultural community as a whole. Concepts form a semantic space of a language that shows its categories and structures of knowledge characteristic for a nation.

Problems related to linguocultural concepts in Even and Evenki have not been studied before except the Evenki concepts “маан” ‘fate’, “кууту” ‘happiness’, and “оми” ‘soul’ compared with the Russian concepts “судьба” ‘fate’, “счастье” ‘happiness’, and “душа” ‘soul’.

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Until present, reindeer breeding terms, including those of Even and Evenki, have been studied as household vocabulary. Research was generally restricted to analysis of reindeer breeding terms, their lexico-semantic groups within the lexical theme. The concept of reindeer breeding has not been system described due to complexity of the subject.

Semantic-cognitive direction of linguistics considers semantics of linguistic units objectifying a concept as a means to explore its content and theoretically model its structure and content.

The purpose of research is a comprehensive study of categories of space and time of the concept “reindeer breeding” in the linguistic picture of the world of the Even and the Evenki.

To achieve this goal, we need to reveal universal and specific national characteristics of the concept in the linguistic picture of the world of the Even and the Evenki.

The objectives of the study defined its methods and techniques: the componential analysis based on dictionary definitions, etymological analysis, comparative-contrastive analysis. The range of the used methods is determined by complexity of the subject and multi-aspect nature of the study. The general research method is inductive-deductive.

This study presents the first attempt to compare categories of space and time of the concept “reindeer breeding”, its content and categories in related Tugusic languages – Even and Evenki.

The theoretical basis for the research were works of Russian (V.A. Keymetinov [1], A. Dybo [2], S.M. Prokopieva, Yu.P. Borisov [3, 4], E.A. Krivoshapkina, S.M. Prokopieva [5], V.I. Rassadin [6]) and foreign (A. Lavriller, A. Dumont, B. Brandisauskas [7], Tessa de Mol-Mol Valen [8], Kazama Shinjiro [9], Enkhmaa Narmandakh [10], P.S. Piispapanen [11]) linguists.

Theoretical value of the study consists in extending the list of basic concepts based on Even and Evenki material and introducing the concept “reindeer breeding” into linguistic research interests, opening prospects for further description of the concept sphere of indigenous language of the North.

Material for research was taken from lexical and phraseographic sources: V.A. Keymetinov [12-16].

The linguo-cultural concept “reindeer breeding” is a complex mental construct, the content minimum of which is presented as follows: on the one hand, it is a “type of economic activity”, “traditional sector of agriculture”, on the other it is “a set-up of life”, “lifestyle”. Images of the concept include travelling on vast stretches of tundra and taiga, reindeer herds, travelling on reindeer or in relays, staying from time to time at camps, living in portable shelters (shelf, shelter) for a while. The values forming the concept are recognition of constant awareness of traveling to find fresh pasture as a sustainable way of life, necessity of indigenous knowledge of the environment, including topography, anatomy and behavior of livestock, and awareness of cyclic nature of being.

II. RESULTS AND DISCUSSION

Conceptual space and time are referred to as internal organization of sensory experience, structural arrangement of our sensations reflecting objective space and time structure of reality at the sensory level of cognition. Learning changes in space and time, transformation of shapes and sizes of objects in the environment, people comprehends general characteristics of space and time and records them in language.

The study analyzes the concept of time using the system of means of expressing space relations in Even and Evenki. The starting point of the study was a general cognitive idea of space and its characteristics relevant for temporal description of an object, namely extent, duration, continuity, discontinuity, stability, instability, finiteness, infinity, limit, distance, dimension, object’s track when moving, static object’s location in space, object’s orientation in static position or in motion, etc. On this basis, various space and time structure of the concept are made.

Linguists drew attention to the category of locality to study real functioning of language, its use in communication where this phenomenon functions as a universal arranging principle since any utterance records space nature of reality. Researchers emphasize the importance of studying this phenomenon and developing procedures of multi-aspect description.

Locality has linguocultural and axiological bases; it is present at the cognitive, metaphoric, standard and symbol levels of linguoculture and shows its involvement into the axiological sphere in combinations with emotional and rational verbal estimates in utterances and texts.

The category of locality is a set of multi-layer means arranged as a field that reflects certain variants of location in language: event-situation, event-dynamic, object, subject, and dimension relative. In linguistic representation of locality, space denotations and space relations are differentiated and interact.

