# CONTENTS

Biological sciences Article	
DUCK HEPATITIS VIRUS TYPE I Trefilov B.B., Nikitina N.V., Yavdoshak L.I., Dmitriev K.Yu., Trubitsyn M.M. HYDROCHEMICAL CONDITIONS OF WATER BODIES OF THE URAL-CASPIAN BASIN Tulemisova G., Amangosova A., Abdinov R., Kabdrakhimova G., A. Orynbasarova	3 7
Materials of Conferences	
THE EFFECTS OF STRESS ON THE REPRODUCTIVE SYSTEM Loginov P.V., Ishqairat Ya., Mavlutova E.B.	13
Economic sciences Article	
CLUSTER TECHNOLOGIES IN THE POSITIONING OF THE TOURISM MARKET Bekboeva M.A., Nisharapov N.B. HISTORICAL COMPONENT OF FORMATION OF TRANSFORMATIONAL PROCESSES OF THE REPUBLIC OF KOREA OF THE END OF THE XX CENTURY Litvinova I.V.	14 20
	20
Historical sciences Article	
TO THE QUESTION ON UNDERSTANDING ABSOLUTE AND AUTOCRACY IN RUSSIA Belova T.A., Britskaya A.L.	23
Legal sciences Article	
TYPICAL VIOLATIONS OF THE STUDENTS` RIGHTS AND LEGAL METHODS OF THEIR ELIMINATIN Simonyan R.Z.	NG 27
Short Reports	
MODERN STRUCTURE OF THE INTERNATIONAL CRIMINAL JUSTICE AND PROSPECT OF USE OF UNIVERSAL JURISDICTION <i>Gracheva R.O.</i>	30
Medical sciences Article	
EVALUATION OF SKIN MICROFLORA IN PEOPLE WHO HAVE BEEN IN EXTREME CONDITIONS Khusnarizanova R.F., Vildanov T.R., Shagarov R.T.	31
Short Reports	
PROSPECTS OF THE HIGHER MEDICAL EDUCATION DEVELOPMENT IN RUSSIA IN THE CONTEXT OF NEW MORAL PARADIGMS Zahovaeva A.G., Kopisheva E.N.	33
Pedagogical sciences Article	
EVALUATION OF THE USE OF THE "MOODLE" SYSTEM IN ENGLISH LANGUAGE TRAINING AT KSMU Kalimbetova A.B., Ibrayeva Zh.K., Burmistrova V.A.	34

# EUROPEAN JOURNAL OF NATURAL HISTORY № 1, 2018

# CONTENTS

GENDER ORIENTATIONS AND PRACTICES OF EDUCATING MODERN PRESCHOOL TEACHERS AS AGENTS OF PRIMARY GENDER SOCIALIZATION OF A PERSONALITY Semenova L.E., Chevachina A.V., Semenova V.E., Tishkina Yu.A.	38
Philological sciences Article	
WORD FORMATION IN TURCOLOGY: THEORY OF MOTIVATION AND NOMINATIONS Odanova S.A., Shoibekova G.B., Zhangabayeva N.A.	42
Philosophy Article	
THE NATURE AND THE ESSENCE OF YIN AND YANG IN THE CONTEXT OF SPIRITUAL EVOLUTION Kokumbayeva B., Temirton G.	48
Psychological sciences Article	
MILD MENTALLY RETARDED ADOLESCENTS <sup>,</sup> VISION OF THE FUTURE CHARACTERISTIC FEATURES <i>Kisova V.V., Razuvaeva N.E.</i> THE ROLE OF FAMILY IN SPIRITUAL AND MORAL FORMATION OF PERSONALITY AT THE BASIC LEVEL OF ONTOGENESIS <i>Serebryakova T.A., Makarycheva Y.N., Kazakova O.M.</i>	56 59
Physical and mathematical sciences Short Reports	
CATASTROPHE THEORY FOR THE ANALYSIS AND FORECASTING OF THE FOREST DYNAMICS <i>Ivanova N.S.</i>	62

# **DUCK HEPATITIS VIRUS TYPE I**

Trefilov B.B., Nikitina N.V., Yavdoshak L.I., Dmitriev K.Yu., Trubitsyn M.M.

All-Russian Research Veterinary Institute of Poultry Science – Branch of the Federal State Budget Scientific Institution Federal Scientific Center "All-Russian Research and Technological Poultry Institute" of Russian Academy of Sciences, St. Petersburg – Lomonosov, e-mail: boris.trefilow@yandex.ru

Infectious diseases prevent the intensive development of industrial duck breeding. Among them, viral hepatitis of type I ducklings has become widespread. The disease is registered in all countries of the world. This is due to the epizootology features, the stationarity of the foci due to the significant sustainability of the virus and its variability. The article presents data of domestic and foreign researchers on the epizootology of the disease, taxonomy and biological properties of the pathogen, pathogenesis and clinico-pathoanatomical manifestations of the disease.

Keywords: duck hepatitis virus, epizootology, biological properties, clinical signs, pathoanatomical changes

#### **Epizootic features of the disease**

Viral hepatitis of ducklings of type I (infectious hepatitis of ducks) is highly contagious, super acute among ducklings [3, 19] and latent among ducks disease [11, 23], with predominant liver damage and high mortality of young animals. Viral hepatitis of ducklings (DHV) causes considerable economic damage to duck farms, especially the industrial type, as it causes a massive loss of ducklings 1-30 – the daily age of 30-95% and a decrease in the productivity of ducks. Recovered ducklings are lagging behind in growth and development, which leads to a partial loss of meat production, a violation of breeding work. The damage from the DHV is exacerbated by the costs of restrictive measures that violate the economy of the economy, especially when the disease takes a stationary character [9, 13, 23].

In vivo, viral hepatitis can be affected by ducklings up to 40 days old, but more often, at 1-30 days old [19]. To the virus of hepatitis of ducklings, goose is also susceptible up to 10-12 days of age, both under natural conditions and when they are infected by artificial means [1, 29]. Rapid development of age-related immunity serves as a characteristic property of this infection, that is older ducklings and adult ducks are not clinically ill. Not susceptible to the causative agent of hepatitis ducklings also domestic, wild and laboratory animals, and other species of poultry. There is no documented disease in humans [37, 39].

The source of the causative agent of infection is a sick and sickly bird – virus carriers that release into the external environment of the pathogen with litter, nasal and conjunctival outflows. The duration of virus carrying after an illness varies from 60-75 to 300-650 days [26].

The causative agent of the disease is transmitted by ducklings and for incubation eggs delivered from disadvantaged farms at the DHV. Embryos from such eggs in 75-90% of cases die during incubation at various stages of embryonic development. Drift of the pathogen is possible with wild ducks and free-living birds [5, 21, 41].

Inside the farm, the virus is transmitted when a healthy and sick bird is together. The causative agent of the infection is also transmitted with infected food, water, litter, care items, transport and maintenance personnel. Infection occurs alimentary, but it is also possible aerogenic infection of ducklings. It is possible that the virus can enter the body of birds when injured, for example, when injecting various drugs, as well as by mechanical and transovarial routes [2, 5, 41].

There is a characteristic feature of the epizooticity of viral hepatitis, which is repeated almost in all cases: the death of ducklings is growing quite rapidly: the peak is 4-5 days, and the decrease by 7-8 days, by 10-12 days, there is a sharp decrease in the number of dead ducklings. In viral hepatitis, stationarity of the foci is noted, which is determined by the relatively high resistance of the pathogen in the external environment, the constant presence of ducksvirus carriers and susceptible livestock, especially in the year-round cultivation of ducklings [11, 27].

The reservoir of the virus can be rats [9]. One should also take into account the possibility of a "natural focality" of the pathogen. Wild ducks often settle on ponds near duck farms. They also get viral hepatitis and can spread the virus. There is no pronounced seasonality, but violations of conditions of maintenance, inadequate feeding of birds and fodder toxicosis contribute to the manifestation of the disease. It should be especially emphasized that a number of pathogens can complicate the course of the main infectious process, first of all, in ducklings, pathogens of salmonellosis, colibacillosis, aspergillosis and chlamydia, and in ducks – hepadovirus infection. Such a bird should be classified as an increased risk [2, 5, 28, 35].

At the first appearance of the disease in a prosperous farm, the enzootic begins, as a rule, among ducklings 5-10 years old and affects a series of consecutive conclusions, quickly covering all susceptible livestock. The incidence of ducklings up to 3 weeks of age is 80-90%, the lethality with super-fast flow for the first 10 days of life reaches 100%, with acute flow – 70-80%. In permanently dysfunctional farms viral hepatitis is registere among ducklings 15-30 days old and older, the case in separate batches is 5-10%. If non-immune young animals re-enter this economy, the death rate among ducklings from party to party increases again and sometimes reaches 80-95% [19].

## **Biological properties of the virus**

To date, it is known that there are three types of viruses for the causative agents of ducklings: type 1 - "classical", widespread everywhere [44]; type 2, isolated in England [34], and type 3, isolated in the USA [40]. It was determined that viruses of type 1 and type 3 belong to the family of picornaviruses. Type 1 virus is reproduce in cell cultures and embryos of ducks, chickens and quails. Type 2 virus differs from type 1 in that it is well reproduced in embryos and in the body of ducks, in cultures of liver cells and in the kidneys of a duckling, but its reproduction in chicken and quail kidney culture is limited, and it is not reproduced in chick embryos. It is important to note that type 3 virus causes hepatitis among the ducklings immune to virus type 1, that is, these types of virus have antigenic differences. As for the type 2 virus, recent studies have shown that it belongs to astroviruses.

The type 1 causative agent is an RNAcontaining virus belonging to the family Picornaviridae, the genus Avihepatovirus of type 1 hepatitis virus (Duck hepatitis virus type 1 DHV-1), which includes three serotypes of the DHAV-1 virus, DHAV-2, DHAV-3 (Resolution adopted by the world assembly of delegates of the oie in May, 2010) [42].

Electron microscopic studies have determined that these are specific viral particles of round or spherical shape, the size of the virus is from 20 to 40 - 60 nm. [8, 19]. The virus is resistant to ether and chloroform and various pH of the medium: 4.8; 7.8; 3.0 and from 6.8 to 7.4 [19]. The virus of hepatitis of ducklings is considerably resistant to the influence of the external environment: in the feeders survive more than 10 weeks, in the litter – 37 days, water – up to 74 and in soil – from 105 to 131 -157 days [8, 19]. The virus of hepatitis of ducklings kept pathogenicity while being on the surface of the walls of poultry houses from 20 to 40 days depending on the air temperature, in the litter – 15-20 days [22]. The vaccine strain of 3M duckweed hepatitis virus was viable in aerosol at a room temperature of 18-20 °C for 45 minutes [19]. The virus can withstand heating to 50 -56° C for 60 minutes or more. When stored in the refrigerator at minus 14 – 32 °C, the virus remained viable for several years [8].

Ultraviolet rays at a distance of a radiation source of 30 cm killed the virus in 3 minutes, at a distance of 60 cm in 10 minutes [6].

Disinfecting solutions of xylonaphtha, lysol, creolin and soda ash at ordinary concentrations are not effective. 1% chloramine solution has virucidal properties [31]. Influences the virus and the temperature of the disinfectant solution. Thus, 4% hot and 5% cold solutions of sodium hydroxide inactivated the virus of hepatitis of ducklings for the same time – 6 hours [22].

The virus of hepatitis ducklings replicates on 10-12 day old duck and 9-10 day old chick embryos by infecting them in the allantoic cavity [19, 36].

Embryos die in 2-6 days in 10-60% of cases, but some of them develop before withdrawal and hatch, which depends on the properties of the virus, the method of infection and the age of the embryo.

Passing the virus through embryos increases its virulence. The "peak" of virulence (up to 100%) falls on the 53th passage, and the concentration of the virus in the allantoic fluid after 48 (53-69) hours. The virus accumulates in the body of the embryo to 7.5 lg, in the chorioallantoic shell – 5.79 lg and in the allantoic fluid – 3.62 lg.

In dead embryos, the allantoic fluid and the contents of the yolk sac acquire a greenish tint. Hemorrhages and swelling of the thoracic and abdominal areas with hemorrhages are noted on the embryo body. Liver of loose consistency of gray-yellow color with foci of necrosis.

The virus is capable of replication in primary-trypsinized liver cells and kidneys of duck embryos [15, 26, 43], as well as on duck and chicken embryo fibroblasts with collagenase [16, 17].

After 3-7 days, the authors observed the formation of the symplasts, the appearance of granularity in the cytoplasm and the vacuolization of the affected cells, and then the destruction of the monolayer [25].

#### Pathogenesis of the disease

In natural conditions, infection of ducklings occurs mainly through the mucous membranes of the digestive and respiratory organs. The virus, infiltrated into the body, carries blood to many organs, primarily the liver and brain. The titer of the virus already in the first hours after infection in the blood is high, but gradually decreases to 48-72 hours. At the same time, the virus titer in the liver and brain is increased 48-72 hours after infection. Neutralizing barrier function of the liver decreases and toxic products are spread by blood throughout the body. The death of ducklings occurs as a result of irreversible changes in the liver and other organs. Bend, as a rule, ducklings with good fatness, with intoxication phenomena [7, 14, 19].

In the liver of infected embryos and diseased ducklings, hepatosis and hepatitis develop, which are naturally accompanied by necrobiosis and necrosis of cell elements, as well as a decrease in the level of total protein and albumin in the blood serum, a decrease in the protective properties of serum colloids and alkaline phosphatase, glutamate-pyruvate transaminase, bilirubin and creatine. In chronic course of viral hepatitis, changes in organs are of the same nature, but foci of necrosis in the liver of ducklings are more extensive.

# Clinical and pathoanatomical picture

Viral hepatitis of ducklings proceeds superfast; describes the chronic course and atypical form of the disease. The incubation period with natural infection is 1-5 days, and with artificial infection – 1-8 days. A shorter incubation period with oral, intranasal and aerogenic infection compared with the parenteral method [18, 33, 38].

In conditions of unfavorable farms in the acute course of the disease, the incubation period is 1-7 (less often 12-13) days, and the duration of the disease is 1-3 hours, less often 4-5 hours. The disease with visible clinical signs proceeds rapidly, and often the period of the disease precursors with the first clinical signs of hepatitis remains unnoticed. Often in clinically healthy from the evening of the herds in the morning are found many dead ducklings. At the same time, it was noted that most ducklings ran from the room to the paddock, and some ducklings were sitting, swollen or falling and died immediately with seizures up to 95% [10, 12, 38].

At viral hepatitis ducklings develop the following signs of the disease: refusal of feed, drowsiness, lack of mobility, ducklings sit for a long time, movement disturbs coordination of movements, sometimes diarrhea, rhinitis, conjunctivitis. After 1-2 hours, less often after 5-6 hours, from the moment of the appearance of the nerve signs of the disease, convulsions appear, while the limbs are stretched along the trunk, the ducklings lie on the back or on the side with the head thrown back (opisthotonus), make swimming movements. After several seizures, death occurs. Ducklings recover completely rarely, sometimes the disease takes a chronic course, while the bird lags behind in growth and development [11, 12, 18, 20, 32].

The chronic course of the disease is observed in 3-4-week-old ducklings. The disease lasts 10 to 20 days, sometimes more, accompanied by diarrhea. Ducklings become inactive, some swollen joints of the limbs. There is a penguin-like gait – the ducklings move, keeping the vertical position of the body [8, 11].

Clinical signs do not always accompany disease of the ducklings. The disease in such ducklings is asymptomatic, or subclinically [23]. Not all ducklings that showed the first signs of the disease die, some of them recover, and they cannot be distinguished from healthy ones. From these ducklings, it is possible to isolate the virus, as well as to detect virus-neutralizing antibodies in serum.

There is an associated course of viral hepatitis with salmonellosis, influenza, mycoplasmosis, colibacillosis and aspergillosis. Viral hepatitis remains the leading [20].

When autopsies of fallen ducklings in an acute course, characteristic changes are found in the liver, which appears to be markedly enlarged in size, ocher-yellow, the consistency of its parenchyma is flabby, easily destroyed under pressure, in most cases its surface is strewn with hemorrhages, from point to spotted, hemorrhages without clear boundaries. The gallbladder, as a rule, is full of bile. The kidneys are swollen, blood-filled. Changes in the spleen are not the same type and are not characteristic. It is pale - or dark red, of normal size or enlarged, sometimes bumpy, mottled. The cardiac muscle in the state of granular dystrophy has the form of boiled meat, coronary vessels are blood-filled, in the pericardial cavity, and often an increased amount of serous fluid is noted. The brain vessels are full-blooded. Many ducklings find catarrhal inflammation of the intestinal mucosa, which, corresponds to complication of hepatitis with bacteriosis, primarily salmonella.

In the chronic course of the disease at the dissection, the liver is usually enlarged 1.5 times, spotted, granulomas similar to leukemias are found, and the spleen is blood-filled. Pathoanatomical studies show the development of the liver and spleen of necrobiotic processes, perivascular lymphocytic-plasma infiltrations. Changes in the brain indicate serous encephalitis [4, 24, 30].

#### Conclusion

In recent years, against the background of relatively stable well-being for viral hepatitis, ducklings are constantly occurring sporadic cases of the disease.

Essential factors contributing to the emergence of cases of the disease are favorable conditions for the passivation of opportunistic microorganisms. High – density of planting of livestock, heterogeneity of its immunological status, optimal habitat conditions for pathogens, as well as untimely implementation of antiepizootic measures without biology of the pathogen as its ability to prolonged asymptomatic persistence in the body of a sick bird.

Given these circumstances and taking into account the flow of information on viral hepatitis ducklings over the past two to three decades, we were convinced of the relevance and timeliness of summarizing the data in the review article.

#### References

1. Akulov A.V., Kontrimavichus L.M., Majboroda A.D. The susceptibility of goslings to the virus of hepatitis ducks / Veterinary. – 1972. – No. 3. – P. 47.

2. Bessarabov B.F. Some epizootological features of viral hepatitis ducklings / Mater. All Union. Conf. on the sickness of young animals with animals and birds: Collection of MVA, 1964. – P. 205.

3. Bessarabov B.F. Viral hepatitis of ducklings / M., 1974. – P. 482-486.

4. Bogolepov V.I. Pathomorphological changes and their significance in the diagnosis of viral hepatitis ducklings / Proceedings of VNITIP. -1968. - T. 30. - P. 163.

5. Buryakivskij V.D. Until the epizootology of viral hepatitis cacheni / Tvarinnitsu Ukrain, 1965. – № 7. – P. 50-51.

 Buryakivskij V.D. Susceptibility of wild ducklings to viral hepatitis / Poultry. – 1967 – No. 5. – P. 30.
 Buryakivskij V.D., Panikar I.I. Pathomorphological

7. Buryakivskij V.D., Panikar I.I. Pathomorphological changes in the liver in wild and domestic ducklings in viral hepatitis / Veterinary. Kiev, 1969. – No. 20. – P. 24-27.

8. Vinohodov O.V., Vinohodov V.O., Vinohodov D.O. Viral hepatitis of birds / Veterinary Archive. Sciences. – St. Petersburg, 1998. – P. 68-91.

9. Demakov G.P., Ostashev S.N., Semenovyh A.P. Efficiency of measures for viral hepatitis ducklings / Veterinary. – 1973. – No. 4. – P. 59-61.

10. Doroshko I.N., Smiyan YU.P. Viral hepatitis ducklings / Poultry. – 1962. – No. 1. – P. 31.

11. Doroshko I.N., Bezrukavaya I.YU., Skonsmanas I.P. About the chronic form of viral hepatitis ducklings / Veterinary. – 1968. – No. 2. – P. 63.

12. Zubcova R.A. Veterinary preparations. – Moscow: Kolos, 1981. – P. 135.

13. Knyazev V.P. Diseases of waterfowl: monograph / Vladimir, 2010. – 160s.

14. Kurilenko A.N. The development of viremia in experimental hepatitis ducklings / Sb. works of young scientists / VNITIP. – Zagorsk, 1968. – Issue. 10. – P. 274-276.

15. Leonov I.K. The ability to replicate vaccine strains of the virus of hepatitis of ducklings in cell cultures / Mater. XVIII Intern. Conf .: Innovative Provision for Egg and Meat Poultry in Russia. – Sergiev Posad, 2015. – P. 483-484.

16. Majboroda A.D. The effect of the virus of hepatitis ducklings on cells of tissue cultures of kidneys of chickens and duck embryos / Veterinary. – 1965. –  $N \otimes 8$ . – P. 28.

 Majboroda A.D. Formation of the virus of hepatitis of ducks in the culture of cells / Veterinary. – 1972. – № 8. – P. 50.
 Mitropol'skij A.S., Zubcova R.A., Golod YA.R. [i dr.]

Viral hepatitis ducklings / Poultry. – 1963. – No. 4. – P. 24. 19. Panikar I.I. Viral hepatitis of ducklings and its prophy-

Iaxis / M.: Rosselkhozizdat. – 1987. – 64c. 20. Panikar I.I., Nalezha A.T. Clinico-epizootological and

pathoanatomical diagnostics of viral hepatitis of ducklings, taking place in association with other diseases / Intensification of production: a collection of scientific works. – Kharkov, 1991. – P. 87-90.

21. Panikar I.I. Viral hepatitis of ducklings: epizootology, diagnosis and specific prophylaxis / Probl. Zoo – engineering and vet. Medicine: collection. Sci. articles, it is consecrated. 150 th anniversary of the foundation of the Kharkiv Zoo veterinary institute. – Kharkov, 2001. – Issue. 9 (33). – Part 1. – P. 24-27.

22. Polyakov A.A., Volkovskij G.D. Survival of the virus of hepatitis of ducklings in the external environment and development of disinfection regimes / Proceedings of VNIIVS. – M., 1969. – T. 34. – C. 278.

1969. – T. 34. – C. 278.
23. Skonsmanas I.P., Panikar I.I. Hidden form of viral hepatitis ducklings / Poultry. – 1966. – No. 7. – P. 30-31.

atitis ducklings/ Poultry. – 1966. – No. 7. – P. 30-31.
24. Strel'nikov A.P. Pathomorphology of viral hepatitis ducklings: Abstract. Dis. ... cand. Vet. Sciences. – M., 1964–22 p.
25. Trefilov B.B., Leonov I.K., Nikitina N.V. Replication of

25. Irehlov B.B., Leonov I.K., Niktina N.V. Replication of the virus of hepatitis of ducklings at different temperatures // Zh. Modern problems of science and education. – 2015. – No. 2 (part 2); URL: http://science-education.ru/en/acticle/view? Id = 22250.

26. Trefilov B.B., Leonov I.K. Biological properties of vaccine strains of hepatitis virus ducklings / B.B. Trefilov, // Materials of Intern. Congress. – St. Petersburg, 2014. – P. 90-91.

27. Asplin F.D. Notes on epidemiology and vaccination for virus hepatitis of duck /Off. Int. Epizoot. Bull. – 1961. – V. 56. – P. 793-800.

28. Chalmers W.S.K., Farmer H, Woolcock P.R. Duck hepatitis virus and Chlamydia psittaci outbreak / Vet. Rec. – 1985. – P. 116-223.

29. Chang C.F. An outbreak of viral enteritis in goslings in Taiwan / J. Vet. Med. Anim. – 1983. – Vol. 42. – P. 37-46.

30. Correa W. Liver histology in virus hepatitis of duck-lings/ Poultry Sci. – 1959. – V. 38. – P. 516.
31. Dvorakova D., Kozusnik Z. The influence of tempera-

31. Dvorakova D., Kozusnik Z. The influence of temperature and some disinfectants on duck hepatitis virus / Acta Veterinariya. – Brno, 1970. – V.39. – P. 151-156.

nariya. – Brno, 1970. – V.39. – P. 151-156. 32. Fabricant J., Ricard C., Levine P. The pathology of duck virus hepatitis /Avian Dis. – 1957. – V. 1. – Nr. 3. – P. 256-274.

33. Fitzgerald J.E. The pathogenicity of duck hepatitis virus for duck cell cultures, chicken embryos and ducklings /Res. Froo. III. Agric. Exp. Scien., 1965.

34. Gough R.E., Borland E.D., Keymer I.F. [et al.] An outbreak of duck hepatitis type II in commercial ducks /Avian Pathol. – 1985. – V. 14. – P. 227-236.

35. Gough R.E., Wallis A.S. Duck hepatitis virus type I and influenza in mallard ducks (Anas platyrhynchos) /Vet. Rec. – 1986. – V. 119. – P. 602.

36. Hwang G., Dougherty E. Disribution and concentration of duck hepatitis virus in inoculated ducklings and chicken embryos / Avian Dis. – 1964. – V.8. – Nr 12. – P. 264-268.

37. Hwang J. Susceptibility of poultry to duck hepatitis viral infection /Am J Vet Res. – 1974. – V. 35. – P. 477-479.

38. Levine P. Duck virus hepatitis / Disease of poultry. – Gowa, 1962. – P. 622-626.

39. Schoop G., Staub H., Erguney K. Virus hepatitis of ducks. V. Attempted adaptation of the virus to chicken embryos / Monatsh Tierheilkd. – 1959. – V.11. – P. 99-106.
40. Todd D., Smyth V.J., Ball N.W., Donnelly B.M., Wylie M., Wile M., Schicht and Schuler and S

40. Todd D., Smyth V.J., Ball N.W., Donnelly B.M., Wylie M., Knowles N.J., Adair B.M. Identification of chicken enterovirus-like viruses, duck hepatitis virus type 2 and duck hepatitis virus type 3 as Astroviruses /Avian Pathol. – 2009. – V. 38. – P. 21-30.

41. Vindel J., Agcardi J. Transmission naturelle ab eve du virus de l'epatite infectiouse du caneton / C.R. Acad. Sci. Paris. – 1962. – T. 255. – Nr 4. – P. 800-801.

42. Wang L., Pan M., Fu Y., Zhang D. Classification of duck hepatis virus into three genotypes based on molecular evolutionary analysis / Virus Genes. – 2008. – V.37. – P. 52-59.

43. Woolcock P.R. An Assay for duck hepatitis virus type I in duck embryo liver cells and a comparison with other assay / Avian Pathology. – 1986.a. – V. 15. – P. 75-82.

