Journal of History Culture and Art Research (ISSN: 2147-0626)

Tarih Kültür ve Sanat Araştırmaları Dergisi Revue des Recherches en Histoire Culture et Art مجلة البحوث التاريخية والثقافية والفنية Vol. 7, No. 5, December 2018 Copyright © Karabuk University http://kutaksam.karabuk.edu.tr

DOI: 10.7596/taksad.v7i5.1905

Citation: Satanar, M. (2018). The Ancient World-View and Cosmologic Perception of the Arctic Peoples in the Physical Picture of the World. Journal of History Culture and Art Research, 7(5), 113-122. doi:http://dx.doi.org/10.7596/taksad.v7i5.1905

The Ancient World-View and Cosmologic Perception of the Arctic Peoples in the Physical Picture of the World

Marianna Timofeyevna Satanar¹

Abstract

The article focuses on the interdisciplinary study of the cosmologic views among the Arctic peoples on the material of oral works - olonkho, nimkan, nimngakan, olongko. An attempt is made at integrating the humanities and sciences with the priority on the convergence. Following the necessity to form a new worldview guideline, the synthesis of the empirical methods and meta-scientific knowledge are considered the starting point in developing the new values of the systemic thinking. The suggested approach shows practical steps towards expansion and deepening of the basics of scientific rationality in humanities (for the highest result of scientific knowledge is considered to be the perception of the universal and objective natural laws in subjects and phenomena in their life process) on the one hand, and humanization and humanitarization of sciences, which provide an important moral category on the other hand. The authors of the study use the methods widely used in folklore study, as well as the less-frequently used modern approaches – synergetics, hermeneutics, and the systemic method. Ancient samples of the Arctic peoples' epic heritage is brought forward to the inter-disciplinary crossing point, where integration of methodologies allows to remove the dividing line between the rational, irrational, and transcendental categories of human mind, which are directly connected to the problem of studying the very phenomenon of storytelling – a complicated and multi-lateral object of study. Human integrity, formulated by M.S. Kagan as that of "the measure of all things", serves as the uniting basic fundament of analyzing science and culture. Under the given work such basis serves as an approach to the epic work as the product of storyteller's work. Comparative analysis revealed a certain semantic and structural unity between the cosmologic perception in the Arctic peoples' ancient world-view and the modern physical picture of the world. This leads to understanding the strong cognitive unity of the world-formation, which is directly linked to the concept of humanism. The work approbates the methodology of comparison and extrapolation of the different knowledge forms during which a kind of "writing-in" of the old mythological world-views into the fundamental natural laws occurs.

Keywords: Myth, Epic, Ancient world-view, Cosmologic perception, Motive, Narrative, Physics, Law.

-

¹ Folk Art Culture Master, Olonkho Research Institute, North-Eastern Federal University, Yakutsk, Russia. E-mail: satanar68@mail.ru

"Science is the basis of the worldview; art is the basis of the world-perception. Their sum is the basis of harmony in understanding the world as a whole – it is the basis of understanding between the worlds"

D.I. Blokhintsev

Introduction

Ancient peoples of the North: Evens, Evenks, Chukchis, Sakha, Yukaghirs, Dolgans, are the direct representatives of the Arctic culture. Persistence, spirit of collective fight for survival among the aboriginal peoples built a single type of the Northern identity over the course of history, with the formed tradition of mutual aid, and stable spiritual and moral system. Factor of the similarity of the northern cultures is visible, and the term "circumpolar culture" sounds all the more persuasive in this context.

Crisis and extreme situations of today only exacerbate the controversies of social life, estranging human from the root basis of biological environment. Scientists justly state that under northern conditions not only nature, but humans as well become vulnerable. They foretell the disappearance of the whole Yukaghir genofond in 1-2 generations. U.A. Vinokurova writes: "Average life expectancy is 10-15 years shorter than that in Russia. The majority of Aborigines do not make it to retirement age" (Vinokurova & Shilin, 1995, p.29). Such are the sad facts of today's state of the Arctic and the North.