Breeding of reindeer involves grazing of a great number of animals өлөмөөсөн a vast area, constantly searching for rich grazing land. Accordingly, conditions of housing, grazing and feeding, areas of longer and temporary keeping of reindeer, their breeding and calving are most important and essential in economy of reindeer breeders.

Let us illustrate terms denoting areas and conditions of rearing reindeer: өңөк ‘pasture forage’; өңөмүү ‘reindeer grazing’; өңөкүүтүү is a verb showing people’s actions towards reindeer meaning: 1) graze reindeer; 2) feed under supervision; өңөдөө is a verb showing animal’s actions meaning ‘feed on pasture’; ‘graze’; өңө күйү ‘drive reindeer’; өңөдөөдүү ‘drive reindeer’.

According to V.A. Keymetinov, onyrons – mountains and uplands where reindeer are reared
year-round – are of special importance for finding areas to graze reindeer. It is worth mentioning that our informants, such as my father who had been working in reindeer breeding for about 60 years, agree with V.A. Keymetinov who identified about 20 ononyms in Even: урежэма general term for ‘mountain’, амкин ‘knoll, hill’, очир гиллик or steep bank, ғээээ ‘mountain with a peak’, нолкын ‘rocky mountain raising above others’, нориг ээ ‘mountain with a rock or cliff on its summit’, коёд ‘gorge rock at the foot or in the middle of a mountain’; ногоо ‘steep rock one can fall down from’, ғааинд ‘solid rocky boulder’, нооңун ‘rock consisting of separate rocks that wild sheep cannot climb’, нөңек ‘pass on a mountain’, бо PARAMETERS ‘the north face of a mountain’, аргүү ‘slope of a mountain between two mountain rivers’, өмөн ‘highest mountain’, нориг ‘mountain with loose slope’, ээдэр ‘mountain with a steep slope’, нооңун ‘cape, jet, rock on the sea coast’, etc. Also, anatomic terms are often used to denote ononyms: норог ‘thumb like mountain’, нори ‘lit. mountain’s back, ridge’, нооңун ‘lit. nose, cape’, урежэма ‘lit. mountain’s face, slope’, мөөн ‘heart like mountain or hill’, etc.

Observation of ground conditions in in search of best grazing land resulted in the following denotations: төрө ‘soft ground’, кыңкы ‘hard ground’, көрөн ‘waterless valley’, химин ‘ground with jutting out stones’, үңү ‘ground consisting of small stones’, нирээн ‘ground with crushed stones’, тасын ‘stony, hard surface’, тонут ‘sandy, loamy ground, sand or clay’, нанғун ‘cup moss ground’, окку ‘ground covered with rich grass’.

The examples given above show that, when designating mountains and uplands, the Even always paid attention to the condition of ground, landscape, presence of water bodies, shape and height of mountains, features of slopes since they looked for rich grazing land for reindeer as their main resource. Hence, in summer when there are a lot of mosquitoes and other bloodsucking insects, reindeer herds were driven to open wind-blown areas – tundra and mountain passes. The mountain-taiga Even chose the following most convenient area for grazing during this period: аван ‘open area with low sparse trees and shrubs’, окат ‘head of a river on a plain’, оба ‘lowland surrounded by hills at the head of a mountain river’. A correct approach to reindeer rearing during the period of bloodsucking insects allowed animals to survive this most restless period in their life, as a result they fed and fattened calmly to prepare for the following winter season.

Vocabulary related to vegetation on reindeer grazing land is of interest. It may be classified into three groups: areas according to the presence of certain vegetation, berries and shrubs, annual or other grass, e.g.:


the second group: өзээтичэ ‘area abundant in red currant’, өрбөтатач ‘area abundant in black currant’, қуыққыч ‘area abundant in blue berries’, etc.;

the third group: қабағы ‘area abundant in Siberian cow-parsnip’, нерүс ‘area abundant in moss crop’, ныңкы ‘area abundant in horsetail’, etc.

A scrupulous approach to designating areas taking into account all factors allowed reindeer breeders to find best places for grazing of herds and single split off reindeer.