44. Woolcock P.R., Fabricant G. Duck virus hepatitis /Diseases of Poultry. – Ames, Iowa, 1991. – P. 597-608.

# HYDROCHEMICAL CONDITIONS OF WATER BODIES OF THE URAL-CASPIAN BASIN

Tulemisova G., Amangosova A., Abdinov R., Kabdrakhimova G., A. Orynbasarova

Kh. Dosmukhamedov Atyrau state university, Atyrau, e-mail: tulemisova62@mail.ru

The global environmental issues of technogenic pollution occur pressure on natural forms of the pathology of all living organisms and inevitably have an adversely affect on them. In recent years, hydrobionts have become objects of study of the outdoor pollution level. Numerous publications, including reports of World Health Organization Expert Committees allow us to conclude that there is evidence to suggest about the rising aggressiveness of environment. One of the important aspects of such insufficiently controlled process is the contamination of the micro elementary nature. At the present stage, the ecological state of transboundary rivers is especially important. These rivers include the Ural River flowing through the territory of the Russian Federation and the RK, and flowing into the Caspian Sea. The article presents the results of a study of the hydrochemical regime of the rivers of the Ural-Caspian basin in different periods of 2017. In the work for comparison, the data on the state of chemical indicators of drinking water in the region are characterized. In order to determine the state of the hydrochemical regime in the lower and upper reaches of the Ural River, the indicators of the Ilek River, the flow in the Aktyubinsk Oblast and the Chagan River, the flow of the river in the West Kazakhstan region are given.

Keywords: The Ural-Caspian Basin, the Ural River, tributaries, the hydrochemical conditions, pollution, oil products

Environmental problems in the third largest river in Europe, the Ural River Basin have remained extremely tense. Meanwhile, there are 70 cities and settlements with total population of about 4.5 mln people. The total length of the river is 2428 km and its catchment area is 237 thous. km<sup>2</sup>. The length of the river in the territory of Kazakhstan makes 1084 km, including length within the boundaries of West Kazakhstan Region – 761 km. The largest tributaries are the Or, Sakmara, Ilek, Chagan Rivers. Below the Uralsk, there is no lateral in flow. The reduced river flow cause due to national water supplies and evaporation of the extensive floodplain. The river flow is formed at the top of the basin, mainly within the boundaries of Russian Federation (Kurmangaliyev R.M., 2008) [3].

The Ural-Caspian Drainage Basin is located in the western part of the Republic of Kazakhstan and occupies the territory of four regions with a total area of 640,8 thous. sq.km, including Atyrau – 118,6 thous.km<sup>2</sup>, Aktobe – 205,3 thous.km<sup>2</sup> (except for the territories of Ayteke Bi and Irgiz regions), West Kazakhstan – 165,8 thous.km<sup>2</sup>, Mangystau – 151,3 thous.km<sup>2</sup>. On the whole almost 2 mln people live in this region. The main direction of economic activity is the oil and gas field development, agriculture and fisheries. Intensification of agricultural and fish production largely depends on the regional water supply (Onayev M.K., 2013) [6].

Preserving fish diversity in the Caspian Sea basin are one of the most pertinent issues: the commercially valuable fish catches has been steadily decreasing, the low-value ichthyofauna has not been developed, the quality of fish populations has been decreasing, that suggest a violation of their genetic pattern. There are troubling trends in the current state of commercial stocks of sturgeons in the Caspian Sea. Over the past 10 years fish catches have decreased by 10-fold in the Ural-Caspian basin.

The areas for exploration and development of hydrocarbons in the North-Eastern Caspian Sea coincide with the areas for feeding and migration of sturgeons and other commercially valuable fish, the concentration of foraging planktonic and benthic organisms. The large-scale development of oil and gas fields in the North-Eastern Caspian Sea is associated with environmental risk, as the most intensive bioproduction processes occur in the peripheral (coastal and shelf) zones where the main biomass of marine flora and fauna are concentrated [1, 2,7].

The deterioration of the quality of the water condition due to external natural and anthropogenic factors and the continuing unstable state of marine biota, the technogenic load will inevitably lead to ecosystem degradation and irreparable damage the biota of the North-Eastern Caspian Sea. Study of chemical composition of seawater and marine sediments is fundamental for solving the problems involving transformation and integrated use of water bodies. Transitionalrunoff within the upper and middle reaches of the river also contribute to pollution [4, 8].

#### Materials and methods of research

During the current year, study was carried out based on the R & D Schedule on six relatively isolated water bodies of the Ural-Caspian Basin: Ural River, its estuary, tributaries of Ilek and Chagan River.

Collection of samples to assess hydrochemistry and toxicology was conducted within expedition flights at 7 permanent observation stations: the Ural Rivers and their seashores.

The hydrochemical conditions of the Ural River in winter were estimated based on observations. Hydrochemical analysis included the following complex of parameters: pH, ORP, oxygen concentration, nitrite nitrogen content in water, permanganate oxidizability, alkalinity, BOD<sub>3</sub>, water hardness, salinity, electrical conductivity, chlorides and sulfates. Analyses were conducted according to the most recognized hydrochemical methods (ST ISO 9863-1-2008. Water quality. Determination of alkalinity).

Concentration of petroleum products in water and bottom sediments was measured by the Fluorate 02-2M by fluorescent method in accordance with the PND F14.1:2:4.35-95 and PND F 16.1:2:21-98 (PND F, 98) [5].

Boron concentration was also measured by the Fluorate 02-2M by fluorescent method, without sample preservation. Permanganate oxidizability was determined according to the method of oxidation of organic compounds with potassium permanganate in an acid medium. The concentration of oxygen and BOD<sub>5</sub> were measured based on the dissolved oxygen content by an Anion-7051 oxygen meter within 5 days after sampling. The specific electrical conductance (SEC) and the content of NaCl ions, i.e. salinity, were also measured by the Anion-7051 portable fluid analyzer. The water pH and its oxidation-reduction potential (ORP) were measured by an Anion-7051 portable fluid analyzer.

# Results of research and their discussion

Study for the hydrochemical regimes of rivers of the Ural-Caspian basin are important for describing the ecological and toxicological state of the water body. This would be especially relevant for the characteristics of the water bodies in different periods of the year. So it can be a useful way to identify the nature of pollutants entering into the river basin. Table 1 shows the data of the hydrochemical regime and the ecological state of the Ural River water and drinking water in various seasons of 2017. It also contains the indicators of flood period, winter and summer seasons. The pH levels of the samples are normally similar to magnitude. No special seasonal fluctuations were observed.

Although, the pH level of drinking water in February was within the limits of sanitary standards.

Hydrocarbonates and carbonates were within established standards, although these indicators have been decreased during winter– spring seasons (Table 1).

The salinity and the electrical conductivity (the EC) of the water bodies correspond to the values of the hydrochemical regime of the river (Tulemisova and others, 2017) [9]. The high indicators in the winter and their reduction to the beginning of the flood period are naturally occurring situation. Study of qualitative composition of pollutants was conducted to determine the content of nitrites, boron, petroleum products and easily oxidized organic compounds.

The amount of nitrites of the toxic oxides of nitrogen 1-3 times higher than the MPC values. There are extremely high concentrations of nitrites in spring before the flood period. Their concentrations have increased during flood period, sometimes have maintained same limits. The content of nitrites varies within the MPC limits during winter (Table 1).

In this respect, the quality of the drinking water is much cleaner. The content of potassium permanganate oxidation compounds are much less during the winter than the spring period, which is typical for this water body (Table 1).

This year boron content in the Ural River is much less than previous periods. However, its contents increase during the flood period. Petroleum products are always found in the Ural River. In winter and early spring, concentration of petroleum products is lower than the MPC values, but their concentration have increased 1,1 times before the beginning of flood period. Drinking water complies with the sanitation quality. Among all the quality indicators nitrites appear to be constant all the periods. This suggests that nitrites have not been washed out during flood period, representing constant source of pollution.

It is common knowledge that the primary pollutants enter the water bodies in the spring period. However, studies we have conducted over the last three years suggest that pollution appears to be constant, which increased only slightly for the flood period.

In order to obtain the pollution sources of the Ural River, water samples were collected from the territory in the reservoir flows and its tributaries (Table 2).

			Hydroct	Hydrochemical regime data of the Ural Kiver in different periods	me dala 01	the Ural K		יוישע ווושוטוו	<b>Gm</b> O			
Indicators	pH level	Alkalinity, mg *ea/ dm <sup>3</sup>	Hardness, mg *ea/ dm <sup>3</sup>	s, Nitrites, Im <sup>3</sup> mg/dm <sup>3</sup>	ORP, Eh. mV	Salinity, NaCI, mg/ dm <sup>3</sup>	aCI, EC, <sup>3</sup> uS/cm		Permanganate oxidizability, mg/dm <sup>3</sup>		Boron, P	Petroleum products, mg/dm <sup>3</sup>
Ural River, January	8,1	-	7,10	-	_	671.0		57	3.28		0.24	0,0447
Tap water	8,0	4,0	7,03	0,05	-0,06	630,2	1320	20	3,20		0,15	0,0318
Ural River, February	7,9	3,6	6,84	0,08	-0,08	712,3	1457	57	1,84		0,43	0,0405
Tap water	7,5	3,5	6,74	0,05	-0,07	700,1	1405	35	1,60		0,20	0,0350
Ural River, March	8,0	3,5	6,5	0,20	-0,06	472,0	1047	47	4,80		0,19	0,0667
Tap water	7,9	3,25	6,3	0,15	-0,06	469,0	964	4	3,05		0,10	0,0495
Ural River, April	8,2	3,25	6,70	0,25	-0,04	328,0	675	5	4,32		0,25	0,0695
Tap water	7,6	2,6	6,1	0,05	-0,03	140,0	278	8	2,88		0,06	0,0152
Ural River, June	7,8	2,85	4,80	0,15	-0,05	453,0	924	4	6,20		0,18	0,0487
Tap water	7,5	2,65	4,50	0,15	-0,04	440,0	912	2	3,5		0,07	0,0371
MPC	6,5-8,5	3,5-5,0	3,5-7,0						10-15		0,50	0,05
Indic	Indicators		Hd		Hardness,		ORP,	Salinity,		Permanganate		Р
			level	mg•eq/ dm <sup>3</sup>	mg•eq / dm <sup>3</sup>	mg/ dm <sup>3</sup>	Eh, mV	NaCI, mg/ dm <sup>3</sup>	µS/cm ox	oxidizability, mg/dm <sup>3</sup>	mg/ dm <sup>3</sup>	nct
llekRiver, Aktyubinsk, 03.05.17	3.05.17		8,09	5,5	5,9	0,16	-0,046	204,8	426	4,80	0,11	$\frac{0,057*}{0,288**}$
llek River, end of the village Georgiyevka 03.05.17	age Georg	iyevka 03.05.17	7,90	5,9	5,2	0,35	-0,037	316,0	652	6,08	0,07	$\frac{0.090}{0.460}$
Ural River, top of the city Uralsk, 04.05.17	y Uralsk, (	)4.05.17	7,97	4,0	3,1	0,12	-0,040	159,4	333	6,24	0,04	$\frac{0,026}{0,131}$
Ural River, end of the city Uralsk, 04.05.17	y Uralsk, (	04.05.17	7,67	3,1	3,2	0,15	-0,041	160,6	335	6,00	0,06	$\frac{0,021}{0,107}$
Chagan River, 04.05.17			7,76	3,7	3,0	0,10	-0,029	167,2	350	4,40	0,02	$\frac{0.030}{0,150}$
Ural River, Atyrau, University 05.05.1	ersity 05.0	15.17	7,81	4,3	3,2	0,20	-0,042	173,5	362	4,54	0,08	0,018
Tap water			7,05	3,1	3,6	0,05	-0,022	148,7	311	2,72	0,03	0,019
Ural River, Atyrau, University 11.05.17	ersity 11.(	15.17	8,05	3,25	3,3	0,25	-0,055	328,0	675	5,20	0,06	0,027
MPC			6,5-8,5	3,5-5,0	3,5-7,0	0,08	•	ı	•	10-15	0,50	0,05

# **Biological sciences**

1	0	

# **Biological sciences**

		Data on	the hydrologic	al-hydrochen	nical regin	ne of the	Data on the hydrological-hydrochemical regime of the Ural River by the end of flood period	the end o	f flood period	ſ	Table 3
Hd	pH level	ORP, mV	Alkalinity, mg•eq/ dm³	Hardness, mg•eq/ dm <sup>3</sup>	Nitries, mg/ dm <sup>3</sup>	02 mg/dm <sup>3</sup>	Salinity, NaCI, mg/dm³	EC, μS/cm	Permang.oxid., mg/dm <sup>3</sup>	Boron, mg/ dm³	Petroleum prod- ucts, mg/ dm <sup>3</sup>
	7,3	-0,011	4,8	4,0	0,15	6,30	160,0	303	5,84	0,06	$\frac{0.05*}{0,25**}$
	6,9	+0,003	4,9	4,0	0,12	7,87	174,6	367	6,08	0,00	$\frac{0.009}{0.045}$
	7,8	-0,046	5,3	3,3	0,13	7,86	172,2	358	5,76	0,07	$\frac{0,01}{0,05}$
	8,0	-0,049	4,4	3,2	0,13	7,15	175,2	368	5,92	0,760	<u>0,06</u> 0,30
	7,2	-0,008	5,0	3,5	0,14	6,98	181,2	379	5,20	0,05	<u>0,005</u> 0,023
	7,3	-0,015	4,8	3,80	0,12	8,52	178,6	374	6,40	0,09	<u>0,018</u> 0,093
	7,9	-0,048	4,6	3,5	0,13	9,91	180,9	377	5,12	0,08	<u>0,097</u> 0,097
	7,4	-0,019			0,05		188,0	391	4,24	0,07	0,012
	6,5-8,5		3,5-5,0	3,5-7,0	0,08	6,0		I	10-15	0,50	0,05
l ž	centratio	n of petrole	c oncentration of petroleum products for	the 100 ml fix	ed sample;	** - conc	centration of petr	oleum pr	the 100 ml fixed sample; ** – concentration of petroleum products for the 500 ml fixed sample.	ml fixed sar	nple.

# EUROPEAN JOURNAL OF NATURAL HISTORY № 1, 2018

# Table 4

Hydrochemical data of rivers of the Ural-Caspian basin, fall

Petroleum prod- ucts, mg/ dm <sup>3</sup>	<u>0,008</u> 0,039	$\frac{0,049}{0,223}$	$\frac{0,028}{0,131}$	$\frac{0,040}{0,181}$	$\frac{0,035}{0,161}$	0,096	0,035	0,030	0,05
Boron, mg/ dm <sup>3</sup>	0,31	0,27	0,24	0,26	0,20	0,15	0,12	0,05	0,50
Permanganate oxi- dizability, mg/dm³	4,80	4,77	4,10	4,00	5,84	8,00	4,50	3,78	10-15
EC, μS/cm	718	808	1093	1083	1626	908	1126	1126	ı
Salinity, NaCI, mg/ dm <sup>3</sup>	349,0	388,0	537,4	532,6	808,2	444,0	554,5	544,0	ı
ORP, Eh, mV	-0,046	-0,037	-0,040	-0,041	-0,029	-0,029	-0,042	-0,022	1
Nitrites, mg/ dm <sup>3</sup>	0,20	0,15	0,14	0,16	0,08	0,14	0,10	0,08	0,08
Hardness, mg *eq /dm <sup>3</sup>	5,7	5,5	6,7	5,8	10,8	6,0	5,4	5,0	3,5-7,0
Alkalinity, mg *eq/ dm <sup>3</sup>	4,8	4,8	6,0	6,0	9,2	5,7	5,5	4,7	3,5-5,0
pH level	8,00	8,20	8,20	8,00	8,5	8,00	6,50	7,50	6,5-8,5
Indicators	llek River, Aktyubinsk, 09.10.17	Ilek River, end of the village Georgiyevka 09.10.17	Ural River, top of the city Uralsk 10.10.17	Ural River, end of the city Uralsk 10.10.17	Chagan River, beginning of a river 10.10.17	Chagan River, end of a river 10.10.17	Ural River, Atyrau, University 11.10.17	Tap water	MPC

# **Biological sciences**

11

EUROPEAN JOURNAL OF NATURAL HISTORY № 1, 2018

Research has shown that the composition of the Ural River, the Ilek River and its tributaries in the Aktobe region varies considerably. So that, there were high nitrite levels at the Ilek River mouth – 4,5 MPC (Table 2), permanganate oxidability - 6,08 mg/dm<sup>3</sup> and petroleum products - 1,9 MPC. Reduction for these indicators has determined in the Chagan River. This suggests that no pollution were found in the territory of the West Kazakhstan Region. Although, the 2016 research [10] showed increased concentration of petroleum products. An excess salt concentrations were found in the Ural River, Atyrau region, along the University zone typically the Caspian Lowland. This area showed increase in concentration of nitrites -2,4 MPC (Table 2). Other indicators in the Ural River were within established standards. During this period drinking water complies with the sanitation quality (Table 2).

By the end of flood period, the ecological state of the Ural River was determined by the collection of water samples along the different sections of lower reaches of the water bodies. Water quality indicators such as pH, oxygen and petroleum product levels describe the presence of pollution in the upper reaches of the Ural River compared with the samples of the lower reaches (Table 3). The Lower Damba section one of the most contaminated area – 6.40 mg/dm<sup>3</sup> (Table 3).

This area includes all the settlements, so there are household wastes (illegal dumping), as well as extreme congestion of coastal vessels along the river bank. By the end of the flood period, the pollution inflow has slightly reduced.

The study of fall samples in the rivers of the Ural-Caspian basin showed a decreased rate of pollution, compared with spring samples (Table 4).

The Chagan River mouth is the only exception, in that the high rate of permanganate oxidation equal to  $8,00 \text{ ml/dm}^3$ , also the concentration of petroleum products  $-0,096 \text{ mg/dm}^3$  (1,9 MPC), compared to other stations.

High levels of nitrite were found in the Ilek River and are 2 - 4 greater than the MPC. There are also consistently high levels of nitrite in the Ural River, Uralsk, although its concentration has significantly decreased compared to the flood period. In fall, the rates of mineralization, salinity and the EC of the water body have increased significantly (Table 4). It should be noted that such event is a typical process nor the salinity has sharply increased both the Ural River and the squares of the North-Eastern Caspian Sea. Summarizing the obtained results, it should be noted that sources of pollution such as nitrites, petroleum products were found in

the upper reaches of the Ural River and the river flows towards the territory of Kazakhstan.

#### Conclusion

The Ural-Caspian basin is the most important area for the breeding of sturgeons and semi-anadromous fish species and has the leading position in the commercial fishing industry in Kazakhstan.

In recent years, there were significant changes over the entire basin affecting hydrobionts' natural habitat. The anthropogenic impacts on coastal and marine ecosystems have increased immeasurably. Due to the intensification of fishery and violation of breeding and feeding patterns, their numbers have dramatically decreased. Of particular concern is the increasing amount of offshore oil and natural gas development.

In order to assess the current state of the ecosystem functioning in the Ural-Caspian basin fisheries and predict its probable future behavior, it is necessary to analyze the influence of multidirectional factors on the formation of biological resources. In that context, the continuous monitoring of ecological status of the North-Eastern Caspian Sea and the Ural and Kigach Rivers is of the utmost importance.

Study of the hydrochemical regime components of the Ural River has shown that this year there were positive dynamics of parameter changes of the state of the Ural-Caspian basin waters.

#### References

1. Amirgaliyev N.A. Ecological and Toxicological State of the Ural-Caspian Basin and Some of Its Research Priority // Proceedings of the International Scientific Conference "The Current State and Ways to Improve Research in the Caspian Basin", Astrakhan, 2006, P.21-25.

2. Burlibayev M.Zh., Kurochkina L.Ya., Kashcheeva V.A, Erokhova S.N., Ivaschenko A.A. The Ural River delta and adjacent territories along the coast of the Caspian Sea. Astana, 2007, P.264.

3. Kurmangaliyev R.M. Ecological challenges of transboundary watercourse of Ural River and ways for its resolvement / R.M. Kurmangaliyev // Gilim zhane bilim. 2008. No. 3, P.91-97.

4. Leshan I.Yu., Khubitdinova A.F., Hydrochemical features of Ural River basin // Actual problems of the humanities and natural sciences, 2016., No.2-4. P.11-13.
 5. PND F 14.1:2:4. 128-98. Quantitative chemical analy-

5. PND F 14.1:2:4. 128-98. Quantitative chemical analysis of waters. Procedure for mea-surement of mass concentration of petroleum products in samples of natural, drinking or waste water by fluorescence method with the Fluid Analyzer FLUORAT-02. In supersession of PND F 14.1:2:4.35-95; have been introduced in 2007-2018. M.: Lumeks, 2007. P. 24.

6. Onayev M.K. Jose of water resources of the West Kazakhstan used in to land reclamation. // Science news of Kazakhstan. 2013., Edition 3 (117). P.186-190.

7. Ogar N.P. etc., Environmental monitoring of the North-Eastern Caspian Sea while development of oil fields. Almaty., 2014. P.70-73.

8. Shimshikov B.Ye., Izbassarova A.K. Hydrochemical and toxicological characteristics of the state // KazNU Bulletin. Ecological series. 2014, No.2 (41). P.163-167.

9. Tulemisova G.B., Abdinov R.Sh., Batyrbayeva G.U., Kabdrakhimova G.Zh., Mustafina A. Zh. Current state of hydrochemical regime of the rivers of the Ural-Caspian basin. // Proceedings of NAS RK. Chemistry and Technology Series. 2017, No. 1 (421), P.96-100.

10. Tulemisova G.B., Abdinov R.Sh., Kabdrakhimova G.Zh., Zhanetov T.B. Ecological conditions of the Ural River // KazNU Bulletin. Chemistry series. 2017., No. 2 (85), P. 18-24.

## Materials of Conferences

## THE EFFECTS OF STRESS ON THE REPRODUCTIVE SYSTEM

Loginov P.V., Ishqairat Ya., Mavlutova E.B. Astrakhan State Medical University, Astrakhan, e-mail: loginovpv77@mail.ru

The problem of stress is too often avoided. Oxidative stress is an imbalance between the systemic manifestation of reactive oxygen species (ROS) and a biological system's ability to detoxify readily the reactive intermediates or to repair the resulting damage. Disturbances in the normal redox state of cells can cause toxic effects through the production of peroxides and free radicals that damage all components of the cell, including proteins, lipids, and DNA. Further, some ROS act as cellular messengers in redox signaling. Thus, oxidative stress can cause disruptions in normal mechanisms of cellular signaling. In humans, oxidative stress is thought to be involved in the development of many diseases or may exacerbate their symptoms. Oxidative stress also provokes infertility. However, ROS can be beneficial, as they are used by the immune system as a way to attack and kill pathogens [1].

Stress is one of nature's contraceptives and can have a dramatic effect on healthy reproduction. The major stress hormone, cortisol, is derived from progesterone, the primary source of the reproductive hormones testosterone and estrogen. Cortisol is like a long-term form of adrenaline, produced in the adrenal gland when the body is under pressure. Most active people suffer for some form of adrenal fatigue due to pushing their limits for too long. Men and women need testosterone to produce the eggs and sperm. Testosterone converts to estrogen in the follicle; this process is called aromatization. Testosterone has to be present for the full 72-day spermatogenesis process. When stress is stealing all the progesterone, neither estrogen nor testosterone can be in adequate supply to support healthy reproductive tissue growth [2].

We have studied the effects of microwave radiation on male reproductive system. In fact, microwave radiation as a kind of a comparatively "soft" stress may also cause damage to the male reproductive organs. Specifically, scientists have demonstrated that exposure to microwave radiation may result in partial or permanent sterility. In addition, some scientific evidence suggests similar effects associated with microwave exposure and female reproductive problems. Making the model of reproductive system suppression has allowed us to indicate the specific markers of stress within the hypothalamic-pituitary-testicular complex. It is no doubt that the universal marker of oxidative stress at all units of reproductive system is the malonic dialdehyde (MDA) and intermediate products of lipid peroxidation. In practice, the MDA is good for indicating the oxidative stress development in hypothalamic tissue where considerable changes in lipid peroxidation were observed. This is explained by the fact that hypothalamic tissue is rich in the main substrate of lipid peroxidation - lipids.

#### References

1. Gems D., Partridge L. Stress-response hormesis and aging: "that which does not kill us makes us stronger". Cell Metabolism. 2008;7(3):200–203. https://doi.org/10.1016/j. cmet.2008.01.001.

2. Nikolaev A.A., Loginov P.V. Spermatogenesis state in men exposed to adverse environmental conditions. Problemy reproduktsii. 2015;21(5):96-101. (In Russ.). https://doi. org/10.17116/repro201521596-101.

The work is submitted to the International Scientific Conference "INNOVATIVE MEDICAL TECHNOLOGIES", Russia (Moscow), November 20-21, 2017, came to the editorial office on 10.11.2017.

# CLUSTER TECHNOLOGIES IN THE POSITIONING OF THE TOURISM MARKET

Bekboeva M.A., Nisharapov N.B.

Naryn State University named after S. Naanatov, e-mail: bekboeva\_naryn@mail.ru, nurbek.nisharapov@ucentralasia.org

The article on the basis of theoretical analysis substantiates the necessity of formation and application of tourist clusters for increasing the competitiveness of the national economy. Important tasks that the tourist cluster allows to solve, as well as, the positive effect that is possible from uniting enterprises into a typical cluster are presented. Theoretical analysis of information sources of a number of scientists made it possible to identify certain aspects, characteristics and components of the cluster, which in turn allowed the authors to define their own regional tourist cluster. The authors of the article emphasize that the application of the cluster approach will create a successfully competing tourist destination based on an innovative platform, generate and implement new proposals on the market, stimulate entrepreneurial activity and the growth of accompanying and supporting industries.

Keywords: Tourism infrastructure, regional tourist cluster, state regulation of tourism, forecasting of tourism development, tourism development strategy

In present, the National Sustainable Development Strategy (NSDS) of the Kyrgyz Republic for 2013-2017, adopted by the Decree of the President of the Kyrgyz Republic on January 21, 2013, which refers to the importance of the development of the tourism industry and emphasizes: "In the Republic has a high tourist and recreational potential, on its territory is concentrated a wide range of unique natural and recreational resources, objects of national, cultural and historical heritage. At the same time, there are a number of problems hampering the further development of the tourism industry. And to solve these problems, a policy is formulated where one of the first and main measures is: "the creation of tourist clusters, which involves the concentration within the limited territory of enterprises and organizations engaged in the development, production, promotion and sale of tourist products".

To date, despite the fact that fundamental scientific research has been carried out on the development of tourism in some foreign countries, in Kyrgyzstan the issues of managing the development of the tourist market are still not deeply researched and required in-depth analysis and scientific reflections. The formation and application of tourist clusters is determined by the need for theoretically substantiated and practically significant developments providing an effective management system in the regional tourist cluster.

The tourist cluster allows to solve such important tasks as the inventory of tourist resources; creation of a modern tourist market; priority development of domestic and incoming tourism in the territory; formation of a system of state regulation of tourism; development of various types of tourism; support for the development of various types of entrepreneurship (medium and small) in the tourism sector; integration of the territory into the system of the domestic and world tourism market and development of international cooperation in this field; attraction of extra-budgetary sources for the reconstruction and construction of tourist facilities; creation of a modern system of training, retraining and advanced training of tourist personnel; implementation of comprehensive basic scientific research in the field of tourism, taking into account territorial features.