Each of the Northern people preserved oral legends and narratives of the world creation and first people from the ancient times. The carriers of the northern traditions highly value the meaning of the myths for reconstructing the spiritual system of the ancient people. It is also important to emphasize that the genetic memory of the myths functioning in the mind presents an effective spiritual instrument which is of high humanistic value. That is why science has always considered mythological perceptions and deep structures to be of particular significance.

All the above-mentioned factors call for the new positions in reconstruction the world-perception layers on the one hand, and to building the pre-requisites for changing the values and meanings in the mind of modern people towards a global, systemic thinking for the sake of safety and stability.

World-perception views of the Northern people have become the basis for many studies. Works by the prerevolutionary researchers V.I. lekholson, A.F. Meddendorf, G. Miller, V.L. Seroshevsky, I.A. Khudyakov, E.K.
Pekarsky, N.A. Troschansky, Y.I. Lindenau are fundamental in the study of the Arctic people's culture in
general. Later the Sakha culture was studied by G.V. Ksenofontov, A.E. Kulakovsky, A.A. Popov, G.U. Ergis,
and many others. The Dolgan oral folk works were researched by A.A. Popov, P.E. Efremov; those of the
Chukchis by V.G. Bogoraz; Evens by Zh.K. Lebedeva, V.D. Lebedev, K.A. Novikova; Yukagirs by L.N. Zhukova,
G.N. Kurilov, N.N. Kurilov; Evenks by G.M. Vasilevich, M.G. Voskoboinikov, A.N. Myreeva, G.I. Varlamova. It
is worth noting that world perception of Yakutia's aboriginal peoples remains one of the little-studied
themes. Studies of the Sakha cosmologic world-views were the study focus by N.A. Alexeev, A.I. Gogolev,
R.I. Bravina, E.N. Romanova, D.S. Makarov. Works by S.K. Kolodeznikov, Z.S. Semenova, L.L. Gabysheva and
others have greatly contributed to advancing the reconstruction of the Sakha mythological perceptions.

Cosmology was to a great extent built on the works by Plato, Aristotle, Ptolemy, and Pythagoras. The first scientific arguments which were based on the star astronomy indications were made by Eudoxus. In Russia the ideas of cosmism were carried on by K.E. Tsilokovsky, V.I. Vernadsky, A.N. Umov, V.P. Kaznacheyev, and others. Modern cosmology is based on the Galaxy systems conception (Popova, 1996, p.5) which was largely based on the works by academicians V.L. Ginzburg, E.M. Livshitz, M.A. Markov, and others.

Based on the works by predecessors we once again address the comparative analysis of the ancient knowledge world-view and modern science. Objective of the study is comparative analysis of semantic and

structural singularity of the ancient mythoepic world-view (on the example of the Arctic peoples' epic heritage) and models of physical picture, the study of which opens the possibility of in-depth interpretation of epic text.

Methods

Methods used are the widely popular in folklore studies; those of overview, structural, semantic, comparative analysis, as well as methods of generalization, synthesis, and modeling. Also used in the study are methods of synergetics, extrapolation, hermeneutics, empathy, and systemic method.

Under the aspect of mythological perceptions word in epic works have double meaning. Words functions both as a lexical unit, and an element of sign system. In order to identify the "out-of-text" information the K. Levy-Strauss's structuralism method was employed as well. In order to re-create the ancient world-perception the method of empathy based on the notion of the "sakhalyy tolkui" ("the Yakut logic") and based on the ethno-genetic traditions is based. The specific characteristics of the inter-disciplinary comparative research as out-of-research form of data transference on scientific knowledge suggest the use of extrapolation methods. The need for objective interpretation and interpretation of epic texts calls for the use of hermeneutics methods. Due to the specifics of the research field (epic texts, penetrated by the ancient mythological and proto-logical thinking) the research obviously requires the introspective method based on the author's intuition. The comparative analysis uses the principle of holistic approach. Also used in the research is the method of synergetics, based on the single evolution of the complex, chaotic systems.