Spatial skills, powers of environment observation are a tradition for the Even, a lifestyle trait passed on from generation to generation. As reindeer breeders and hunters the Even and the Evenk mostly oriented themselves by river directions, mountains, mountain hollows, less often by mountain rivers, dwellings, direction of vegetation. As an example we will provide words and expressions for traveling through a mountainous relief during reindeer grazing or hunting.

It is better to illustrate the process of travelling of reindeer breeders on Even lexicology and phraseology. In the language of the Lamunkha Even moving uphill is represented by the word оңуңдо ‘going up the cleft of mountain streams - нөңөд’, going down a mountain - нөңөдө ‘going down the cleft of mountain streams - нөңөдө’. Going on the mountain slope in some direction can be represented through phraseologisms: өңүңдөдүү ‘go on the mountain slope, lit. on the mountain’s face’; өңүңдөдүү ‘go on the mountain slope, lit. on the mountain’s nose’; нирээндүү ‘go on the mountain slope, lit. on the mountain’s back’, i.e. mountain ridge; қоңдөдүү – ‘go lit. across the mountain, i.e. taking a short cut’.

A special attention should be paid to nomination of orientation by water bodies. From ancient times people tried to build their houses near rivers, lakes, the sea as the main object of human life. The river gave water and food, life depended on it, and it served as one of the main ways of orientation for man. To have a full picture of orientation by river and its course represented by the word окат one must take into account that the Even language has more detailed variants of hydronym nomination: бирчө ‘small mountain stream’, бирчөд ‘large mountain stream’, дөөқоң ‘mountain stream flowing from under the head of a mountain’, қайкап ‘small spring’, өлү ‘small but deep river with even banks in a valley’, нүү ‘river built of a great number of tributaries’, өңүң ‘spring’, өңүң ‘inflow of river into a lake resulting from melted water’, etc. The analysis of the given hydronyms allows considering them as independent means of orientation in space. It is worth mentioning that the given examples of nominations support the idea that the Even as well as other peoples of the North are distinguished by exceptional powers of observation in finding and giving names to finest specific features of certain environment, area, or place of residence.
However, the main way of nomination of movement direction is the notions холига, холасы ‘upstream’, эдөш, эсеки ‘downstream’, барага ‘the opposite bank to refer to location of an object’. Here, it would be appropriate to mention dreams and their interpretations related to movement of man. It was believed that if one dreams about going upstream or uphill, this dream carried positive emotions and motivation, promising success and good luck.

Like other peoples, in the nighttime the Even oriented themselves to the moon that has some variants of nomination - бяг, аткакан, илаан – and stars оскик. Besides, they had an idea of the four corners of the earth. The east and the west are the starting and final points of Sun trajectory уң alta meaning ‘something rising and emerging’. Correspondingly, the east in Even is нэлтэнхиптуунит эчитит ‘the sun is rising’, in other sources дөгүүлүгү үчү жүзүлүк, the west in Even is нэлтэнхиптуунит эчитит ‘the sun is going down’, in other sources тикуүлүгү.

In general, the notion of space orientation involves estimation of distance size, shape, position of objects relative one another and speaker. In the present paper, the most important types of orientation for nomads are presented:


- location of an object relative to the speaker, e.g. to my left and to my right, e.g.: Агылдардагы жетен бадыт айлан, дөгүүдөө – байрама зөөлөө ‘There is a large tree to my right and a stream to my left’;

- location of an object relative to another object, e.g. on a table, e.g.: Дөлмөө окат баргылданип көздөө ‘Drive the herd to the other bank’.

In this study, we follow the researchers who consider the category of locality as a complex of various means arranged in a field that reflects certain variant of location in language: event-situational, event-dynamic, object-relative, subject-relative, and parametric.

The logical-semantic category of temporality is a synthesis of linguistic and logical understanding of time. The logical-semantic feature of temporality (categorized in a linguistic unit at various levels) is a mental notion of time subjected to Semantization, i.e. represented as a semantic feature. The logical-categorial feature of temporality indicates relation of notions to the mental category of temporality and is identified according to this ontological category.

The idea of temporality in our understanding is wider that the idea of time as temporality includes it. The category of temporality can be represented at all level of language – derivative, lexical, morphological, and syntactic. The logical-semantic feature of temporality can be objectivized and represented by lexico-grammatical means of various levels.

