

SUMMARIES OF THE ARTICLES IN ENGLISH

PHILOLOGY

P. 7. *Belokoneva Anna O.* National Research Tomsk Polytechnic University (Tomsk, Russia). **ANTHROPONYMS IN POST-MODERNIST TEXT: STRUCTURAL AND FUNCTIONAL TYPES (BY WORKS OF V.O. PELEVIN).** The aim of this research is to determine characteristics of using different types of anthroponyms in a post-modernist text on the basis of V.O. Pelevin's works: *Generation "P"*, *The Yellow Arrow*, *Omon Ra*, *The Horror Helmet*, and *P5*. In the article according to linguistic cultures the anthroponyms in the above-mentioned works are divided into two types, each of which is divided into subtypes. To define how these two-typed names function in the text the concept of markedness is used. The names corresponding to the Russian trinomial system of the complete anthroponym, used in texts in one or several structural forms, relate to the first type. This anthroponym type is used to characterize a personage socially and culturally and is represented in the analysed works in various structures: trinomial, binomial and mononuclear. According to the context the names of the given type can be characterised as marked and unmarked. The second type attributes to the names, which do not belong to the Russian anthroponym system. The analysed anthroponyms are regarded as marked for the representatives of Russian linguistic culture. This type has two varieties: the first is the names with semantic direct reference to the "alien" culture, the second type refers to occasional, individually author's anthroponyms (these proper names have a reference to worldwide culture realities and are regarded as occasional – that is the author's name-creation product). The article focuses on occasional names-nicknames and considers the peculiarities of name-nicknames functioning in V.O. Pelevin's novel *The Horror Helmet*. The name-nicknames are divided into subtypes in accordance with the purpose of using them in the text: 1) the names preceding the text used for marking the addresser; 2) the names used for addressing to or informing about the character in the message text. The article characterises each subtype and describes demonstration of mythological origin in the characters' names. The author concludes that name myth development in post-modernist texts is realisation of characters' social status and behaviour strategy influenced by the name referred to mythologems and linguistic cultureemes.

Key words: anthroponyms; types of anthroponyms; post-modernism; markedness / unmarkedness of anthroponym.

P. 11. *Vasin Nikita S.* Gorno-Altai State University (Gorno-Altai, Russia). **SEMANTIC FIELD OF J.W. VON GOETHE'S FAUST REPERCUSSIONS AND ALLUSIONS IN A.S. PUSHKIN'S WORKS.** The article examines allusions and references to J.W. von Goethe's *Faust* in the art of A.S. Pushkin, 1821-1830. We assume that the first Pushkin's reference to *Faust* is a preliminary epigraph to the poem *The Prisoner of the Caucasus* (Kavkazskiy Plennik) finally assigned to Tavrida, a rough draft that had never been finished. Then goes a huge group of works – rough sketches, odd fragments – The Onegin Circle, closely linking the artistic concept of Eugene Onegin (Yevgeny Onegin) with *Faust*. Later – the unfinished letter <to V.F. Raevskiy>, October 1822 (You are right, my friend – I've regained my sight in vain...); the draft *In sweet dazzle I had*, June 13 – November 1, 1823; the strophe XVI (b) of the second chapter of *Eugene Onegin's* draft, written before November 3, 1824; elegy *Demon*, December 1-8, 1823. *Conversation of a Bookseller with a Poet*, September 26, 1824, continues the further elaboration of *Faust* themes in the works of Alexander Sergeyevich. The other work disclosing the close bond with *Faust* is *Scene from Faust* (1825). Justly being the core of Pushkin's works dependent on Goethe for themes and inspiration, the piece reveals clear references of a huge part of author's works, with *Eugene Onegin* topping the list, to Goethe's tragic play. Moreover Pushkin was writing a *Faust* of his own, thus giving life to several sketches and outlines of unfinished works: *Sketches on the Concept of Faust*, *Demon in Love*, *Infernal Poem*. To some extent *Boris Godunov* is another piece confirming the Goethe-dependent character of Pushkin's plays. The specific composition and complex genre texture of *Boris Godunov* bring the piece close to the structure of *Faust*. *The Little Tragedies* (Malenkie Tragedii) and the poem *Hero* (1830) are other examples of Pushkin's obsession with *Faust*. The form, the structure of motifs and scenes of *The Little Tragedies* let us assume it has common genesis with the composition and semantics of *Faust*, while the plague motif of the *Hero* poem plays a vital role in creating a complex dialogue integrity between *The Little Tragedies* and *Eugene Onegin*. *About Pope Joan* and *Scenes from Knightly Times* crown the Goethe-inspired works of Pushkin. Both texts indicate the author's profound knowledge of the tragic play. Thus, the outline of *About Pope Joan* covers all the *Faust* leading motifs, while the idea of *Scenes from Knightly Times* reveals Pushkin's deep understanding of the essence of Goethe's *Faust*, as well as the *Faust* of medieval legends. All the mentioned references to *Faust* in Pushkin's works undoubtedly reveal the huge interconnected system of Goethe's *Faust* repercussions and allusions, bringing a new understanding of the dialogue between Russian and German cultures, breaking the canon of poetry and motif structure of Pushkin's heritage.

Key words: Pushkin's *Faust*; *Faust* in Pushkin's works; *Faust* allusions; influence of *Faust*; Goethe's *Faust*; Goethe's text; dialogue.

P. 15. *Tarakanova Darya A.* National Research Tomsk State University (Tomsk, Russia). **"SYMBOLIC" IN COLOUR TERMS OF FOLK CULTURE (LINGUISTIC AND CULTURAL ASPECT).** Comprehension of the world people's consciousness took place with all the senses, and therefore, assessment, standards setting in popular culture is largely associated with the colour. In modern science, great attention is paid to the interaction of language and culture, language and thought processes, perception. Colour as one of the most important factors in man's perception and description of the world stands out as a modelling element of folk linguistic picture of the world and is the subject of study of linguistics, ethnolinguistics, cognitive linguistics. The main place in these studies is the study of the semantics of colour to identify associative, symbolic meanings. The object of the article is based on the symbolic meaning of white, red and black colours in Russian national culture. The symbolism of white colour in folk culture is realised in the transition rites of birth, marriage, death and other. Text describing a wedding ceremony in the Middle Ob region reflects the functioning of "white" to indicate the transition state between the living and the dead, and actualise the symbolic meaning of death, afterlife, as well as the mascot of the semantics. In the wedding ceremony "red" often means the semantics of life, health and girl's young ages. The semantics of the elements seen in the wedding ceremony aimed at identifying the honesty (innocence) of the bride. There also is an all-Russian context, demonstrating the use of tokens in relation to the girl of marriageable age in the sense of "beautiful", "young". In the dialects of the Middle Ob region black colour is mostly presented in opposition to the white and has a different semantics. For example, the designation

of the colour "black" appears in the description of wedding train horses. They symbolise the bride's transportation from one world to another and perform a protective function. Traditionally, the groom's suit is black and white. This indicates the status of the subject who is in a transitional state between our world and other ones. Thus, white, red and black colours are symbols in the Russian folk culture. The colour symbol reflects the colour picture of the world, at the same time subjected to mental processing, it becomes an instrument of remaking reality and a means of transmitting cultural and spiritual experience of the people.

Key words: picture of folk culture; symbolic value of colour.

P. 18. *Turina Irina I.* National Research Tomsk Polytechnic University (Tomsk, Russia). **GENRE ORIGINALITY OF PLAY "IS LOVE A MIRAGE?" BY VYACHESLAV IVANOV.** Vyacheslav Ivanov defined the genre of the play "Is Love a Mirage?" either as a tragicomedy or as an operetta-melodrama. This points, first of all, at the complex nature of this literary work. But, in general, it is possible to designate two poles of it: one is tragic, the other is comic. In the text of the play formal features of operetta are subordinated to the original author's plan. Firstly, the characters are complicated due to the introduction of socially-philosophical implied sense. For instance, the problem of the "superfluous" person and the idea of eternal wandering add not an operetta overtone to the atmosphere of the play. Secondly, the author preserves the external love conflict between a representative of wealthy aristocracy and a star of artistic bohemia, which is traditional for a plot of such a genre. But the real plot forming conflict does not have an external but internal character and is built due to the laws of "new drama" of the twentieth century. Thirdly, the text realizes motives with more likely tragic, than operetta property. For example, the motive of integrity / not-integrity is obviously out of the operetta paradigm. The melodramatic nature of the play by Vyacheslav Ivanov attracts attention by its ambivalence and "multilayeredness", "growing" of the tragic through the melodramatic canvas. The play raises the problem of imaginary and authentic reality, which was interesting for Vyacheslav Ivanov long before the appearance of "Is Love a Mirage?" But the framework of the melodrama genre obviously limits the range of problems of the play. The characters, conflict typology and even the intrigue of the play go beyond the melodrama frames and take other genre forms. The main characters of Ivanov's melodrama evolve against the genre often producing ambivalent attitudes of the readers, the conflict becoming tragic. So, "Is Love a Mirage?" could only partly be accepted as an operetta or a melodrama. Its plot and composition have a number of features of a tragicomedy. But the play is believed to have an essential feature: none of the main characters, who should come "per aspera ad astra" due to the logic of a tragicomedy, settles their internal conflicts at the end of the play. The author believes that a personality of the twentieth century cannot find the wholeness even in the death as today's deliberate choice of leaving life is inaccessible: a personality has neither physical strength nor soul powers enough for it. This is the root of the original tragic element of the modern epoch of destruction and transformations. That is why, there is no overcoming of the tragic situation in the play, it is realised through the comic element. The main character, not "having reached" the status of the tragic hero, becomes the tragicomic one. The situation, the main character of "Is Love a Mirage?" acts in, is put in the context of the events that are tragic by their nature and therefore it reveals truly catastrophic aspects of existence.

Key words: Vyacheslav Ivanov; comedy; tragedy; tragicomedy.

PHILOSOPHY, SOCIAL AND POLITICAL SCIENCES

P. 24. *Agafonova Yelena V.* National Research Tomsk State University (Tomsk, Russia). **PHILOSOPHICAL ASPECTS OF EDUCATION: UNIVERSITY AND CHANGING EDUCATION STRATEGIES.** This article discusses the relationship of philosophy and education. The themes defining philosophical aspects of education are specified. We discuss the validity of the thesis that philosophy, evolving some ideas about man, society and the world, has vocation for developing the fundamental principles of education and training. In this regard, special emphasis is laid on the history of relations between philosophy and education that began in antiquity. Starting from this moment close connection of education, philosophy and society was captured. The education of antiquity placed a virtuous person on the first place, combining his own benefit with the common good. The exalted image of an educated person was differently represented in various philosophical and pedagogical concepts, but the principle of ascension to the general pattern remained the same. The person finds himself only in society, in social practices and training. Therefore, pedagogy was understood as the practical side of philosophy, which, in turn, gave the ontological justification of society and man, thereby appeared as the basis for all available educational systems. Accordingly, the change in social reality should lead to new attempts in understanding it. Each re-description of sociality will be transmitted to social practices that adopt the main features of the new movement and change. Hence is the problem: how the current conception of man and his identity correlates to the available structures of education? Does the present model of education correspond to the modern socio-political and economic realities? Education becomes a service industry and its "openness" meets the needs of the market, providing opportunities to participate in the competition. The article discusses the question of influence of the current situation in education on the definition and functions of the university, as well as the question of changing the status and role of university in education of a personality. University today must support its own image built over the centuries. That is, there must be public education and criticism, and both must meet the requirements of modern economic recovery and growth. Rival ambitions inevitably lead a university away from the consistent movement towards a single goal. Then it is logical to ask the following questions. How is it possible that the structure has continued to dominate the minds of educators and bureaucracy in spite of the heterogeneity and mobility of intellectual activity today? Will there be a real change in the modern institutions of education, where the quality as anywhere else depends on the infinite and chaotic set of personal aspirations and interactions, if only to reform the structures?

Key words: philosophy; education; identity; university.