Affinity of Cosmologic Perceptions of the North and Arctic's Indigenous Peoples

"Analysis of the epic works of the Northern peoples provides multiple pieces of evidence of their affinity which is characterized by either genetic, or historical affinity determined by the facts of ethnic history" Zh.K. Lebedeva believes (Lebedeva, 1982, p.3). Contacts influenced the elements of material and spiritual culture of the ethnic groups. The researcher of Siberia N.A. Alexeev states: "Comparative research of the mythologies of the Dolgans, Yakuts, Evenks shows direct correlations. For instance, the Dolgan myths of the proposal to the Yuryung Aiyy's daughter have direct analogies in Yakut mythology. The Evenk myths state that a human can marry the Upper world women. The Dolgan text of a human visiting the Lower world is similar to the Yakut and Evenk myths down to the smallest details" (Alexeev, 2008, p.437). The motives of Creation among the Northern indigenous peoples bears typological similarity; for instance, the earth is compared to "head of a reindeer", "the tenin carpet thrown down", while the sky is compared to "an elk ear" and "carpet made of reindeer head hides" (Emelyanov, 1983, p.35). A.I. Gogolev noted that the plot of the Yukagir myth titled "How Christ made people" is close to the Yakut myth of human creation (Gogolev, 2005, p.52).

When conducting the general overview of the archaic epics of the Northern and Arctic indigenous peoples the researchers note not only borrowings, but also the mutual penetration of folkore motives, storylines, and heroes. Identity and similarity in views could be seen in cosmologic perceptions as well. Let us bring the examples of similar world-perceptions: dualistic conception of world-view; threefold model of the Universe; world tree image; the three worlds interact via an "opening"; upper world is presented by the pantheon of Gods; middle world is inhabited by spirits; the Moon and the Sun occupy a special place; the story of the Milky way; space world-view has a horizontal-vertical organization; similar formulae which reflect the folklore time; spiritualization of the nature; divine origins of heroes; image of the lone hero; conception of eternal soul, ideas of re-incarnation; three elements of soul.

The most widely-recognized of the northern peoples' spiritual heritage as of now is the epic work of the *sakha* ancestors which was preserved in the olonkho. That is why the work concentrates on the world-view

guidelines of the Arctic peoples' epic heritage in general through the prism of Yakut world-view in particular. This approach is determined by the fact that epic cosmologic views of the small-numbered people are still relatively little-studied on the one hand; and due to the above-mentioned similarity of cosmologic views on the other. Therefore it seems well-founded to conduct an in-depth analysis of the better-studied field – that of the epic heritage of the *Sakha* people. Our task is to provide whole characteristics of different branches of the ancient northern world-perception, since the in-depth approach allows to identify the specifics of each ethnic consciousness and image of the Arctic people.

Parallels between the Ancient World-Perception and Scientific views in Modern Physics

The sign of ancientry of the Arctic peoples' epic text could be seen in the way the plotline is built on the visibly "out-of-text" information. In the Yakut epic tradition the world-view depiction starts with the notion of "in the beginning of times": "Beyond the far faraway final peak of my ancient years, on the other side of the ridge of my old-time war years ... when human tribes after starting conversations had not known each other, when Yakut tribes exchanging words had not known each other..." (Karatayev, 1996, p.77). This is how "the beginning of times" is verbalized in the archaic Even epic: "When the earth was only just being created, when rivers had just started flowing, the larch was only just becoming the larch, when the birch was only just becoming the birch, when middle earth started growing, when..." (Varlamova & Varlamov, 2004, p.126). Let us also consider the Dolgan olonkho: "Back in the time when this inhabited land was the size of the hide of a reindeer buck in the time when this vast sky was the size of a human face..." (Efremov, 2000, p.79). The epic narrations do not give specific explanation of the notion of "the beginning of times"; nor does the notion touch upon the nuances of space concepts which are only briefly mentioned. Time appears to be a category of regular abstraction. From our perspective here one can observe a physical regularity – that presented in the second law of thermodynamics. The meaning of the latter could be explained as follows: life process of any system continues through destruction and degradation of other system's structures by means of transferring its irregularity beyond the system. Hence, one may conclude that the postulate of physics predicts an inevitable "end of system in time, which shows that a system must also have a beginning in time" (Satanar & Illarionov, 2018, p.492).