It is known that space and time as fundamental properties of being define the nature of mentality of an ethnic community, determining uniqueness of temporal and spatial aspects of its life. All mentioned above is well illustrated when studying the concept “reindeer breeding”. This is why we cannot ignore ideas of the Even about the major time guidelines which are the phases of the Moon and the Sun.

It can be seen that the denotation of a month as a time period and that of the Moon are identical - илаан, аткакан, бяг. A time unit is a dayунун жүзүлүк илаан, a year айлан. Various types of reindeer pasturing are closely related to these time guidelines depending on the time of day: кояндук ‘reindeer pasturing at day time’, respectively: косымдук ‘day time herdsman’, косымдук ‘pasture reindeer at day time’; аялдук ‘reindeer pasturing at night time’, respectively: яччакма ‘night time herdsman’, аялдук ‘pasture reindeer at night time’. In Evenki, эччекчи, иччакма, этчукку, дагычиман mean ‘reindeer breeder, herdsman’. Also, depending on the season, reindeer breeders use different areas for pasturing: open wind-blown places in summer so that mosquitoes would less bother reindeer, sunny gentle slopes in spring for calving, areas abundant in moss in fall and winter to provide enough food for the stock.

Space and time underlie mental characteristics of an ethnic group, defining time and space sides of its life patterns. The material of this study suggests that the Moon and the Sun and their phases were used as central time guidelines. In Even, a month and the Mood both are represented by илаан, аткакан, бяг. As mentioned above, a day инэӈи and a year айлан were used as units of time. Division of time within a year had two variants reflecting different calendar principles: natural-economic and according to parts of human body. According to the first principle the year was divided into six seasons corresponding to natural climatic conditions of the North. The economic year cycle starts with the late summer мөнтэлөсэ which is the end of August until the end of September, i.e. early fall. In this time gnut and mosquitoes disappear, mushrooms and berries are available, it is time of free pasture and rut of reindeer. It is an important period for reindeer breeders; reindeer gain weight, preparing for long winter. Reindeer rut also depends on pasture conditions which directly affects spring calving of shee-deer. It is in this period when reindeer breeders count their herds. The next season is early fall болоха (the second half of October – the beginning of November) that is beginning of traveling of the Even to hunting.
grounds for winter nomadic route and pasture of reindeer. The third season 

жёнэ (the end of February – March) is time of 

crunching ice over snow, i.e. elk hunting by pursuit on 

skis. жёнэ is followed by жёнэ (April – May). This time is characterized as most awaited and responsible for nomads as in this period calving of 

reindeer starts. Welfare of the Even used to depend on 

this time. жёнэ finish es with the approach of 

summer жогой or ирэл (June – July). In the past, in 

this period the Even celebrated эмээж, the festival of 

new year and celebration of newborn reindeer calves.

The second type of calendar ‘according to parts of 

human body’ developed later. Probably, it was 

introduced under influence of Russian folk time 

dividing according to arm joints. It moves clockwise 

starting from the right hand, then up the arm to the 

head and down the left side ending up with the left 

hand. The Even months are literally translated as the 

‘rising’ palm, wrist, elbow, shoulder, top of the head 

and back ‘going down’ parts of the left side. The 

traditional calendar looks as follows: хээ – the top of 

the head corresponds to January, эрүүмэр – the left 

shoulder February, эрүүчэн – the left elbow March, 

эврибэлэн – the left hand April, эвручима – the first 

joints of the left arm May, эвригордак – the second 

joints of the left hand fingers June, дэгэн (ирил) 

дэгэн– the third joints of the left and right hands July, 

эвридордак – the second joints of the right hand 

fingers August, ойчирума – the first joints of the 

right arm September, ойчирбэлэн – the right hand 

October, ойчуричэн – the right elbow November, 

оийчирмэр – the right shoulder December.

Like all nomads, orientation in space of the Even 

and the Evenki is based on the immediate perception of 

space and designation of space cate-

gories: location, 

ception “reindeer 

depending on the 

third time’

objects and themselves is of no small importance. 

Identification of objects relative to other 

man and environment, serve as a key to 

understanding worldview of northern peoples 

living nomadic life in the extreme conditions of the Arctic 

North. Further comparative study of certain layers of 

vocabulary and phraseology of Tungusic, Turkic, and 

Germanic languages in terms of cognitive linguistics is 

of great interest.

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