P. 31. *Goncharenko Mark V.* Baltic Higher Naval Institute named after Admiral F.F. Ushakov (Kaliningrad, Russia). **PRINCIPLES OF KNOWLEDGE EFFICIENCY AND PERFORMANCE IN J. LYOTARD'S CONCEPTION.** Scientific discourse alteration and, consequently, knowledge transformation has become urgent since the Modern Age. In this respect, the issue arousing well-grounded interest is of mutual relations between knowledge and other traditions of reality comprehension, the methodological and metaphysical status of which both in the first and second cases indicates the impossibility of objectified "priority" against them. J. Lyotard's conception of modern state of knowledge as post-modernist discourse is stated in retrospection terms that enabled him to word a well-reasoned conclusion of inability of the old principle of knowledge attainment which "...is inseparable from mind and... personality moulding" (Lyotard). Lyotard's comparative analysis of grounds of myth, narrative and statement proved inconsistency of claims of the latter (statement) on exceptionality of its soundness. For the post-modern state, in Lyotard's opinion, a continuous "effort" of keeping of

a certain state is quite natural, i.e. an effort of system preservation as a global network of relations: game directives change is fraught with disappearance of a cultural-historical type, but not certain expression forms of the state of affairs (myth, narrative, statement) that have existed for thousand years. Therefore the "implementation" of efficiency and performance principles in mass consciousness as principles aiming at stability of the integrated "intellectual system", the utilitarianism of which is consciously ignored by the intellectual Western community, looks so natural and explainable. A currently prevailing attempt of knowledge transformation into a global information system, on the one hand, is an absolutely logical development stage of positivist view of knowledge nature ("knowledge is power"), and, on the other hand, is an outcome indicating the state of a global crisis of the current system (tradition), since knowledge, as well as information, is deprived of its key feature – viewing aspect (grounds do not condition conclusion – the post-modern state as the reverse side of consequence out of contradiction). The problem of knowledge and other traditions grounds has also been considered in terms of impossibility of the grounds validity, according to Wittgenstein. Axiomatic provisions character [of science] is also rather disputable as their transcendental description is not possible. Different ways of reality understanding/comprehension have been conditioned by one and the same referent.

Key words: knowledge; sciences discourse; legitimating; rationality; post-modern.

P. 35. *Mukhin Andrew S.* St. Petersburg State University of Arts and Culture (Saint-Petersburg, Russia). **HUMAN BODY AND ITS COVERS: ARCHITECTURE, COSTUME, AND TRANSPORT.** All objects created by man, are in close relation with his body, regardless of the size, mass and function of these items. Anthropomorphism, the existence of the world of artefacts in relation to the body, is a fundamental principle of culture. The author of the article considers the main types of suit, architecture and transport as a cover of the human body. Connection of these covers with the person exists not only in the physical mode, but also at the level of semiotic codes. Even etymologically it can be seen in the language, in the names and terms of parts and structural elements. In spite of the fact that the human body is not of exact geometrical shape, the covers are clearly pronounced correct geometrical figures, be it patterns of costume, cubic capacity of building, or the salon of air plane. Outside the covers the person is impossible not only as a biological species, but also as a creature, endowed with intellect and creative force. They are cultural markers, whose role in the early development stage of primitive communities belonged to manipulations of the body (tattoos, painting, scars, change in the form of lips, neck or ears). However, even societies on a primitive stage of social development have objects corresponding to body covers: fabric and leather garments, masks and ritual costumes, primitive armour and shields, boats and canoes with ship-like cabins, huts, community houses of impressive size, and caves. Costume, architecture and transport are not only the contours of the flesh, the receptacle of the organic being, but also a source of complex signals sent to the society. These signals broadcast a set of information about the body and its owner. Body covers led to development of a rich object-domestic and artistic thesaurus of achievements of civilization, as well as space and time intervention – the spread of homo sapiens on the planet, expanding its geographical and historical horizons. Without them a person could not leave the territorial boundaries of the region of origin, could not bear an entirely new species, which differs from the rest of the animal world, and would have remained at the level of animal existence. Technological progress led to a high degree of covers isolation from the environment. On the Earth, which the humankind has adapted, it is still possible to take off the covers and fuse with nature. In the Space taking off the covers is a threat to the human exploring the vast expanses of the Universe in search of other worlds and other Mind.

Key words: human body; cover; costume; architecture; transport.

P. 39. *Novikov Ivan A.* Tomsk State University of Architecture and Building (Tomsk, Russia). **ON SOME ASPECTS OF A.F. LOSEV'S DEFINITION OF DIALECTICS IN DIALECTICS OF MYTH.** In the first paragraph of definition Losev considers dialectics as "logos". This means that dialectics is always an abstraction, a distraction from the thing. Dialectics is not a direct and immediate perception, in which all its moments are given together and indistinguishable, in contrast, dialectics is always formalization and differentiation, causing order and regularity, harmony in perception. It should be noted that this "logization" of dialectics does not indicate its abstraction in general, its strangeness in real life. It is an "abstraction" of dialectics to immediate perception that says dialectics is directly related to real life. The second paragraph in Losev's definition of dialectics is positioning it as the "eidos of logos". Eidos of thing is the thing itself. Dialectical knowledge of thing is knowledge of thing relative to thing by itself, dialectics is precisely the lack of "normativity" in cognition in the negative sense of this word. The things that surround us in our immediate existence are always a little meaningful, are a certain degree of the meaning themselves. This "degree of comprehension" of things is absolutely natural, and this circumstance justifies the existence of all other sciences except philosophy. Meanwhile, neither the existence of these sciences, nor their success in the cognition of the universe indicates that there is no possibility of a more holistic approach to things. Eidos of thing is taking thing in the fullness of its meaning, which makes eidos the "semantic face" of the thing. The third and last paragraph of Losev's definition of dialectics is positioning it as logos not of any eidos, but "logos of the categorical eidos". Thing exists in itself and it also relates with other things. The specificity of the dialectical approach is in the fact that dialectics takes eidos in its more external sides, fixes in eidos its external relations. Losev calls this way of eidos in dialectics "categorical eidos". In order to use thing there is no need to pay attention to the semantic context, in which it connects with other things. But let us make a mental experiment: pay attention to these connections. What happens in this case? The thing reveals to us. How will the nature of our interaction with this thing change? Our interaction will become... communication, from using the thing we will get to communicating with it.

Key words: dialectics; logos; abstraction; eidos; category.

P. 44. *Sycheva Svetlana G.* National Research Tomsk Polytechnic University (Tomsk, Russia). **ON SOME AESTHETIC IDEAS OF KANT AND V. IVANOV.** The influence of Kantian philosophy on Russian thought is beyond doubt. In the article we must investigate one aspect of this effect – the influence of philosophy of Kant on the aesthetics of V. Ivanov. In what manner are the Kantian ideas interpreted in texts of Ivanov? And if this influence really exists, what is its essence? For answering the questions, we must analyse some essential elements of Kantian aesthetics. Is interest in beauty connected with interest in the good? This is the question Kant needed to answer. Some people think that a man who likes beauty tries to establish moral goodness. Others think aesthetic men are passionate, vain, stubborn, and, therefore, interest in beauty is not combined with interest in the good. What does Kant himself think about this question? He supposed that interest in beauty does not combine with interest in the good, but interest in the beauty of nature is a sign of a good soul. One of the peculiarities of art is the fact that it harmonically describes things, which are ugly and disgusting in nature. Here we must remember the aesthetics of ugliness. Even more vile things may be shown artistically, if they express a creative aesthetic idea. We imagine God symbolically, not schematically. The last point of view leads to anthropomorphism. But if we move off all the intuitive

from the knowledge of God, we may come to deism; and this style of thought is unproductive, according to Kant. So, the Kantian interpretation of the symbol absolutely corresponds to the tradition of European philosophy and may be described as sensible image of abstract notion. Kant differs the notions "beauty" and "moral good", and in his philosophy the first depends on the second. The free mind of the Russian poet-symbolist could not agree with this idea, of course. The analysis of texts of Kant and Ivanov allows making a conclusion that the choice between Plato and Kant, made by Ivanov, was made in favour of the former. It is a wrong opinion that Plato opposed two worlds: the world of ideas and the world of things. Really, Plato's philosophy has a notion of the "World Soul", which connects the two worlds into a harmonious whole. As for Kant, in his aesthetics, which follows from his ontology, the world of beauty is opposed to the world of the good and submitted to it. This idea contradicts to the spirit of the free aesthetics.

Key words: Kant; Ivanov; problems of aesthetics.

P. 48. *Faritov Vyacheslav T.* Ulyanovsk State Technical University (Ulyanovsk, Russia). **TRANSGRESSION, BORDER AND METAPHYSICS IN DOCTRINE OF G.W.F. HEGEL.** Philosophical searches of Hegel are based on two opposite tendencies. On the one hand, negativity is released from the power of identity and positive presence, negativity has the status of an independent and fundamental vector of life. On the other hand, there is a tendency to submission of negativity to presence, identity, which finally wins and becomes the determining moment of Hegel systems. Kant criticised the content of metaphysics, however, preserving its form – the opposition of the sensually perceived and super-sensual worlds. Criticism of Hegel is directed at this form. The fundamental mistake of metaphysics by Hegel is that it takes the finite and the infinite as two extreme terms, as different spheres of being contrary to each other, occurring outside each other's areas, separated by an unsurpassable border. Transcendental infinity is only the result of denying the finite. Opposing the finite, the infinite is nothing, pure negativity, emptiness. Hegel replaces transcendence as the exit to the beyond by transgression. Transgression assumes displacement of borders resulting in the transformation of the starting point. For Hegel the movement of transgression, formation is primary, with contrasts being only moments of this formation. There is a neutralization of the transcendental world: it no more has the independent ontological status, but becomes something to overcome. Neutralization of the transcendental results in similar neutralization of the immanent – this area of being is also overcome as a moment without independent being. At first sight, such a result is close to Nietzsche's thesis on overcoming metaphysics. However, similarity here is only formal. Hegel, preserving the metaphysical tradition going from the antiquity, prioritizes presence and identity, considering formation and distinction as moments whose movement inevitably results in final identity. Nietzsche, on the contrary, approves formation, believing that any steady and completed existence is the purely feigned, the platform for even greater differentiation. By Hegel, the identity neutralizing itself is the moment of self-consciousness or spirit as presence (identity) of a higher level than simple definiteness, as unique true presence, original life. By Nietzsche, the identical and the present are the simulation of will to power, which levels any presence and reveals the formation of surplus, loss, and transgression. Hegel tested the power of transgression as an independent vector of life on own experience and built a grand system to rescue the breaking and escaping world of identity. Thus, Hegel remains in the sphere of metaphysics of presence and totality, despite the successful destruction of the metaphysical theory of two worlds.

Key words: border; transgression; transgression; metaphysics.

CULTUROLOGY

P. 53. *Bazhanov Nicolay S.* Novosibirsk State Conservatoire (Academy) named after M.I. Glinka (Novosibirsk, Russia). **ON TEMPO OF DURATIONS IN BEETHOVEN'S SONATAS.** The article studies the time intoning on the basis of chronometric measurement system during the piano performance. With the help of the computer program, Adobe Audition 2.0, the audio signals from the gramophone and audio records performed by the best pianists of the past and present were recorded. Then, using the same computer program, we carried out the time-keeping of a very single tone of the composition. Measurement accuracy of this program is 0.001 sec. The measured time results of every tone were written into the table built in Microsoft Word–2003, where the time automatically was recalculated in the tempo system according to Maelzel's metronome (the number of beats per minute to the metric duration). After that, on the basis of the mentioned table and a diagram in Microsoft Word –2003, the tempo profile of every tone in performance was elaborated. To compare and discover the common tendencies, we combined some tempo profiles of different performers and built the summary diagram of tempos. As a result of our measurements and analysis of the performer intoning, we have come to the following conclusions. Strong concordance of the tempo profiles are observed during some fragments, while there is complete disagreement during the others. The concordance and disagreement of tempo profiles during the performance can be explained by many facts including composition genre, composer's style, form and context, tempo of performance itself. There is interference between closely placed durations, when a long duration makes the next short duration a little bit longer, while the following short duration shortens the previous longer one. We cannot put an equality mark between the complex of the composition structure and chaos. The correlation of tempo profiles into expositions and reprises can definitely show us this fact. The chaos cannot create repeating structures. Only the focused targeted wish of a musician can implement it into life. A great number of agreements in tempo trajectories of one performer point out his individual way in time intoning. The measurement analysis of performer's duration shows that the rhythm has a great influence on the tempo of durations performance. Thus, the rhythmic image set by a composer includes some tempo ideas of a musician as well, which are realised by a performer, sometimes even unintentionally. The tempo trajectories of performers are more individual, while they are performing the slow tempo or cantilena, than the fast one. The theme of a composition becomes more individual and peculiar. A performer's individual character of time intoning possesses quite strong stability and repetition. The pianist's stability in the time intoning is so high, that it can be treated as a practical mechanism of the performer's style. Analysing the way of repetition we can conclude that performers, while playing, intone time differently in respect to composition notes, but not to their own way of performing. A number of rules, which the performer applies, are enormous and a part of them he or she establishes individually.

Key words: music time; tempo; rhythm; performer intoning.