Texts of epic narrations bear a strong tradition of dual partition between the visible and the invisible. For instance, the Yakut olonkho "Nyurgun Bootur, the Swift" contains a picturesque description praising the almighty mind capable of ending "a fierce hostility", "fruitless struggle": "The three great families bestowed by immortality have led an eternal fight for a hundred centuries and could not defeat one another..., they started to contemplate: "... Until our troubles have grown, until our bones have cracked – let us try and talk in peace, let us rub foreheads, let us council in good spirits! Would it not be better for us to make peace?" - that is how they started to speak" (Oyunsky, 1975, p.11). Mentioned here is peaceful conclusion of the contradiction between such contradictory notions as light and darkness, and good and evil as a singularity of two beginnings leading to the universal balance. The given idea denoting the opposition of notions which are in constant dynamic (rather than static) balance penetrates the structure, the contents and the imagery system of the narration concepts. "The typical heroes of the Evenk narrations are the mata-warriors (sonings). They travel over the three worlds. They fight with enemies - the avakhas, while referring to themselves as humans -aii – in opposition the former. Term aii-baie (aii-human) is used in the epic to denote the Middle earth people - the Dulin Buga, and the inhabitants of the Upper world - Ugu Buga. The people referred to as aii focus their life around doing good in both Upper and Middle worlds. In this aspect they are opposed to the Lower worlds avakhas – the Khergu Buga" (Varlamova & Varlamov, 2004, p.11). In the Dolgan olonkho "Hero is the defender of the aiyy tribe (the inhabitants of heaven and people) from attacks of the abaasy-warriors (the inhabitants of the Lower worlds" (Efremov, 2000, p.16). Thus, the dualistic world-view of the Arctic peoples is presented clearly and expressively. Meanwhile the modern cosmology of the Universal model depicts the progress of the Universe as continuous and forever dynamic balance of all the cosmic processes.

However, the integrality of the Universe could also be found in the microscopically small elements. One such example could be positron (an anti-particle of electron) where both share similar mass but are different in that electron has negative charge, while positron is charged positively.

Furthermore, the micro-world of the matter is marked by both the wave and corpuscular characteristics denoting the duality of its nature. In other words, on the level of atomic physics a matter manifests itself as both a wave, and a particle; it is divisible and indivisible, continuous and discontinuous. It does not matter where it is located; on the surface of the Earth or in space everything partakes in eternal movement of opposite forces. This postulate of the matter is visibly present in epic narrative texts as an element of continuity and discontinuity. For instance, in the Yakut olonkho: "With trees which die while falling; with waters which shallow while evaporating; with fish which leave after spawning; with cattle which grows smaller while decaying... The Middle, original mother-earth they continued to build and create, as it turns out" (Karatayev, 1996, p.79). Visible here through the drawn comparison with the earth parallels is the compressed meaning of the narration text. The meaning is: all the earthly things have time limits, therefore they are discontinuous and finite. Nevertheless, in the context of mytho-poetic thinking each one born has their continuity and is thus perceived as continuous and immortal, capable of identifying the notions of beginning and eternity. According to A.N. Chanyshev "the uniqueness of human is awareness of their own mortality and dependence on the forces which are hard to foresee. In essence, humans live a life full of reverses and surprises while realizing that nothing and no one can withstand the time. And although people know that eventually all will be absorbed by the eternal element of the being they live as if their works and deeds were eternal and timeless aspect" (Chanyshev, 1970, pp.80-81).

Dual world perception could also be found in the religious traditions of ancient East; in the structures of the Indian "Rigveda", Iranian "Avesta", Judaism, Hinduism, Buddhism, and Daosism.

Now let us consider the motive of creation, a stable organizing element in the epic storyline of the Arctic peoples' world-perception traditions. This description is given in the Yakut olonkho: "Being the size of a grey squirrel's heel, expanding and stretching, being the size of an inside-out stretched soft hide of a two-year-old female reindeer, the mother-earth lady has pulled itself apart towards all sides of the world" (Karatayev, 2017, p.113). The Evenki nimngakan this motive is narrated as "The three worlds like the keen ears of one-year-old reindeer; the Middle world stretched like a fur rug" (Myreeva, 1990, p.239). The Dolgan epics give the following description: "Back in the time when this inhabited land was the size of the hide of a reindeer buch, in the time when this vast sky was the size of a human face..." (Efremov, 2000, p.79). Her one may find the traces of cosmological model of the space expansion on the early stage, or the so-called Big Bang theory from which space and time originated.