## Literature review

In economic studies of the prospects for the development of various sectors of the domestic economy, in particular regional tourism, the concept of "cluster" is used. The cluster approach is applied as one of the paradigms for the development of the tourist industry.

As a consequence, the problems of identifying clusters, the use of cluster technologies in the tourism industry, the assessment of their impact on the economy of the Kyrgyz Republic, and the management of their development in this area are becoming increasingly important.

The cluster approach was originally applied to industrial production, one of the founders of which was A. Marshall. Today, according to many researchers, the cluster ideas for increasing regional competitiveness are promoted by Michael Porter the professor of Harvard Business School. According to his classical definition of the term "cluster" means "geographically concentrated groups of interrelated companies, suppliers of goods and services, firms specializing in relevant industries, as well as related organizations that compete with each other, but at the same time engaged in joint activities" [10].

Economic sciences

According to another, more refined definition of M. Porter, a cluster is understood as "a geographically close group of related companies and interacting institutions in a specific area, bound by communities and complementarities" [11]. To date, there are more than 20 well-known definitions of the cluster.

Classic examples are the cluster of computer technologies in Silicon Valley (USA), the logistical cluster in Rotterdam (Netherlands), the cluster of offshore programming in Bangalore (India) [6].

Theory of the cluster or the application of cluster technologies is currently being implemented in many sectors of the economy by many countries of the world and quite successfully. As for tourism, countries such as Canada, the United States, many European and Asian countries (Greece, Croatia, Finland, Italy, China, Singapore, Malaysia, etc.), using this approach as a development tool, managed to achieve positive results.

The main theoretical provisions concerning the application of the cluster approach in various sectors of the economy were determined by P. Fischer and D. Jakobson; among Russian authors we note D.A. Yalova, R.Kh. Khasanov, V.B. Kondratyev and others.

The analysis of sources of information shows that in the modern professional literature the concept of a "tourist cluster" is already widely used. It is used by such researchers as A.B. Aleksandrova, E.V. Belyakova, M.M. Makoyev, O.S. Mozgovaya, I.S. Miloslavsky, A.N. Morozov, O.Zh. Ustenova and others.

Scientists such as E.M. Bergman, B.K. Boyd, Courtland L. Bovee, Gohn V. Thill, S. Gronroos, S.J. Page, J. Connell, S. Pike, and A.B. Rodrigues, W. Freyer, J.E. Fletcher, J. Warming, D. Weaver, L. Lawton, M. Montford, M. Beni and S. Nordin were engaged in scientific research in the field of tourist clusters, in particular the application of industrial cluster concepts to tourism.

M. Porter's main points on the cluster approach, applied to the tourist industry, were first taken into account by M. Monford, who paid much attention to the characteristics and components of the cluster. Its concept of a tourist cluster includes the following aspects:

- availability of tourist services;

- impressions of the rest;

- synergetic effect of enterprises in related industries, services for accommodation, meals, excursions, etc.;

- transport infrastructure and accessibility of information about the tourist product;

 briefing and familiarization services, as well as promotion of the territory in the tourist market;

- natural and recreational resources and regional institutional policy [5, p. 67-68].

Unlike M. Monford, who paid attention to the characteristics and components of the cluster, M. Beni stressed the externally observed relationship between agencies, cooperation between them, in the form of networks in the definition of a tourist cluster: "A tourist cluster is a group of tourist attractions in a limited geographical area, secured a high level of infrastructure and services development, which has established social and political ties, as well as well-managed management in the companies that form networks for the production of tourism services, provide strategic competitive and comparative advantages" [15].

A. Rodriguez defined the tourist cluster as "a group of companies and institutions located on a geographical basis and having vertical links (chains of companies that produce a tourist product) and horizontal communications (including industry, regulatory support, information exchange) that produce a tourist product or group of products" [14].

S. Nordin was engaged in theoretical substantiation of the tourist cluster and the possibility of applying this theory in practice.

The configuration of the tourist cluster according to S. Nordin is:

- a complex of tourist resources attracting non-indigenous residents of the territory;

- the concentration of companies aimed at meeting the tourist demand: restaurants, accommodation sector, transportation services, crafts and tourist agencies, etc.;

- sectors and industries aimed at supporting tourism services;

 – environmentally friendly and cheap infrastructure (roads, fuel, sewerage, medical care);

- companies and institutions that provide the necessary skills for personnel, information support and financial capital;

- internal agencies that organize and implement the cluster concept;

- state bodies, regulating and coordinating structures influencing cluster formations [15].

Sufficiently short but informative concept of the tourist cluster is illustrated in "International Tourism" textbook by A.Yu. Aleksandrova: "A tourist cluster is a system of interrelated firms, organizations, institutions and related executive authorities that form and serve tourist flows using tourist and recreational potential of the territory" [1]. A.Yu. Alexandrova's claims, clusters are an important factor in the development of the tourism industry.

However, there is no single interpretation of the concept of the "tourist cluster" in specialized literature, especially in the legislation of our country, which allows us to generalize and give the following definition: "*Regional Tourist Cluster*" is a form of tourism organization that includes a set of enterprises in the material production sector; tourist specialization and tourist services in a specific territory, as well as related industries, which are united by horizontal and vertical links, the cooperation and activities of which lead to synergy in general and its individual enterprises.

## Results of research and their discussion

A distinctive feature of the tourist cluster in - it's territorially routing organization. As defined by M.B. Birzhakov the tourist route is a geographically defined path of movement of a tourist or group of tourists, tied to the terrain, and the corresponding tourist stream connect objects, transforming them from competitors into interacting elements of the system [3].

The geographical scales of tourist clusters vary from local and regional to interregional. For example, in Mexico, the tourist cluster is the resort of Cancun, and in Indonesia – a resort on the island of Bali. Croatia and Slovenia agreed to establish a cross-border tourist cluster [12].

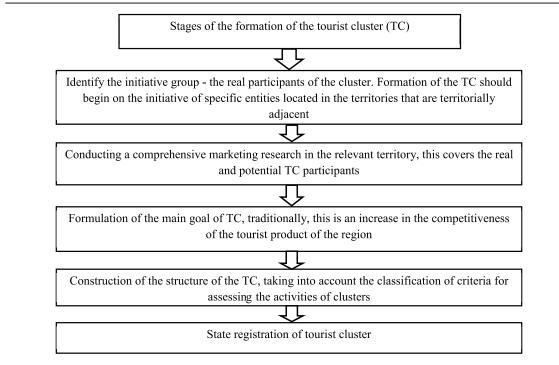
Before starting to form a cluster of tourism, it is necessary to conduct a cluster analysis, make a forecast of its development and choose an effective development strategy.

The application of cluster technologies in the tourism industry of the Kyrgyz Republic, aimed at creating favorable conditions for the development of inbound and domestic tourism, using all the potential opportunities of the republic, will contribute increasing the efficiency and competitiveness of the national economy.

Tourist clusters are characterized by various directions of development, the disintegration of some, the enlargement and expansion of others. However, it is the high competition that pushes them to cooperate, joint partnership and activities with other sector clusters, which is the process of forming a tourist cluster in the region.

This process is characterized by the presence of various signs, the use of which makes it possible to evaluate the development of tourism in the region from a qualitative and quantitative point of view. Evaluation of individual characteristics in groups allows us to identify the conditions for the formation and development of a cluster.

Figure shows the stages of the formation of the tourist cluster.



The formation of the tourist cluster, its main stages

G 11	D 11 00	
Subject of evaluation	Possible effect	Possible indicators for the assessment
Sector of pro-	Attraction of investments;	Profit
duction of basic	Increase in the provision of tourist services	Revenues from sales; profitability
tourist services	Optimizing the use of shared resources	Change in the share of cluster production in the
	Decrease in the cost price	world market
	Development of new types of tourism services	Number of new products and services
	Increase in the number of tourists	Change in the share of the cluster in the regiona
	Expansion of sales markets	gross product.
	Reducing risks	
Service sector	Additional advertising	Providing graduates with jobs, additional funding
	Entering new markets	Revenues from sales, profitability
	The expansion of the customer base	The number of new markets for which the prod
	Increase in the volume of travel services pro-	ucts of the cluster are supplied
	vided	The change in the number of economic agent
	Increase in profit	in the cluster
		Level of investment
Subsidiary sec-	Creation of new workplaces	Profit (increase, loss)
tor	Increase in the volume of travel services pro-	Revenues from sales; profitability
	vided	Number of new jobs
	Decrease in cost price	Increase in the volume of tax revenues
	Increase in profit	Number of new companies
	Increase in the volume of tax revenues	
Sector ensuring	Development of marketing strategy	The effectiveness of advertising costs in com
the life	Reducing the cost of an advertising campaign	parison with the "before clustering period", and
	Reduction of logistics costs, profitability	the cost

Levels of evaluation of the efficiency of a typical tourist cluster

Studying the tourist cluster as an economic category makes it possible to distinguish its goals, objectives and main provisions [13; 15].

The formation of a competitive tourism industry remains the main mission of the tourist cluster, including such elements as human resources, attracted places for sightseeing, sights, knowledge, tourism products, capital, etc.

Accordingly, the achievement of the goal of the cluster is possible by positioning the region or country on the international tourism market by creating an appropriate infrastructure and carrying out activities and initiatives in this area.

Of course, the achievement of the goal requires considerable efforts to address a number of important tasks of the cluster: the preparation of an appropriate regulatory framework or improvement of the existing one; creation of conditions for the construction and modernization of the material and technical basis (MTB), infrastructure; education, training and professional development of human resources; creation of a favorable investment climate; improvement or application of innovative technologies in the tourist industry.

Further efforts to compile the map, core and links of the cluster allow including all in-

terested direct and indirect economic entities, with the construction of a vertical and horizontal structure of interaction.

Cluster meetings provide an open discussion of problems for their solution and initiatives for their development, adoption of joint decisions; development and maintenance of constructive dialogue, provision of assistance and strategic guidance for cluster members. Meetings of working groups are aimed at identifying action plans for solving specific problems, organizing presentations of the results of the working group, attracting international consultants to provide analysis and a strategic plan for entering the market, and to attract investment [2; 9; 11].

It is better to start determining the components of a cluster by considering a large firm or the concentration of similar firms, and then to identify a chain of vertically related lower and higher firms and organizations. Further, it is necessary to go horizontally branches passing through channels that produce products and services. Additional horizontal chains of industries are established based on the use of similar specialized factors of production and technology or are linked through supplies [4; 7; 15]. Successful implementation of the cluster depends on cooperation and trust between the public and private sectors. It is to the private sector that a big role is assigned, as it is represented by a high concentration of enterprises, where the need to create a cluster and guide the cluster is realized. The public sector represents factors such as financial resources, facilitation and processes that develop on the basis of factors [12].

For the efficient assessment of the cluster, various variables are used:

- measuring the overall performance of the cluster (increase in the number of firms, the volume of production, the volume of exports, etc.);

 indicators that characterize the impact of the cluster on the development of the territory or industry (gross regional product, unemployment, income level);

 indicators that assess the performance of each of the enterprises interacting within the cluster (revenue, profit, profitability);

- indicators of the effectiveness of the use of certain types of resources (material resources, capital investments, labor productivity) [13; 16].

Complex analysis shows that a positive effect is possible from the combination of enterprises in a typical cluster (see below Table).

In operation of the tourist cluster, the calculation of its effectiveness has significant differences from the assessment of the effectiveness of the activities of individual organizations, primarily because of the emergence of a synergistic effect.

The activity of a cluster association is evaluated on the basis of a comprehensive analysis of the final results of its effectiveness. The economic essence of the efficiency of the tourist cluster is that, with a comprehensive approach to each unit of costs, a more significant increase in profit should be achieved through a synergistic effect than with a single approach of each individual tourist enterprise.

An effective activity of a tourist cluster can be considered only when, in the process of cluster functioning, the effectiveness of not only individual tourist enterprises but also the cluster as a whole is increased by multiplying the positive consequences of mutual support [11].

#### Conclusions

In order to activate the state policy in the field of tourism development in the country, which is related to the launch of specific investment and infrastructure tourism projects, the formation of tourist clusters, it is necessary to create an organizational, legal, coordinating, analytical and expert working groups.

Co-operation of economic entities in the tourism sector makes it possible to effectively use the capabilities of these collectives, and also promotes the development of related industries. The creation of a tourist cluster leads to a diversification and deepening of the specialization of products, the reconstruction of shared infrastructure, the benefit of a joint discussion of complex issues with suppliers. Cooperation of the network promotes the development of innovative models of the production process and organization, the exchange of technical and market information, agreements when buying and selling goods and services, developing a common marketing company. Interaction and synergy, resulting from joint actions, has a clear advantage over isolated companies [6].

International research shows that the establishment and development of a competitive national economy is assigned an important role in any state as a process of economic viability and international recognition, for which it is necessary to use all effective mechanisms.

World experience in the development of successful international companies, transnational corporations, and economic systems shows that the effective form of justification for economic growth is the theory and practice of the cluster mechanism of activating market relations and competitiveness. Thus, the development of the national economy largely depends on the formation and level of development of individual or cluster groups, which poses fundamentally new tasks, such as the choice of a competitive model of the economy and priority sectors that have a prospective economic potential for increasing the country's competitiveness.

#### References

1. Alexandrova A.Yu. International tourism / Textbook. manual for universities / A.Yu. Aleksandrova. – Moscow: Aspect Press, 2001. – 464 p.

2. Bekboeva M.A. Development of the tourist market of the Kyrgyz Republic / Naryn State University. S. Naamatova, B., 2015. -451 p.

3. Birzhakov M.B. The tourism industry. Transportationshipment / M.B. Birzhakov, V.I. Nikiforov. – Ed. house "Gerda", 2001. – 400 with.

4. Vertinskaya T.S. Methodology of the creation of regional tourist clusters in Belarus / T.S. Vertinskaya, V.A. Klitsunova. – Mn., 2014. – 52 with.

5. Voloshin N.I. International tourism: legal acts / N.I. Voloshin. – Moscow: Finance and Statistics, 2000. - 400 p.

6. Makoev M.M. Cluster approach to the development of the tourist sphere of the North Caucasus Federal District / M.M. Makoev // Naukovedenie. -2014. – Issue. 4 (23).

7. Mitrofanova A.V. The regional tourist cluster is a form of the spatial organization of tourism: Abstract of thesis Dis.... cand. geogr. sciences. – Kaliningrad, 2010. - 34 p.

8. Mozgovaya O.S. Tourist multiplier in assessing the economic contribution of ecological tourism to the development of the region // International law and international relations. – 2009. – No. 2. – P. 85-90. [Electronic resource]. – Access mode: http://elib.bsu.by/bitstream/123456789/18831/1/2009\_2\_JIL-IR\_mozgovaya\_r.pdf.

9. Nedosvitiy N.V. Formation of a strategy for the development of the tourism industry in the region on the basis of a cluster approach: Abstract of thesis Dis.... cand. econ. sciences. – Cheboksary, 2010. – 35 with.

 $10.\,Porter\,$  M. Competition: revised edition / M. Porter, O.L. Pelyavsky, A.P. Urikhanyan, E.L. Usenko, I.A. Shishkina. – M.: Williams, 2005. – 602 p.

11. Rumyantseva E.V. Role and features of the cluster approach in the development of international tourism: materials of

the international. Scientific-practical conference / E.V. Rumyantseva // Business education as an instrument of sustainable economic development. – Krasnoyarsk, 2014. – P. 234-237.

12. Temirbulatova M.A. Cluster-innovative development of tourism in rural areas: Dis.... cand. econ.sciences. – Astana, 2008. – 144 p.

13. Bergman E.M. Industrial and Regional Clusters: Concepts and Comparative Applications / E.M. Bergman, E.J. Feser. – Regional Research Institute, WVU, 1999. [Electronic resource] – Mode of access: http://www.rri.wvu.edu/WebBook/Bergman-Feser/contents.htm. – Date of access: February 15, 2014.

14. Rodrigues A.B. Turismo rural: praticas e perspectivas / A.B. Rodrigues. – Sao Paulo: Contexto, 2003.

15. Regional Clusters in Europe // European Commission, Observatory of European SMEs. – 2002. – No. 3. – Luxembourg: Office for Official Publications of the European Communities, 2002. – 64 p.

16. Access mode: https://www.wikipedia.org/wiki/kluster.

# HISTORICAL COMPONENT OF FORMATION OF TRANSFORMATIONAL PROCESSES OF THE REPUBLIC OF KOREA OF THE END OF THE XX CENTURY

Litvinova I.V.

The senior lecture of department of Management and economy of Vladivostok State University of Economics and Service, branch in Nakhodka, Nakhodka, e-mail: solomonova irina@mail.ru

In this article features of formation and development of transformational processes of the Republic of Korea of the end of the XX century, namely the concerning development of institute of the president and the government are considered. Explanation for it only one: the South Korean political regime of the end of the 80th years of the XX century was two-faced: I carried peculiar only to him line and pro-American character and Korean-patriotic. The priority of standards of moral right, over the legal procedure is characteristic of the Republic of Korea, i.e. the end result, but not dragged out process is important for South Korean society. The character of the Republic of Korea can be defined how character peculiar to "patrimonial society" which in total presents the alloy of national and historical unity, the general for all Koreans. Listed above lines, specific to the Republic of Korea, are also considered in article below.

Keywords: historical component, republic, transformational processes

In the conditions of deficiency of resources, in situations of crisis, accidents, radical transformations come to the forefront values of survival and there is a request for the centralized power realizing strict social control.

And with emergence and expansion of a layer of owners inevitably there is a request for the legal culture providing their rights, a possibility of free self-realization. Historical experience of modernization of Spain, Germany, Japan, South Korea, Chile demonstrates that in process of the successful course of modernization in the country are formed and democratic institutes begin to work, replacing with themselves rigid dirigisme.

The purpose of this article – to define the main historical components making transformational processes of the Republic of Korea at the end of the XX century.

Tasks of this article:

- to define historical factors of influence on transformational processes;

- to reveal the main historical stages forming transformational waves;

- to define historical prerequisites of development of institutes of the power.

The main method of a research used when writing this article historical, retrospective.

The aspect of functioning of political legal mechanisms in the Republic of Korea is as follows.

The republic, South Korea has been called on August 15, 1948, since this period the state existed at six the constitution (1948,1960, 1962, 1972, 1980, 1988). Since 1948 functions of executive power headed by the president who was elected for 4-year term rather accurately registered in each of Constitutions. The parliamentary system to which executive authorities were accountable was in parallel installed [3].

Since 1972 functions of the president were expanded and about today active development of legal institutes and mechanisms of interaction between the president and the government is carried out.

Today the Republic of Korea lives in a condition of reforms, the provision on which has been published in January, 2013. Was at the head of the angle of this reform as it isn't strange, reduction of the ministries. Their quantity was supposed to be reduced to 13 ministries, with initial 18 at what two ministers, without so-called "portfolios" have to be a quantitative part.

The South Korean political system is extremely not stable. The national Assembly performs functions on adoption of the state budget, laws, approves the international agreements, can approve or not approve candidates to the presidency.

In the theory the National Assembly has the right to declare war, but this right is more symbolical, only the president can make such real decision. Work of National Assembly lasts all the year round, standardly the session takes place 100 days if there is the state need, and then also additional sessions can be convened [5].

It is advisable to consider formation of modern South Korean transformational processes in a historical retrospective and in the context of formation of institute of the president.

It is necessary to pay attention that process of emergence and further formation of institutes of democracy was not only difficult, but also contradictory. So formation of I and IV Republics took place actually in authoritative realities, and not about what democracy of the speech to be and couldn't. The shy prerequisite of transition from authoritative to democratic regime has arisen only in the late eighties. 20th century, it was that period of time when South Korea "has ripened" for carrying out comprehensive reforms and administrative, and constitutional sense.

The president Roh Tae Woe who has taken the responsibility for forestalling in life of new constitutional reforms which at the correct adaptation and understanding would provide in a consequence the presidential power and a possibility of transfer of the authorized presidential beginnings from one president to another became the founder of this phenomenon [4].

Thus, in a basis the Constitution of the VI Republic not only features of the principle of division of the authorities, but also the basic ideas of civil society and the constitutional state have been put.

Democratization of the Korean society, the legal foundation of the new Korean state has been laid by the president Kim Yong Sam who besides maintenance of general South Korean stability has stated also conceptual regulations on the new Korean state, having called it "the doctrine singaghyk" [6].

The following stage in development of society of the Republic of Korea was the government of the president Kim Tae June who has strengthened bases of parliamentary democracy and has kept the status of the president capable to make own political decisions which wouldn't contradict not the constitutional bases, democratic postulates.

Further there were actions directed to fight against the residual phenomena of authoritarianism by political transformations in the state system of the Republic of Korea, the president of the VI Republic, But Mu Hen seeing that all reforms have to be based on the constitution became this reformer. The tradition of reforming and advance of regional interests has remained up to 2007 – time period when But Mu Hen has retired. But against the background of the appeared democratic – the corruption problem has increased.

Relying on experience of the colleagues, using in the pre-election race for belief of South Korean citizens a spirit of administration on democratic formations in 2007 at presidential elections Lee Myung-bak. But as it isn't strange, the administration of this president has headed for lack of attention to the so-called "Korean regionalism" [8]. The so-called "regional hostility" ("chiban kamchzhon") has appeared in Korea long before emergence of institute of presidency. Despite ethnic uniformity of the population of the Korean peninsula, at the beginning of our era in his territory three state educations – Koguryo, Pekche and Cilla settled down.

Historical memory of existence and rivalry of three states remained so far. In the modern Republic of Korea natives of provinces the Southern and Northern Cholla (Pekche's territory) mutually dislike residents of provinces the Southern and Northern Kyonsan (the territory Cilla) and more or less loyally treat residents of provinces the Southern and Northern Chkhunchkhon. The Province of Kanvon, the capital province Kyongi and Seoul hold special position.

In the conditions of authoritarian regime the phenomenon of "regional hostility" minimum influenced political process. The ruling party enjoyed the greatest popularity on the periphery, and opposition forces found the considerable support in Seoul and the capital province Kyongi. During transition from authoritarianism to democracy the factor of "regional hostility" began to exert clearly impact on process and totals of choices, both parliamentary, and presidential. All three candidates for president were natives of three different regions in who got the maximum support.

Still more this tendency was shown at parliamentary elections of 1992: the ruling "Democratic liberal party" and according to places in parliament (28 of 32 possible places) received the largest number of votes in provinces Northern and Southern Kyonsan (the party leader Kim Yonsam of that time is the native of the province Northern Kyonsan). "Democratic party" Kim Dechzhuna (the native of the province the Southern Cholla) was the absolute leader in provinces Northern and Southern Cholla (95% of voices, 31 places), however in other provinces managed to carry out to parliament only on one candidate [5].

Actually in the Republic of Korea there was a party system on a formula "2+". For more than ten years of one of two largest political forces the conservative "Party of the great country" is. The name of other largest political party of the liberal sense several times changed, however, despite these changes and also changes of leaders, its ideological basis and the political program remained invariable.

These two parties fight for the majority of seats in Parliament; their representatives are the main applicants for presidential post during the presidential elections. The main program differences between these two largest forces lie in the field of foreign policy: conservatives traditionally support close cooperation with the United States both in economic, and in the military-political sphere, they are also distinguished by very hard line in relation to North Korean regime.

The present, but formally existing Constitution of the Republic of Korea has been adopted on July 17, 1948, today it is day of a national holiday. It is necessary to tell that South Korean society has decided to borrow the American experience: not to adopt the Constitution anew not to change a political component, and only make amendments to the existing Constitution [4].

The modern South Korean political system and the Constitution contain in the existence a little more than 30 years, rather strong influence from the American system of public administration is by the way, seen on South Korean, the last though reminds on the structure "boss" well functional loading carries essential differences.

Actually, all political life is in South Korea under control at the president. In the so-called "Blue house" (the residence in the center of Seoul) fatal decisions for the whole country are also made.

Since the end of the 2000th of year in the Republic of Korea we see that the called split on two confrontational camps. These are the supporters of the left opposition calling themselves progressive who can be negative enough to pro-American tendencies in the Republic of Korea, even concerning economically developed chebol concerns, but support the western model of democracy. So-called "left" feel sharp hostility to military dictatorship, but take a liking for military dictatorship Kims in the neighboring Northern Korea.

Of course, mass layers of the South Korean population only have begun to join step by step policy, but large-scale process of integration of interests, both businessmen, and representatives of the middle class has already begun. Of course, so-called formation and selfdetermination of the main political forces in the Republic of Korea has very short history and for today it is rather difficult to speak about formation of pro-political groups which would be capable to provoke formation of multi-party system.

Experiment of South Korea is shown by a set of conditions under which the political authoritarianism can be economically productive. First, the ruling clique has to put the interests of social development above aspiration to personal enrichment.

This in itself the rarity is also reached only through the corresponding education and education. Success of authoritative modernization is impossible without group of the formed and disciplined state bureaucracy capable to formulate the economic program.

#### References

1. Brief History of Korea - English. URL: http:// www.geocities.com/mokkim/koreahistory.html

2. Choi S. National report for Korea. UNESCO Asia-Pacific Sub-regional Preparatory Conference for the 2009 World Conference on Higher Education, Macao, 24-26 September 2008.-URL: http://west-pac. unescobkk. Org / fileadmin / user\_upload /apeid/workshops/macao08/papers/3-p-6-4.

3. Hong Y.S. Evolution of the Korean national innovation system: Towards an integrated model. Organisation for Economic Co-operation and Development. Governance of Innovation Systems, Vol. 2: Case Studies in Innovation Policy 65-85.- URL: www.oecd.org/dataoecd/1/48/35734108.pdf.

4. History of Korea ,part I English. URL: http://www.lifeinkorea.com/Information/history1.cfm.

5. Korean History – English.- URL: http://www. Media. granite. k12. ut.us/Curriculum/korea/ history.htm.

6. The cost of too much credit (The consequences of South Koreans' credit-fuelled spending spree) // The Economist. – 2004. –  $N_{2}$  1. – P.23-24.

7. Regional Resources on East Asia and Southeast Asia – English.- URL:http://newton.uor.edu/Departments&Programs/ AsianStudiesDept/general.html.

8. World History Archives: History of South Korea – English. URL: http://www.artford-hwp.com/archives/55a/index-a.html.

# TO THE QUESTION ON UNDERSTANDING ABSOLUTE AND AUTOCRACY IN RUSSIA

Belova T.A., Britskaya A.L.

Omsk State Medical University, Omsk, e-mail: belova.t.a@mail.ru

The authors analyzed the phenomenon of power in Russia, namely, its two forms – autocracy and absolutism. The first part of the article presents a historiographic analysis of this problem by Russian historians. The authors of the article note that the national historians have not worked out a complete unanimity regarding the beginning of the formation of absolutism in Russia. Also up to the present time there is no official unambiguous understanding of the terms "absolutism" and "autocracy" (in their similarity or difference). The second part of the article presents a historical analysis of the peculiarities of the emergence of autocratic power in Russia. The reasons for the formation of autocratic rule in Russia, according to the authors, were: at first, difficult natural and geographical conditions, secondly, the long existence of the Tatar-Mongol yoke, as well as the communal mentality of the Russian people.