P. 60. *Goncharenko Svetlana S.* Novosibirsk State Conservatoire (Academy) named after M.I. Glinka (Novosibirsk, Russia). **INTEGRATIVE PROCESSES IN MUSICAL COMPOSITION.** The article deals with connection of modern music dramaturgy, thematic processes and composition and classifies thematic organisation types. The first classical type of thematic organization is based on rhetoric logic and includes three components: exposition of a theme – structural stability – is followed by the theme development – structural instability – and recapitulation – structural stability (German – fest, locker, fest). All the other thematic organization types are

based on the first one. The second non-classical type is an inversion of the first type, in which the structural stability is in the centre of composition. The third and the fourth types consist of two components. The third type is differentiating – the theme exposition is followed by the theme development; in the fourth, the integrative type of theme development precedes its exposition. The author pays special attention to the integrative type of theme organisation (ITO) in the music of the end of the 20th and the beginning of the 21st centuries. This type can be found in two groups of compositions – ternary, rondo, sonata, cyclical, free and mixed forms and in specific variation and theme form, which is also defined as "variations with theme at the end", "reversed variation cycle", "reversed variations" and "inverted variations". The research of this type of composition has just started. The author sums up observations and singles out the common traits found in music works of R. Shchedrin, A. Shnittke, A. Tchaikovsky, S. Gubaidulina, D. Krivitsky, etc. The transformations of the theme micro-structures (short tunes, phrases, elements of serial, aleatoric, sonoristic techniques) create a wide area of structural instability. The theme form is opposed to previous variations in structural stability. Meanwhile, it possesses openness characteristics due to high shifts of melodic sentences, improvisation, etc. Complicated integrating progressing leads to meditation. The theme has lyrical and philosophical content, and melodic nature. It sounds as the "voice of the author" and symbolizes soul harmony. The article discovers the comprehension history of ITO potentials and forms of "variations and theme" in works of West European and Russian composers, the author gives references to words of R. Schumann, A. Serov, V. d'Indy, M. Gnesin and D. Krivitskiy and shows that the form descends from homiletic traditions and cycle structure of J.S. Bach's cantatas. In the conclusion the author connects Igor Stravinsky's *l'homme integral* idea and philosophical conception of unity of homo sapience and homo religious and gives culturological grounds for integrative processes in modern musical composition.

Key words: musical theme; theme organization; variation; integrative development.

P. 65. *Drozhzhina Marina N.* Novosibirsk State Conservatoire (Academy) named after M.I. Glinka (Novosibirsk, Russia). **JALOLIDDIN RUMI'S POETICS IN COMPOSING CREATIVITY.** In this article, the reasons of tremendous influence of Sufi, poet and mystic-philosopher Jaloliddin Rumi on modern music art are analysed. The main of these reasons is that music is one of his doctrine concepts. In Rumi's poetry and philosophy it is presented as love and means of comprehending God, while Nai (a reed flute) expresses the Sufi symbol of man's aspiration for God. In Mawlawiyah fraternity founded by J. Rumi, the practice of ecstatic dance accompanied by wonderful music had been established. Here the importance of translations made in the nineties by an American poet K. Barks is underlined, in his helping the active musical comprehending of Rumi's poetry by representatives of the Western (first of all, English-speaking and mass) culture – let us just recall "Monsters of Grace" opera (1998) by a minimalist composer Philip Glass and "Turning to the Centre" symphony for baritone, percussion, clarinet and piano (2002) by Philip Schroeder, as well as some others. To understand the reasons of Rumi's creativity influencing music composing, category of poetics is chosen as a universal aspect. By analysing the number of works created by composers of various epochs and directions – i.e. "Song About Night" Symphony # 3 by a Polish composer K. Shymanovski (1916); "Rumi Recitatives" suite for flute and piano by a Tajik composer T. Shakhidi (1981); "Parables" – the cycle of four a cappella choirs by a Uzbekistan composer A. Varelas (1986), etc., – the main parameters of J. Rumi's poetics were singled out, realized in music opuses. Among them is "sound of silence" transferred into music with the help of repetitive techniques, poetical "double metaphor" technique in music through interaction of two imagery strata – "anthropological" and "cosmological" one; improvisations based on variant development of one nucleus-leitmotif. Its sources are found in the imagery sphere of Rumi's poetry, in development principles of traditional professional music of the Central and the Middle East, as well as in Mawlawiyah Order rituals, in particular. But the leading role here belongs to the vividly expressed dialogue character conditioned by the influence of "sukhbat" Sufi tradition (communicating on religious- mystical themes). In Rumi's poems we constantly hear what Bakhtin calls "internally dialoguized words". With Rumi, this internal dialogue ascends to the conceptual level, where the stream of conversation flows through the man independent of what he is talking or keeping silent about. By example of the number of works we find a whole set of universal parameters conditioned by both the tendencies of the poetic text ("sukhbat" principle) and peculiarities of music development ("makam" principle of varying a single nucleus-leitmotif). The sources of the discovered commonality are concentrated in poetics of J. Rumi's immortal works. Along with this, these compositions reflect both individuality of the authors and peculiarities of each particular epoch.

Key words: Sufism; poetics; composing creativity; dialogue nature.

P. 69. *Pokrovskaya Nadezhda N.* Novosibirsk State Conservatoire (Academy) named after M.I. Glinka (Novosibirsk, Russia). **INTERNATIONAL THEMES VARIATIONS FOR HARP.** Harp music is still a "blank" in musicology. But it does not mean it is not worth of some special attention from musicians. Recent discoveries in Russian and West European archives make us reconsider our attitude to this type of musical instruments and to music written specially for harps as a whole. This article aims at describing its artistic and masterly features in a musician's opinion and in the context of different centuries, styles and national peculiarities. The time limits were from the middle of the 18th to the middle of the 20th, which is connected with the creation of a modern pedal harp. The object of our study is harp repertoire within a single genre. We have chosen variations as the most widely spread and demonstrative kind for the stated tasks. The subjects are variations on the topics of La Folia, Haydn, Mozart, Paganini and Russian folk songs; we applied historical method and comparative analysis to study them. These topics are quite a rewarding field to work with as they have attracted much attention of many composers and musicians. There are some similarities among them, which draw them together: like the simplest harmony (T–D–T and S in close), short deviations to major in flat topics, repetition of the main melody and rhythmic outline, as well as emotionality, dancing or imperative character, folk (or near folk) background, simplicity in its comprehension and performing by nearly any instrument depending on the complexity of refinement either by amateurs or professionals. We could perfectly see the integration processes between Russia and West Europe on the basis of these variational cycles. In the 18th – 20th cc. Russia did not only receive strong cultural impulses from Germany, Italy and France, but it itself endowed them with ideas, which we can observe in harp music. Mutual enrichment tendency started in late 18th c., Sonata # 3 by Hartmann is a perfect example as we know it includes a song called "Cossack was going to the other side of the Danube". This article studies the works of Hartmann, Cardon, and Dumour created in Russia where the topics of variations became La Folia and Russian folk songs, and some variations for harps created in France and based on the songs "Kamarinskaya" and "Cossack was going on the other side the Danube". Special attention in the article is paid to the Russian composers. Creative work of Stroganov possesses all tendencies of Russian music of the early 19th century. Its variations were analysed through the themes, La Folia, songs "Cossack was going on the other side the Danube". This article shows a regular pattern based on hand bells theme by Papageno used by Glinka, which was previously used by different composers, such as Dalvimare, Desargus and others. The comparative analysis of Dalvimare and DeVitt variations for a Cossack song has been carried out in this article. On the

theme of J. Haydn from Symphony #6 (with kettle-drum beats) variations by Bochsa and (in 100 years) by M. Grandjany. Examination of their opuses and variations on the themes of Paganini's caprices by M. Magistretti and a Soviet teacher M. Mchedelov finish the article. Information and additional materials were taken and based on the documents and resources found in the archives in St. Petersburg, Tomsk and Moscow.

Key words: harp; history; international connections; repertoire.

P. 76. *Smirnov Mikhail A.* National Research Tomsk State University (Tomsk, Russia). **FORBIDDANCE AS PART OF LIBERAL CULTURE.** The article is devoted to theoretical aspects of interrelation between institute of forbiddance, one of traditional elements of culture, and idea and practice of liberalism. Are the notions that forbiddance is foundation of culture and the liberal ideal of freedom compatible? And if they are what is the role of prohibition in liberal culture? What prohibitions does such a culture cancel and what prohibitions does it save or even introduce? The ideal of liberalism is interpreted in the article via the analysis of the ethic "golden rule" and the slogan of the "revolution of 1968" "it is forbidden to forbid", which are applied to the "platinum rule" ("do unto others as they want to be done unto") and to the principle formulated by Kant: "every person has the right to freedom as long as it does not entrench the freedom of other persons". It is shown in the article that the sanctioning of freedom and its protection imposes many restrictions on man and society. But these restrictions are not based on voluntarism of certain persons or social groups and they are not some unreasonable rules. This system of norms is rationally and necessary founded by the principle of respect to freedom of each subject. Many of these norms are an essential part of traditional institutes of morality. However, the evolving of abstract thinking improves and develops this system of norms, new norms emerge (such as adherence to the rights of animals, protection of environment). The article introduces concepts "society of values" and "society of norms". They allow clarifying the structure of current and possible interrelations of person and social environment. Society of values and society of norms are two different principles of building of relations between people and these principles are complementary in the modern world. Values and norms are interchangeable, alternative determinants of human behaviour: some type of behaviour can be caused by the fact that the subject has respective values or observes respective norms. To maintain a unified, total system of values in the society in order to form required values in the subject is a more reliable method to obtain certain acceptable behaviour from the subject. And this is the way the society followed initially in upbringing its new members. However, this way is the denial of internal freedom of person. Society of norms (which the liberal society belongs to) is such a type of social interactions, which does not imply intrusion into the sphere of personal freedom of the subject. Vice versa, the essence of such a type of sociality is the defence of the subject's freedom (as long as it does not entrench the freedom of other subjects) and nothing more. It means that the subject may have any value orientation if he does not express it in the way, which is destructive towards others. The view expressed in the article allows complementing the understanding of sociocultural processes in the period from the second half of the nineteenth century.

Key words: forbiddance; liberalism; society of values; society of norms.

P. 80. *Tosin Sergey G.* Novosibirsk State Conservatoire (Academy) named after M.I.Glinka (Novosibirsk, Russia). **GOLDEN AGE OF RUSSIAN BELL CULTURE.** The term of bell culture is a complex one and includes a number of diverse issues. Of greatest significance are the manufacturing and organological aspects. Given the environment of the evolution of the Russian bells traditions, bells casting, belfry tools and art of zvon (bell ringing) were tightly interconnected. These are the main focus of the present paper. For pre-revolutionary Russia, the author distinguishes four periods of the history of Russian bell culture (i) 11th to 13th cc.; (ii) 14th to end-15th cc.; (iii) end-15th to 17th cc.; and (iv) 18th to early 20th cc. The first period spans predominantly over the pre-Golden Horde times. It is characterised by paucity of the bells, their small size and mostly foreign origin. However, back then, Rus starts to develop its own bell craft. There were no particular architectural bell facilities. Zvon was produced in the Western style by swinging the bell itself. In general, there were only two bells per church (used for signalling purposes). In the second period particular bell architectural structures appeared – churches "for bells". The bells were moved from the ground to the top, and mounted in the temple, around the dome drum, and this evidences the early manifestations of national traits in the nascent art of zvon. This also embraces the trends in technical design and musical performance. Little changes though could be seen in bell casting: Russians continue to adopt the craft from Europe. In the third period, the development pattern of the Russian bell culture reflects the thrust of the era of the emerging independent and strong Muscovy. Russia becomes the world leader of bells casting: the Russian shape of the bells appears, and new technology is elaborated for casting gigantic bells. In the meantime, new types of architectural structures for bells are designed, including the chamber belfry and the bell tower. The zvon starts to be produced by pulling the rope attached to the bell clapper. As of the end of the 17th c., this method of zvon spreads almost everywhere. A significant role is played by bellmen. They lay the foundations for the new zvon technique, and their practice completes the process of formation of the genre system of the Russian Orthodox zvon. In the fourth period, we can see the downturn in the positive dynamics of the bell culture evolution. At this point, one might mention sporadic positive processes, but in general, this stage is not characterised by bright upswings and drastic changes of the past. Comparing the development stages of the Russian bell culture, the author concludes that the third period was the most intensive and rich in principally important achievements. Its end is marked by the final shaping of the national features of this phenomenon in all of its aspects both in bell casting, belfry tools, and in the art of zvon. Of special importance is the role of the 17th c., which the author defines as the Golden Age of the Russian bell culture.

Key words: bell; bell chime; belfry; bell tower.