The Olonkho texts consider the Earth inhabitants "children of the sunny aiyy ulus, the ones with foreseeing eyes, the people of the *aiyy-aimaga* family, the ones with reins behind their backs" (translated by the author). It is important to note that according to the plot the upper creator-deities give orders to send down the hero defenders of their prototypes in order to organize the course of life. As a result the Mother Middle-earth became inhabited by the sunny *aiyy* ulus families, the *aiyy-aimaga*. Thus, when addressing the mythical creator named the White lord the epic heroes accompany their words with blessings: "You brought us down to the earth, defining and saying: "...let your offspring spread, let you be the people among the Yakuts – people with freely moving heads, with crumbling earthy breath" (Khudyakov, 1969, p.282). Let us bring an extract from the Dolgan olonkho text: "Well, brought down from the Upper world by (the deity) *Aiyy* in the adorned wide and free home-town there lived three sisters, as they say" (Efremov, 2000, p.135). Let us also bring an extract from the song of the horse-man; the song is about his child: "*Aiyy* has brought

down a horse into the Middle world. This is how the horse lived. He took a wife from the *aiyy*-people; she gave birth to two mares. This is our kin, our family; this is for you to know" (Efremov, 2000, p.51). Researcher G. Keptuke notes: "In all the Evenk heroic narrations the epic warriors marry heavenly maidens (kilivli), or the kidak-maidens. They occupy the upper world – Ugu Buga. Therefore, the people of the Dulin Buga Middle earth should thank the Upper world Ugu Buga brides and wives for all the familial ties with the heavenly folk" (Keptuke & Robbek, 2002, p.15). Evenks tie the origin of their ancestors to the Upper World. Let us consider an extract from the nimngakan text where the epic hero Develchen states: "My father is Ugu Ulger baegin of the three upper tribes" (Myreeva, 1990, p.199). He also considers himself and his sister the ancestors of the Evenk earth kin: "We were both born on the Middle earth; we are both destined to become the ancestors of the Evenks" (Chistov, 1972, p.118). This constant motive in narrations is in proximity to the scientific conception of the cosmic origins theory based on the view of humans as a cosmoplanetary phenomenon. It should be enough to cite a phase from the conclusion made by biophysicist V.P. Kaznacheyev on the basis of a large bulk of verified empirical facts: "Earth people are derivative of the Universe" (Kaznacheyev, 1995, p.19).