Keywords: absolutism, historians, historiography, Russia, autocracy

In the second half of the XVII – early XVI-II centuries the state system of Russia, in the opinion of the majority of domestic historians, was transformed into absolutism. The theme of Russian absolutism attracted and attract the attention of domestic historians, jurists, lawyers who, in accordance with their ideology and political views, tried to understand the background, the social essence, the historical significance of Russian absolutism. However, in historical science there is still no unified opinion on the content of this term, although all authors acknowledge that the problems of Russian absolutism are complex and ambiguous. Controversial questions regarding the concept of "absolutism" include the following: the prerequisites for the formation of absolutism, the correlation of the concepts "absolutism" and "autocracy", the time of the existence of absolutism and the stages of its development, the historical role of absolutism in Russia and a number of others.

Note that the Russian sovereigns of the XVI century, the XVII century and the XVIII century. titled themselves autocrats. In 1716, in the interpretation of the 20 article of the Military Statute, it was noted: "His Majesty is an autocratic monarch, who should not give an answer to anyone in his affairs; but the strength and power has its own states and lands, for example, as a Christian sovereign, by its own will and splendor to rule" [4, P. 50]. A later in the "Spiritual Regulations", compiled by Theoph-an Prokopovich, it is recorded: "Monarchs are the autocratic power, which God himself obeys for conscience" [9].

And how did the national researchers treat the notion of "autocracy"? Noble historians stood on the ground of the primacy of the autocracy in Russia. N.M. Karamzin saw him already in the Kiev state and, of course, in the Moscow state from the moment of its formation. But historian S.M. Soloviev speaks of an absolute monarchy. In the second quarter of the XIX century S.M. Soloviev justified the historical conditionality of Peter's transformations. Reforms of Peter appeared before him not as a violent break with Ancient Russia and the introduction of customs and practices alien to the country, but as a natural and necessary development of Russian history. For this very reason, S.M. Soloviev attributes the formation of absolutism in Russia to the time of the reign of Peter I.

Unlike S.M. Soloviev, his pupil V.O. Klyuchevsky with confidence found autocracy under Ivan IV, and possibly under Ivan III. It should be noted a fair observation of the modern researcher Y.A. Sorokin that probably these historians "were not interested in the difference in terms" [8, P. 11]. They did not divide such concepts as "autocracy", "absolutism", "unlimited monarchy".

At the turn of the XIX-XX centuries Russian scholars – liberals (for example, M.A. Reisner, V.M. Gessen, P.G. Vinogradov, M.M. Kovalevsky, N.E. Kudrin, P.N. Miliukov) "bred the concept of "autocracy" and "absolutism", "believing, firstly, that the autocracy was established in Russia much earlier than absolutism (the latter only with Peter I), and secondly, they found a fundamental difference between them in European theories that explain the monarch's power not by the Divine Craft, but the theory of the common good and the theory of natural law" [8, P. 11-15]. Historians – monarchists in the early XX century distinguished the autocracy from Eastern despotism and Western absolutism. "Autocracy ... lived in the people and in the Church. Absolutism became superior to both of them. Absolute detached from the people, is overshadowed by an absolute bureaucracy, which, having created an infinitely complex state mechanism, under the Tsar's name, under the sacred slogan of autocracy, is working according to its program, growing and expanding and entangling both the Tsar and the people ..." [3]. Thus, the authors of the turn of the XIX-XX centuries still agreed that in the XVIII century. Russian monarchs had absolute power.

In the 1920-1930-s problems of the history of absolutism were discussed through the prism of the views of the historian M.N. Pokrovsky. Mikhail Nikolaevich linked the establishment of absolutism with the name of Ivan the Terrible. An important reason for the emergence of absolutism in Russia, according to M.N. Pokrovsky, was the economic development of the country in the XVI – XVII centuries. "The modification of the feudal economy under the influence of commodity economy was absolutism, speaking more precisely bureaucratic monarchy" [6, P. 498]. After M.N. Pokrovsky's death, a lively criticism of his views unfolded. Great controversy continued to go on the question of the time of the emergence of absolutism in Russia. Soviet historians, describing the conditions for the emergence of absolutism in Russia, were guided by the well-known statement of K. Marx that absolute monarchy arose in transitional periods when feudal estates decay, and a modern bourgeois class is formed from the medieval estate of townspeople, and when none of the struggling The parties did not yet take the upper hand over the other and F. Engels: "The disintegration of feudalism, as well as the development of cities, both processes caused decentralization, hence the direct need for an absolute monarch and in force, the fastening nationality. It had to be absolute precisely because of the centrifugal character of all elements" [2, P. 417].

However, the modern domestic researcher O.A. Omelchenko believes that historians have not always correctly interpreted the statements of K. Marx and F. Engels, namely: "The analysis of the problems of the concept of absolutism ... built largely on the general concepts taken out of context and interpreted in violation of own problems of this concept of the texts of classical Marxism" [5].

Also, soviet historians referred to the work of Lenin, in which autocracy, absolutism and an unlimited monarchy were viewed as synonyms.

Most Soviet researchers also did not share the notion of "absolutism" and "autocracy". So, for example, Professor S.V. Yushkov argued that the terms we have identified are synonymous. Another researcher S.O. Schmidt believed that absolutism in Russia was formed in the era of the Moscow kingdom, under Ivan the Terrible, but with the death of the tsar ceased, and then revived in the XVII century in the reign of Mikhail Fedorovich. Herepnin's view is also unique. He allowed the simultaneous coexistence of two forms of the state under Ivan the Terrible: the autocracy in oprichnina and the estate-representative monarchy in the zemshchina. D.N. Alshits unambiguously regards Ivan VI as an absolute monarch.

It should be noted that among the Soviet historians there was a rather heated discussion in the pages of the journal History of the USSR. The discussion as a whole was quite fruitful. A significant number of new sources were introduced into scientific circulation, basic approaches to revealing the social and political essence of the Russian autocracy, the stages of its formation and development were determined.

N.P. Pavlova-Silvanskaya, A.N. Chistvoznov, A.Y. Avrekh distinguished the following features of the Russian autocracy, bringing it closer, in their opinion, to Asian despotism: the prevalence of non-legal methods of governing society and, above all, the personal arbitrariness of monarchs; the predominance of state ownership of land and communal land use; underdevelopment in Russia XVII-XVIII centuries third estate, and hence, exclusively the noble character of Russian absolutism. In particular, according to A.Y. Avrekh, absolutism arose and was finally established under Peter I. The historian believes that the crux of the problem of absolutism is the ratio of feudal and bourgeois in nature and the policy of absolute monarchy. However, in his opinion, the effect of the bourgeois factor in Russia takes force historically too late. Russian absolutism arose and blossomed when the primitive nobility not only did not decompose, but, on the contrary, it consolidated and strengthened. Another factor in the formation and existence of absolutism in Russia A.Y. Avrekh considers the peasantry – the mass social support of Russian absolutism. Thus, in the absence of pronounced bourgeois tendencies in the country, absolutism in Russia arose and was affirmed thanks to the support, on the one hand, of the consolidated nobility and the patriarchal peasantry, on the other. Thus, A.Y. Avrekh defines absolutism as a feudal monarchy, capable of evolving into a bourgeois monarchy.

Another Soviet historian, S.M. Troitsky called the time of appearance of absolutism in Russia in the XVIII century. He argued that "the transition from the estate-representative monarchy to the absolute began in the XVII century and ended mainly in the first quarter of the XVIII century" [10, P. 24]. A.L. Shapiro also believes that the autocracy, which developed in Russia XVI-XVII centuries – this is one thing, and absolutism of the XVIII century – something else.

However, most of the scientists who took part in the discussion did not support this position. N.I. Pavlenko, A.N. Sakharov, Y.Y. Titov and others argued that, theoretically, the division of concepts into absolutism and east (Asian) despotism is very conditional. After the Western reforms of Peter I, the Russian autocracy, in its external form, is finally drawing closer to Western European absolutism.

The modern historian E.V. Anisimov also does not share the concepts of "autocracy" and "absolutism": "So in the course of the state reform, Peter I... "strengthened" autocracy in Russia for a long period" [1, P. 292].

Thus, the national historians have not developed complete unanimity regarding the beginning of the formation of absolutism in Russia. Also up to the present time there is no official unambiguous understanding of the terms "absolutism" and "autocracy" (in their similarity or difference).

We would like to note in this connection several features that distinguish Russian autocracy from any other similar phenomena of Western or Eastern history. The fact is that the ability of a Russian person to work, in particular a Russian peasant, is largely determined by natural-geographical conditions. Having a long winter, spring and autumn, often similar to winter and too short a summer, the Russian peasant has to work with great intensity to get the produce. The peasant, unable to produce marketable bread, often sells the product he needs, so he does not "live" but "survives". That is why Russia has struggled for centuries with the threat of famine, which has been exacerbated by the slightest socioeconomic or political destabilization. That is why, in need of an aggregate surplus product, the state in Russia was to become very strong, like the eastern despotism. Here is the economic reason why autocracy is the specificity of Russia.

Certainly, the presence of the 300-year-old so-called Mongol-Tatar "yoke", the functioning institution of "hostage", the long stay of members of the princely family at the rate of the khan, as well as the penetration of eastern traditions into Russian culture, the destruction of the urban veche system, helped to turn away from democratic manifestations, which were in the state system of Ancient Russia, and had a strong influence on the process of forming a new form of power relations and the emergence of the regime of unlimited power in Russia in the XVIth-XXth centuries. Here we agree with S.A. Kislitsyna, G.N. Serdyukova, I.O. Ionova, that the relationship between the Russian princes and Mongolian khans was built precisely by the type of citizenship and service, that is, "Ministers", and not by the type of contractual relations, i.e. "Vassalage", which later resulted in the "despotic autocracy". The state organization of the Golden Horde, without encroaching on the foundations of the spiritual life of Russians and Orthodoxy, has become a model for the creation of a powerful state. V.V. Shulgin believes that "Russia borrowed from the Mongols their highest achievement and their strongest weapon, namely, the Khanat, that is, the autocracy. The eastern hordes assembled in one hand could not be opposed to each other by a feudal system that was struggling with one another" [7, P. 170].

And, of course, it would be impossible to fold the autocracy without that special type of mentality that existed in the Russian community. In Russia there was no West-specific accent on personality, personal beginning, there were no ambitions related to private property. In Russia, there was "peace", and the Russian peasant thought the category "we". Community consent was above the law, above the individual, as discussed by Aksakov and others. But, I would like to note the ambivalence inherent in the community. On the one hand, the community had protective functions: there was social responsibility, collectivism, a certain attitude towards the miserable, poor, arrested, orphans affected by natural disasters, etc. On the other hand, it was the community that monitored the payment of taxes and fees, the execution of punishments and the like. The feudal lords were afraid to encroach on some independence of the community, but it was beneficial and necessary for the system. The community, helping to improve the position of the peasants, simultaneously eased the pressure on them, between the peasants and the peasants. It was included in the state system: the community was a state mechanism of influence on the peasant, a mediator between power and man. This ensured the conservatism and vitality of the community. And in the future this communal mentality, this feeling of self not as "I", but as "we" was easily transferred to the state and the attitude towards it.

Perhaps this idea is confirmed by the fact that the state could not survive in the conditions of the deepest crisis of the Troubles, if not for the support of the people. An important feature of the emerging ideology was patriarchy and the state's awareness of the highest value,

compared to which the fate and freedom of a single person did not matter. On the other hand, the people constantly sought protection from the state, which personified in the figure of the sovereign. After all, despite a large number of uprisings, the peasants and the people did not oppose the sovereign or state, but against the boyars, landlords, officials, etc. The very appearance and spread of such an institution as "imposture" testifies, as many researchers note, not about a decrease, but just the opposite, about the growth of the authority of the tsarist power. In the tsar the people saw the true defender, directly referring to him with petitions: for example, in 1606, to False Dmitriy, in 1648, 1662 years to Alexei Mikhailovich. The very fact of such appeals to the tsar testifies to the existence of a definite idea of the inseparability of power and the people on the one hand, and the impossibility of limiting the power of the tsar, or on the other, by something or by somebody else. Thus, there is an evolution towards the tsar - "autocrat" and autocracy.

#### References

1. Anisimov E.V. State transformations and autocracy of Peter the Great. – St. Petersburg, 1997.

2. Engels F. To the peasant war. // Marx K., Engels F.  $\circ Works.-2$  ed. – T. 21. – M., 1961.

3. Kazansky P.E. The power of the All-Russian emperor. – Odessa, 1913.

4. Military articles of Peter I. - M., 1950.

5. Omelchenko O.A. Historical and political concept of absolute monarchy in classical Marxism (To criticism of traditional problems of historical government). // Femis. Yearbook of the history of law and jurisprudence. -2000. – Issue 1. – M., 2000. // URL: http://www.hf.msiu.ru/nauka\_femis\_1-5.htm#\_ftnref60 (reference date: 09.05.2017).

6. Pokrovsky M.N. About Russian feudalism, origin and character of absolutism in Russia. // Pokrovsky M.N. Russian history in the most concise essay. – M., 1933.

7. Shulgin V.V. Three capitals. // In Search of Your Way: Russia Between Europe and Asia. Reader on the history of Russian social thought of the XIX-XX centuries. – Part 2. – M., 1994.

8. Spiritual regulations of 1721. // URL: http://lib.pravmir. ru/library/readbook/1340 (reference date: 04.05.2017).

9. Sorokin Y.A. Russian absolutism in the last third of the XVIII century. – Omsk, 1999.

10. Troitsky S.M. Russian absolutism and the nobility in the XVIII century. – M., 1974.

# TYPICAL VIOLATIONS OF THE STUDENTS' RIGHTS AND LEGAL METHODS OF THEIR ELIMINATING

Simonyan R.Z.

Kursk State Medical University the Russiam Ministry of Health, Kursk, e-mail: rimmasimonyan@mail.ru

Article 43 of the Constitution of the Russian Federation states that "everyone has the right to education". And herewith it is guaranteed access to free preschool, basic general and secondary vocational education in state or municipal educational establishments and at enterprises. But the Constitution says about the right to free higher education, which can be obtained on a competitive basis. This right is implemented through state or municipal educational institutions and enterprises. The state also guarantees the right to higher education of private institutions through the "establishment of Federal state educational standards, support of various forms of education and self-education". As you know, if there is a law, there will be surely their violations. In modern Russia the rights of students are violated, first of all, "the heads of educational institutions and the bodies exercising administration in the sphere of education of constituent entities of the Russian Federation" – it follows from the analytical information on work results with citizens' references in 2012 provided by the Federal Education and Science Supervision Agency. In our opinion, violations by teaching staff are also not uncommon. Also possible violations of the students' rights by authorities at the Federal level, however, these bodies usually are mediated and their violations are less visible from the direct owners.

Keywords: higher education, violation of students' rights, educational services, Federal state educational standards

One of the violations of students' rights in the work sphere is the attraction of students to the so-called "voluntary public works". In accordance with the Article 37 of the Constitution of the Russian Federation "Labor is free. Everyone has the right to freely dispose of his abilities to work, to choose the kind of activity and profession". Paragraph 2 of this article says that forced labor is prohibited, therefore attracting students to "voluntarily forced labor" is a violation of their constitutional right to free labor. [2]

The administration of an educational institution can mask this violation. The student must comply with the curriculum developed and adopted by the university in the manner prescribed by the relevant legal acts. To do this, such a duty is foreseen in the educational plan of the educational organization and "is justified by the need to form a civic position, ability to work and life" [3].

If the administration of the university did not bring the relevant rules into the local normative acts, then one can safely resort to the judicial procedure for the rights protection, referring to Art. 37 of the Constitution of the Russian Federation and art. 2 of the Labor Code. If the administration has adopted regulatory measures, then it is necessary first to challenge the relevant local norms – primarily through the mechanisms of student self-government. If a constructive dialogue with the administration fails, it will be effective to organize a collective complaint to the prosecutor's office. In accordance with Article 45 of the Civil Procedure Code of the Russian Federation, "the Prosecutor has the right to apply to the court in defense of the rights, freedoms and legitimate interests of citizens, an indefinite circle of persons or the interests of the Russian Federation". Thus, in court there will be a confrontation not of officials and citizens, but of officials and the prosecutor's office, or a commercial (or non-profit) organization and the prosecutor's office, which will certainly increase the possibility of case winning.

Providing a non-quality education is a fairly special case in educational institutions of any organizational and legal forms [1]. This problem is relevant not only for Russia. So in Poland, the practice of concluding contracts guaranteeing the quality of training has become widespread. A sample document was prepared jointly by representatives of the student parliament and the Foundation of Polish rectors. In such contracts, it should be written about the tuition fees, the establishment of a number of lectures and seminars offered by the university and the conditions for practical classes and the receipt of a diploma.

In Russia, a "contract for the provision of paid educational services" has long since become a practice. This contract can be qualified as a contract of accession, i.e. the contract terms of which have already been developed and are not subject to change. In this regard, one must bear in mind: firstly, the administration of an educational institution in such a contract cannot in advance specify the limitation of the size of the university's responsibility; this conclusion can be made on the basis of paragraph 2 Art. 400 Civil Code of the Russian Federation. Secondly, the party joined to the contract has the right to demand the termination or amendment of the contract, if the accession contract, although does not contradict the law and other legal acts, but deprives this

party of the rights usually provided under such contracts, excludes or limits the responsibility of the other party for violation obligations or contains other conditions that are clearly burdensome for the party, which, on the basis of its reasonably understood interests, it would not accept, if it has the opportunity to participate in the determination of the terms of the contract (par. 2, Article 428 of the Civil Code of the Russian Federation).

Responsibility in addition to the contract itself is determined by the provisions of the Civil Code of the Russian Federation and the Law of the Russian Federation "On Protection of Consumer Rights". So, if there are deficiencies in the services provided, including providing them in an incomplete volume assumed for by educational programs and curricula, the consumer (the person who enters into the contract, as a rule, the parent of the applicant) has the right to demand at his choice:

 Gratuitous provision of educational services
 A corresponding reduction in the cost of the educational services provided

- Reimbursement of expenses incurred by him for the elimination of deficiencies in the provision of educational services on his own or third parties.

The consumer has the right to refuse to execute the contract and demand full compensation for losses, if the defects of the rendered service are not eliminated by the contractor within the period specified in the specified contract. The consumer also has the right to refuse to execute the contract if he finds significant shortcomings in the service or other significant deviations from the terms of the contract.

The consumer has the right to demand the drawing up of an estimate referring to Part 1 of Art. 33 of the RF Law "On Protection of Consumer Rights" [7].

The Federal Law "On Education in the Russian Federation" stipulates that students of all educational institutions have the right to receive education in accordance with federal state educational standards, federal state requirements and educational standards and requirements established in accordance with Article 11 of this Law, for training within these standards on individual curricula, for accelerated training, for free use of library information legal resources of libraries, to receive additional (including paid) educational services [5].

If the right of students to receive quality education is violated, then in addition to the trial, a complaint to the (Federal Education and Science Supervision Agency is possible. The reception of complaints is conducted in accordance with the Federal Law "On the Procedure for Consideration of Appeals of Citizens of the Russian Federation" and the Order of the Federal Service for Supervision of Inspection of the Russian Federation "On Approval of the Instruction on the Procedure for Considering Citizens' Appeals in the Federal Service for Supervision in Education and Science". So the order established that a written request is subject to mandatory registration within three days from the date of receipt. It is given a registration number, which is formed from two initial letters of the name of the author of the appeal and the serial number of the appeal in the current year. The analytical information on handling citizens' appeals provided by Federal Education and Science Supervision Agency in 2012 indicates that in 2012 the tendency of recent years continued, according to which the number of citizens' appeals to the Federal Education and Science Supervision Agency increases every year. It is possible to send a complaint via e-mail. Electronic letter is transferred into paper form, i.e. is printed, and further work with it is conducted as with a written appeal. The registration number and the date of registration are automatically inserted by the electronic document management system. If the educational institution is non-governmental, then a complaint is possible to made to the Association of non-state higher education institutions of Russia [4,6].

There are often cases of students' rights violation at the exam. In accordance with the Federal Law "On Education in the Russian Federation" during the exam, students can use the curriculum, as well as with the permission of the examiner reference literature and other benefits. However, teachers quite often deny students the realization of this right, referring to the possibility of writing off both with materials previously affixed to curricula or modification of programs in order to add additional information to them, and use the official texts of the curricula themselves. The cases of attachment and modification of programs can be stopped with the help of appropriate control measures. The reference to the prohibition of using the official texts of curricula themselves makes the statement of the examiner even more unlawful, since it contradicts the federal law.

Students of state educational institutions often face violations of their housing rights. Now the average scholarship for university students is 1500 rubles. So, the minimum state academic scholarship in our country is 1,340 rubles for higher education (bachelor's programs, specialty programs, master's programs), the maximum is 6 thousand rubles. The last scholarship can be received by university students, students without satisfied marks. At the same hostel, for example, in the Kursk State Medical University costs the student 700-800 rubles per month. The procedure for determining the amount of payment for the use of a dwelling is established by the educational organization independently. The utility fee includes fees for hot water, cold water, sanitation, electricity, gas supply (including supply of domestic gas in cylinders), heating (heat supply, including the supply of solid fuel is having stove heating).

Housing conditions also often leave much to be desired. And students at the legal level are limited in the ability to independently improve their living conditions. In accordance with an approximate regulations on the student hostel of the federal state educational institution of higher and secondary vocational education of the Russian Federation, the use of personal energy-consuming power-consuming appliances and equipment in living rooms is allowed with the permission of the hostel administration in accordance with the procedure established by the educational institution for an additional payment for consumed electricity. The fee is borne by those living in the rooms in which these appliances and equipment are used.

## Conclusion

This article described only a small part of violations of students` rights. Analysis of the above violations allows us to conclude that they are entrenched stereotypes of behavior and even teachers of law faculties often take them for granted. Increasing the level of sense of justice should start with the administration of educational institutions and faculty. If we talk about legal methods to combat these violations, then, in our opinion, it is necessary to combine civil-law methods with publicly legal ones.

#### References

1. Zelenova I.V., Simonyan R.Z. Features of the organization (integrated) inclusive education of persons with disabilities and children with disabilities in educational organizations // University Science: A Look into the Future. Materials of the international scientific and practical conference dedicated to the 81-th anniversary of the Kursk State Medical University and the 50th anniversary of the Faculty of Pharmacy. In 3 volumes. 2016. – pp. 133-136.

2. The Constitution of the Russian Federation of December 25, 1993, as amended on December 30, 2008 // Rossiyskaya Gazeta – Federal Issue No. 4831 (0).

3. Pashina I.V., Simonyan R.Z. The right of every person to health care and medical care // Modern problems of science and education. -2015. - No. 4. - p.414.

4. The Order of the Federal Service for Supervision in Education and Science of December 11, 2014 № 1900 Moscow "On approval of the Instruction on the procedure for considering applications from citizens in the Federal Service for Supervision in Education and Science" // Rossiyskaya Gazeta – Federal issue No. 6648 (77).

5. Federal Law of the Russian Federation of December 29, 2012 No. 273-FZ "On Education in the Russian Federation" // Rossiyskaya Gazeta – Federal issue. No. 5976. 31.12.2012.

6. Federal Law No. 59-FZ of May 2, 2006 "On the Procedure for Considering Applications of Citizens of the Russian Federation" // Rossiyskaya Gazeta – Federal Issue No. 4061 (0).

7. Federal Law of February 7, 1992 No. 2300-I "On the Protection of Consumer Rights" Rossiyskaya Gazeta – Federal issue of December 1, 2008.

#### Short Reports

# MODERN STRUCTURE OF THE INTERNATIONAL CRIMINAL JUSTICE AND PROSPECT OF USE OF UNIVERSAL JURISDICTION

Gracheva R.O.

Kursk State Medical University, Kursk, e-mail: kopcevarada@mail.ru

The short message opened the question about modern structure of the international criminal justice and prospect of use of universal jurisdiction. Interaction of the international and national law enforcement in the sphere of criminal legal proceedings: 1.in influence of the international criminal rule-making on process of improvement of national norms;2.in universal jurisdiction of national courts on the basis of internal criminal norms;3.in applicability of self-executable standards of international treaties in national law – enforcement practice.

Keywords: international criminal justice, universal jurisdiction, national law, international law, state co-operation

"Justice" (from Latin "justitia" – justice) – system of legal agencies, judicial department. Depending on the sphere of legal proceedings distinguish: criminal, civil, administrative, constitutional, international, military, electoral, juvenile and other types of justice.

"Jurisdiction (from Latin "jurisdiction" – legal proceedings, from "jus" – the right + "dico" – to say) – established by the law or other regulatory legal act of power of public authorities and officials on permission of any legal questions".

Antonio Kassez pays our attention that "so far human rights of bonum commune humanitatis steel, a kernel of values of great value for all mankind. Therefore logically and consistently to give to vessels of all states an opportunity and also to impose on them a duty to pursue on court, to lead to court and to punish people who are suspected of intolerant violation of such values".

There are following forms of the international jurisdiction:

1. Nuremberg and Tokyo tribunals. They were created by the countries of the anti-Hitler coalition on the basis of the relevant international agreements in between. These tribunals often name "vessels winners", and it is necessary to recognize that this determination is fair.

2. Special international criminal tribunals for the former Yugoslavia (the location – the Hague, the Netherlands) and Rwanda (the location of Trial chambers – Arusha, the United Republic of Tanzania, the Appeals chamber – the Hague, the Netherlands), the United Nations founded by the decision of the Security council according to chapter VII of the Charter of the UN.

3. The hybrid or "internationalized" courts which were created not by the decision of the Security Council, but agreements between the United Nations and the governments of those countries concerning the crimes committed in the territory of which these judicial authorities were allocated with jurisdiction.

Three above-named forms of the international jurisdiction unite the common important features. First, these courts have been created by the principle of ad hoc, i.e. as the special temporary tool for consideration of the crimes committed during a certain period of time and in a certain geographical territory. Secondly, these courts are retroactive, i.e. are allocated with competence to consider the crimes committed before their establishment.

4. International Criminal Court (Hague, Netherlands). "His essential differences from the judicial authorities mentioned above is that he is permanent, its personal and territorial jurisdiction isn't connected with concrete armed conflict or an event, and he isn't retroactive, i.e. has the right to consider only the crimes committed after the introduction of his Statute in validity (since July 1, 2002)".

It should be noted that universal jurisdiction – rather new and promptly developing area is right.