HISTORY

P. 84. *Bykov Roman A.* National Research Tomsk State University (Tomsk, Russia). **HISTORICAL CONDITIONS OF NEW RELIGION MOVEMENTS FORMATION IN RUSSIA.** The article covers the formation history of new religions in the 19th century and New religious movements (NRM), arisen in second half of the 20th century as the brightest phenomenon in the religious sphere, which caused a set of contradictory interpretations. Historical facts remove some contradictions as the tendentious perception of this phenomenon is minimised at the expense of the collected materials, field data, generalizations, comparisons with old religions and, as a whole at the expense of a simplified prospect – what was then, how it was transformed and what the situation is now. The specificity of the sociocultural space religions develop in, certainly, defines the reasons and formation course, the specificity of new religion forms. The formation history of new religions of the 19th century has its own features, as well as conditions for NRM formation and their

development in Russia are specific. Certain kinds of NRM developed in various ways, for example, Christian movements, which have arisen in line with Protestant sects (different charismatic groups, The Church of Jesus Christ of Latter-day Saints, Jehovah's Witnesses, etc.) were developing gradually, but with confidence, for Russia, as the sects members say, is an evangelized country – the doctrine of Christ is accepted by many inhabitants. Other kinds of NRM, for example neo-orientalistic, were also actively developing during the "religious agiotage" in the 1990s, but gradually their growth slowed down, and the number of their participants remains approximately at the same level lately. The percent of leaving NRM is also high, that is, individuals receive what they needed and do not participate in the movement life anymore. NRM involve people not only by the religious components – dogma, practices, but also by the structure that gives identity, the knowledge close to psychology, courses on quasi-religious themes, and so forth. The article covers the data on some types of domestic religious movements. The history of formation of the Church of Last Testament, Anastasia's movement is described in brief. The history of formation of new religious movements testifies that the processes connected with secularization are ambiguous, religious senses and symbols are still urgent, on the contrary to what many social theorists predicted. Together with society transformation, the character of religiousness faces changes, which should correspond to the inquiries of the modern person rejecting the global authorities, individualised, believing in meta-ideas, a little disoriented, pragmatically oriented, but still needing limiting senses and answers to "eternal" questions.

Key words: new religions; new religion movements; out-of-church religiosity.

P. 87. *Dugarova Serzhena Zh.* Buryat State University (Ulan-Ude, Russia). **ON RESEARCH OF 18TH CENTURY MONGOLIAN LEGAL CODE "MONGOL TSAAZ BICIG"**. In the process of globalization the question of the disclosure of the common and the specific in the state legal development of peoples becomes urgent; a certain reevaluation of many legal and political values takes place. In this case reference to the origins of state and law is quite important. Therefore the legislation of the medieval Mongolian state is of much interest. The scientific value of this work is determined by the close interconnection and interdependence of the historic past and present; the necessity of effective usage of the historic past. The article studies issues of historiography of research on the Mongolian code of law "Mongol Tsaaz Bicig". In the scientific literature the meaning of the code is determined by the content of the two versions represented in the national state archive and library of Mongolia. The scientists have thoroughly studied the first version of the code published in the period of Emperor Enkh-Amgalan's ruling, the structure and the sphere of application of the law were fully described. But the second version of 1795 studied partly is of high scientific interest. One of the problematic issues of the history of creating this manuscript is dating of the main versions of this code of law. Scientists paying attention to the historic events characteristic of Mongolia of the middle of the 17th-18th centuries define the date of the first version of the "Mongol Tsaaz Bicig" differently: 1643 (period of Emperor Eyer-Zasagci's rule) and 1667 (period of Emperor Enkh-Amgalan's rule). Also the question of dating the second version of the code is not clear yet; some scientists date the compilation of the code back to 1789, others – to 1795. The point of view that the first version of the Code was published in 1643 is based on the Chinese archival sources and is confirmed by the legislative acts of Eyer-Zasagci (1644-1662) and Enkh-Amgalan (1662-1723), the Emperors. The most veracious and proved by scientists is the variant of dating the code back to 1643. Much specification needed on dating of the edition of "Mongol Tsaaz Bicig" of 1789. A group of Mongolian scientists who follow this point of view refer to inscription "Mongol Tsaaz Bicig" on the cover of another statute roll "Huul Tsaaz Bicig", published in 1789. We suppose that "Mongol Tsaaz Bicig" is the latest version of "Huul Tsaaz Bicig". For further resolution of the disputable issues it is necessary to implement a comparative analysis of the Mongolian legal acts of the 18th century. Comparative analysis would let us minimize the disputable issues and make objective conclusions about these issues of history of state and law.

Key words: Mongol Tsaaz Bicig; huul zuyl; Eyer-Zasagci; Enkh-Amgalan; Mongolia; Manchu; Tenger-Tetgegcgi; Qalq-a Jirum; Ulaan-khatsart.

P. 90. *Kurmanguzhin Rustem S.* Ministry of Foreign Affairs of Republic of Kazakhstan (Astana, Kazakhstan). **KAZAKHSTAN'S CONTRIBUTION TO ELABORATION OF "THE EU AND CENTRAL ASIA: STRATEGY FOR A NEW PARTNERSHIP FOR 2007–2013"**. "The EU and Central Asia: Strategy for a New Partnership" was adopted on June 22, 2007 during German Chairmanship in the European Union. Although the Strategy is the EU internal document, Kazakhstan submitted its proposals to Germany on regional integration, economic development, democratization, energy and security as was agreed. Astana suggested to take into account the CA countries tasks such as building the institutes of market economy and economic systems diversification, various needs in increasing the efficiency of economy management and private sector development, human potential expansion, public administration efficiency, enhancement of the investment climate, attracting new technologies, development of highly technological and export-oriented production. It was expedient to supplement the regional approach with the individual focused one. Kazakhstan suggested stating the important role that Russia, China, the USA and other countries played in regional integration within the cooperation with the EU. The EU gaining the observer status in Shanghai Cooperation Organisation (SCO) and the Conference on Interaction and Confidence-Building Measures in Asia (CICA) was also initiated. It seemed necessary to create additional elements for cooperation in agriculture, transport and logistical services, construction, metallurgy, tourism, oil and gas engineering, food, chemical and textile industries, to establish special economic zones, technological clusters and information technologies parks, small and medium business development, the solution of the issues related to water and energy resources consumption, high technological and science-driven sectors development, increasing the number of private investments into the scientific and technological areas. The state and democratic institutes development was supposed to be implemented taking into account the historical and cultural diversity of the Central Asian states, the gradual process of democratization, unpredictability of radical changes and unproductiveness of pressure in any of its forms. The importance of the common European energy policy in Central Asia, the need to develop the energy dialogue, cooperation on TRACECA and INOGEIT projects, the energy resources transit according to the Energy Charter Treaty were also noted. Overall the Central Asian states proposals were taken into account, including those stated at the meeting of the Heads of foreign policy services in Astana within "The EU TROIKA – Central Asia" on March 28, 2007. The development of the Strategy stimulated Kazakhstan to present its own vision of the perspectives for cooperation with the EU, which, in its turn, led to the elaboration of "Path to Europe" state program for 2009–2011, which took its place among the key initiatives of President of Kazakhstan N. Nazarbaev, successfully implemented in recent years.

Key words: Kazakhstan; European Union; Strategy for new partnership.

P. 94. *Teplyakov Aleksey G.* Novosibirsk State University of Economics and Management (Novosibirsk, Russia). **IVAN DANISHEVSKY: SECURITY OFFICER, AIRCRAFT MANUFACTURER, PUBLICIST.** The article, which is mainly based on archival documents, is the first attempt to compile a biography of an outstanding person in Soviet history – Ivan Mikhailovich Danishevsky. The Party profile and 1938 Novosibirsk NKVD investigation profile on Danishevsky, his own memoirs and works allow you to see a portrait of a man whose life was marked by active participation in the tumultuous events of the 20th century. Coming from a middle-class Jewish family, he was born in Warsaw in 1897 and received a secondary education. Danishevsky revolutionary activities began in 1916 in the Ukraine in the Socialist Revolutionary Party; he was in the Red Guard in Kharkiv, fought with the white troops. In the middle of the Civil War, he was quickly promoted to major posts in the Soviet political police and joined the Bolshevik Party. Danishevsky was a prominent figure in the military counter-intelligence service in the central office of the Cheka (the All-Russian Extraordinary Commission for Combating Counter-Revolution, Speculation, and Sabotage), head of the special department of the Cheka of the 13th Army, the organizer of the merciless Red Terror in the Crimea and the Caucasus. In late 1920 – early 1921 Danishevsky headed a special Cheka three in the Crimea and shot at least 2000 people, white officers and refugees, without trial. In 1921 Danishevsky transferred to the economic department. In the 1920s he worked in the handicraft industry, banking system and foreign trade. In 1930 the CPSU sent Danishevsky to train at the Air Force Academy. With a degree in engine building, Danishevsky worked in the Urals and Novosibirsk till 1938, having become a prominent organizer of the aviation industry. In 1937-1938 Danishevsky headed a large aircraft plant in Novosibirsk. But in the climate of political repression Danishevsky was accused of sabotage and sentenced to 20 years in prison. He was sent to the concentration camps of Kolyma, where he stayed for 14 years. In 1955 Danishevsky was rehabilitated and returned to Moscow and until his death was actively engaged in literary work. He wrote memoirs and collections of memoirs of the heroic pages of Soviet history. It must be admitted that his letters to government authorities show him as a man of extremely dogmatic beliefs. But people who knew Danishevsky draw a portrait of an attractive person, always ready to help others. Danishevsky died in the second half of 1970 in Moscow and was quickly forgotten. A typical old Bolshevik, Danishevsky lived a life of a man, convinced in the correctness of the ideas he believed in. In his eventful biography there still are many unknowns pages.

Key words: Ukraine; Siberia; Kolyma; chekists; repression; aviation industry.

P. 98. *Shcherbin Nicolay M.* Museum of SB RAS (Novosibirsk, Russia). **ACHIEVING AIR SUPERIORITY BY SOVIET AIR FLEET DURING WORLD WAR II (1941–1945).** This article discusses the state of the Soviet Air Force at the beginning of the war, the fighting of the aircrafts at the early stage of the war, the losses of German and Soviet aircrafts. The actions of the Soviet pilots to gain operational excellence in the Moscow area are described. The causes of air combats that Soviet pilots won are explained. The estimation of inefficient use of aircrafts by many joint commanders during the transition to the centralised management of it. Having large numbers of aircrafts, they sought to use all their force regardless of the situation for air support and cover for troops on the battlefield solely. The summer and autumn of 1942 were a critical step in the development of the Soviet Air Force as the share of new aircrafts grew over the months from 28.7 to 77.2 percent, while in the army aviation it went from 44.7 to 81.1 per cent. In this period of war the country had extensive experience in fighting for supremacy in the air. Of the total of 803 sorties of combat aircrafts in the fight against the enemy planes, the Soviet fighters made 184,686 sorties to cover up the Army and the most important objects in the rear of the front and 69,397 – to support other types of aircrafts. In the Stalingrad offensive action the scope of action of the Soviet Air Force for the destruction of enemy aircrafts directly on the ground widened. The designated turning point at Stalingrad in the struggle for supremacy in the air further developed in Kuban region and ended in the summer of 1943 near Kursk. During the air battles in May – June 1943, the leaders, commanders and staffs at all levels had a good schooling in air units control in a complex environment. As a result of the victories by the Soviet aircrafts and air-defence artillery in the winter and spring of 1944 the Wehrmacht lost about five thousand aircrafts. The 4th Air Force and 16th Air Army in the period from 29 June to 3 July made 4000 sorties, and the Long-Range Aviation – 3200 sorties. The Air Force of the Soviet Union entered 1945 at the height of its power. They outnumbered the Wehrmacht fleet by over 3 times. Thus, it should be noted that in the third period of the war (1944 – May 8, 1945) all operations of the Land Forces were made in the atmosphere of air supremacy of the Soviet Air Force, but intense struggle with enemy aircrafts continued until the defeat of Nazi Germany. Thus, the struggle for air superiority was an essential part of the warfare of the Soviet Union against Nazi Germany.

Key words: air force; war; hostilities.

P. 101. *Yun Sergey M.* National Research Tomsk State University (Tomsk, Russia). **POLICY OF EU "GREAT POWER" MEMBER STATES IN CENTRAL ASIA: DIFFERENCES IN APPROACH.** Three EU countries, Germany, France and Britain, pursue an active autonomous policy in Central Asia. Despite a certain similarity of interests and goals, there is a significant difference in both the general approach and specific aspects of their regional policy. On the other hand, the policies of the three states do not have special interests that would significantly hinder the making of a common approach within the European Union. Germany has the most powerful position in the region. For Berlin, it is a kind of foreign policy capital that is used to safeguard a variety of its political, military and other interests in the world. All the time Germany maintains intensive, diversified relations with all countries of the region while focusing on Kazakhstan and Uzbekistan. Compared to other EU Member States, it implements the biggest program of economic assistance to the countries of the region. In 2007 Berlin lobbied the expansion of the EU presence in Central Asia. Another strong point of German policy is its moderate position and its desire to avoid excessive politicization of political processes and human rights issues in the region. British policy in Central Asia is distinctive as it basically follows the interests of British oil, gas and allied sectors companies in the Caspian region. The relations with Kazakhstan are of the highest UK priority that attract the bulk of political and diplomatic resources of influence. The links with Turkmenistan are the second policy priority, which, however, has not produced significant results yet. The period of building closer relations with Uzbekistan after September 11, 2001 was brief and ended in 2005 when Britain launched EU sanctions against Uzbekistan because of the events in Andijan. Greater emphasis on human rights issues has made Kyrgyzstan the main recipient of UK economic assistance to the region. French authorities initially bet on the promotion of relations with the largest regional economies in the region, namely, Kazakhstan, Uzbekistan and Turkmenistan. However, Paris was inconsistent, periods of activity alternated with those of restraint. As a result, France was able to gain a foothold in Turkmenistan only, mainly in the interests of big French industrial companies that specialize in executing major turnkey contracts. The interests in Afghanistan brought about a rapprochement between France and Tajikistan. After 9/11 a small contingent of French Air Force was deployed there. Since Nicolas Sarkozy came to power in 2007, French policy in Central Asia has intensified, primarily in order to support French business activities in Kazakhstan. In addition to bilateral diplomacy, Paris has made greater use of multilateral institutions, particularly, the European Union.