Yakut olonkho, Even nimngakan, Evenk nimkan, Dolgan olonkho reflect spirituality and ensoulment of the nature and natural objects, of the animal world, plants, and objective worlds which could be seen in the forms of animism, fetishism, and totemism. The almighty spirit lives everywhere: in rivers, lakes, natural objects of any location, or in various objects; that is, in all the structures of the palpable, sensuously perceived world. According to mythological views the warriors' weapons possessed magic qualities and were extremely dangerous. When describing the weapons of the warriors the oral folklore abounds in epithets like "ilbisteekh" - "penetrant", "khomulunnakh" - "magic", which contain an element of supernatural. Here is an example of the olonkho text, where narrator depicts the material world of the epic hero: "Inside this dwelling chairs tell tales; tables narrate olonkho; cupboards sing songs; beams hold conversations; shelves make riddles; attics read fables - as it turns out" (Yadrikhinsky, 2011, p.65). Each of the household items is conscious (they talk), has a certain talent (singing, performing) and are represented as living beings. Researcher P.E. Prokopieva in the work titled "Reflection of mythological thinking in the Yukaghir folklore" brings an example of a northern shaman's perception of his environment: "In the river ravine lives the owner - "the Master"; the voice lives there and talks from there. A small grey bird with blue chest shamanizes while sitting in the corner between a branch and a tree, calling upon its spirits. The tree is shaking and weeping under blows of an axe. All that is living is alive; house walls have the voice; and even chamber-pot has its own land, a wife and children. Hides stowed in sacks for future trade talk at night. Reindeer horns placed on the graves walk around, watching the burials" (Prokopieva, 2009, p.23). In Yukaghir mythological tradition all that surrounds people is viewed as alive and intelligent. Each element contains spirits who in their turn have souls. Let us consider an example from the Dolgan world-perception tradition: "The girl, she has a bow and arrows. She is shooting a rider whose back is turned towards her. As she is shooting, she is conjuring: Here, from father and mother the memorial arrow which remained with master-spirit; pierce the back of this abaasy..." (Efremov, 2000, p.135). According to the Tungus-Manchurian peoples' animistic beliefs, every tree is alive, has a soul and hosts spirits (Skorinov, 2005, p.86). Further, under deeper analysis of narrations one can find that both the word and the mind are capable of a tremendous power. Here is an example from olonkho: "Spirits of the words uttered by me, a knot on my memory, and yearning of the living thoughts – all three will become one, will turn into a triple-layered tent, strong as a rock, similar to a saksan duck egg, with no cracks or seams..." (Govorov, 2010, p.135). It means that a human having both tongue and mind, is capable of breathing a particular spirit into an object and a word; a spirit which according to ancestral beliefs can feel, perceive and affect. To be more precise, a word is seen as a single, independent substance with its own elementary mind. Yakuts were wary of any natural object's spirit, or even of a given item. This is the basis of belief that even a child's toy may become haunted. In archaic poetry word is often presented as a separate being independent from a singer. Chukchis believed that words may turn into both animate and inanimate objects, to become visible (Meletinsky, 1994, p.103). The Nanay spirit of intelligence and eloquence is embodied in the cuckoo bird (Lebedeva, 1982, p.14). According to the traditional Yukaghir beliefs all the objects are inhabited by spirits; they are spiritualized and animated to the degree of "living an independent life, falling in love, fighting, getting married, procreating, and hunting" (Spiridonov, 1996, p.49). This stable perception is confirmed by the modern quantum physics postulate known in science as the anthropic principle of participation. Physicist F. Kapra states: "... if on atomic level objects may only be understood in interaction between an object and an observer, that is, scientist cannot only act as an observer, but rather is doomed to be the part of the observed world to an extent of direct impact on the quality of the observed" (Kapra). According to this principle the key link of the observer and participant – object observed is human mind which always affects the features of an object, thus acting as the most adequate argument of perceiving the traditional mythoepic world-view from scientific positions. Back in 1927 physics N. Bohr and W. Heizenberg mentioned this problem in the famous Copenhagen interpretation of the quantum mechanics, having stated it as follows: "it is impossible to speak of the characteristics of matter until the measurements of the observed are conducted, making sure that these characteristics only exist at the moment the measurement is performed. In scientific view of the nature our own activity becomes important where one has to deal with areas of the nature" (Heizenberg, 1990, p.27). Therefore, the analogies with the fundamental quantum physics principle – the principle of indeterminacy and complementarity – are also highly possible.