William Shabas defines universal jurisdiction as "competence of national court to judge the person suspected of serious international crime – like genocide, war crimes, crimes against humanity or torture – even if neither the suspect, nor the victim are citizens of that country where the court is located, and crime took place out of this country".

"Practice of the states establishes this norm as norm of common law concerning the war crimes committed as during the international and not international conflicts".

"So far about 120 states have adopted the laws giving to them courts the right to carry out this or that form of universal jurisdiction".

"Nevertheless, universal jurisdiction, even as it stands – the unique mechanism containing the big and still not up to the end conscious potential of fight against impunity irrespective of frontiers. It is necessary to agree that "investigation and prosecution can be successful and without cooperation of the states in the territory, of which a crime is committed, in cases where private applicants well identify witnesses and sources of the proof".

#### References

1. Salgereev A.S. Features of jurisdiction in the international criminal law. 2010. P.31.

2. Criminal Code of the Russian Federation. Schabas, 2006, p. 156-157.

3. The detailed review of use of these principles in national and international law see: Cassese, 2003, p. 277-284.

4. Dosvald-Beck, 2006. Volume I. Norms. P. 781.

5. The draft of the Code of crimes against the world and safety of mankind of 1996, Art. 9, the comment, 6.

6. Rome Statute of ICC.

# EVALUATION OF SKIN MICROFLORA IN PEOPLE WHO HAVE BEEN IN EXTREME CONDITIONS

Khusnarizanova R.F., Vildanov T.R., Shagarov R.T. Bashkir State Medical University Ufa of Ministry of healthcare of Russia, Ufa, e-mail: doctor maga@mail.ru

The state of the surface and deep microflora of the skin was studied in 48 patients of different departments, on the day of their admission and discharge. Quantitative changes in the autoflora are revealed, depending on the type of department and the number of days spent in the hospital.

Keywords: Microbiology, superficial and deep skin microflora, microbiocenosis, immunological reactivity

Relevance. The influence of adverse factors of the external environment, in particular extreme conditions associated with professional activity, leads to significant physical and psychological stress, what is stress to the body. The close relationship of the nervous, endocrine, and immune systems provides a single body control system, its protection against multiple external impacts [3,4]. Disorder of the nervous regulation and immune suppression, usually accompanied by a change in the qualitative and quantitative composition of the normal microflora of the human body as the factor of nonspecific resistance of the organism. In the recent past, the study of the skin microflora is widely used to assess immunological reactivity of the human organism to various adverse conditions [1], but at present, the application of the method is somewhat limited, despite its informativity and availability.

Purpose. To examine the state of the microflora of the skin of the people who were in extreme conditions.

#### Materials and methods of research

Evaluation of superficial and deep skin autoflora was conducted on 48 patients who were hospitalized in neurology departments 14 people, therapy departments – 14 people, palliative care and trauma departments – 10 persons. Material sampling for the study was conducted on the day of admission of patients and after the course of treatment, on the day of discharge. The average age of the surveyed, including 45.8% of men, 54.2% of women, was 64.9 years.

Static processing of results of research carried out using the program Statistica 10.0 software. The average arithmetic and mean-square deviations of the studied variables and nonsampling errors were calculated. Normal distribution of the obtained data were presented as M±m, where M is the arithmetic mean of the studied variables, m is the non-sampling error. The difference of indicators in the group with normal values was estimated with Student's ttest. Statistically significant differences were considered when  $p \le 0.05$ .

## Results of research and their discussion

It was established that in day of hospitalization of patients exposed to extreme conditions during the various periods of their lives, the content of the microflora on the skin surface and deep layers was in the average  $22.7 \pm 1.4$ and  $79.9 \pm 4.3$  respectively of all surveyed. Due to performed treatment their contents adequately decreased in 2.4 times in patients of neurology department, but in patients of the therapeutic department decreased in 3.6 times ( $p \le 0.05$ ), On the day of discharge. When comparing the content of superficial and deep microflora in women and men, no significant differences were detected ( $p \ge 0.5$ ).

When comparing the average content of surface microflora in patients of different departments (Table 1) it was found out that was not significant difference from the average, herewith their content in patients of neurological department was in 2,3 times more than in patients of traumatology department, which may be due to severe psycho-emotional state, with appropriate pathology. The same tendency was noted in the content of deep autoflora.

The comparison of the content of superficial and deep microflora with the average data obtained in healthy individuals [2,5] showed that in average their number is above normal in 1.3-2.2 and the 3.4-4.7 times, respectively. More significant differences were found in patients of neurology department surface 1.8-3.0 times and the content of deep microflora was above normal in 5.1-6.5 times. On the day of discharge surface of the skin microflora in patients of the neurological department corresponded to generally accepted norm, the concentrations of the deep autoflora exceeded the normal figures in 2.1-2.9 times. The validity of the results ( $p \le 0.05$ ) may indicate the effectiveness of treatment.

#### Table 1

#### Skin microflora of patients of the hospital who were treated in different departments

Departments	Skin microflo	ra (M $\pm$ m)						
	superficial	deep						
	Patients on the day of admission to he	ospital						
Neurology	$30,4 \pm 2,7$	$118,2 \pm 9,1$						
Therapy	$28,1 \pm 2,3$	70,7 ± 1,9						
Palliative care	$19,1 \pm 1,7$	$71,2 \pm 3,6$						
Traumatology	$13,2 \pm 0,9$	59,8 ± 2,9						
Common value	$22,7 \pm 1,4$	$79,9 \pm 4,3$						
Patients on the day of discharge								
Neurology	$12,7 \pm 1,4$	$49,0 \pm 1,8$						
Therapy	$7,7 \pm 0,5$	36,5 ± 2,9						
Common value	$10,2 \pm 1,1$	42,7 ± 2,8						

#### Table 2

# Comparative characteristics of the microflora content of the skin of people who were in extreme conditions

			Microfle	ora indices s	uperficial / deep				
Department	mean value	minimum	maximum	standard deviation <sup>a</sup>	standard error of standard deviation <sup>a</sup>	Significance (2-sided) <sup>a</sup>	Student's t-test <sup>a</sup>		
		Patients	on the day o	fadmission	to hospital				
Neurology	30,4/118,2	18,0/83,0	47,0/153,0	8,6/28,8	2,7/9,1	,000/,000	7,4/11,1		
Therapy	28,1/70,7	20,0/60,0	41,0/79,0	7,5/6,0	2,3/1,8	,000/,000	7,5/28,3		
Palliative care	19,1/71,2	11,0/55,0	29,0/93,0	5,5/11,3	1,7/3,6	,001/,000	5,1/15,0		
Traumatology	13,2/59,8	10,0/50,0	19,0/81,0	3,1/9,2	0,9/2,9	,011/,000	3,2/14,6		
Common value	22,7/79,9	10,0/50,0	47,0/153,0	9,4/27,7	1,4/4,3	,000/,000	8,4/14,3		
Patients on the day of discharge									
Neurology	12,7/49,0	10,0/44,0	16,0/53,0	2,7/3,7	1,3/1,8	,140/,000	1,9/17,1		
Therapy	7,7/36,5	7,0/32,0	9,0/45,0	0,9/5,9	0,4/2,9	,018/,007	-4,7/6,5		
Common value	10,2/42,7	7,0/32,0	16,0/53,0	3,2/8,1	1,1/2,8	,836/,000	0,2/8,9		

N o t e . <sup>a</sup> - test. Value. = 10 / test. Value. = 17.

Table 2 presents a comparative analysis of the results of the study with normal microflora of the skin of a healthy person using a Student's t-test, which also confirms the results of nonparametric analysis.

#### Conclusion

Qualitative and quantitative content of microflora of the skin is an informative indicator for the evaluation of immunological reactivity of the human organism to adverse factors of environment.

More pronounced changes in the content of superficial and deep microflora were revealed at patients of the neurology Department compared to the average performance of all patients and generally accepted performance standards. As a result of the treatment of patients of neurological and medical departments, it was noted the normalization of the content of superficial and deep microflora of the examined patients.

#### References

1. Ayubova G.Sh. Influence of factors of aluminum production on microbiocenosis of genital organs and skin reactivity: dissertation abstract of doctoral student (14.02.01) / Ayubova Gulnora Shirinova; TIPPMK: Dushanbe, 2012. – P. 122.

2. Klemparskiy N.N., Shalnova G.A. Methodical recommendations on the assessment of the immunological reactivity of people based on the state of the autoflora of the skin and oral cavity / Ministry of health of the USSR. – M., 1978. – P. 22

3. Noble U.K. Microbiology of human skin / TRANS. from English. – M.: Medicine, 1986. – P. 493.

4. Parakhonsky A.P. Functional unity and interaction of the immune and nervous systems / A. P. Parakhonsky// MODERN HIGH TECHNOLOGIES. – 2013 – №1. P. 116.

5. Petrovskaya V.G., Marco O.P. Human Microflora in normal and pathological condition. – M.: Medicine, 1976. – P. 232.

#### Short Reports

### PROSPECTS OF THE HIGHER MEDICAL EDUCATION DEVELOPMENT IN RUSSIA IN THE CONTEXT OF NEW MORAL PARADIGMS

Zahovaeva A.G., Kopisheva E.N. Ivanovo State Medical Academy, Ivanovo, e-mail: ana-zah@mail.ru

The beginning of the 21<sup>st</sup> century is the epoch of the dominant moral paradigms destruction, when commercial side, pragmatism and utilitarian side press high moral values. Everything influences as culture and society in all, as the quality of the education.

The competence approach in modern high school opened new perspectives in the educational process. The competence approach in the higher education is the change from theory to professional competence. But the effectiveness of the approach may be based only on universal etic norms.

"Competency" is the index of the essential system characteristic of the person of the school-leaver. It was important to become not only a professional, but to be a fully developed person. So the new aim of the global educational sphere appeared – personal approach. So the priorities are transformed gradually, so the main factor is the formation not only a specialist, but the person itself. This is really important in medical education.

So common cultural and professional competences are really important, especially the foundation of the worldview position and civil position, the readiness to be social and ethical responsible in case of making serious decisions, readiness for self-development, self-realization, self-education, use of artistic potential, ideas of tolerance, capacity and readiness of realization of ethical and deontological principals in professional activity – they give the policy of the founding a "human" doctor in the high school.

Education is the awakening of the humanistic in human, the cultivation of the soul. The personal approach make an accent at normative definite knowledge, skills, experience, as competences, transforming them into the state of bifurcation, changing qualitative characteristics, that helps the synthesis of experience and knowledge.

The result of the approach is the morality of the person, developing of the human to his real nature. The morality becomes the base, on which the fully educated person is formed.

The main problem of education in any discipline (even if it is medical or humanitarian) is the solvation of such questions of: What to teach? How to teach? What should the person know? If the answer to the first question is pretty simple: the real knowledge of the subject, then the question "how to teach" is a methodological problem. A lot of methods and techniques of the teaching exists, but we should speak about a global method, which would include all existed methods, so here we come to the problem of the humanization.

The essence of the humanization in education is the addressing not only to the intellect, but also to the emotions, it is awakening, concentration, filling with the new meaning of human emotions. The humanization of the person is the upbringing the Human in the student (Me-conception), the formation of the person in all its spiritual nature.

So in the end "what should the person know?", so what should be the level of the professional competency? What should the student get to himself at the level of the consciousness, unconsciousness, how the information can be memorised. So here the competence approach dominants.

It is impossible to know everything is a banal phrase. Much knowledge doesn't mean intellect, so the vital wisdom says. But what should the student know? It is clear that the student memorise just the part of the received knowledge, so this depends from a lot of man factors (the level of the intellect of the person, the speed of the analysing of the information (development of the CNS-central nervous system), the readiness and desire to receive, from interest, from attention, from the capacity to work individually and in team (the level of communication), from the mobility, etc.

So in what is the effectiveness of the education through the personal approach contained? It is:

1) "to teach to learn", so to show the way of receiving information (working with student's books, monographs, magazines, the Internet), to teach educational techniques (making the summary, speed reading, etc.), and also universal methods of learning: generalization, analysis, synthesis, induction, deduction, etc.

2) "educating on the experience", so using the experience and traditions of the clinical medical practice, formulation of the personal experience of the subject, whom the student appears in using skills and knowledge in practice. In the process of realization the working functions in practice or solving professional tasks in conditions of simulation centre at the trainers. The theory should not be without practice.

3) **"self-educating"**, when the very desire to learn becomes the main need and the main motive.

The education system must evolve! At the same time, one should not forget the main thing: education is the awakening of man in man, the "cultivation of the soul". The value of the Person ("I-concept") is the basis of the modern moral paradigm. Personality is a self-improving structure, and assistance in this process can be rendered only by such an education system, where the personal approach based on the principles of humanism dominates.

# EVALUATION OF THE USE OF THE "MOODLE" SYSTEM IN ENGLISH LANGUAGE TRAINING AT KSMU

Kalimbetova A.B., Ibrayeva Zh.K., Burmistrova V.A.

Department of Foreign Languages, KSMU, Kazakhstan, e-mail: akerke-kalimbeto@mail.ru

The aim of the study was to evaluate the use of the "Modular Object-Oriented Dynamic Learning Environment" system in English language training at Karaganda State Medical University. The main task was to develop a questionnaire on the effectiveness of using the "Modular Object-Oriented Dynamic Learning Environment" platform among students and teachers of Karaganda State Medical University, to conduct questioning among students and teachers of Karaganda State Medical University, to conduct questioning among students Oriented Dynamic Learning Environment" system and to develop recommendations for optimizing and improving English language teaching on the "Modular Object-Oriented Dynamic Learning Environment" platform as well.

Keywords: MOODLE, KSMU, assessment, trainees, learning, grammar

MOODLE – the abbreviation of the phrase "Modular Object-Oriented Dynamic Learning Environment", is an automated, computerbased and Internet-based learning management system. The first version of MOODLE 1.0 was developed by Martin Dougiamas, the professor of Pärt University (Australia), and put into operation in August 2002. Nowadays, there are a significant number of platforms for the organization of e-learning and control in the world. Initially, they appeared in the USA, and in the last decade are actively developed and implemented in Kazakhstan. According to research, the leader is the MOODLE system [3, 4]. The latest version of MOODLE is MOODLE 2.3 at the moment. Despite the fact that the MOODLE system was originally oriented towards university education, it was subsequently successfully used to organize both pre-university (school) and postgraduate (corporate) education.

**Relevance:** Currently, there are more than 60,000 registered installations of the MOO-DLE platform in 201 countries worldwide, it has been translated into 78 languages. About 2 million teachers around the world use MOO-DLE to train more than 26 million students. Through this system, about 2.5 million courses are being taught today using almost 20 million electronic resources. MOODLE is a webbased application located on the server, and is accessed through a browser. The server is usually located in a university or faculty building, but it can be located anywhere else. At its core, MOODLE gives the teacher the opportunity to create a course website and manage access to it so that only enrolled students can view it. In addition to access control, MOODLE provides a wide range of tools that will make the training course more effective. The system implements the philosophy of pedagogy of social constructionism developed by Martin Dougiamas,

which is primarily aimed at organizing interaction between the teacher and students, although it is also suitable for organizing traditional distance courses, as well as supporting full-time education. The test system MOODLE allows you to create banks of test tasks of all the basic forms and build tests that are designed for self-control and training, thematic tests, tests for current and final assessment of the level of trainees, etc. [5, p.17; 6, p.109]. Thus, MOO-DLE can be effectively used for both current control, and in more traditional situations: testing, creating hypertext materials, etc. Full use of this training management system makes it possible to ensure: multivariate presentation of information; interactive learning; revision of the studied material; structuring of content and its modularity; creation of constantly active help system; self-control of training activities; alignment of individual educational trajectories; confidentiality of training; compliance with the principles of successful learning.

In this paper, we will try to present the possibility of using the MOODLE training management system to organize and conduct current monitoring of the development of grammar skills in English teaching.

The objects of current monitoring in English teaching to students at the Faculty of continuous professional development are the adequacy and reliability of concepts regarding the meaning, form and use of specific grammatical phenomena to be learned, and the level of developed grammatical actions and operations themselves, which can be checked with the use of control exercises and test items. Despite the fact that the main subject of control must be speaking skills, which testify to the ability to participate in communication, the most important role, in our opinion, belongs to grammar language skills on the development of which speech activities are based. Organization of the educational process using MOODLE has a number of features. MOODLE has an automated test system that allows the teacher to form test banks and build test items out of them. An important feature of this system is that the test items can be diverse; their solving requires students' knowledge of grammatical material and creativity, as students are involved in active cognitive activity connected to the comprehension and revision of educational material, putting knowledge into practice during solving problems.

Let us consider the features of the organization and conducting of the current monitoring with the use of the training management system MOODLE on the example of studying the grammatical theme "Conditional sentences". Acquaintance with this grammatical material takes place at the lesson where students first independently read the rules with examples, and then a joint and detailed discussion of the read rules is carried out. Next, the group starts working with training exercises in order to consolidate this grammatical material. One part of the exercises is done at the lesson, and another one is the homework. After acquainting and consolidating this grammatical phenomenon, the main task of the teacher is to control the mastery of this grammatical theme. At the organization stage, the teacher develops and prepares tests. When working in the MOODLE environment, the teacher is provided with a very wide range of tools. One of the main possibilities giving to the teacher by the Moodle system is the creation of the course (module): adding, removing, moving resources, blocks. The module-test allows the teacher to create a set of test items. Test items can be with: multiple choice answers, one correct answer, the choice of "true" / "false", a short text answer, a numerical answer; they can be matching questions, questions with answers in the gaps, a calculated question, and others, not included into the standard framework.

Students can receive feedback on the completed test and / or the correct answers. Questions are entered manually by the teacher through the interface in MOODLE or can be imported in various formats. Students start working with self-control test. In our opinion, self-control tests are a useful and necessary link, as students have the opportunity to revise the grammatical material and pay attention to the mistakes done during testing. Such tests are an integral part of the independent work of students due to the presence of a key. At the same time they activate mental operations, develop memory, attention.

All questions are stored in a database by categories and can be subsequently used again in the same course (or in others). To the test, random items from a certain category can be added, where random test items from a given category will be substituted for each test attempt. Test items and answers to them can be shuffled (randomly) to limit opportunities for cheating. Test items can contain HTML and images. Due to the combination of various parameters, it is possible to create training tests. The test results may show the correct answers or just a mark. After the tests for self-control have been successfully done, the mistakes have been analyzed, the students start performing evaluation tests, which can have different types, as the MOODLE system allows to organize and conduct control quite versatile and interesting.

The aim of the research: to evaluate the use of the "MOODLE" system in English language training at KSMU

Tasks:

1. to develop a questionnaire on the effectiveness of using the MOODLE platform among students and teachers of KSMU.

2. to conduct questioning among students and teachers of KSMU, which allows to determine the use of the MOODLE system.

3. to develop recommendations for optimizing and improving English language teaching on the MOODLE platform.

Materials and methods: a survey of first-, second-, fourth-year students, as well as master's-program students of KSMU has been conducted.

Methods of research:

1. Sociological research method (questionnaire).

2. Statistical methods for processing research data with the use of computer programs (Microsoft Excel).

**Results.** At the Department of Foreign Languages of KSMU, a survey was conducted among first-, second-, fourth-year students, as well as master's-program students, total – 100 students, in order to assess the use of the MOODLE training management system. The greatest number of respondents was fourth-year students – 66%, 20% – first-year students, 8% – master's-program students, 6% – second-year students. The results obtained were analyzed and systematized.

The following aspects were considered by the respondents as advantages of the MOO-DLE system:

- accessibility to the educational material of a discipline anywhere and at any time - 51%;

- reduction of the classroom study load -25%;
- saving material resources 11%;

# Pedagogical sciences

- provision with all necessary methodical materials -4% (fig. 1).

The difficulties with which students were faced when working with MOODLE are:

- it is hard to understand educational material without teacher's comments – 48%;

- it is difficult to organize independent study of the material -42% (fig. 2).

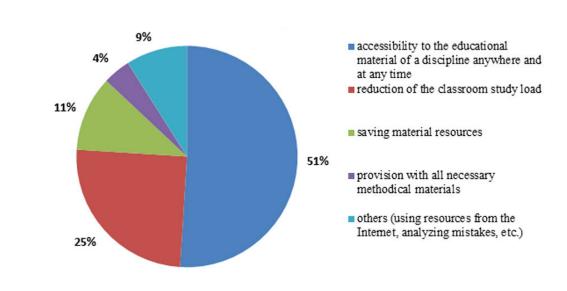
Comments, suggestions and additions were made to use the MOODLE platform in the educational process:

 to develop methodical recommendations for using the MOODLE platform;  to increase the time for testing because of the system hang;

– to reduce the workload of the MOODLE platform.

# Conclusions

The MOODLE system is used for organization and conduction of the current control of acquisition of students' knowledge and skills in teaching English language at the Department of Foreign Languages of KSMU. This system, in our opinion, allows conducting control most effectively.



# Fig. 1. The main advantages of Moodle are

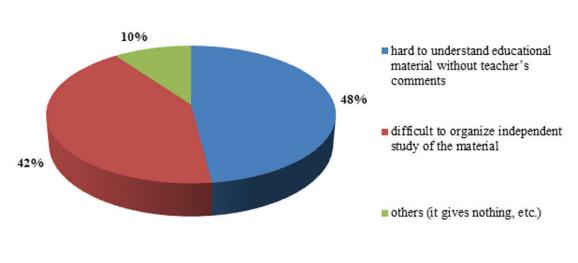


Fig. 2. The main dysadvantages of Moodle are

# EUROPEAN JOURNAL OF NATURAL HISTORY № 1, 2018

Summarizing, it is important to note the effectiveness of using the MOODLE training management system to organize and monitor the development of grammatical skills, because such organization of the control process makes it more objective, effective and has a number of the following advantages over traditional control methods: it allows more efficient organization of the educational process as a whole and student's independent work in particular; provides an opportunity to interest students through the introduction of new technologies and forms of training process. Thus, based on the results of the questionnaire to improve the efficiency of the MOODLE platform, it is possible to recommend: to develop methodical recommendations for using the MOODLE platform; to add a course of listening, video lectures, and to implement a MOO-DLE mobile application for teaching English.

In conclusion, we would like to express gratitude to our scientific advisor – the Head of Foreign Languages Department, c.p.s., associate professor V.A. Burmistrova.

#### References

1. Shchukin AI Learning foreign languages. Theory and practice. M.: Omega-L, 2010.

2. Konysheva A.V. Monitoring the results of teaching foreign languages. Materials for a specialist in an educational institution. SPb.: KARO, 2004.

3. Andreev AV, Andreeva SV, Dotsenko IB The practice of e-learning using MOODLE. Taganrog: Publishing house of TIT SFedU, 2008. P. 6-8. URL: http://moodle.org.

4. Gilmutdinov A.Kh., Ibragimov RA, Tsivilsky I.V. Electronic education on the MOODLE platform. Kazan: KSU, 2008. P. 17-39.

5. Gal'skova N.D., Gez N.I. Theory of teaching foreign languages.

## GENDER ORIENTATIONS AND PRACTICES OF EDUCATING MODERN PRESCHOOL TEACHERS AS AGENTS OF PRIMARY GENDER SOCIALIZATION OF A PERSONALITY

<sup>1</sup>Semenova L.E., <sup>1</sup>Chevachina A.V., <sup>2</sup>Semenova V.E., <sup>2</sup>Tishkina Yu.A.

<sup>1</sup>Nizhny Novgorod State Pedagogical University named after Kozma Minin, Nizhny Novgorod, e-mail: annochka\_v@mail.ru;

<sup>2</sup>Nizhny Novgorod Institute of education development, Nizhny Novgorod, e-mail: verunechka08@list.ru

The article discusses the role of preschool teachers in the process of primary gender socialization of girls and boys. It shows specificity of primary socialization in the preschool period, indicates some positive and negative tendencies in relation to monitoring the principle of gender equality in the contemporary Russian preschool education. It presents the results of the empiric study of content characteristics of the opinions of teachers working with children of preschool age about the future of their pupils and the real educational practice in preschool educational institutions. Based on the analysis of gender orientations of teachers about the future of girls and boys, and on the observations over the educational process in kindergarten groups a fact was established of the traditional strategy of gender socialization of preschool children, which is based on pedagogical influence strictly differentiated according to gender.

## Keywords: primary gender socialization, preschool teachers, ideas about the future of preschoolers, the practice of educating girls and boys

It is known that the preschool age is the period of the so-called primary socialization, the essence of which is the understanding by the child of the meaning of norms, values and requirements put forth by surrounding socio-cultural environment. In other words, "the first task which the child, "entering" the social world must solve is to reconstruct the social world in the subjective space by means of forming an appropriate system of commonly accepted values" [7, p. 152]. And the period of the primary socialization is associated mainly with unconscious and passive mechanisms of assimilation of culture, and only the secondary socialization beginning not prior than adolescence, is characterized by greater involvement of cognitive mechanisms, critical reviewing of adopted norms and stereotypes and, as a consequence, by the possibility of creative transformation of the environment.

Another fundamental feature of preschool children socialization may be the fact that natural influences of socio-cultural environment are superseded by targeted social influences in the process of interaction of an adult (as the bearer of culture) and a child, i.e. education which, as considered by L.S. Vygotsky, is the leading source and defining beginning of a personality's development. Thus, according to available scientific data, the process of targeted educational influences during the primary socialization is accompanied by a number of mechanisms, among which, first of all, we should mention internalization, identification, learning, social comparison with the immediate environment and the acquisition of categorization [9]. However, as noted above, it should be kept in mind that all indicated mechanisms are

not quite consciously defined and for the most part are not subjectively controllable.

Primary socialization, especially in the process of educational influences, presupposes the existence of intermediaries between the child and the social world, and this role of a mediator, in the first place, is performed by those culture bearers who belong to the group of significant others – the close adults. It is through them that the child learns about the cultural heritage, the system of social norms and values (including gender ideals and standards), and, consequently, not all cultural achievements, not all actually existing social experiences become available to the child, since his integration into the society at the earlier stages of development is considerably limited by subjective experience and activity of intermediaries - significant others. And although modern preschoolers grow up in a completely different socio-cultural environment than earlier [1], the role of significant others in their development can hardly be overestimated.

At a preschool age the number of significant others, along with parents, includes also preschool institutions personnel whose influence has a significant effect on the social development of the child's personality including gender socialization as well.

It should be mentioned that in our country the problems of psycho-pedagogical support of gender socialization process of preschool children and the introduction of gender approach into pedagogic practice of preschool educational institutions came to the agenda rather recently, however, it is worth noting that some pertinent experience has already been gained. Thus, according to some experts, though the educational community cannot have a direct influence on changing gender roles in the family and gender ideals of the media, it is capable of identifying and amplifying positive transformations correcting gender socialization of children towards the egalitarian model of interaction between the sexes, which, in its turn, will expand the social space for self-realization [10]. And, to this end, it is suggested that pedagogical attention should be focused on the development in the younger generation of the following self-actualizing personality features:

- self-confidence, activeness (desire to manifest one's own self in various activities);

- creativity, tolerance (flexibility in the perception of gender roles);

- peacefulness (sensitivity, empathy and reflexivity, ability to understand the condition of another person, sincerely express own feelings without any limitations from the point of view of "gender adequacy", desire and ability to care for others);

- social loyalty when both the girls and boys perceive as a norm free choice of activities, games, professions, cooperation in joint activities, exchange of managerial roles, etc.