Key words: Germany; France; United Kingdom; Central Asia; foreign policy.

LAW

P. 107. *Akhmedshin Ramil L.* National Research Tomsk State University (Tomsk, Russia). **BEHAVIOUR EVIDENCES IN SYSTEM OF INDIRECT EVIDENCE.** Now researches of evidentiary importance of data about the personality of the criminal established in the course of the analysis of vestiges of the crime are topical. Earlier the specified group of vestiges of the crime had rather a speculative value, but with the development of techniques of criminal behaviour analysis in the course of basic investigatory actions, the urgency of the considered information has sharply increased. The establishment of truth in the course of preliminary investigation and proceeding of criminal cases is carried out by proving circumstances, the set of which is the object of research in the given case. Proving here is finding objective connections between the given phenomenon and other facts supporting it. The set of circumstances proved in a case forms the subject of proving. With reference to our topic it is crucial that in a criminal case the subject of proving is circumstances characterizing the personality of the accused (Item 1 Part 1 Article 73 of CPC). Circumstances proved in a criminal case under certain conditions become evidence, direct or indirect. The basis of the given division of evidence is the distinction in the structure of the proving circumstance substantiation process. Direct evidence is the one directly establishing the circumstance, while the indirect one establishes the given circumstance through an intermediate fact. The legal literature states direct evidence as directly establishing the guilt of the person in committing a crime. Sometimes the main fact is the thesis of direct evidence. In the context it is obvious that the data received in the course of the criminal's personality features analysis are not direct evidence, as it does not directly establish the guilt of the person in committing a crime. The system of indirect evidence should authentically establish the corresponding fact, denying explanations contradicting it. When building the system of indirect evidence it is important to consider independent sources of facts establishing them. In the end it is possible to summarize that the competent, almost verified actions of criminal prosecution bodies on collecting indirect evidence promote realization of problems of a criminal trial regarding disclosing of a crime and finding the persons guilty of its committing.

Key words: evidence; proof; personality of criminal.

P. 109. *Vedernikov Nicolay T.* National Research Tomsk State University (Tomsk, Russia). **SOME DECISIONS OF CONSTITUTIONAL COURT OF RUSSIAN FEDERATION ON CONSTITUTIONALITY OF NORMS OF CRIMINAL PROCEDURE CODE OF RUSSIAN FEDERATION AND DEVELOPMENT OF RIGHT OF PERSON TO JUDICIAL PROTECTION.** In the article the analysis of decisions of the Constitutional Court of the Russian Federation on constitutionality of norms of the Criminal Procedure Code of the Russian Federation (CPC) is carried out. The given problem is considered in the context of development of the right of the person to judicial protection. In contemporary history of Russia a tradition has developed that the constitutional changes and innovations frequently advance due to changes in the branch legislation corresponding to them. It can be clearly noticed in the practice of solving the cases on conformity of the constitutional norms with the positions of the criminal procedure legislation. It was observed that conformity with the constitution of norms of CPC reduces from the former CPC of the RSFSR (1960) to the current CPC of the Russian Federation, passed in December, 2001 and put into execution on July 1, 2002. Regretfully, it is necessary to note that almost 8 years passed between introduction of the current Constitution of the Russian Federation (December 12, 1993) and the current CPC (July 1, 2002) with a constantly operating Parliament in the country. CPC came into action on July 1, 2002, but in 2003 the Constitutional Court started receiving inquiries of different level of courts and complaints of citizens doubting the conformity of CPC positions with the Constitution of the Russian Federation. One of the first inquiries was the case of December 8, 2003 on checking the constitutionality of positions of Articles 125, 219, 227, 229, 236, 246, 254, 271, 378, 405 and 408, as well as Chapters 35 and 39 of CPC. It included inquiries of Vologda and Kurgan Regional Courts, Kurgan and Podolsk City Courts and the Soviet District Court of Chelyabinsk, and the complaints of nine citizens. As all inquiries of courts and complaints of citizens concerned the same subject, the court considered them in one process. The analysis of the decisions of the Constitutional Court of the Russian Federation concerning criminal legal proceedings and, in particular, the right of persons to judicial protection clearly testifies that the court consistently and steadily spends a firm line of protection, deepening of understanding and provision of rights of the human and the citizen in a criminal trial at all its stages and in different directions concerning separate institutions of procedural law, investigatory and judicial actions. Thus, the predominating position of the court as the body of justice invariably affirms.

Key words: right; person; judicial protection.

P. 113. *Gorovtsova Margarita A.* National Research Tomsk State University (Tomsk, Russia). **FORMATION AND DEVELOPMENT OF LEGISLATION ON TAX STIMULATION OF SMALL BUSINESS IN RUSSIA.** The article discusses issues of formation and development of legislation on small business taxation in Russia. Opinions stated in special legal literature concerning the moment of formation of legislative regulation and number of stages of small business life are resulted. The author's periodization of processes of origin and evolution of small forms of management is offered and described. The first stage covers the period from the middle of the 18th century till the Revolution of 1917. The circle of subjects of small business of that epoch is defined. It is underlined that since the first half of the 18th century the state actions in rendering assistance to small business were systematic, which meant the formation of the mechanism of legal regulation of small business. Basic statutory acts of that time, in particular, the law "On more uniform taxation of trade and industry", rules of taxation of trading and industrial enterprises by additional collection of money, which established two forms of taxation are considered. The second stage of development of small business starts in October, 1917. It is marked which small business most actively reacted to new rules of economic activities with the introduction the New Economic Policy (NEP). The tax policy of the Soviet Union in NEP is considered. The third stage of development of small business is presented by the period of time since 1987 for 1992. The statutory acts that made an appreciable impact on small business are investigated: the Law of the USSR "On individual labour activity", the Law of the USSR "On cooperation in the USSR", the decision of the Ministerial council of the RSFSR of position "On measures of support and development of small enterprises in RSFSR". Tax privileges to subjects of small forms of business of that time (clearing of the profit tax payment, accelerated amortization) are considered. The fourth stage of development of small business starts in 1992. The common faults of the standard base of the first half of the 1990s are underlined, including small business support: an obviously declarative character of the fixed positions owing to insufficiency of budgetary funds, uncertainty of concrete executors, absence of liability for failure of laws.

Key words: small business; taxation; legislation; history; periods.

P. 117. *Larionov Ilya A.* National Research Tomsk State University (Tomsk, Russia). **CRIMINAL LAW AND CRIMINOLOGY BASES FOR COMBATING CRIMES IN ILLEGAL MIGRATION.** The indicators of illegal migration in Russia are high nowadays. This state of affairs is connected with a number of factors, which include a complicated demographic situation, a specific social and economic life in the Russian society, the migration policy of our state and active involvement of Russia in the world migration exchange. The complex of criminally legal and criminalistic measures of preventing crimes can serve as means of counteraction against illegal migration. Statistics indicate that a criminally legal mechanism of counteracting illegal migration does not work properly. Experts estimate that there are about 10.2 million migrants in the Russian Federation who have no settled legal status, i.e. have no legal grounds to live and work on the territory of the Russian Federation. Despite the mass concentration of migrants in some regions, invited by their developed economy, various opportunities for labour activity and favourable conditions for residence, only single facts of illegal migration are revealed. Therefore, to make prevention of crime in the sphere of illegal migration more effective it's necessary to clarify the legislative construction of Article 322.1 of the Criminal Code of the Russian Federation. Criminological crime preventive measures in the sphere of illegal migration also require some new legal support. In this connection it would be reasonable not only to amend and supplement the legislation, regulating the issues in the sphere of counteracting crimes of immigrants but also to create a codified act – the Migration Code of the Russian Federation. Besides, the adoption of the Federal Law "On immigration in the Russian Federation", aimed at facilitating the implementation of basic principles and goals of the immigration policy, including the streamlining of the policy with regard to illegal migration, would be a big step forward. Among the urgent measures of counteraction against illegal migration are the unification and rapprochement of the interstate migration legislation, the creation of national and interstate structures for the purpose of coordinating the efforts in the fight against illegal migration. It is necessary to develop fundamental research into social-economic, legal and psychological foundations of regulating migration processes, to conduct monitoring and scientific prediction of the migration situation in our country. It is reasonable to use the experience of foreign countries in the sphere of prevention and suppressing the illegal migration, which endangers the national security of the Russian Federation. The development of fight against illegal migration by criminally legal and criminological, preventive measures will ultimately contribute to the decrease of the threat to the national security of the Russian Federation and protect the rights and interests of both Russian citizens and immigrants.

Key words: illegal immigration; emigration; immigration legislation.

P. 120. *Lebedev Vladimir M.* National Research Tomsk State University (Tomsk, Russia). **CRITERIA DISTINGUISHING CIVIL LAW FROM RELATED BRANCHES OF LAW.** Civil law regulates property relations. As such relations make the subject of other branches of law, civil law experts specify the case: property independence of their subjects; property administrative independence of participants of property relations; isolation of property in turn; equality of participants of property relations regulated by civil law; mutually estimated character of public relations making the subject of civil law. Instructions on property character of public relations is not enough for distinguishing civil law from a number of other branches, for example, labour, social security, agrarian, land rights, etc. So, labour relations include property relations connected with payment, guarantees and indemnifications, compensation of harm caused to the subject of labour law in the structure. However, labour relations are also regulated by civil law: turnkey contract, performance of research, developmental and technological works, remunerated rendering of services. According to Article 780 of the Civil Code of the Russian Federation the executor usually "is obliged to render services personally", i.e. to perform certain work on the instructions of the customer. Labour relations arise between the executor and the customer who is carrying out the contract for research, developmental and technological works (Chapter 38 of the Civil Code the Russian Federation). "Under the turnkey contract one party (contractor) undertakes to execute certain work on the instructions of the other party (customer)" (Article 702 of the Civil Code the Russian Federation). Therefore, there is a problem of differentiation of subjects of labour and civil law. Labour relations, as well as relations making up the subject of civil law, do not properly perform the role of the backbone factor at allocation of branch of law in the system of domestic law. Domestic law should be analysed as a system. As any social system it consists of separate elements – branches. In the theory of law the following main (traditional) branches are distinguished – state, administrative, civil and criminal laws. Other basic branches are administrative procedure, criminal procedure law and special branches generated on the basis of the traditional ones – the labour, family, financial, and land laws. The system of law also includes complex, specialised and integrated branches. Differentiation of law into branches is carried out by means of two backbone factors – subject and a method of legal regulation.

Key words: civil law; employment law; object; method of legal regulation; criterion of subject.

P. 122. *Malyshev Yaroslav V.* National Research Tomsk State University (Tomsk, Russia). **MAIN DIRECTIONS OF PERFECTION OF CRIMINAL LIABILITY FOR WITNESS'S AND VICTIM'S PERJURY.** According to the official statistics in the Russian Federation in 2008 there were 2539 crimes under Art. 307 of the Criminal Code of the Russian Federation, in 2009 there were 2187 crimes, in 2010 – 1755, in the first half of 2011 – 907 crimes. According to most researchers, this type of crimes is characterised by a high level of latency. Thus, the average rate of latency of crimes under Art. 307 of the Criminal Code, in the whole amounted to 33.02 in the Russian Federation. The high latency of this type of offence connected with false testimony makes a critical attitude to official statistics about the level of the phenomenon. However, as some researchers mark, it is necessary to take into account the fact that crime statistics largely do not reflect the crime itself, but the practice of public authorities to respond to crimes. In such circumstances, one of the priorities in the implementation of legal reform should be to strengthen and improve the institution of liability measures for perjury. In this regard, the author made the following suggestions to improve the criminal liability for witness's and victim's perjury. Firstly, a proposal is made for Article 307 of the Penal Code, setting out as follows: "The witness, victim, expert or translator should be exempt from criminal liability if they voluntarily declare the falsity of statements, conclusions, or knowingly wrong translation in the course of inquiry, preliminary investigation or trial acting as a witness, expert or translator before the sentencing court or the court decision in the case they participated in. The expediency of introducing the amendments to the law is justified, securing in Paragraph 40 of Article 5 of the Criminal Procedure Code that the testimonial privilege also works for former spouses, if they have been married at the time of giving initial testimony. It is suggested to provide as an aggravating circumstance of the offence under Art. 307 of the Criminal Code "the same actions if committed by prior agreement of perjury with others". In addition it is suggested to renew the institute of judicial oath in the current Russian legislation.