An important place in texts of the epic heritage of the Arctic peoples is occupied by the ancient animistic beliefs within which the complex souls, or breaths are treated as the substantial catergories. From our perspective, the repercussions of the similarity are visible from the positions of the so-called wave function of the quantum theory that gives a qualitative explanation of the simultaneous existence of many quantum states. Let us bring an example of the olonkho storyline where the shamans rescue the epic heroine: "the shamans exhaling loudly dropped her face-down..., with power of conjuring they separated the woman's syur-kut, raised it and stuffed it in the iron cradle..., they found the lost air-soul, the rejected mother-soul, the dismembered earth-soul of hers; brought it back and joined it to the syur-kut of hers; with conjuring of return they brought back the animal-mother of the female shaman from the remote corner of Siberia" (Timofeyev-Teploukhov, 1985, p.144). Evenks believed in complexity of the soul. According to these beliefs "every human has not one, but several souls known as "shadow-soul", "body-soul", "fate-soul", and "reflection-soul" (Popova, 1981, p.191). In terms of quantum characteristics every particle has wave function, and upon disappearing in one world, it continues to act in another, which in its turn leads to the concept of worlds' multiplication. In other words, simultaneous presence of elementary particle several location characteristic of various quantum states inevitably leads to Everett's interpretation which suggests the existence of "parallel Universes". Evens and Evenks believed that a deceased person continues to live in another world. In the aspect of immortal soul describes in olonkho text as "And when Uot Usumu warrior flew down, cut in half..., the excellent leregey Udagan known for her gluttony, opened her jaws, stuck out her long tongue and caught the falling man with it in an instant; only her teeth gave a clatter, and the spirit of his transformations fluttered away from the dark throat of hers..." (Oyunsky, 1975, p.350) - the identity of the notions could be found in the universal law of energy conservation which was discovered empirically and which states that energy could be neither created, nor destroyed; it is conserved at all times by way of transforming from one type into another. The threefold model of the universe also correlated with the concept of multiple worlds.

Of no less interest is an important category of human existence; that of the "freedom of choice". Narrative texts abound in storylines where heroes are overcome with doubts concerning choices throughout their lifetime. As it was stated earlier, the settlement of the original people-warriors in the Middle earth was based on idealistic objectives and for "greater" deeds. Higher deities are considered to be creators, but they

never directly interfere with human lives. Later human lives was unpredictable; all the problems were solved by conscious decisions by people who were constantly facing the choice of "what to do" in every difficult situation. Epic heroes are not strangers to inner contradictions. Thus, in olonkho: "The woman, preening herself without interruption uttered rather severely: "Sit!" Then Chugdaan Buhatyyr not daring to sit on the main bench, took the middle one. The woman thought to herself: "Although I have been punished severely by the immutable decision of the formidable heaven's rulers; to refuse food and stay to the only guest who has come to visit me - that would be too much" (Burnashev, 1993, p.179). Then, during the warm reception the warrior shares the misfortune that has befallen his family, and the heroine goes through inner turmoil: "at one moment anger begins to boil inside her upon thinking that the first person she met is asking for her assistance; at another, sympathy warms up upon hearing a story of the man in grief. Kyys Debiliye voices her grievance - none of her own kin showed empathy to the unfortunate, exiled woman; none even greeted her" (Burnashev, 1993, p.23). In the end, however, "she overcomes her inner duality, forgets her grievances, putting tribal interests in the first place" (Burnashev, 1993, p.23). The given storyline could be interpreted from the quantum physics positions as follows: people are prone to sense the presence of the multiple "I's"; they in their turn simultaneously exist in diagonal worlds; and when an individual makes a conscious decision all the other variants retreat to their respective worlds, while eternally tormenting them as possibilities.

Conclusion

An epic work presents a complex system with multiple levels and dimensions. In this aspect physics as a science focusing on the universal laws and equipped with better evidential and methodological status, could only be of help. Universal character of the synergetic approach enables the qualitative transference of various forms of knowledge in the dialogues between humanities and sciences which in its turn advances the inter-disciplinary communication. Comparative analysis of the world-perception of the Arctic peoples' archaic epics representing the non-scientific form of knowledge, and modern physics representing the basis of scientific disciplines leads to integration of various forms of knowledge and understanding the integral nature of the being. This is the leading tendency in forming the humanistic ideas, establishing the systemic, global thinking, in strengthening the categories of human responsibility via the understanding of its symmetry to the rest of the world, and organic belonging to the integrity of the cosmos. The approach used in the research has been determined by challenges of the modern science; it demonstrates partial solving of the problem of humanitarian knowledge subjectivism on the one hand, and problem of humanization, provision of the "ethic aspect" in scientific knowledge. Thus the novelty of the approach provides the advance in status of both systems.

Acknowledgements

The study was conducted as part of the NEFU research project titled: "Heroic epics of the Eurasian Turkic-Mongolian peoples: Problems and perspectives of comparative studies".

References

Alexeev, N. A. (2008). Ethnography and folklore of the peoples of Siberia. Novosibirsk: Nauka.