In other words, we are talking about the so-called alternative (to patriarchal norms and standards) strategy of gender socialization, which with reference to psycho-pedagogical practice is brought down to the following benchmarks [8]:

- foreswearing educational influences differentiated by gender; neutralization and mitigation of socially determined differences between persons of female and male sexes;

 lack of focus on their "special predestination" and recognition of interchangeability of female and male social roles;

- implementation of ideas of gender equality in different spheres of life;

 providing each person with freedom of choice, encouraging individual interests and preferences to which the person's sex is irrelevant;

- creating conditions for opportunities to be different girls / women, and different boys / men.

- bringing up gender unbiased children.

One of the positive trends in terms of psychological and pedagogical support of preschoolers' gender socialization is the emergence of a methodological guide for the organization of educational activities in preschool educational institutions under the Federal State Educational Standard of Preschool Education ( $\Phi\Gamma OC \mbox{JO}$ ), wherein the notions of "sex" and "gender" have been correctly differentiated for the first time and true interpretation of gender approach in pedagogical practice has been presented [2]. However, at the same time, according to the data available as on date, preschool institutions' teachers themselves have mainly traditional gender attitudes [5] and, according to their pedagogical views and the content of some of their preschool educational programs used by them, they implement in practice mainly the strategy of traditional rigidly differentiated gender socialization [3; 7].

Thus, as shown by the analysis of pedagogical activity experience, the modern practice of Russian preschool education is yet little focused on the norms of gender equality, though some positive changes, including the very fact of being aware of the existing state of things, are being noted.

#### Materials and methods of research

Considering all the facts presented above, we have organized and carried out our own empiric study, the purpose of which were the content-based characteristics of gender orientations and the actual practices of educating teachers working with preschool children (a total of 80 persons; of them, 55 teachers from Nizhny Novgorod, and 25 teachers from district centers of Nizhny Novgorod region).

Our study included two stages: in the first one, we have analyzed the perceptions of preschool educational institutions' teachers about the future of their wards of girls and boys, using a modified version of N.V. Osetrova's [4] method; in the second one we have studied real educational practices of preschool teachers by way of watching over the pedagogical process in kindergarten groups (observations were carried out during several months in 14 groups of 7 preschool educational institutions in the city of Nizhny Novgorod and the city of Semenov, Nizhny Novgorod region).

#### Results of research and their discussion

Using the logic of a step-by-step analysis we shall briefly summarize the results we obtained. First, we'd like to refer to the data of the table that reflect meaningful aspects of teachers' gender orientations.

So, as the data of the first stage of the study convinced us, the teachers of preschool educational institutions, with few exceptions, mainly have traditional views regarding femininity and masculinity, according to which they associate the future of the girls with their self-realization in a family as a beloved, physically attractive wife, caring mother and competent housewife, while the future of the boys – with their professional self-realization, financial competence, ability to defend their rights, to be a physically strong and self-confident personality.

	-	
Features/Values	Girls	Boys
	(X / δ)	(X / δ)
Well-brought, educated	5,3 / 3,9	7,3 / 4,8
A successful professional engaged in favorite business	12,9 / 4,3	6,6 / 6,5
Happy in love	3,1 / 2,8	13,0/3,7
Able to make concessions to other people	6,1 / 5,4	12,4 / 5,5
Attractive appearance	7,3 / 4,9	15,9/2,8
Capable to set up a good family	2,7/3,1	9,6 / 6,1
Patriot	17,7/4,9	16,3 / 5,1
Self-confident	13,1 / 4,8	4,1 / 3,3
Hardworking	8,3 / 5,6	9,1 / 5,9
Capable to start one's own business and achieve success in it	14,8 / 4,0	9,9 / 5,9
Having real friends	11,1 / 4,0	10,8 / 4,9
Caring father (mother)	4,7/4,5	9,7 / 5,8
Physically strong, developped	16,7/6,9	3,4 / 1,7
Able to run the household	5,9/3,8	11,3 / 6,7
Delicate and responsive	6,7 / 4,5	11,1 / 5,5
Capable to provide for the one's own material well-being	15,1/3,7	8,7 / 5,4
Able to care for the own appearance	7,1/3,2	15,1/5,7
The one who achieved high social status	15,8/3,9	12,2 / 6,6
Capable to defend himself (herself), to stand up to his (her) interests	14,3 / 4,6	3,9/4,7
Financial viability	16,4/3,5	8,9/6,3
A truthful person	13,3 / 4,3	10,1 / 4,4

Perceptions of preschool teachers about the future of girls	s and boys
---	------------

Note: X – average values data (the smaller X is, the higher the degree of quality significance);  $\delta$  – standard deviation from medial values.

Thus, socio-psychological portrait of a girl in the future is endowed by teachers with the following qualities: the ability to build up a good family, the ability to be happy in love and be a caring mother, to be cultured and educated, the ability to run household, to make concessions to others, sensitivity and responsiveness, the ability to take care of her appearance and, subsequently, to look well, and somewhat less often – diligence.

In other words, teachers tend to view the future of their girl pupils only through the prism of private (family) sphere, and their activity is associated with caring for children and spouse, creating home comfort, housekeeping and caring for their appearance, which, along with being educated and cultured is considered to be a significant enough attribute of the modern woman. However, a girl's education turns out to be practically out of demand outside the family circle because such qualities as professionalism, the ability to set up their own business and succeed in it, the ability to provide material well-being and to achieve social standing are not among the priorities of the future life of the girls from the point of view of teachers. Besides, such features as honesty, self-confidence, ability to defend their interests are considered to be not typical and not significant, and such feature as patriotism is not considered to be topical at all.

Thus, teachers view girls not as independent members of social life, but as a kind of addition to their husbands and children, guardians of a family hearth, i.e. their future is perceived by them exclusively from the standpoint of the traditional stereotype of femininity.

The socio-psychological portrait of boys in the future is endowed with different features, such as physical strength, the ability to protect themselves and defend their interests, selfconfidence, high-level professionalism, being cultured and educated, the ability to provide for their material well-being, financial solvency, and, less often, being hard-working. At the same time the features that move into the background are: the ability to build up a good family, being a caring father, honesty, sensitivity and responsiveness, the ability to run the household, the ability to achieve high social standing, willingness to make concessions to others, the ability to care for their own appearance and to look

family and domestic responsibilities. Yet on the whole teachers of preschool edu-

cational institutions showed the predominance of traditional stereotype views on masculinity.

attractive. And, as well as with girls, the feature

of teachers regarding the future of the girls

were on a whole rather similar whereas re-

garding the boys we have observed that the

teachers from the regional centers showed a tendency to deviate from their stereotypical

perception as they associated their future life

not only with gender-normative features of

masculinity, but also with those socio-psycho-

logical qualities and values that do not belong

to the traditional standards of male gender

roles. So, according to their point of view, in

addition to physical strength, self-confidence,

ability to defend themselves and defend their

rights, a modern man should also set up a good family and become a caring father, be

sensitive and responsive and be able to run the

household. And the ability to provide for their

material well-being, financial viability, ability to set up their own business and succeed in it

nomic situation in the district centers, where it is not always a man who may realistically be

the main breadwinner in the family and where

there are no conditions for successful busi-

ness, as well as with personal experiences of

the subjects (they are all divorced mothers)

who dream of a life partner oriented not only

on professional self-realization but also on his

We associate this fact with the socio-eco-

move into the background.

However, it should be noted that the views

of patriotism is not called for.

Based on the obtained data, it is quite logical to expect that such opinions and attitudes of teachers as regards their pupils are reflected in their ongoing educational practice. We have found a proof of this in the course of the second stage of the study when observing organization of pedagogical process in kindergarten groups (the help in making the observations was rendered by psychology students of NNSPU named after K. Minin).

So, it was found out that for girls there is a restriction in their activities beyond cultural and hygienic skills and domestic labor, there are demands for obedience and diligence, they are oriented on interests related exclusively to home and family whereas boys are encouraged in intellectual activities, physical strength and competence (especially during outdoor walks), stimulated in professional interests (in the process of playing, drawing, reading literature), while as a rule care for their looks is neglected and appeal to their feelings and emotions is extremely rare.

#### Conclusion

Thus, as our study shows, the absolute majority of preschool educational institution teachers, both in their beliefs and in actual pedagogical practice do not tend to adhere to a widely declared in the public discourse of contemporary Russian society in general and Russian educational system in particular, democratic principle of gender equality and accountability for individual specifics of each child regardless of its sex. On the contrary, quite a number of teachers prefer to focus on traditional gender norms and standards, guided by the principle "according to the gender of the child", reinforcing gender stereotypical interests in children and, therefore, act as agents of rigidly differentiated gender socialization.

#### References

1. Andreeva A.D. Peculiarities of psychological development of preschool children in modern civilized conditions // Bulletin of Minin University. – 2013. – No. 2. – URL: http://vestnik. mininuniver.ru/reader/search/osobennosti-psikhologicheskogorazvitiya-doshkolni/

2. Budzhe T.A., Dokukina O.S., Nikitina T.A. Methodical recommendations on organization of educational activities of preschool educational organizations in the wake of implementation of the Federal State Educational Standard of Preschool Education. – M.: MCKO, 2014. – 160 p.

3. Klyuchko O.I. Models of sex-role socialization in the Russian education // A woman in Russian society. -2016.  $-N \ge 1$  (7). -P. 80-91.

4. Osetrova N.V. Human rights and gender aspects of school education. – M.: Center for human values, 2002. - 128 p.

5. Otvechalina O.B. Peculiarities of gender representations of teachers of preschool educational establishments: The author's abstract of the thesis of the candidate of psychological sciences. - M., 2005. - 19 p.

6. Radzivilova M.A. Gender approach in the education of preschoolers in preschool educational establishments // Fundamental Research. – 2013. – No. 4. – URL: http://www.rae.ru/fs/?section=content&op=show article&article id=10000426

7. Rozum S.I. Psychology of socialization and social adaptation of a person. - SPb.: 2006. - 365 p.

8. Semenova L.E. The content of the basic models of the process of gender socialization in modern society // Yaroslavl Pedagogical Bulletin. – 2009. – No. 3. – P. 143-147.

9. Solodnikova I.V. Socialization of personality: nature and characteristics at different stages of life // SOTSIS. -2007. - No. 2. - P. 32-39.

10. Shtyleva L.V., Pushkareva N.L. From theory to practice. How can we change it? // Gender-based approach to preschool pedagogy: theory and practice. Part 1. – Murmansk, 2001. - P. 94-104.

## WORD FORMATION IN TURCOLOGY: THEORY OF MOTIVATION AND NOMINATIONS

Odanova S.A., Shoibekova G.B., Zhangabayeva N.A.

Kazakh State Women's Teacher Training University, Almaty, e-mail: sagira68@mail.ru

Along with the study of language, it is necessary to study a language picture of the world in a diachronic look. This results from the fact that the history of language is closely connected with essence, outlook, consciousness, thought and practical experience of the person. The history of the person formation is a development of the world in the practical way, his knowledge and the doctrine. Knowledge and study give an ability to think abstractly. Abstract thinking is considered a generalized way different objects and phenomena that are rich in various features and properties. It is concluded form the conceptual perception of the world. Thus, the real picture of the world engages with the tongue. The real picture of being dubbed a language picture of the world, formed in accordance with certain natural laws. The real picture and subjective thinking based on existing patterns of development. Turning the world of images in the words of a person combines two things: first - a reality that is common to all mankind, and the second - national identity inherent in its nationality. They have an impact on the emergence of the word. Picture of the world did not come into contact with a man - this is the real picture of the world, and after the entry into interaction with a man, his consciousness, worldview, it becomes secondary. Thus formed the linguistic picture of the world. Consequently, the picture of the world, language picture of the world, the national language picture of the world all these concepts are characterized in this way. Linguistic picture of the world – it is a fundamental principle of the birth of language, however, it is phenomenal. Linguistic picture of the world - a language law when the motivation of any denomination. The article reveals the role of motivational theories in the Kazakh language in the creation of the name. The characteristic of motivation as a result of theoretical and practical studies.

Keywords: word, communication, motivation, word formation, derivative word, semantic phenomenon, motivational personality, motivated personality

Stable expression "language – it is a means of communication" and has not lost its relevance today. If a person is going to live forever, then this tool will consistently continue to perform their function.

If the language – it is a means of communication, the language exists because of its one way, which adds to its functions, its value.

Indeed, to enter into communication state it is necessary to say, because the living world around us communicate with each other without words, while understanding each other. Hence, even if the words are absent, however, communication seems possible. Language is inherent in all animate entities, and yet, it should be noted that the language used by the person represents different concepts, promotes mutual understanding and provides the consumer demand. As a result, a number of different grammatical changes people establish relationships with each other language. Word – the first necessity for communication.

There are many different opinions about the science of language. In his textbook "Linguistics" A. Hasenov said that word in terms of value and structure has individual characteristics, it is – part of the language, at the same time with its help people communicate with each other and understanding each other only occurs through words, because it is an overriding unity of language. This statement of the scientist proves that word is first necessary unity for the communication. With the turn in the course of time the word human worldknowledge, his views on the world around us as a result of external perception.

In general, society's past and future, formation and development of historical identity, perception of the world are eternal matters of entire humanity. The matter of language which has always been a tool of interrelations among humanity is the heart at any time. We can see how our nation's spiritual development significantly matures through language units of vocabulary which are clear facts of every period of language development, some piece of certain historical conjuncture saved in scrolls, or research of complex of written monuments showing safe characters of each era [1, 32].

Word through mental activity, comparison and contrast, cardiac perception, emotion filled with meaning and enter into the development phase. So, in the words of the unity of form language.

One of the founders of the Kazakh language, K. Zhubanov, defined the relationship between language and the word, said: "The idea – this knowledge about the man or about the world. Word – is the name of the results of this knowledge" [2, 140].

Man throug hout his life paid attention only to the things that he had received any benefit or harm. Only the differences among those herbs that can be used as animal feed, as a fuel, as a poison, for paints, for the treatment, the man gave the plant the name of Compliance. Likewise they added other things. As a result, that meant already know the thing we call the word. K. Zhubanov's adoption at that time was set out an affordable, simple, clear and understandable language, and it must be admitted that this is the correct characterization.

The first words in our language, performs communication functions used by an individual without any additions and applications. For a small child it explains the necessary thing without any attachments and additions, as well, and the first words of our communicative meet the requirements in the form of roots is not entirely clear. From this perspective, the view of K. Zhubanov that man creates words from the practice of perceiving the world and life situations, is very true.

In our opinion, the creation of new words, simple, without any additions, filling them with meaning, the spread began in very ancient times. The fact that the first words were no applications that they have arisen by comparing subjects and these subjects were called so, and not otherwise, the following example shows.

For example, if the fluid to quench thirst, called by water, and all related material on it was also called.

The fact that the external design of the words water, milk, liquid, drink the same way, as evidenced by their conceptual basis and the level of perception.

Because as well as water, milk - it is a liquid, and the color of there is similar. Only the color of milk when compared with water is whiter.

Therefore, there suffix -m indicating plural. In our opinion, the suffix -m in this case is used to indicate the density of the color of milk.

The formation of words play an important role linguistic and extra linguistic factors. For the birth of the new name must be nominative observance of linguistic and extra-linguistic regularities.

If the linguistic factor determines that the internal semantic structure of words, the performance of the valence patterns, line marking persons in the definition based on motivational laws, united in a single schema that defines the nominative individual characteristics, maintains unity of content, thus defines the marking of the new concept, the most important category extra linguistic factor is time. To the novel word semantically anchored, words, users must make a great effort. To consolidate the words in the language (connotative significant word, the word significant, variable word, generally speaking, the newly formed, but not fixed) is greatly influenced by two factors. The first, derived words take on a stable character, provided that their communicants use very often, the second – it is clear that in order to fix them in a language takes time. If the time is not enough, and the use of the word binding is quite impossible. "Will the newly formed words are necessary, whether it will be accepted by the people, it depends on the relationship with the internal semantic structure of the word and its meaning" [3, 109].

The words "ice cream", "cottage", "champagne", "stop", and others. The author of which is in the Kazakh language I. Zharylgapuly acquired today a special attraction, and what they have become a necessity for great communicators today influenced by extra linguistic factors.

Inside the semantic meaning of the words correspond directly indicating denotation values accurately and clearly correspond to the concept. The values of these derivative words can determine the features of nominative value, formed in the society.

Referring to the next word, which was formed as a result of extra linguistic factors.

For example, the word "hello"", which is pronounced when talking on the phone is a greeting. People at the meeting to greet each other, but with the passage of time while talking on the phone has become a welcome speech interjection. This indicates that the word takes on a different meaning, necessary for communicative relationship, changing its scope.

The refore, a change in the use of words depends on the application of the communicants. If we compare the words "ice cream", "cottage", "champagne", "stop", then fix the word "hello" in the language there is a difference. If the first created by the famous author, taking into account the internal laws of language, the second turned into a new quality on the basis of the inversion values.

The consolidation of both words in the language of the special place takes time. Thus, we can conclude that the language – a phenomenon that is not subordinate to the individual, having social, community, mental features, based on a coherent system. The linguistic, extra linguistic, historical factors – a phenomenon peculiar to the language system. The richness of the language, engaging in semantic development of speech, acting in various shades, is closely related to compensation needs to communicate.

Humanity is at the dawn of its inception to use the word without any affixes these words, developing in accordance with the laws of the language used for communication purposes.

In this regard, the word can be characterized as a category, performing the communication function. The language, along with the consideration of his motivational, linguistic picture of the world should make sense in a diachronic. This is due to the fact that the history of language is closely related to the essence, ideology, consciousness, thought, and practical experience of a person. The history of man – is the practical development of the world, his knowledge. A knowledge creates abstract thinking.

Abstract thinking is the way, which embodies various features of mental and items are rich in a variety of properties and qualities. It reflects the characteristics of the conceptual perception of the world. The reality of the world in this way reacts with the language.

The real picture of consciousness, called "linguistic picture of the world" is formed on the basis of certain natural laws.

The real picture of consciousness, called "linguistic picture of the world" is formed on the basis of certain natural laws. The reality and subjective thinking is based on the laws of development. When a person makes the picture of the world in words, it combines two elements: first – being common to all mankind, and the second – being characteristic of their nationality.

Both of them have an impact on the process of word formation. Picture of the world, which has not yet come into contact with a man – this is the real essence of the world, and after the entry into interaction it becomes a secondary character in contact with the thinking man, his consciousness, worldview.

Thus formed the linguistic picture of the world. Consequently, the picture of the world, language picture of the world, the national language picture of the world - all of them are characterized in this way.

Linguistic picture of the world – it is a fundamental principle of origin of the word, however, phenomenal. Linguistic picture of the world – a language law motivation of any denomination. We believe that the derivatives of words of the language, especially were developed through the semantic method, closely related to the language picture of the world. The problem of studying the derivatives of words has not lost its relevance to the present.

This is, firstly, requires research in terms of word formation, allowing the development of language diversity and richness of the meanings of words, the whole language system. That is why the study of derivatives of names created by the semantic method that should be considered in terms of derivation, it is today a major in the teaching of the language. Only the semantic analysis of the word derivative helps to identify a particular unity of the language system.

Semantics defines the phases of life tags: extension of meaning, distribution, characteristics, value and appearance of names, etc. With this in mind, we will try to reveal in this section using different vocabularies meaning of the word, his motivation.

When the value of the derivative referred to the words formed by the semantic method, we aim to describe ways to motivate them to each other. That word, evolving with the meaningful aspect acquires two meanings can be associated with the perception of the world of humanity. Through the analysis of the meaning of derivative words we consider the structure of the word. With this in mind, in this section, we consider the following questions:

- The basic concepts and features of formation of semantic structure of motivated words;

- Definition of the role of human cognition in the words of motivation;

- Semantic change in the process of word formation;

- The study of the various features of motivating words to each other.

When considering the semantic structure of derivative words by semantic approach is of particular importance is the definition of what are motivating and which motivated.

Two linguistic units (a derivative of the word and the unity that contributed to the formation of a derivative of the word), one of which is the source of derivation – motivating unity, the second – the result of derivation – motivated unity.

Motivating words, their influence on the emergence of new words has long been debated. The concept of motivation originates from the ancient philosophy. The ancient Greek philosopher Plato formulated the concept of the "world of things" and "the world of ideas". Later, these concepts are collectively known as the "inner form of the word" and began to designate the main feature of the theory of motivation.

Ferdinand de Saussure, given the rules of justification "relativity", related to the quality, activity type, quantity of any word or words, based on the free-hand, focused on the variation of the words and meaning of personal character.

In onomasiology synchronous and wordformation motivation has come to signify the basis of scientific concepts.

So, this phenomenon came to be regarded as a basis for derivation. Relevance of the research phenomenon motivating words that are based on semantic methods, can be traced from the next.

1. As stated by de Saussure, "is the word will not contribute to the emergence of each other's language development is impossible" [4, 165].

2. The role of linguistic signs, motivating each other, in the process of word formation is high.

3. Motivated relations, which are considered a particular phenomenon of motivation, have the same qualities as the system of synonyms and antonyms. This is due to the fact that their semantic facets linked.

4. Although among the derived words formed with the help of semantic methods, there are motivational communication, in their internal contents and activities there are similarities and differences.

Motivating the word has an impact on the use and semantics of motivated words.

The theory of motivation is closely connected with the theory of the category of science onomasiology. Because the birth of a new name, this phenomenon has a special place. Nomination – a multifaceted phenomenon. It is closely intertwined with the theory of motivation, addressed by the derivation. Considering separately the values motivating personality and motivated person, at the same time it is impossible to separate them from each other. Being dependent on each other, are separate words with an individual sense.

The process that exists among independent and free of concepts, we call word-formation process, and concepts that are the basis of this process, called word-formation concepts.

The derivative word formed by a semantic method – it motivated the floor, having a special semantic structure, which arose as a result of the well-known linguistic sign, the real picture.

Russian scientist D.N. Shmelev characterizes the term "motivation", "Motivation ... full or partial output of the complex whole of the value of parts of the whole" [5, 101].

Considering the special theory of motivation in the derivation as a research object, S. Ulukhanov claims that derivational motivation at least two words will come in the future, motivational attitude.

a) that the two words are derived from the same root,

b) says that the essence of a word passes to the second fully or partially [6, 7 pp.].

In determining the features of the derivatives of words in the different semantic structures with the aid of the semantic approach different seme, drop-down in the process of language analysis, occupy a special place. The initial value of the derived word to other concepts serve as guidelines and the starting point.

From this we define the two positions:

- That the words involved in linguistic analysis, are the same root;

- It can be argued that any word, participating in the linguistic analysis refers to reality;

Analysis of the word in terms of its meaning – it means to analyze it from the point of view of the law of motivation.

Motivating words based on its structural and semantic features, and sound envelope of speech – on the lexical and structural relationships.

Russian scientist O.I. Blinov explained basing words with such scheme:

Sound shell

## ★ main form

primary importance

### Ł

### Lexical meaning [7, 16].

The clarification of the word usually refers to the fact that it consists of a unity of sound and meaning. O.I. Blinov's explanation in the definition of the word motivation is very close to this statement.

First, a word consists of sound envelope, and secondly, a sound membrane forms any form, thus believe that derivational form inherent value, after which comes the lexical content. The Kazakh language scientific papers on motivation, a little bit. The fact that the terms have different names indicative of failure of the research. For example, the terms of motivation, the basis of causality are widely used.

Although in recent years, scientists have recognized the term motivation, however during its application unanimity not observed.

In our basic science – the language – the names of plants, their study, the lexical composition, structure, morphological, lexicalsemantic and grammatical features, as well as an explanatory note describing the complete transmission path in dictionaries – all this is reflected in the research scientist B. Kaliev "The names of the plants in the Kazakh language".

Regarding the timing of the name, its features, and the author expresses the following thought: "We know that people's history originates from the depths of centuries". In this case, to argue that "it is the name of the primary" and "is the name of the second", to be born with these people, to live together and to chronicle the emergence of each word. Only then we could get a comprehensive answer to this question. This, of course, not the power of anyone. There fore, we assume that one of the oldest types of plants – this is probably the name of the tree or branch, vegetable or fruit, or grain plants related family [8, 5].

One plant can have several names, it is, as the author claims, is dependent on the terrain, the soil, for example, zholzhelken – plantain, suzhapyrak – wet leaf, another name given to them, depending on who uses them for food, for example, bakazhapyrak – list for frog, tartarzhapyrak – attracting sheet: "assignment of different types of plant, the reason for a large number of synonyms in our language the names of these plants, as well as the existing multi-variant words associated with the selected motif while assigning names" [8, 49].

At the same time, we note that in the process of naming the people based on different properties, signs, symbols, quantity, quality, movement, destination and other reasons.

A.B. Salkynbay who studies it as an object of special semantics, clarifying the role of the theory of motivation in word formation, emphasizes its necessity, causality, the main role in the formation of any new words. Various linguistic data demonstrate the scale of motivation as the research object.

She proposes to consider ways of motivation separately, as the root of motivation, rationale, basic rationale of the system studies, unsystematic studies [9, 70].

The textbook for higher educational institutions "Word formation in the Kazakh language" given the following definition: "Motivation – semantic and structural study of derivatives of words in the sense of its components make up.

Given that preformative theory considers the words that take on special importance after the root cause of the foundation and meaning in the structure preformative sense nominating names in separate sections of the language sphere of motivation of word formation is seen as a separate branch of linguistics" [10, 97].

The Republic of Kazakhstan keeps working to increase the credibility and relevance of the state language in all fields, and especially in the professional field. President Nursultan Nazarbayev noted the high unifying role of the state language. In his address to the people of Kazakhstan, he spoke of the need to enhance its role in the state. In the light of national revival and improvement of the country's competitiveness, the emphasis was laid on the language policy. The state program of languages development for 2010-2020 in the Republic of Kazakhstan emphasizes the specific areas of work to raise the standing of the state language. The President in his 2004 address noted the need to apply innovative technologies in the field of education in this respect [11].

Special scientific studies were carried out that the new name was created as a result of the preservation of certain language units in Kazakh and Turkish languages and published in scientific publications in the national and international rating and proved in the scientific community [13].

Questions motivational theories have been considered in the U. Adilbaeva, M. Sarsembayeva, Zh. Akimisheva's written on the basis of the master's thesis.