Key words: responsibility; lie; witness; crime.

P. 125. *Manankova Raisa P.* National Research Tomsk State University (Tomsk, Russia). **HOUSING CODE OF RUSSIAN FEDERATION IS NOT NECESSARY.** Life has shown the real importance of valid housing laws, instead of simply declared guarantees of its realization. Destruction of socialist system of economy and legislation occurred in a historically short time. Housing law decayed from 1990 (the Law on property in the USSR) till 1994 when the project of a new Housing Code was published, and Part I of the Civil Code of the Russian Federation was introduced. Art. 212-213 of the Civil Code stated, "The Russian Federation recognises private, state, municipal and other forms of property. The amount and cost of property owned by citizens and legal bodies is not limited...". Introduction of the new Housing Code since March 1, 2005 has caused mass protest actions under slogans "Down with the Antisocial code", Anti-housing, Anti-national, etc. Such a reaction should have been anticipated, during the Code concept discussion, but it did not happen and, as a result, the new Housing Code was a strong social irritant. The wording of the Code was very careful (Article 1), still it became obvious that the state shifted off the control over the most essential right of citizens. Real guarantees of a constitutional right to dwelling, listed in Article 1 of the Housing Code of the RSFSR disappeared, too. Some of the guarantees, as a matter of fact, contrasted into obstacles and restrictions. At present, there are no high rates of development of state and public housing fund based on State Planning, no fair distribution of dwelling under public control. The former guarantee of the low rent and utilities payment seems a mockery. Experts criticise the structure and content of the current Housing Code. Claims to the authors of the project are caused by two circumstances: first, ignoring certain important conclusions of the Soviet science on housing law, and, second, aspiration to react to the problematic issues of practice with a substantially political character. The quality of regulatory material in the current Housing Code of the Russian Federation is not efficient, as it is abundant in norms of different branches of law, duplicating them. There is an impression that the authors of the project included the positions about payment for premises and utilities (Articles 153–160), about powers, state control, and others in the Code, on purpose, somehow to neutralize the negative effect of the basic thesis: the state will not grant dwelling.

Key words: right to dwelling; Housing Code.

P. 127. *Osokina Galina L.* National Research Tomsk State University (Tomsk, Russia). **ON PARITY OF SUBJECTIVE CIVIL LAW AND POWER TO PROTECT IT (BY EXAMPLE OF RIGHT TO PROPERTY).** In the legal doctrine the opinion, according to which the subjective civil law is defined as a triad of powers, dominates: the right to positive actions (power to one's own behaviour); the requirement right (power to another's behaviour); power to protection (claim) as a possibility to use the force of state compulsion. The author critically reviews the concept dominating in jurisprudence, according to which the subjective civil law represents a triad of powers, including the power to judicial protection. Using the right to property as example the conclusion that the subjective civil law in case of its infringement or contest cannot execute the regulatory function assigned to it is made, moreover, it is not capable of compulsory self-realization, i.e. of performing the protective function peculiar to it. To restate the broken or challenged subjective civil law, a special mechanism to clear, improve the legal nature of a disputable civil legal relationship is required. Such a mechanism is the protective legal relationship, an element of which is the protective power to judicial protection (right to action). The author proves that the subjective civil law and power to its protection (right to action) represent legal categories differing in the moment, occurrence and termination bases, content and subject. The subjective civil law represents a measure of possible behaviour provided by law (the right to one's own actions) and a measure of due behaviour (right to another's actions), without the third element of a possibility to resort to measures of state compulsion. Security of subjective civil law is shown in the possibility of occurrence of a new additional right – power to its protection. Thus, the subjective civil law, which is subject to judicial protection, is an element of civil (regulatory) legal relationship. The duty of another participant of civil legal relationship corresponds to this right. The power to judicial protection is an element of protective-actional relation, for the duty of the state to apply measures of state compulsion as ways of protection of subjective civil law in the name of court corresponds to this right. Thus, the subjective civil law, which is subject to judicial protection, is an element of civil (regulatory) legal relationship. The duty of another participant of civil legal relationship corresponds to this right. The subjective right to action is an element of protective-actional relation, for the duty of the judge, the court as a jurisdictional state body corresponds to this right.

Key words: subjective civil law; property right; subjective procedural right to judicial protection; means and ways of protection of subjective rights.

P. 131. *Petrushin Artem I.* National Research Tomsk State University (Tomsk, Russia). **SOME PROBLEMS OF INVOLVEMENT OF PRELIMINARY INVESTIGATION AGENCIES IN CRIMINAL PROCEEDINGS IN PRIVATE PROSECUTION CASES.** The problems of involvement of preliminary investigation agencies in criminal proceedings in private prosecution cases have not been solved either in science or in legislation yet. In this connection the most controversial issues are those relating to the participation of preliminary investigation agencies in the examination of pretexts and grounds for bringing the criminal private prosecution case before the court, as well as the problems of making a list of grounds for conducting a preliminary investigation in private prosecution cases. In the course of the analysis of these topics the author comes to the following conclusions. Firstly, the preliminary investigation agencies officials have the right to check the pretexts and grounds for bringing the criminal private prosecution case before the court both at the request of the injured party and on their own initiative. If there are no grounds for conducting of a preliminary investigation but there is a request of the injured party, the investigator (inquirer) should either inform the justice of peace in the order provided by Item 3, Part 1, Article 145 of the Criminal Procedure Code of the Russian Federation, or pass a resolution abandoning the institution of criminal proceedings according to Item 5, Part 1, Article 24 of the Criminal Procedure Code of the Russian Federation. The norm of Article 318 of the Criminal Procedure Code of the Russian Federation should be supplemented by a provision stipulating that the institution of criminal proceedings on private prosecution can be exercised by reference to the justice of peace of all the materials of preliminary examination, containing a preliminary appeal of the injured party to the agencies with a request to institute criminal proceedings against a person. Secondly, the norm of Part 4, Article 20 of the Criminal Procedure Code of the Russian Federation has been formulated incorrectly and needs some broadened interpretation. In our opinion, the circumstances specified in the norm above should be considered not only as the grounds for instituting criminal proceedings without the consent of the injured party, but also as the reason to refer the function of prosecution to public officers. Moreover, the institution of criminal proceedings without the consent of the injured party should take place provided that it has no possibility to form and express a position connected with the questions of criminal prosecution consciously and freely. Public officers can prosecute on the basis of a broader range of cases, e.g., when the injured party is not able to protect its rights and legal interests due to its limited physical possibilities. Besides, the injured party should have the right to choose the procedure of criminal prosecution within the frame of the criminal procedure in private prosecution cases.

Key words: injured party; institution of criminal proceedings; private prosecution; access to justice; preliminary investigation.

P. 135. *Pisarevskaya Yelena A.* Novokuznetsk Branch of Kemerovo State University (Novokuznetsk, Russia). **REORIENTATION AND DISSOCIATION OF PRECRIMINAL AND CRIMINAL GROUPS OF JUVENILES.** The prevention of occurrence of criminal groups of juveniles can be promoted by educational and other measures in this direction. The exclusive attention is demanded by pre-criminal groups of teenagers. Ignoring the fact of existence of the given groups can lead to their development into the criminal ones. Minimization or liquidation of negative influence of micro-habitat, strengthening of attention of a family, educational and leisure establishments to the organization of free time of juveniles can promote the prevention of pre-criminal groups of juveniles. The special attention is the role of a family and city school. Work on dissociation and reorientation of groups of juveniles with deviating behaviour should become a prerogative for educational institutions. It is an absolutely inadmissible practice of early dialogue with police juveniles, who break moral standards of behaviour. Possibilities of educational institutions in realization of direct preventions of juvenile crimes decrease, as in such situations it is the question of the teenagers who have committed crimes. However, in interaction with other subjects of preventive measures they should try to change the environment of juveniles, to organize their leisure. Practical workers ascertain that now work with criminal groups is conducted by a residual principle. An essential drawback is lack of the duty fixed at legislative level on carrying out of work with criminal groups. In practical activities it is possible to see examples of successful reorientation of criminal groups of juveniles, but the given groups are unstable, their participants do not have steady criminal habits. The most real preventive goal is dissociation of pre-criminal and criminal groups, which occurs under the influence of internal and external circumstances. As a rule, juveniles are withdrawn from the given groups during a conflict situation in the group or influence rendered by parents protecting the young from group influence. But the last variant is only possible in the situation, when parents correctly perceive the current situation. Besides, it is often impossible to reorient criminal groups owing to the objective and subjective reasons, it is necessary to create leisure establishments for juveniles, which can interest them and offer alternatives to the criminal way of life. Unfortunately, opening leisure establishments for the young depends exclusively on local authorities and is not considered as a nation-wide problem. It is necessary to make a change in the current legislation with a view of maintenance of efficiency of preventive work, making it the duty of the Police Juvenile Department to carry out preventive work concerning criminal groups of juveniles.

Key words: criminality of juveniles; reorientation and dissociation; pre-criminal group of juveniles; criminal group of juveniles.

ECONOMICS

P. 138. *Magomedova Natalia M.* Rostov State Transport University (Rostov-on-Don, Russia). **SYSTEM OF MANAGEMENT BY EXPENDITURE OF COMPANY IN STRUCTURAL CHANGES CONDITIONS ON RAILWAY TRANSPORT.** Modern condition of management theory and practice of operating costs of railway enterprises may be characterised like transition, when traditional methodologies demand corrections, taking into account changes in connection with realization of the reform processes and structural conversions. Traditional management theory and the system of every type (economic, technical) are based on the principle of feedback. Managerial decision is based on analysis of system respond to internal and external influences. Generally, the subject of management in the economic system is a manager of a specific level, "armed" with the knowledge base about the conceivable behaviour of the system depending on internal and external characteristics. The inertial behaviour of the economic system (enterprises) in conditions of stable economy allows using their behaviour trend models, correlative and regression analysis for prognostication. Unfortunately, in the recession situation or structural changes in the control object (amalgamation, separation), the retrospective foundation of information and knowledge base of the manager loses its topicality for using traditional prognostication and administration methods. Let us assume that the original object management (company) Ω is divided into two objects (companies) Ω_1 and Ω_2 , $\Omega = \Omega_1 \cup \Omega_2$ and $\Omega_1 \cap \Omega_2 = \emptyset$. We assume that there is no synergistic effect of association. Then the set of input parameters x will also be divided into two subsets $x = x_1 \cup x_2$. In this case, the retrospective basis to manage the new enterprise Ω_1 will be x_1 , and the second will be x_2 . It is natural to presuppose that the further dynamic development of the first enterprise depends on retrospective database indicators x_1 . Herewith, the control system is described as $x_1 = F(X, Y)$, $x_2 = U(X, X_1, Y)$, where F is a functional determining the results of the enterprise under the influence of the internal input and external factors X and Y ; U is a functional determining the control impact on the analysis of output data of the enterprise. Let $X = (x_1, x_2, \dots, x_n)$ be the vector characterizing the absolute values of the parameters $A = (a_1, a_2, \dots, a_n)$ of the system $-\Omega$. Division of the enterprise into two structures $\Omega_1 \cup \Omega_2$ suggests new subsets A_1 and A_2 , in which each of the indicators a_i : 1) $a_i \in A_1, a_i \notin A_2$; 2) $a_i \in A_2, a_i \notin A_1$; 3) $a_i \in A_1, a_i \in A_2$. In general, we can assume that $x_{i1} = \alpha_1 x_i$; $x_{i2} = \alpha_2 x_i$; $\alpha_1 + \alpha_2 = 1$, where x_{i1} is the share of index x_i , attributed to the structure Ω_2 , x_{i2} is the share of index x_i , attributed to the structure Ω_1 . The previously proposed concept of operating costs prediction and control based on the mechanism of correlative and regression analysis. Thus, regression function can be transformed to control operating costs of rail transport company in terms of structural changes (separation).

Key words: object; subject; restructuring; reforming; converting.