Burnashev, N. P. (1993). Kyys Debiliye: Yakut heroic epic. Novosibirsk: Nauka.

Chanyshev, A. N. (1970). Aegeian proto-philosophy. Moscow: Moscow University Publishing House.

Chistov, K. V. (1972). Folkloric words by G. M. Vasilevich. Issues of language and folklore of the Northern peoples. Yakutsk: Institute of Language, literature, and history, 183-238.

Efremov, P. E. (2000). Folklore of Dolgans. Novosibirsk: SB RAS Institute of Archeology and Ethnography Publishing House.

Emelyanov, N. V. (1983). Storylines of the early types of the Yakut olonkho. Moscow: Nauka.

Gogolev, A. I. (2005). Folklore of the Paleo-Asiatic peoples. Proceedings and Reports from the International research conference (November 26-30, 2003).

Govorov, D. M. (2010). The Undefeatable Myuldju Byegye. Olonkho. Translated by E. S. Sidorov. In 2 books. Book 2. Yakutsk: Bichik.

Heizenberg, W. (1990). Physics and Philosophy. Part and the Whole. Moscow: Nauka.

Kapra, F. (1997). Dao of Physics. Retrieved October 1, 2018 from URL: http://lib.ru/KAPRA/daofiz.txt

Karatayev, V. O. (1996). Yakut heroic epic "Er Sogotokh the Mighty". Novosibirsk: Nauka.

Karatayev, V. O. (2017). Ogo Tulaayakh warrior. Olonkho. Yakutsk: Alaas.

Kaznacheyev, V. P. (1995). Problems of living matter and intellect: studies to theory and practice of the 3rd millenium medicine. Herald of N. A. Kozyrev International Institute of Space Anthropoecology, 2, 7-24.

Keptuke, G. & Robbek V. (2002). Tungus archaic epic (Evenk and Even heroic narrations). Yakutsk: SB RAS Institute of the Problems of the small-numbered peoples of the North Publishing House.

Khudyakov, I. A. (1969). Brief description of the Verkhoyansky district. Leningrad: Nauka.

Lebedeva, Zh. K. (1982). Epic monuments of the peoples of the Far North. Novosibirsk: Nauka

Myreeva, A. N. (1990). Evenki heroic narrations. Novosibirsk: Nauka.

Oyunsky, P. A. (1975). Nyurgun Bootur, the Swift: Olonkho. Translated by V. Derzhavin. Yakutsk: YKI (Yakutsk Publishing House).

Popova, A. S. (1996). Synopsis of the thesis in Candidacy for a degree in Philosophical sciences. Yakutsk.

Popova, U. G. (1981). Evens of the Magadan area. Moscow: Nauka.

Prokopieva, P. E. (2009). Reflection of mythological thinking in the Yukaghir folklore. Novosibirsk: Nauka.

Satanar, M. T. & Illarionov, V. V. (2018). Synthesis of the Fictional and Imagery world-view in Olonkho, and the scientific world-view. World of Science, Culture, and Education, 3 (70), 490-493.

Skorinov, S. N. (2005). Cosmologic beliefs of the Tungus-Manchurians and Nivkhs of the Russian Far East (XIX – early XX centuries). Herald of FEB of RAS, 2, 84-95.

Spiridonov, N. I. (1996). The Oduls (Yukaghirs) of the Kolyma district. Yakutsk: Severoved.

Timofeyev-Teploukhov, I. G. (1985). The Obstinate Kulun Kullustuur. Olonkho. Moscow: Main Editorial Board of Oriental literature.

Varlamova, G. I. & Varlamov, A. N. (2004). Narrations of the Eastern Evenks. Ed. by A. N. Myreeva. Yakutsk: Yakutsk Branch of "SB RAS Publishing House".

Vinokurova, U. A. & Shilin, K. I. (1995). Life is built by people. Japan — Russian — USA: Eco-synthesis of cultures. Book 1. Ecosophy of Life. Ecosophy of Japan. Moscow: Ochag.

Yadrikhindky, P. P. & Bedjeele (2011). The Maiden-warrior Djyrybyna Djyrylyatta. Yakutsk: Saydam.