U. Adilbaeva in their research paper on the motivation of names of plants in our language, the foundation took motive, theory of motivation, their role as the terms, place, and description of the conceptual motivation in other areas of science, communication theory word formation nomination, based on the types of plants.

He considers motivation for plant names into 4 parts:

– A sound motivation,

- Morphological and synthetic motivation
- Syntax and analytical motivation
- Lexical and semantic motivation [14, 11].

Researcher based separation methods on 4 kinds of word formation gives the following definition of motivation: "Motivation – section lexicology that studies the connection between the word and the object."

If the word-formation motivation is considered to be regularity in the transition to the name, the lexicology it can be the object of study only after full readiness.

And motivation is considered word-formation process and acquires the form of phrases. The same view is found in Zh. Akimisheva's scientific work "Motivation names ornaments and symbolic nature (lingvo-cultural aspect)":

"Motivation – this is one of the areas of lexicography, which deals with the nature of language development and its motivation in a certain period, is aimed to study the connection between the word and its meaning at the time of origin of the word" [15, 18].

The author speaks of the dispersion of research scientists' nature of the relationship between the object and its name: claims that they blend with the terms of motivation, motivated, motivation, motivate, base proof. Known to science:

- Full motivation;
- Partial motivation;
- Motivation system;

 Systematization by dividing non-systemic similarity of motivation are in the works of all researchers.

Comparing the determination, motivation data in Kazakh and Russian linguistics, summarizing the definitions given in the concept of motivation section of the Kazakh language, we can conclude:

The fact that phonetic features of Kazakh and Turkish languages are associated with the wordformation is also published in foreign publications [16].

In conclusion, motivation - a pattern that satisfies the human need in a language based on meanings, by motivating all the primary word in the language (phonetic, semantic, semantic, synthetics-semantic, analytical and semantic) and form a common language picture of the world.

#### References

1. Yermekova T.N., Odanova S.A., Issabekova U.K., Abdirassilova G.K. The role of historic-linguistic factor in development of Turkic civilization in meddle ages // Life Science Journal 2014;11(4s)320-330

2. Zhubanov K.K. Qazaq tilinin zhogary kursy. – Almaty. Qazaq universyteti. 1999. – 112 p. 3. Salkynbai A.B. Istoricheskoe slovo-obrazovanie (semanticheskii aspekt) (in Kazakh language). – Almaty: Kazakh University, 1999. 309 p.

4. F. De Saussure. Trudy po yazyko znaniyu. – Moscow: Progress, 1974. – 695 p.

5. Shmelyov D.N. Problemy semanticheskogo analiza leksiki. – Moscow: Science, 1973. – 280 p.

6. Ulukhanov I.S. Slovo-obrazovatelnaya semantika v russkom yazyke I principy eio opisaniya. – Moscow: Science, 1977. – 255 p.

7. Blinova O.I. Yavlenie motivacii slov. Tomsk: Pub. Tomsk University, 1984. – 191 p.

8. Kaliyev B. Nazvaniya rastenii v kazakhskom yazyke. – Almaty: Gylym, 1988. – 159 p.

9. Salkynbai A.B. Istoricheskoe slovoobrazovanie (semanticheskii aspekt) (in Kazakh language). – Almaty: Kazakh University, 1999. 309 p.

10. Salkynbai A.B. Slovo-obrazovanie v kazakhskom yazyke (in Kazakh language). – Almaty: Kazakh University, 2003. – 271 p.

11. Naraliyeva R.T., Mukhanbekkyzy L., Toiganvekova M. Sh., Sultanova B. M. Modern methods of teaching Kazakh as foreign language: search, innovation, quality, result // Review of European Studies. Canada, Vol. 7, No 7 June 2015.

12. Economy in the Kazakh language: law or phenomenon? \\ Life Science Journal 2014; 11 [4s]. //http://www.lifesciencesite.com/lsj/life1104s/066\_23817life1104s14\_370\_372. pdf370-372

13. Adilbayeva U. Motivacia nazvanii rastenii v kazakhskom yazyke (in Kazakh language). Cand. dis. in Philology: 10.02.02. – Almaty: KazNU named al-Farabi, 2001. – 121 p.

14. Akimisheva Zh. Motivacia nazvanii ornamentov I priroda znakov (lingvokulturnyi aspekt) (in Kazakh language). Cand. dis. in Philology: 10.02.19. – Almaty: KazNU named al-Farabi, 2004. – 120 p.

15. Vowel Harmony is a Basic Phonetic Rule of the Turkic Languages

16. Shoibekova G.B., Odanova S.A., Sultanova B.M., Yermekova T.N. // Vowel Harmony is a Basic Phonetic Rule of the Turkic... ijese.net>makale/646.

## THE NATURE AND THE ESSENCE OF YIN AND YANG IN THE CONTEXT OF SPIRITUAL EVOLUTION

<sup>1</sup>Kokumbayeva B., <sup>2</sup>Temirton G.

<sup>1</sup>Pavlodar State Pedagogical Institute, Pavlodar;

<sup>2</sup>Central State Museum of the Republic of Kazakhstan for Research, Almaty, e-mail: galtem.kz@mail.ru

The paper deals with and solves a problem of social and philosophical analysis of Yin and Yang in the context of an integral historical and cultural process. Based on thorough understanding of its two major stages – matriarchy and patriarchy, the concept of the next stage of post-patriarchy or neo- matriarchy has been substantiated. An Introduction presents a holistic view of the chosen topic of discussion justifying the necessity of its further theoretical development and appraising its significance in modern practice of life. The main part is dedicated to the stages of human progress: matriarchy as the first, patriarchy as the second and neo-matriarchy as the third stage of spiritual evolution based on the author's viewpoint. Conclusions and some prospects for further research are outlined in the Conclusive statement. The study of the matter was carried out based on the classical philosophical writings and the works of contemporary researchers.

Keywords: Ana (Mother), matriarchy, patriarchy, neo-matriarchy, love, Morality-Charity, a new generation

The study of yin and yang in the context of the integral historical and cultural process is a genuine concern of the modern society. It is conditioned by a series of circumstances, firstly, by the absence of scientific development of the problem as a philosophical and scientific topic. This especially applies to the definition of the intrinsic features of the yang and accordingly of the patriarchy, a question actually demanding serious philosophical thought. Secondly, the society has mixed feelings about a woman both in philosophical term and in modern practice of life. And, thirdly, these key constants of humanity have not been raised as problems of philosophy and social and humanitarian knowledge.

*The purpose of the paper*: philosophical inquiries into existential and essential foundations of the human world as natural and social constants determining future spiritual evolution of humanity.

The main tasks and ideas are interrelated and formulated as follows: to analyze the basic approaches to understanding the nature and the essence of the matriarchy and the yin; to make philosophical and cultural analysis of the matriarchy and the yin as cultural and genetic foundation of anthropogenic civilization; to draw up a general picture of the nature and the essence of the patriarchy and the yang as natural historical and cultural process continuation.

The paper is a product of the author's vision and individual view on the problem of transformation of yin and yang in the course of further spiritual evolution that can become a *certain contribution* to the relevant field of knowledge.

*Study method* is based on a comprehensive and systematic analysis of the subject being

analyzed with involvement of general civilizational and regional approaches, as well as comparative studies of cultural, historical and sociocultural approaches.

In the process of research into the topic we have arrived at the following results answering to the novelty status: it is established that substantiality of spirituality as an ontological principle result in attributive qualities of anthropogenic civilization; we studied internal laws of the nature and the essence of the matriarchy and the vin in the context of cultural whole and defined their features in each cultural and historic period on a large scale; we developed individual approach to review the patriarchy and the yang from the perspective of paradigm of the related sociocultural reality. Based on the material of cultural history it has been established that in spite of existing problems and contradictions, a consequential global spiritual evolution process is going on.

### Main part / Discussion

Humanity as an integrity is a creation of a complex outer space process, its essential and natural part. In modern times, having travelled a long way from matriarchy through patriarchy it entered its evolutionarily mature age. Right now the humanity reached the stage, when the results of the past are being reflected and long term future is being conceptualized. And therefore modern age is the enquiries into the truth of existence: a man reflects on the earthly course and is searching for meaning in his live. This explains the degree of complexity and ambiguity of modern age, which is at present in the bifurcation point.

Thousands upon thousands facts indicate to the effect that the world is on the verge of

milestone changes. It seems that the air itself is permeated through by certain vibrations implicating these invisible but clearly felt changes that are about to take place. Another feature is that those vibrating currents affect fundamental principles of human existence and form a continuum in which the key stages of human history represent the highest conceptual unity in an immanently meaningful relationship. In this sense, the yin and the yang as the key constants of human being are universal, universally significant unity of "fundamental nature and existence", in which fundamental nature "radiate the seeming into itself so that its differences take shape of independent realities" [1, p. 327].

# Matriarchy as the first stage of spiritual evolution

Holding thesis about spiritual character of human evolution, we proceed from an understanding of the immanent nature of spirit as a living processual phenomenon. Spirit is a primal phenomenon, representing existential structure; its laws are as eternal in this world as natural laws of the universe are indefeasible. They are of outer space origin and fundamental to continuous evolution, based on such a universal spiritual and ontological foundation as love. Its genetic source comes from the Creator himself and contains three interconnected historical stages such as theogenesis; comogenesis; anthropogeny (Empedocles). This substantive core of theo-anthropo- comogenesis is the very essence of existence. The divine spark of life of the Creator, who created the Universe with love, acquires human qualities in anthropogenesis. Indeed, love of a mother for her child is divine in its spiritual essence. It is a key constant in history of humanity. And in our opinion, it was a great love of Mother for her child that to a great extent allowed the mankind to survive in the extreme conditions of the Spaceship Earth.

German scientist J. Bachofen had a similar take on the issue. When he studied the question of matriarchy as the beginning of human history, he said that significance of the yin is determined by the fact that Mother stands in the prologue of life, assisting in transitioning the microcosmos from unmanifested world to manifested one. In "life full of violence" "magic of motherhood" "acts as a divine principle of love, unity and peace. While taking care of her kids a woman learnt sooner than the man to spread loving care beyond herself over to another human being, and to direct all the ingenuity that her spirit has to support and improve other's life" – writes the researcher [2, p. 231]. Thus, the author undertakes analytical discourse of cultural and social female and male principles, emphasizing interest on the historically primal phenomenon.

The scholar's conclusions about the status of the yin at this stage of history of humanity are confirmed by the data from the cultural history. The fact of the beginning of human cultural history as an age of matriarchy survived in many artifacts. Totemic beliefs are all about a woman – bird that "imparts warmth to global egg" [3, p. 412]. As it is known, the bird image holds a specific place in the mythology of the nations of antiquity. The ability of the feathered tribe to fly was perceived by our remote ancestors as a supernatural gift, hence the birds acted as symbols of supernatural nature such as top, sky, sun, thunder, wind, freedom, life, inspiration, prophecy. There are a lot of birds – symbols since each people had their own images (a crane is a symbol of eternal life, Japanese longevity; a pigeon is a harbinger of death in India). The typology of birds ranges from existing species to fanciful images (firebird in Russian tradition, the roc from Arabic stories).

An important role as per beliefs of ancient people was played by images of a woman-bird, who was believed to be a foremother of human race, which roots back to the storyline about Goose – Swan. They have the most ancient Central Asian origins and can be traced in the beliefs of majority of the Turkic-Mongolian peoples such as Kazakhs, Yakuts and Tuvinians, Bashkirs, Turkmen and Kyrgyz, Shorians, Tofalars and Sayan-Altai Turks, Mongolians and Buryats. In this context, the Goose-Swan was also revered by Germans, Finno-Ugrian peoples, Egyptians, Chinese, Greeks.

In addition to the image of Holy Bird, the image of mother is portrayed in the Paleolithic "Venus" statues. They are so named (in our opinion, unfortunate naming) sculptural images of Paleolithic Stone Age, which emphasize the reproductive performance of women as a cult of mother. As for the "Venus" as the cult of a beautiful women body it is a phenomenon of a different Antique cultural and historical situation.

The motherhood in human history was embodied in the first musical genre of all the peoples of the Earth – cradlesongs. They can rightly be characterized as universal genre of world culture. For in whatever language the mother sings a lullaby it is always recognizable different from other genres. It is due to peculiarity of musical language of the lullabies such as intonation full of love, affection, tenderness and care. The cradlesong therefore is the first lyrical hymn of love in the history of humanity, the love of a mother for her kid. And that's why the first and, perhaps, the only musical language in international culture that really does not require translation, it is understandable to all people of Earth [4].

Thus, the status of woman and as a consequence historical implication of matriarchy is exceptionally great. It is the beginning of formation of universal human civilization. Our remote ancestor lived in incredibly difficult and at the same time unique conditions, because his home was a great and beautiful, mysterious and threatful natural environment. The nature caused infinite natural disasters to the ancient man; he was surrounded by a wild animal world, mysterious plants. However, after going through all the trials and hardships, the man managed to survive, **stand the test of time**.

And not only to survive. From the first steps of his conscious experience, the ancient man aspired to live reasonably, in harmony with nature, in harmony with his family, tribe, with himself. At that time the key universally human significant constants of spiritual and practical existence have been developed, in the environment of which the language and ethical principles, myth and religion, art, philosophy and science were shaping up [5]. There were formed the key constants that turned out to be primal for all subsequent human development. An essential feature of the vin that gained momentum during the matriarchy period is that the answers to the main questions including the discourse about existence and duty have been found. In this context, anthropo-socio-cultural genesis can be rightfully defined as a crucial stage in spiritual evolution since the foundations were created for further cultural and historical development.

## Patriarchy as the second stage of spiritual evolution

Philosophical and scientific analysis of the first stage presented herein looks like perfect idyll, "Golden Age", nostalgia for the past. A natural question arises: how much does the sketched picture correspond to scientificallybased truth? Whether the existence of matriarchy is really so integral, harmonious and interrelated? – The answer can be as follows. It corresponds in the most general terms. But this integrity is so generalized that many important details remain beyond our vision.

Let us exemplify on the material of the way of existence of a human being in the world. We advance view, according to which the parent society was at a certain evolutionary phase. Immediate presence in the truth of existence turned into its reverse side eventually. Biological (natural) principle of self-preservation never fails. In order to survive in the spaceworld the force and the power are cultivated. An ancient society, to which the patriarchy is rooted back, is permeated with the idea of omnipotence of a human being. "There are many wonderful forces in nature, but there is no one stronger than a human being", sings a choir in the Sophocles tragedy "Antigone". Therefore, human being is depicted here in all his power and glory, his power and mind are celebrated. "I am powerful, I can change destiny by myself, the power of those who are born in the steppe is great!" - proudly echoes the ancient nomad Engidu [4, p. 42]. It is significant that the image of power is preserved throughout the subsequent stage of human history, reaching its apogee in modern image of American culture, life, human shape, all that is defined by scholars in culture studies by the term "Americanization".

In the society of matriarchy, the Cosmos was appreciated as the "house of Being", "as spiritual substance and spiritual existence of a Man" [5, p. 229]. The next patriarchal period undermines the fundamental principles of being ideologically and meaningfully. The original animated Universum falls into Cosmos and Chaos, spiritual and material principles, heavenly (divine) and earthly (secular), life and death, life and culture. Culture is, further the world is "here" and "now", earthly "here is being" of a human. Sociocultural space more and more takes the features of tangible, materialized reality. Accordingly location of the human being in the World is determined by horizontal society with its "material and existential foundation".

So organic distinction, typological characteristic of the yang and thus the age of patriarchy is originally and ontologically defined as "a stable inconsistency giving rise to increased dynamism of its self-development" [6, p. 61]. A key precondition for its formation and development is the condition under which the world is plunged into its completely new state of achieving progress on the way of material civilization. Epicenter of this period becomes a city, characterized by intensive development of economy and priority of economic factor. It is not by chance that achievements of urban civilization are related to crucial nature of material well-being. Hence casual explication through economics typical of Marxism as historical materialism is an objective reflection of the patterns of that time. Therefore, it was adopted

## Philosophy

as a universal methodology in social thought. Hence, the slaveholding formation as a higher stage of development compared to the primitive communal system was extrapolated to the entire history of human culture. As a result there was formed a paradoxical point of view according to which civilization as a socio-cultural phenomenon, as a spiritual progress is associated with slavery ...

Man's handwriting is clearly read throughout the period, the history of which unfolds in interpretation of experts as opposition, confrontation between conflicting parties, history of wars, defeats and victories, confrontation between nations and states. But there is more to come. Only the great yang is capable of placing a human being on a pedestal, declaring him to be apex of creation. The cult of the strong menfolk and reasonably logical principle is extended to the history of human society and culture. which is revealed as a culture war and bloody religious activities between systems, trends, tendencies within the same spiritual teaching. And here is the same struggle, victory, "global" expansion, interpreted as a cultural progress, another spiritual step and achievement. The fighting spirit, to borrow the words of the poet - "unending battle" penetrates into existence of science. A scientific discovery makes his author rather miserable during his lifetime. he faces psychological pressure from the society. And most often only when he is no more, he gets what he deserves. And maybe the most dramatic situation is in the history of philosophy and art, which contain a lot of bloody ends and high tragedies.

Socio-cultural field at that time belong to the yang, thanks to which humanity has gone through an important school of life, no less and in some cases perhaps even harder than in the matrilocal period, since all efforts were directed towards the process of struggle, antagonism of opposites. This line had its logical extension in the New European philosophy, namely in critical reflection in other words negativity principle, as Hegel called it. It should be specially noted that we proceed from the premise that critical reflection (doubt) as an example of a particular manifestation of the great yang was explicated, in Post-Modernists parlance, not in a destructive sense, as a gesture of negation, but as a positive methodology, an obligate stage in world history. This path allowed searching for some reliable point, after finding which humanity started moving in the opposite direction. It built on its foundation a building in which all those phenomena, the existence of which had been earlier subjected to criticism,

received their own place and their explanation. Much of vestiges of the past were rehabilitated on this "way back" as modern society was becoming more and more aware of its truth. Truthfulness therefore is the thing that humanity was seeking for and with the help of which it has to build the future.

Another peculiarity of the patriarchy period is worldview attitudes, which received clearly pronounced anthropocentric nature. The fundamental nature of the attitude to the world turns out to be by definition of K.A. Abishev the category of force "in its various variations beginning with elementary physical vigor and dexterity ending with many other properties and means to gain superiority". Accordingly in the background "and sometimes even beyond such a system of values" happen to be "all sorts and variations of weakness" namely such moral qualities as kindness, justice, mercy and others that are referred to in such a grid of reference to weakness categories [7, p. 140].

Such an existential foundation as love was also subjected to a cardinal transformation in anthropomorphic civilization. New characters came to the forefront replacing preceding Mother and Child. They are a man and a woman and accordingly love between the man and the woman. It is not a mere coincidence that this topic becomes a leading leitmotif of cultural treasury common to humanity.

In history of culture there are many examples of sublime love between the great yang and the great yin related by spiritual tonality. Culmination of such a feeling is the cross of Christ, the way of Christ and the great male principle as a symbol of the strong menfolk, who sacrificed his pure blood for life as a spiritual future.

And yet, in patrilocal age, which began with cult of body, the stage of physical perfection, as we go forward the more bodily principle prevails. A plastic beauty, a free sculptured body becomes a kind of standard and model to understand the reality. Principle of perfection of physical body as an instrument of perception and cognition of the world around us was completely fulfilled by the ancient Greeks and their successors - the Romans who were at its origins. Representing the author's unified theory of evolutionary development of humanity an independent researcher from Kazakhstan writes that at the next – the fifth – step the Europeans have developed the principle of Reason [8]. The result of the Reason – Logic stage is truly global: an object lesson is that a man comes to understanding that possibilities of the male rational and logic principle

are limited. More and more often when searching for answers to the ultimate questions of being, he addresses to the emotional nature of the yin. More and more confidently guided not only by common sense, he deems it appropriate to have a union of mind and heart with the leading role of the heart center.

The highest achievement of patrilocal age thus is that humanity, having taken a philosophical approach, has prepared a new cultural and historical stage. Continuity, dynamic integrity is found in the fact that matrilocal stage is an integral part of spiritual future, which ensures the continuity of being, carrying out this mission directly in a spiritual and practical capacity. Therefore only the synthesis of spiritual practice of matriarchy and patriarchy is a condition for formation and development of the next higher stage – postpatriarchy or also known as neomatriarchy.

# Neo-matriarchy as the third stage of spiritual evolution

The theme of Future, futurological measuring of society and culture is perhaps the most auspicious for showing limitlessness of human imagination. Inexhaustibility of human wisdom, boundless scope of imagination are manifested even in such a disciplined sphere as scientific thinking. Futurological problematics occupy the minds of all thinking humanity because it represents not only purely academic interest. Its solution requires rethinking of the whole history of humanity, formation of which is one of the eternal mysteries.

One thing is undoubtful that over the historically foreseeable period the history of humanity was twice subjected to conceptual transformations, namely matriarchy and patriarchy. Hence, proceeding from the analysis made it is possible to present a prognostic future pattern, defined here as neomatriarchy. A convincing example of the above is a linguistic material namely international universal "an", which goes back to archaic language of the ancient communities. The word "anshy" - a hunter is formed from "an" -, then "ana" - mother. Thus the word formation line of "an – anshy – ana" indicates to inseparable ties of an animal and a man, or in philosophical language to spiritualized character of the relationship "World -Man". The presence in this word of the syllable "an" also goes back to animism, which is no doubt interrelated genetically semantically and functionally.

As for the word "ana" it has in our opinion a more recent origin and dates back to the time of dual mythology, when binary semantic oppositions were formed such as "life-death". "heavenly-earthly", "male-female". In other words, when a single has fallen into two (another "an", or "an" of the opposite sex). It makes sense to note that birth of microcosmos should not be interpreted in a simplified straightforward manner. The point at issue is not that the human being was at first androgynous, then bisected. Language material shows rather archaic thinking, worldview of the ancient people, according to which the World and the Man made a single whole. Hence, here the point is not that the birth of a human being was the birth of a physical / biological entity in the earthly world. The above mentioned words imply the attitude of ancient communities towards true character of human being.

To continue philosophical discourse we would like to note that the word "ana" up to now preserves its sacred element as a cult of mother with many peoples: Turkic-speaking, Indo-European (Ana, Anna, Ani, ancient name of <u>Yerevan - Aini means mother</u>). Slavic peoples transformed the word "ana" into the pronoun "ona" (she), referring to the female regardless of her social status and age. In other words "ona" (she) is a female infant, a girl, a woman, and a grandmother. As can be seen from the above both Great Beginnings reached a high point of development on the Eurasian Continent, which is proved by both linguistic material and treasury of folk wisdom. As Barthold believed the status of women was better among all nomads than among sedentary Muslims. He explained it by the fact that a woman was a committed helper who endured hardships on an equal footing with men [9, p. 180]. A girl was believed to be future mother hence a destiny of the family, tribe and of the whole people depended on her. This idea has been reflected in the Kazakh proverbs such as "Kyz-ultty urpakpen ulastyratyn uly kush" ("A daughter is a great power since the future of the nation pivots on her"); "Kyzdy kurmette. Kyz – bolashaktyn anasy, argy urpaktyn azhesi" ("Respect the girl, your future as well as the future of your descendants depend on her") and others.

If we translate above mentioned into a philosophical language, at the dawn of human history "Ana" (Mother) gave birth to "Ul" (Son), who created "Ult" (Nation). In other words, universal sources of anthropological multipurposeness are preserved here.

It should be noted that the yin and the yang as key constants of human existence can not be reflected in all their diversity and entirety, because throughout the history of society they are subjected to dialectical change and development. Their interaction to a great extent determines existential and value-based principles of civilization and its fundamental properties such as stability or instability, thus being the most important foundations for existence of human community and culture. Therefore at the time of instability of spiritual, cultural value systems, the necessity arises to enter into completely new (well forgotten!) "relations based on mutual understanding and equality" as well as the necessity for rethinking the key constants of human existence, including nature and essence of yin and yang in the sociocultural aspect [10].

A new sociocultural reality puts humanity to new tasks. In our opinion such prolegomena is in demand of philosophy which accumulates spiritual experience in unity of past and present, truth, goodness and beauty in the context of socio-philosophical construction of the future of humanity. Holistic analysis of radical changes taking place in contemporary world including first of all transformation of ontological foundations of human existence is becoming essential as irreplaceable knowledge-based tool of understanding of the fact where society is now and where it is moving to. And futuristic perspective of understanding of human existence represents requirement of the moment. Therefore before taking any decision it is necessary to make a comprehensive study and a profound analysis of the future.

Proceeding from analysis made the author thinks that in the future of humanity the yin shall be growing in importance being demanded in its fundamental nature. Since only spiritual, genuinely human union of the yin and the yang can contribute to formation of modern society's sense of responsibility for the fate of earthly civilization. This is the essence of human evolution significance of which is relevant both for the present and for the future.

This problem causes concern of many contemporary researchers who highlight the essence of the problem in the context of human civilization as a logical continuation, as a new step in human progress on the planet Earth. According to the researcher Edihan Shaimerdenuly Sabit, a new cultural and historical stage is related to the great yin, but "requires of all people responsibility not only for their actions, but even for their emotions and thoughts" [8]. Mother stands in the prologue of life and therefore mothers – women are especially capable of receiving information from space. This knowledge will enable them to exercise a dominant influence on public consciousness and avoid dead end in human evolutionary progress. That is why Mercy, the main evolutionary principle of the sixth stage "most corresponds to the Yin", argues the author [8, p. 112].

The above means that content of the yin changes radically. In the period of matriarchy mother was primarily a preserver of hearth, fireside comfort. During the neomatriarchy, the great yin has to create a new spiritual and moral Evolutionary stage. The essence in this case is that this great challenge to reach the most difficult spiritual levels is laid upon the great yin.

In connection with the above, there arises a problem of rethinking modern sociocultural reality. We are interested in two aspects. First is the society as an entity; second is the younger generation playing the most significant part in modern society.

"Let's start with the latter, the rising generation. What is it like? Is it like organic cosmos or expanding universe? Is it possible to model / represent social portrait of the modern youth? Or is it an unsolvable problem?" [11]. These and many other questions are put by present-day being, which clearly demonstrates the uniqueness of the youth. The search for answers to these and other questions is significantly complicated by the fact that apparently there is a long-standing necessity for social and philosophical re-evaluation of rising generation, the growing reality, whose status is on the rise. After all, it is the most dynamic part of society, that may give rise to a source of "rebellion" in the society. The situation is aggravated by the fact that in the concepts of "neomodernization" the notion of a man of today "is not considered any more as a symbol of the desired effect of modernization process, rather it is recognized to be an indispensable condition for economic start" [11]. It is clear that customary reducing to "economic" man, "technological" man and other definitions is conditioned by the time of market relations: "it is impossible to achieve stable balance of the lines of economic development without adequate existential-axiological objectives in social reality. No less important is the turn in our time of personalization of the society from the "eternal" philosophical question "Society -Personality" to "Personality – Society", that means to the "lifeworld" [11, p.786].