P. 140. *Rekundal Olga I.* National Research Tomsk Polytechnic University (Tomsk, Russia). **ANALYSIS OF INVESTMENT ATTRACTIVENESS OF SUBFEDERAL BONDS AT FORMATION OF PENSION CAPITAL PORTFOLIO.** With the development of global and domestic financial markets the investment portfolios selection problem is of particular interest. Modern scientists are actively engaged in solving this problem, considering its various aspects, such as estimation of risks, of effective profitability of a portfolio, the account of costs (for example, commission of the broker, stock exchange commission), etc. Now there are various financial institutions (non-governmental pension funds and investment companies, mutual funds and others), which accumulate money resources for their further investment in various market instruments (for example, bonds, stocks, deposits in banks) for subsequent income. Financial instruments are chosen according to the ultimate goal of investment and legislative restrictions, in case of their presence. Specifying, it is necessary to notice that in the research by financial institutions the author understands non-governmental pension funds and management companies allowed to participate in obligatory pension insurance. At present the pension system of Russia has some difficulties in rational pension capital investment. The main cause is the absence of investment instruments able to satisfy legislative requirements concerning pension capital investment and, at the same time, to preserve the governmental pension insurance level. Thus, there is a need in investment of pension capital in most effective financial instruments. And the primary goal of the manager is selection of financial instruments that would provide the greatest possible profit at minimum risk. The list of objects for pension capital investment is determined by the laws of the Russian Federation. Choosing one or another set of securities, the manager

should be guided by the principles of liquidity, profitability, diversification of investment portfolio. In the article the analysis of investment attractiveness of subjects-emitters of bonds on the basis of indicators of reports on execution of budgets is carried out. The main purpose of the analysis in this paper is to obtain the priority indicators that provide an objective assessment of the reliability of the considered bond. As a result of the work done by comparing the calculated parameters the most "attractive" securities for subsequent inclusion in the investment portfolio of pension capital were chosen.

Key words: subjects-emitters; bonds; investment portfolio; pension capital.

PSYCHOLOGY AND PEDAGOGICS

P. 143. *Ilyin Alexander A., Marchenko Ksenia A., Kapilevich Leonid V., Davletyarova Ksenia V.* Tomsk State University of Control Systems and Radioelectronics, National Research Tomsk State University, National Research Tomsk Polytechnic University (Tomsk, Russia). **FORMS AND METHODS OF MOTIVATING STUDENTS TO PHYSICAL TRAINING.** The paper presents an analysis of the leading forms and ways to motivate students to physical training. Change of the target orientation of physical education, the essence of which is reduced to the formation of the physical culture of the individual, requires improving the quality of education, development of new pedagogical and institutional frameworks that provide student-oriented education and training. It is shown that one of the reasons for low physical activity of students is the lack of optimal motivational complex. Formation of the need for movement is a priority in training and athletic activities, it is possible on the basis of systematic studies. Accounting for the initial motivation for physical exercise helps to correct the direction of the motives that do not possess sufficient stability to ensure the spread of the motif from the results onto the activity itself. Therefore, based on the classification of the motives prompting we should identify the leading motives of physical activity among students. Through the activities emanating from certain motives, pursuing some goals and problem solving, a person expresses their attitude to the environment, and this attitude (behaviour) correlates both with the internal and the external (subjective and objective). Therefore, studying the motives of business, we understand not only the degree of interest in it, but we can assume that the level of activity in this area and its orientation. If we consider the problem specifically applying it to physical activity, having determined the motives of students we can assume if they will work out independently or their ultimate goal is getting credits. However, the motive may have the ultimate goal, and may move to the activity itself or a result of it, such as playing the game. Thus, by taking into account the initial motives for athletic activities and using corrective elements in teaching methods we can replace the temporary motives of obtaining the result (positive markers) by a more stable process, the motives of exercising. The formation of an optimal set of motivational physical training depends on following the principle of reason in learning, using problem tasks, psychological comfort, democratic style of communication, situation of choice, using optimal complexity of tasks, taking into account the preferences of students of exercise with gaming oriented, regular attendance, increasing importance of personal training and athletic activities, competitive activities. The problems in the formation of physical culture of students, such as lack of understanding of the interdependence of private and absolute values of physical culture, aborted valeological thinking, inadequate evaluation of their own level of health, irrational organization of life, show a low level of knowledge. Knowledge constructively influences on the motives and interests, and thus is a factor of the athletic training students. Mastery of the knowledge system helps students to use the tools of physical training, to provide adequate self-esteem and self-control. Therefore, one of the fundamental factors of the process of physical education of students is to provide the best theoretical, methodological and practical training.

Key words: students; physical education; motivation; healthy lifestyle.

P. 148. *Kapitanov Sergey N., Kabachkova Anastasia V., Shilko Viktor G.* National Research Tomsk State University (Tomsk, Russia). **INDEPENDENT OCCUPATIONS BY PHYSICAL CULTURE AT MEN AT THE AGE FROM 36 TILL 44 YEARS.** In article the metodiko-practical technology of creation of independent occupations by physical culture at men of mature age with use of means of football, gymnastics and track and field athletics is presented. A main objective of such occupations – improvement of a physical condition and health engaged. Application of the developed metodiko-practical technology is an effective remedy of increase of level of a functional condition and physical readiness.

Key words: mature age; metodiko-practical technology; physical readiness; functional condition; adaptable potential.

P. 152. *Lukyanov Oleg V., Neyaskina Yulia Yu.* National Research Tomsk State University (Tomsk, Russia), Vitus Bering Kamchatka State University (Petropavlovsk-Kamchatskiy, Russia). **MEANING DETERMINANTS OF PERSONALITY'S TEMPORAL PERSPECTIVE.** The article attempts to relate the parameters of the meaningfulness of life and components using temporal perspective by means of surveys (test of life meaning orientations adapted by D.A. Leontev, method of determining the temporal perspective of personality by F. Zimbardo in adaptation of A. Syrtsova, E.T. Sokolova, O.V. Mitina) of respondents of the period of early and middle adulthood. It was found that in groups differing by the degree of meaningfulness of life in general and in the individual time loci, there are no differences in the parameter "hedonistic present," while the index of "fatalistic present" significantly decreased with the increase of the comprehension level. Besides, the level of meaningfulness of life defines the relation of the personality to the negative past experience and influences the formation of attitudes in the future. On the basis of quantitative prevalence in a sample respondents with high indicators of life meaningfulness and in the context of results of researches described in psychological literature an assumption is made that the high rate of meaningfulness of life itself may be a result of consecutive and conscious work of the personality in the process of harmonization of the relations with the world and self-identity establishment at all segments of a temporary continuum, a kind of protective reaction of consciousness to special conditions and situations, in which the personality appears at the moment of the present. Data testifying the high degree of understanding of occurring events of life and greater focus on the future of respondents convicted to long-term and lifelong imprisonment are provided. A hypothesis of the compensatory nature of the "objectively positive" picture of parameters of life meaning orientation of prisoners is made. On the basis of clustering division of a group of persons with high indicators of intelligence into two subgroups is carried out, in each of which the structure of interrelations between parameters of temporary prospect and indicators of meaningfulness of life is defined by means of the factorial analysis. The results of the comparative analysis of the received factorial structures allow suggesting the probability of existence of various strategies of life understanding among respondents with high indicators by a life meaning orientation technique. Generalization of results of research allows drawing the following conclusions: Indicators of temporal perspective of the personality are connected with parameters of intelligence of life and

psychological well-being, but to see these connections the data of measured values (degree of comprehension) and phenomenological data are required – intentionality and response of understanding by the person of life experience. The level of meaningfulness of life is closely connected with the individual limit of time representation, with the idea of fatalism, predetermination of the present; it affects the attitude of the individual to their negative past experience and forms a strategy for attitude to the future. A group of individuals with high levels of life meaningfulness and psychological well-being selected on the basis of the results of studies using the test methods may have a complex "internal" differentiation depending on the strategy of personal building of life perspective.

Key words: meaningfulness of life; temporal perspective of personality; psychological well-being.

P. 158. *Makeeva Irina A.* Vologda State Pedagogical University (Vologda, Russia). **MODEL OF CIVIC EDUCATION OF CHILDREN-ORPHANS BY MEANS OF MUSEUM PEDAGOGICS.** At the present stage of development of our country, in the conditions of construction of a legal state and formation of a civil society the urgency of realization of civil education of the next generation increases. A democratic state needs diversely educated, morally and socially responsible citizens who can independently make responsible decisions in a situation of choice, predicting their possible consequences, ready to cooperation and intercultural communication, possessing civic qualities, sense of responsibility for the destiny of the country, capable to participate in the development of its economic, political and cultural-spiritual spheres. The given problem is of special importance, so far as it concerns socialization of children-orphans with negative social experience, possessing specific medico-psychological status essentially different from their contemporaries' one. A characteristic result of the negative influences is a high level of social deadadaptation of such children, low potential of their self-realization, the consumerist attitude to life. Orphanhood as a factor destroys the emotional connections of the child with the social environment surrounding them, with the world of adults, contemporaries and causes deep secondary disorders of physical, mental and social development. The orphanhood situation influences the life of the child, and the adult essentially complicating the process of socialization and civil identification of the person. The problem of civil education of children-orphans is multidimensional and complicated, demanding scientific judgement, account of new realities, search of effective innovative models of construction of the process of civic education. Culture can become an effective factor of development of the creative potential of the person, a means of education of civic consciousness, social activity of the person, and overcoming of negative vital choices. Now the role of museums, which are an integral part of the system of social education representing a specific, integrative kind of culture establishment, combining various functions both scientific, and socially-pedagogical, cultural and educational, increases considerably. In case with problem children, museums have new functions: social orientation, adaptation and correction, not only considerably expanding the scope of activity, but also creating a favourable environment for civic education of children-orphans. The school museum can become an effective factor of civic education of children and teenagers as it allows carrying out activities on formation of value reference points of schoolchildren; restoring continuity in spiritual development, revival of cultural, historical traditions; generating sincere attitude to the moral concepts of the past, a sense of responsibility for preservation of natural riches, cultures of the native land, pride for the Homeland.

Key words: museum pedagogics; orphan children; socialization museum activity.

P. 164. *Molotkova Nataliya V., Mustafina Oksana A.* Tambov State Technical University (Tambov, Russia). **ON CREATING MODEL OF EXPERT, MASTER OF ENGINEERING AND TECHNOLOGY, IN INNOVATION-FOCUSED SOCIAL AND ECONOMIC DEVELOPMENT.** In order to realise specialised training directed at formation of competences in the sphere of commercialization of scientific ideas for the future experts of technical profile, it is necessary to address to the question of structure and content of the model of expert, Master of Engineering and Technology, They should correspond to the basic requirements for the graduate by the modern society aimed at innovation of development and hi-tech industries growth. As research has shown, the model of the expert is developed by four key characteristics: qualification requirements, professional requirements (requirements of the employer), personal requirements, requirements of the professional environment. The first characteristic of the model of the expert is unique for each trade and defines a definite structure of abilities. The second one corresponds to the requirements of employers to the qualification level of certain experts. The third characteristic includes abilities and certain knowledge, which define the level of spiritual, moral and cultural development of the expert, realization of their professional ambitions. At last, the fourth characteristic makes requirements concerning the modern situation in a definite professional environment. Considering the transition of the Russian system of higher vocational training to the two-level model of experts' education, formation of the model of the Master of Engineering and Technology (MET) includes developing competences, which the graduate expert in the field should possess. Analysing the data presented in researches, it is possible to track a clear tendency of expansion and increase in the professional requirements shown by employers to graduate METs. Qualified staff ready to develop and realize innovative projects at any stage today is required: from idea development to its realization and post-sale service. According to the rate of development of innovations, high and complex requirements to the level and the quality of knowledge, MET as a subject of the innovation-focused economy with an active professional and vital position should generate a certain type of thinking and functioning. Introduction of the Federal State Educational Standard of the Higher Vocational Training of the third generation provides complex preparation of the student not only for professional work in the chosen industry, but also to adaptation in the conditions of the changing reality. Abilities, skills and professional qualities, expressed in the generated and possessed competences, allow the graduate to get successfully involved in any developing sphere, to master new industrial and administrative approaches, to develop as a creative person. Thus, the model of the expert should be a guide for creation of higher education standards, which, in turn, should reflect transition from the qualification model rigidly connected with the subject and object of work to the competence one.

Key words: model of Master of Engineering and Technology; competence; commercialization.

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P. 168. *Vagina Yekaterina A.* National Research Tomsk Polytechnic University (Tomsk, Russia). **ISOTOPIC COMPOSITION OF CARBON AND OXYGEN IN CHERTOVO KORYTO GOLD ORE DEPOSIT (PATOMSKOE UPLAND).** Isotopic composition of carbon, oxygenised in carbonates and deoxidated in kerogen, as well as oxygen of the Chertovo Koryto gold deposit has been studied; the deposit was formed in the early-Proterozoic black-shale series. The isotopic composition of carbon in kerogen has meaning – 26.2

and – 24.6‰. The ankerite from beresite and quartz veins characterised weighted mean – 18.5...– 18.2‰ and – 18.4...– 17.4‰ respectively. The isotope relations of oxygen ankerite keep within a narrow range $\delta^{18}\text{O}$ (14.2...15.1‰). It is supposed that weighting of isotope composition of carbon of carbonates is caused by the mixture of isotopically light carbon kerogen in the course of its oxidation with isotopically heavy carbon, arriving in the system with metal-bearing fluids generated in the mantle reservoirs. A number of facts testify to the possibility of existence of deep fluids: confinedness of ore deposits to the upper wall of a deep fracture, which carries out ore-control and fluid-supplying functions; presence of inter-mineral dolerite dikes; presence of contrasting anomalies of chalcophile elements (P, Ti, Mg, Ca, Fe, Mn) in beresite nearly frame ore-control a deep break; affinity of isotope composition of sulphur early metasomatic and late (in quartz veins) sulphides of ores to the meteoric standard (+1.8 ...+4.7‰). The similar facts are fixed in the deposits localised in shale (Sukhoy Log, Muruntau, Charmitan, Kedrovsky, Sovetskoe, etc.) and crystal (Irokinda, Berikulsky, etc.) substance. Isotope ratios of carbon of hydrothermal carbonates close to the mantle marks (-4.5 ‰) in many mesothermal gold deposits are consistent with the conclusion of the operation of the underlying metal-bearing solutions in systems of mineralization. In the Chertovo Koryto ankerite deposits carbon isotope ratios correspond to values intermediate between isotopically light carbon of kerogen and relatively heavy mantle carbon. Possibly, addition of carbon to the area of mineralization occurred with solutions as a part of deep carbonic acid. The isotope of carbon increased from early ankerite of beresites to late ankerite of quartz veins and veinlets, which may be due to partial mixture of deep oxidised carbon with deoxidised carbon of kerogen slates in the course of its oxidation accompanied by beresite bleaching. The isotope composition of ankerite oxygen is thus common in magmatic hydrothermal carbonates. In other mesothermal deposits, such as the Sukhoy Log, the effect of mixture is absent. In contrast to the Chertovo Koryto deposit the deficit of bleached (excluding kerogen) beresites here shows the functioning of deoxidised solutions unable to oxidise the carbon of kerogen.

Key words: black-shale; Chertovo Koryto gold deposit; kerogen; carbonate; isotopic composition; carbon; oxygen.

P. 172. *Golubev Igor A.* Krasnoyarsk State Cadastre Chamber (Krasnoyarsk, Russia). **SOIL WASHOUT BY THAWED SNOW ON ARABLE LANDS OF NORTHERN KRASNOYARSK FOREST-STEPPE.** Results of the 2009–2011 researches of washout (accumulation) of soil on arable lands of the northern part of Krasnoyarsk forest-steppe at an experimental site typical for the given territory (natural boundary of the Dolgiy Log gully) are considered. The agricultural background of the arable lands of the experimental site for the years of research was stubble, winter crops, complete fallow, and layland. The mechanical structure of the soil cover is mainly medium loam and clay loam. Large fractions of sand are accumulated in the bottoms of flow erosions and holes during the distribution of streams of thawed snow oversaturated with diluvium. The depth of freezing of soil in the considered years was 1.2–1.5m, the depth of thawing by the time of measurement of washout sizes averaged to 15-17 cm. The site of the Dolgiy Log is surrounded by forest, which increases accumulation of snow and influences its distribution on the arable land. On the slopes of the northern exposition the accumulation of snow is 1.5–2 times higher than on the southern one. The maximal accumulation of snow was fixed annually in the eastern part of the northern part at the edge of the forest. The micro-relief of the arable land essentially influences the accumulation and distribution of snow. Its character predetermines the formation of education of the channelized flow. The most important distinctive features of the Dolgiy Log, rendering the most essential influence on soil erosion are plough works mainly along the slopes; prevalence of rather low slopes with significant length – from 500 to 1300m; bordering with forest, which increases snow accumulation; slopes and agricultural background condition influencing the speed of water-currents and turbidity waters. The results of the observations show that the maximal values of erosion were observed in 2009, minimal – in 2010. In 2011 the size of washout was average. The principal causes of the specified distinctions are connected with unequal pre-winter humidifying of soil and various stocks of water in the snow cover. Territorial generalization of the given observations by distribution of characteristics of washout on the sites we have not studied with similar conditions of slopes, length, exposition, location is executed.

Key words: accumulation of snow; thawing of snow; drain of thawed snow; washout of snow; slope; agricultural background.

P. 176. *Kizhner Lubov I., Kizeeva Alena A.* National Research Tomsk State University (Tomsk, Russia). **PROGNOSTIC INFORMATION VALUE FOR REDUCTION OF LOSSES FROM FROST IN TOMSK REGION.** One of the important tasks of the National Weather Service is to improve the functioning of the economy through optimal use of hydro-meteorological information. Along with the variety of climatic characteristics real weather and forecast data are broadly used that can help optimize the activities of enterprises. We calculated the average loss due to frost in Tomsk region, and the possibility of using operational forecasts of spring frost in order to choose the optimal strategy for agriculture. It is shown that the use of operational forecasts of frosts can significantly reduce losses in comparison with climate data. The optimal strategy to minimize the average loss due to the use of climate and forecast data on the frosts in the air and soil was examined. In this paper, calculations were performed for the normalised loss when only climate information (for the two climate strategies) was used, taking into account the operational forecasts of spring frosts. As the main climatic characteristics long-term repeatability of frosts for two periods was taken: the period of the beginning of the vegetation period, and the active growing season. The average normalised losses were calculated when choosing permanent protection neglect as a strategy of constant protections from frosts. Based on the actual data of frost in Tomsk region for the period from 1999 to 2008 the normalised loss was calculated in case of using specialised forecasts of spring frosts. Such economic features of the enterprise as the cost of protective measures against frost (C) and the loss from them (L), as well as the coefficient of the non-preventing losses (ϵ), were used. The climatic frequency of frosts and the accuracy of frosts forecasts were also considered. We obtained the following conclusions. 1. The choice of the strategy depends on the considered economic characteristics of each company and meteorological characteristics: frequency of frosts and climate of frosts forecasts. The higher the accuracy of forecasts, the more applicable and effective the forecast is for many companies. 2. Using the optimal strategy based on reliable prognostic information can reduce losses from frost for nearly all consumers by 2–4 times or more. 3. With other equal conditions, average losses increase with the ratio C/L and the value of the coefficient of non-prevented losses of ϵ . As part of economy the role of meteorological resources is important. It is therefore necessary to further develop the theoretical and practical ideas in the economic and agrometeorological calculations.

Key words: frosts; operative forecasts; average losses; optimal strategy.

P. 182. *Petrov Anatoliy I., Inishev Nicolay G., Dubrovskaya Larisa I.* National Research Tomsk State University (Tomsk, Russia). **REGULARITIES OF SNOW STORAGE FORMATION IN BOGGED WATERSHED OF SOUTH-TAIGA SUBZONE OF WESTERN SIBERIA.** The results of field studies on essential characteristics of the snow cover (depth, density and snow storage) in diverse ecosystems of a small bogged watershed are given. They have demonstrated that the greatest irregularity in the snow distribution is characteristic for the ridge-pool and hummock-lacustrine microlandscapes. This is explained primarily by the snowdrift transport. The

greatest snow layering of 1.5 to 3.0m depth is observed on windward and leeward slopes of forested ridges. In pools alternating with ridges and on vast woodless spaces, the snow cover depth declines to 0–20 cm. The average long-term depth of the snow cover on the ridge-pool complex is 69 cm, while the maximum depth is 360 cm, thus, being over 5 times greater than the average one. The least coefficient of snow storage variability is observed in mixed forests adjacent to the river channel (0.10–0.15), the greatest one is in the ridge-pool and hummock-lacustrine complexes (0.40–0.70). The snow-accumulative role of microlandscapes is exhibited in the greatest extent in the ridge-pool complexes in less snowy winters, whereas in snowy winters it is less. Taking into account the dominating role of the ridge-pool complexes in watersheds of rivers flowing off from the Vasyugan Mire, the calculation for the snow storage volume should be differentiated in forecasting the spring flood volume with regard to the snowiness of the year. The synchronicity is observed in changes of the maximum snow accumulation in the forest-bog group of microlandscapes. No connections are established in the snow accumulation of the forest adjacent to the river bed and that of open forestless sites. In the forest-bog group of microlandscapes, the average coefficient of snow accumulation is 1.16, in the group of pine-sphagnum complexes and in the ridge-pool complex it is 1.26. The average value of the snow accumulation coefficient for all mireless microlandscapes is 1.2. The significant trend is established in the row of solid precipitation at the Bakchar meteorological station (1985–2004), whereas in rows of snow storage it is not revealed.

Key words: snow depth; maximum snow storage; coefficient of snow accumulation; bogged watershed; microlandscape.

P. 188. *Poliakov Denis V., Kuzhevskaya Irina V.* National Research Tomsk State University (Tomsk, Russia). **USE OF CLUSTER ANALYSIS FOR ASSESSING HEAT AND MOISTURE DURING ACTIVE VEGETATION IN SOUTH OF WESTERN SIBERIA AND ITS RELATION TO T.G. SELYANINOV HYDROTHERMAL COEFFICIENT.** In today's changing climate, agricultural companies of Western Siberia are interested in finding a modern methodology for assessing agro-climatic conditions and solutions to problems of zoning, with the subsequent optimization of agro-climatic resources used. For solving these tasks, the problem of estimating the temperature and humidity conditions of the area is researched. This research examines the subject of territorial zoning on a more qualitative and modern level, based on the automatic systematization of the mean values of the fields of SHC (Selyaninov Hydrothermal Coefficient) using hierarchical cluster analysis. The paper presents an analysis of the spatial index values of SHC, which were subjected to clustering followed by obtaining versions for classification. The resulting variations were subjected to statistical testing of the classification, with application of quality criteria for choosing a real and meaningful classification. The statistical evaluation of the quality of the variants identified the more correct number of classes, namely, zoning and site assessment according to three classes, which subsequently had a similarity with the well-known classification of SHC for production of temperature-humidity conditions assessment of the territory. It turned out that the conditions with increased values of temperature and humidity belong to the first class, the second class expresses conditions of optimum moisture content, and the third – insufficient one. Also, the classes received quasi-latitude distribution in space and this picture corresponds to the distribution of the SHC index of the territory. After the conducted research with hierarchical cluster analysis application the objective method helped to create a scientifically based classification complying with the already known, physically based scale of SHC classification. Besides, the presented method of cluster analysis, allowed us to save computation time and to compress the information, which is an important factor in usage of large data sets. In general, by the results of predictive assessment of climate warming, with the condition of SHC index changing, we can assume that the boundaries of agro-climatic zones, classified by the combination of heat and humidity, would migrate away to the northern and eastern territories, but more southern areas would often be subjected to droughts of different intensities. Thereby, while the current trends of climate changing are persevered, during the next 100–200 years the south of Western Siberia has all the prerequisites for increasing of agro-climatic potential, which is due to the northern and eastern areas.

Key words: heat and moisture; territory; cluster analysis.

P. 193. *Tsibulnikova Margarita R.* National Research Tomsk Polytechnic University (Tomsk, Russia). **MAINSTREAMING NATURAL CAPITAL AND ECOSYSTEM SERVICES INTO MANAGEMENT DECISIONS.** Recent decades have witnessed drastic changes in people's perception of environment protection and sustainable development. The sphere of understanding of this issue has broadened to consciousness of advantages and losses from the natural capital, namely earth and water landscapes and their biodiversity. The importance of natural capital preservation for provision of steady flow of benefits from the ecosystem services is seen as vital for both wealthy and poor countries. Nowadays, the task is to integrate ecosystem services into practical solutions. This requires joint understanding of production of ecosystem services and of quantitative variety of benefits from them by various strata of society; understanding of the decision-making process by individuals, corporations, governments, the integration of scientific studies accompanied with institutional changes. The provision of rational nature management requires a mechanism of involvement of the natural capital and ecosystem services into the process of making managerial decisions on the basis of the monitoring system of economic value of the natural capital. Interfaced development of the two scientific fields is crucial for environmental management economization. The first scientific field is perfection of economic assessment methods. The other one, equally representing an important part of the process, is the data collecting system on the use of natural capital reserves in all the spheres of natural management, including housekeeping. The UN statistics department proposed SEEA (System of Integrated Environmental and Economic Accounting System) compatible with SNA (National Accounts System) in 1993. National Accounts classifies natural resources as tangible non-produced assets. Thus, EEAS is a product of new SNA, in which special attention is paid to the necessity of ecological sustainability assessment of economic growth. According to the analysis of the federal state statistical monitoring system in the sphere of natural resources recognition, the official statistics only contains information about the real volume of natural resources use and does not reflect their economic usage. The exploitation of natural resources in the household sector is not reflected in the statistical monitoring system. Improvement of the data collecting system in the sphere of natural resources exploitation is necessary for involvement of natural capital and ecosystem services in the process of making business and power. This process should be implemented in two directions: firstly, it is aggregation of data on physical and monetary flows within the natural resources sector in the statistical monitoring system; secondly, it is involvement into the statistical monitoring system of household activity in the sphere of natural resources exploitation. Restructuring of the statistical monitoring system and creation of the economic value monitoring system of natural capital, including the household sector, will make it possible to plan regional growth with regard to the population interests concerning creation of additional jobs and poverty level reduction. Besides, this will enable to involve natural capital into the process of making managerial decisions of power and business.

Key words: natural capital; ecosystem services; Environmental and Economic Accounting.