Here we should pay attention to such phenomenon as Indigo children (as defined by American scholars). This phenomenon as it is known can be defined without exaggeration as an international trend and brand that is a subject of a particular interest of special scientific knowledge (psychology, pedagogy), outside

## Philosophy

54

scientific and near-scientific forms, theologians [12]. Moreover, scholars believe that they represent the next – the sixth –stage of humanity evolution. And, indeed, Indigo children as someone special, provide an opportunity to philosophically reflect, realize and actualize human, simply human as global. Their coming raises fundamentally new tasks before humanity. The novelty lies in the fact that the problem of rethinking of the distance covered and forecasting future is updated. History suggests us the answer. The new generation is way out which seems to be a conscious transition to a new stage of spiritual evolution – Morality and Mercy.

New children have already been brought into being. It's time to act. In other words, the new time brings forward the new tasks, solution of which is crucial for the future of the Earth and people of Earth. And the fact that this process is taking place not in ideal (spiritual) conditions, but under the conditions of market economy, proves that humanity has reached a critical point, a peak phase, when it requires overcoming difficulties, spiritual and creative breakthrough, spiritual and moral order as a revolutionary-creative act, as a qualitative leap into a new world of human existence.

Now more than ever it is important to understand that any sphere of activity is first of all human and humanity test for moral viability. Only on the principle of morality, having cultivated infinite love to the environment, we will be able to make transition to a higher level, and its awareness is the most significant step towards the true humanity progress. It does not mean that before it, earlier, the human race was immoral. Morality has always been a leading principle of human community; it has already been inherent in the age of matriarchy. Along with this at the time of childhood of human race it was a straightforward, unconscious morality similar to the child's spontaneity. Because our remote ancestor was a child, he was in the stage of evolutionary childhood. Naturally, he was at the age each of us was through. And by the way overwhelming majority considers it to be the happiest period. There was even formed a stereotype of a cloudless childhood. And if we project this stereotype to humanity as an integral organism, doesn't it mean that an archetype of the "golden age", glittering time on the Earth is not a myth, idealization, romanticization of past, that it is a fact of life, such an existence of culture, nostalgia for which overwhelms our souls? [13]. We, now living, are not destined to return to the time of childhood, since we are at a different evolutionary stage

(as well as it is impracticable for each person individually). But if we follow the above stated views (and they are correct!), then we, modern humans (*adam*), have to create, create the most difficult, we have an honor to build the most difficult stage – Morality – Mercifulness, and therefore humanism – "*adamgershilik*" – must receive universal human sound.

Concluding social and philosophical understanding of the stated problem, we have to note that the world is developing in the most unexpected directions. At the same time, implicitly a principle of repetition / return, "recursiveness" (from the Latin recursio – "return") is in force. It is traced in various areas of society and culture. The essence of the recursive principle is based on the return to itself or repetition and selfreproduction according to algorithm of its own unwinding on the analogy, due to which the system becomes more complex. Becoming more complex, the system is each time added on to a dynamic wholeness, which at the same time itself includes many complications.

This is by no means an automatic principle, but the possibility of transition of humanity to a new stage of spiritual evolution. Will it be able to make a new spiral turn – depends on itself.

## Conclusion

In conclusion of philosophical understanding of the existential and essential foundations of human world as natural and social constants determining spiritual evolution of humanity in a futurological dimension, we have to note that we have set and solved the following tasks: provisions have been analyzed to understand nature and essence of the matriarchy and the yin; - provision on matriarchy and yin have been substantiated as the basic cultural and genetic constants of anthropogenic civilization; - overall picture of nature and essence of the patriarchy and the yang is shown as a logical continuation of historical and cultural process; – author's view is given on the problem of transformation of the vin and the yang in the course of further spiritual evolution.

At the same time, it is impossible to highlight in details all problems related to yin and yang, or provide extensive coverage of problems of spiritual future of humanity in one paper. We will briefly point out some problems to be studied in future. For example, it is such a theoretical issue as more intensive theoretical study of conditions that contribute to the emergence and development of the essential features of matriarchy and patriarchy and accordingly of the yin and the yang as the entelechy of human life [14].

## Philosophy

Such an urgent problem as a new generation with cosmic mentality and much more developed psychic (extrasensory) capabilities is a logical continuation of the above and closely connected with it. Therefore we, the elder generation (as befits all wise people with spiritual experience) have to unobtrusively form relevant world attitudes and world outlook. Because we have to repeat that highly developed mentality of the new generation without aim and direction of civilized "fathers" may cause irreparable damage in the future. Unpredictability of situation is predetermined by the age peculiarities inherent in the youth, which does not fully realize the consequences of its tribal nature. It is a spontaneous mentality that urgently requires wise and careful upbringing. It has a more terrible destructive power than nuclear disasters, ecological collapse and force of nature. However, one is inextricably connected with another like microcosmos and macrocosmos. And yet, the garland of victory in this universal duet, apparently, belongs to a human being who is an action force of this cosmic process. Therefore attention to the new generation, study, formation of space mentality is the most urgent task of our time.

In the context of this paper, the problem of the new generation lies in the fact that traditional world view taking into account peculiarities of the yin and the yang as natural and genetic constants predetermined from above was peculiar to the elder generation. At present, the further, the more, they undergo a thorough transformation in connection with which nature and essence of these constants undergo radical modernization. What these searches threaten with is clear: either humanity will have such artificial analogs as clones or face the danger of disappearance of the human race [15].

These are just some of the perspectives that require focused attention at the planetary level. And this is a task of those who is living now. Its decision is fatal, ignoring or delaying would be dangerous because there simply would be no one to forgive their consequences. Future is a spiritual future therefore it must be formed in an adequate spiritual way to start a "new round of humanizing the world" and "write new pages of its history ..." [16].

*Notes.* Cite according to Open Access (CC-BY) verse translation by Robin Bond on UC Research Repository, https://ir.canterbury. ac.nz/handle/10092/9681

#### References

1. Hegel. Philosophy of Mind: Translated from the Encyclopaedia of the Philosophical Sciences. – Oxford: Clarendon Press. 1894.

2. Bachofen J. Das Mutterrecht. 1861 // http:7tor.org/view-topic.php?t=869013&p=869648#p869648.

3. Myths of the Peoples of the World. T.2 – M.: Sov. Enciklopediya, 1992. – p. 719.

4. Nomads. Aesthetics: Learning the World by traditional Kazakh art. Almaty: Gylym. 1993. – p. 264.

5. Ayazbekova S. Picture of the world of ethnos: Korkut-ata and the philosophy of Kazakh music. – Almaty. 1999. – p. 285.

6. Khamidov A. The cathegory of culture. – Almaty: Gy-lym. 1992. – p. 240.

7. Transformation of educational system: view of philosophers. – Almaty: Arys. 2000. – p. 250.

8. Zhikhan Zheltoksan. Ak Sarbaz. – Almaty, 2014 // http://xn-80aaa1brkt0a3m.xn--80ao21a/catalog/140616/140616-001.htm.

9. Barthold W.W. Compositions, 7 volume. – M., 1971. – P. 179-180.

10. Gender interrelation as a problem of cultural studies // http://knowledge.allbest.ru/culture/3c0a65625a2ad68b5d43a89 421316d27\_0.html.

11. Arshabekov N.R. A new generation in the context of the problem of socio-philosophical construction of reality // Philosophy in the modern world: development strategies. – Almaty. 2013. – p. 818.

12. By Bob Frissell – Nothing in This Book Is True, But It's Exactly How Things Are, 15th Anniversary Edition (2nd revised ed of 15th anniversary ed) (8/30/09). North Atlantic Books, U.S., 2009.

13. Bamberger. (1974). The Myth of Matriarchy: Why Men Rule in Primitive Society, Woman Culture and Society, ed. by Michelle Zimbalist Rosaldo and Louise Lamphere. Stanford: Stanford University Press, 263-280.

14. Wesel U. (1980). Der Mythos vom Matriachat: Uber Bachofens Mutierrecht und die Stellung van Frauen infrithen Gesellschaften. Frankfurt, 33.

15. Sysiak Follow P. AI Revolution 101 Our last invention, greatest nightmare, or pathway to utopia? https://medium.com/ai-revolution/ai-revolution-101-8dce1d9cb62d#.bkx5fdnjm.

16. Fatykhov S. world history Women // http://giperborea. liveforums.ru/viewtopic.php?id=201.

## MILD MENTALLY RETARDED ADOLESCENTS<sup>,</sup> VISION OF THE FUTURE CHARACTERISTIC FEATURES

Kisova V.V., Razuvaeva N.E.

Kozma Minin Nizhny Novgorod State Pedagogical University, Nizhny Novgorod, e-mail: kisovaverv@mail.ru

This article presents an analytical review of the scientific literature devoted to the research mild mentally retarded adolescents vision of the future characteristic features. The basic scientific approaches to research this phenomenon are considered. The structural varieties of the future vision in adolescence in the context of different authors' research are discussed. The specific features of the vision of the future in adolescents with mild mental retardation are considered through the analysis of their descriptors (self-esteem, value orientation, professional identity, etc.).

Keywords: adolescents, mental retardation, the vision of the future, self-determination, values, self-esteem

Adolescence is one of the crucial periods in the formation of personality, in which the formation of a worldview and conscious vision of the future life is taking place. The various social and economic changes occured in modern society, which teenagers have to face, affect the features of the formation of their visions about themselves, their future. The research of personality traits of adolescents, especially their visions of the future is devoted to the work of both native and foreign researchers (K.A. Abulkhanova-Slavskaya [1], B.G. Ananiev [3-5], L.I. Bozhovich [6], E. Golovakha [8, 9], I.S. Kon [13-14], K. Levin [16], N.A. Loginova [17] and others).

To determine the category of the visions of the future the following concepts are used in some scientific works: "time orientation" (J. Nutten), "time perspective" (K.A. Abulkhanova-Slavskaya, K. Levin), the subjective picture of a person's life way (B.G. Ananiev), etc.

According to K. Levin, the concept of "time perspective" reflects a holistic view of a person's life: past, present and future, and he understood the life perspective as a kind of self-projection of the person into the future, reflecting the entire system of his motives and at the same time moving beyond the existing motivational hierarchy. The "time perspective" gradually expands and becomes more complex with growing up personality, reflecting the unique experience that a person gets during his life way [11, 16].

J. Nuttin relates the term "time perspective" to three different aspects of psychological time: time perspective, time setting, and time orientation. Time setting is the positive and negative mood of the subject to his past, present and future. Time orientation is the dominant orientation of behavior on objects and events of the past, present or future [20].

B.G. Ananiev first used the concept of the subjective picture of a person's life way. Later

it was interpreted as a mental image, which reflects the socially determined spatial-time characteristics of the life way (past, present and future), its stages, events and their interrelations [3-5].

The time perspective changes during the person's life way and has its own specifics in each age period. Adolescence is of a particular interest, which is the age of psychological readiness for the formation of a person's conscious attitude to his future based on increasing independence in decision-making, professional and personal self-determination. (L.I. Bozhovich [6], I.S. Kon [13, 14], N.A. Loginova) [17].

The analysis of the scientific literature made it possible to conclude that there are two approaches to the analysis of the features of adolescents vision of the future.

In the first approach the vision of the future is divided into three parts: a vision of a personal future, a vision of a family future, a vision of a professional future.

The second one - according to the concept of J.V. Borisova, the adolescents, vision of the future is presented as "a multidimensional psychological composition, consisting of cognitive, emotional and positional components. The cognitive component is a specific mental construction that develops from the concepts used by the subjects in describing the subjective future. The emotional component includes the evaluation of the potential future (positive, negative or indefinite) and an affective attitude to the future that characterizes the significance of the concept of "my future" for the person. The position component reflects the way of comparing oneself with the future, declared by adolescents, internality or externality in the future" [7, p. 24].

It should be noted that the vision of the future in adolescents is a complex integrated composition including value orientations and the first life plans, both planned and expected events, assimilated stereotypes of social behavior, elements of reflection and self-esteem, attitudes and emotional attitudes to the future.

The problem of the formation of the visions of the future is also seen in adolescents with mental retardation. The visions of the future in adolescents with mental retardation are different from these visions in adolescents with normal mental development. It allows us to judge the degree of their willingness to choose a profession and educational institution, where they will study this profession, about a possible change in their place of residence, readiness to seek work, and arrange their personal life.

It is interesting to note that different researchers consider such visions of the future in adolescents with mild mental retardation as the visions of the family future, professional self-determination, features of self-esteem and level of claims (A.K. Akimenko [2], J.V. Borisova, L.P. Grigorieva, E.V. Muravieva [19], E.A. Stebliak, etc.).

Currently, the problem of professional selfdetermination of persons with mental retardation is represented by the works by N.L. Kolomenskii, N.T. Morozova, Zh.N. Nazarbayeva, K.M. Torchinskii, E.M. Starobina and others. The authors observed that the presence of deviations in mental development influences the choice of a profession (E.M. Starobin, T.L. Pavlova). The consciousness plays a leading role in self-determination, it is true for both normal (L.I. Bozhovich, I.S. Kon, E.T. Sokolova, V.V. Stolin) and anomalous development (P.V. Belyakova, I.A. Koneva [15], T.I. Kuzmina, I.J. Levchenko, I.I. Mamaichuk, V.G. Petrov).

It is important to note that all three components making up the vision of the future is characterized in adolescents with mental retardation (J.V. Borisova, [7]): cognitive, emotional, and positional. The content of each component in different degrees is determined by the form disorders of mental development, socio-psychological conditions of education and personal characteristics of adolescents. Mild mentally retarded adolescents visions of the future are immature, mosaic and not associated in meaning. Consider the content of each component.

The cognitive component of the visions of the future in adolescents with mental retardation is characterized by simplicity, lack of the vision of oneself in the future, their profession and family, characterizes the discrepancy between the actual abilities and levels of claims. Adolescents with mild mental retardation have a very narrow range of preferred professions, their choice is often formal (V.V. Romashuk, E.V. Svistunova, E.V. Muravieva). They often do not have the necessary information about the selected professions, but they want to earn a good salary [21].

In her research E.V. Muravieva identifies that the choice of profession mainly depends on the orientation of the school labour training (a mason, a seamstress, and a turner), the example of relatives and friends (a salesman, a driver). Senior pupils with mental retardation prefer group activities and want to work with relatives or friends [19].

Mild mentally retarded adolescents visions of the family future are not enough formed. It is difficult to predict their future relations because of a variety of adverse social and material family foundations, and the deficit of the own social position of the learner (N.V. Moskalenko [18], V.V. Romashuk) [21].

The positional component of the future in adolescents with mental retardation has a high level of lack of the vision of oneself in the future, the mismatch and a clear external orientation. Adolescents often focus on assistance in the future.

The emotional component of the future in adolescents with mental retardation is inconsistent, assessment of the future is not stable in time. According to J.V. Borisova [7, p. 24-25] adolescents with mental retardation assess their future positively.

Adolescents with mild mental retardation overestimate themselves and their personal characteristics and abilities. In their research L.P. Grigorieva, N.V. Zadorozhnaya identified that the level of self-esteem in adolescents with mental retardation matches the level of self-esteem of normal adolescents on the factors of strength and activity, but the factor of evaluation exceeds it. Adolescents with mild mental retardation perceive themselves as independent, strong, confident, independent, and open and sociable [10].

We can observe an overstated self-esteem, and a lower "fragile" self-esteem (depending on external evaluation).

The research of E.L. Indenbaum confirm that self-esteem and level of claims in adolescents with mild mental retardation overstated. The author considers that the relationship between adolescents and their parents significantly affect the visions of their future [12].

So, it is possible to say that the mild mentally retarded adolescents vision of the future consists of the following components: cognitive (the visions of themselves, future professions, future family), position (focusing only on themselves or on assistance) and emotional component (assessment of own future, selfesteem). Senior pupils with mental retardation have low levels of self-determination, self-selection of goals and assessment of their abilities, they often ignore their own disadvantages, failures for the high self-esteem. The self-esteem of the majority of mentally retarded adolescents is high, and the low level of claims leads to the fact that they have formed a protective strategy for avoiding failures.

These features of the vision of the future in adolescents with mental retardation must be considered in teaching and correctional work with them in schools and professional institutions.

#### References

1. Abulkhanova-Slavskaya K.A. The strategy of life: monograph. – Moscow: Mysl', 1991. – 299 p.

2. Akimenko A.K. Visions of the Past, Present and Future in the System of Socio-Psychological Personal Adaptation // Izvestiya of Saratov University. New series. Acmeology of education. Developmental and educational psychology. – 2014. – Vol.3. – No.2. – P. 131-142.

3. Ananiev B.G. About the problems of modern anthropology. – Moscow: Science, 1977. – 380 p.

4. Ananiev B.G. Psychology and the problem of human nature / Ed. by A.A. Bodalev. – Moscow: Publishing house "Institute of Practical Psychology"; Voronezh: MODEC, 1996. – 384 p.

5. Ananiev B.G. Man as an object of knowledge. – St. Petersburg, 2001. – 288 p.

6. Bozhovich L.I. Problems of identity formation. Selected psychological works / Ed. by D.I. Feldstein. – Moscow: Publishing house "Institute of Practical Psychology"; Voronezh: MO-DEC, 1995. – 352 p.

7. Borisova J.V. Features of visions of the future in teenagersorphans with mental retardation: autoabstract of dissertation, candidate of psychological sciences. – St. Petersburg, 2005. – 28 p. 8. Golovakha E.I. Life perspective and professional selfdetermination of youth. – Kiev: Naukova Dumka, 1988. – 144 p.

9. Golovakha E.I. and Kronik A.A. Psychological time of personality. – Kiev: Naukova Dumka, 1984. – 208 p.

10. Zadorozhnaya N.V., Grigorieva L.P. Features of selfesteem and identity in adolescents in normal and mild mental retardation // Vestnik of Moscow State Linguistic University. Series: education and pedagogical science. – 2010. – No.586. – P. 232-244.

11. Zeigarnik B.F. K. Levin's theory of personality. – Moscow: Publishing house of Moscow University, 1981. – 117 p.

12. Indenbaum E.L. Psychosocial development of adolescents with mild intellectual disabilities // Psychological science and education. – 2010. – No.2. – P. 72-81.

13. Kon I.S. Psychology of early adolescence: the book for teachers. – Moscow: Education, 1989. – 252 p.

14. Kon I.S. In search of self. The personality and identity. – Moscow: Politizdat, 1984. – 265 p.

15. Koneva I.A., Raevskaya L.S. Features of identity and its psychological correction in adolescents with mental retardation living in the family and boarding-school // Problems of modern pedagogical education. – 2016. – No.53-10. – P. 248-254.

16. Levin K. Definition of "field at the moment" // Readings in the history of psychology: the Period of open crisis. The beginning of the 10's-mid 30-ies of XX century. – Moscow: Publishing house of Moscow University, 1980. – P. 131-145.

17. Loginova N.A. The development of personality and its way of life // The development principle in psychology. – Moscow: Nauka, 1978. – P. 156-172.

18. Moskalenko N.V. Preparation of children-orphans with problems of intellectual development for independent living // Defectology. -2006. - No.1. - P. 47-52.

19. Muravieva E.V. Psychological conditions of optimization professional and labor adaptation of mentally retarded senior pupils. Candidate's thesis. – Nizhni Novgorod, 2011. – 24 p.

20. Nuttin J. Motivation, action and future time perspective. – Moscow: Meaning, 2004. –  $608 \ p.$ 

21. Romashuk V.V. The vision of the future in adolescents with intellectual disabilities // The Scientific community of students XXI century. HUMANITIES: collection of articles on the fifth international student scientific and practical conference №5. URL: http://www.sibac.info/archive/humanities/5.pdf.

## THE ROLE OF FAMILY IN SPIRITUAL AND MORAL FORMATION OF PERSONALITY AT THE BASIC LEVEL OF ONTOGENESIS

<sup>1</sup>Serebryakova T.A., <sup>2</sup>Makarycheva Y.N., <sup>2</sup>Kazakova O.M.

<sup>1</sup>Nizhny Novgorod state pedagogical University K. Minin, Nizhny Novgorod, e-mail: e-serebrya@yandex.ru; <sup>2</sup>Municipal autonomous preschool educational institution "kindergarten № 469", Nizhny Novgorod, e-mail: k.o.m.2010@mail.ru

The results of theoretical understanding of the problem of family influence on the spiritual and moral formation of children of preschool age. Spiritual and moral development while the authors consider as an important feature of optimal personal development. Based on the analysis of foreign studies (A. Adler, W. James, J. Kelly, A. Maslow, G. Allport, etc.) and domestic (B.G. Anan'ev, A.A. Volumes of L.S. Vygotsky, A.G. Kovalev, A.F. Lazursky, M.I. Lisin, V.N. Myasischev, etc.) scientists as the most important personality parameters we have identified: subjectivity relations, awareness activities, sustainability of socially significant traits and personality. Factor, largely contributing to the process of personal development, including its spirituality and morality, is a society. Based on the specifics of early childhood, which objectively relates to basic levels of ontogenetic development, in this society, determining the success of personal development is the family. That family is the conduit of those moral, spiritual, ethical, values beliefs and attitudes, which further will determine the lifestyle and thinking of today's baby. However, crises typical of modern family (the destruction of the foundations of family traditions and family upbringing; the leveling of the moral views on marriage and the family, and traditional ideas about parenting; many problems of the childhood, often caused by the violation of the traditions of education of children in the family) have a negative impact on the education of spirituality and morals of children. Development of psycho-pedagogical activities, optimizing the process of spiritually-moral education of the child in the family – the aim of our further research.

Keywords: personality, social-personal development, spiritual and moral formation

One of the urgent problems not only of psychology and pedagogy, but also philosophy, cultural studies, sociology, history and many other Sciences was and remains the problem of personality.

Analyzing the approaches of scientists to the concept of "personality", we are in one of his works was considered possible to allocate some basic items which, from our point of view, the maximum reveal the essence of this phenomenon. As such grounds, we highlight the fact that:

1) the person is a human individual as a subject of relations and conscious activity;

2) personality is a stable system of socially significant features that characterize an individual as a member of either society or community;

3) identity is a socially active personality" [6, p. 19].

In other words, a person in our sense, is a person actively and consciously manifests itself in the relationship with the surrounding world and the people around him.

However, according to B.F. Lomov [4], the personality is a product of the society in which man lives and with which he actively engages. It is society, society has a direct and often decisive influence on the development of personality, formation of its value system, spirituality and ethics, moral and ethical principles. This idea finds objective evidence in numerous studies of foreign (A. Adler, W. James, J. Kelly, A. Maslow, G. Allport, etc.) and domestic (B.G. Anan'ev, A.A. Volumes of L.S. Vygotsky, A.G. Kovalev, A.F. Lazursky, M.I. Lisin, V.N. Myasischev, etc.) scientists.

But is the society, the environment has a positive impact on the person?

If it was always that we would not talk about the fact that our society is experiencing a moral crisis that people are largely deprived of the human and are on the verge of social catastrophe. In confirmation of this conclusion we refer to the work of L.A. Surikovoy [9], which notes that a characteristic of the modern stage of development of our society is the aggravation of the crisis in moral and spiritual development not only of society as a whole and each member individually.

Awareness of this problem actualizes the search of means and ways of effective influence not only on the process of development of personality in society, but also on the transformation of society itself, refocusing on spirituality, morality, humanity, and value a culture of interaction.

Special attention, in our opinion, deserves the solution of this problem in relation to the provision of optimal conditions for personality development at the basic level of ontogeny, that is in early and preschool childhood when the foundations of personality and people sensitive to the development of social experience which it encounters, communicating with the world around him. The importance of developing the spirituality and morality of childhood is proved not only by the results of research

scientists (R.I. Zhukovskaya, S.A. Kozlova, F.S. Levin-Shirinoy, D.V. Mendzheritskaya, V.G. Nechaeva, L.A. Penievskoy, T.A. Markova, E.I. Radina, A.S. Ahmanova, etc.). As one of the priorities of spiritual and moral education is defined across a range of regulatory acts concerning the sphere of education (the RF Law "On education", the Strategy of education in the Russian Federation for the period until 2025 (the Decree of the RF Government dated may 29, 2015 No. 996-R)) and even developed the Concept of spiritually-moral development and education of the person citizen of Russia (authors - compilers danyluk A.Y., Kondakov A.M., Tishkov V.A.), which notes "the Multiplication of the Russian people in terms of improving the quality of life and labour, the strengthening of spirituality and morality, citizenship and statehood, the development of culture and creativity is a major national task. It is defined by modern national educational ideal - moral, creative, competent citizen of Russia accepting destiny of Fatherland as personal, conscious responsibility for the present and the future of their country, rooted in the spiritual and cultural traditions of the Russian people" [3].

As very rightly noted by researchers (the works of L.M. Abolina, L.I. Bozovic, L.S. Vv-V.N. Myasishchev, S.L. Rubinstein, gotsky, etc.), a special role in the formation of spirituality and morality of a person in these age stages of development belongs to the family. It is the family, the closest to people in this age – the main link between the child and the world in which he lives, the society, with whom the baby interacts. Having immediate opportunities for the inclusion of child in the household and even social activities in adults, the family is the guide of those moral, spiritual, ethical, values beliefs and attitudes that will continue to define the lifestyle and thinking of today's little and tomorrow – an adult person as a full citizen.

So why is this not happening?

The answer to this question we find in many works of scientists that have concluded the fact that not only society, but the modern family as the most important institution of socialization, is currently experiencing major crises (research Baralgina A.M., L.A. Donici, V.V. Zenkovsky, S.P. Ivanova, O.A. Kolesnikova, O.G. Prokhorova, L.A. Serikova, etc.). Summarizing the works of these scientists, as well as relying on our own research we are interested in the field, we identified the following negative aspects (the crisis), typical for the modern family. They certainly have a negative impact on the education of spirituality and morals of children.

1. The destruction of the foundations of family traditions and family upbringing. First of all it concerns the leveling of centuries of evolving in the history of Russian hierarchy of family relations and traditions of the lifestyle of the family. Here you can talk about, if not complete destruction, of a significant violation of intergenerational relations: the modern the younger generation often ceases to respect elders, respectfully applies to them, but unquestioning obedience and obedience to parents is almost a thing of the past. On change to it's active opposition, the confrontation between the experienced and the young generations that cannot be considered a positive influence on spiritual and moral development of young people.

2. Has changed dramatically, and not for the better, moral ideas about marriage and family. As he writes in one of his works of V.V. Zenkovsky [2], "bracing effects of the family, not lost and not rejected by the gracious power of the sacrament of marriage, often unnoticed, and sometimes pauses as if paralyzed counter bad influence on the child nesamani environment", And the author is absolutely right! In today's world almost ceased to exist, and to be an expression of love, lovalty, spiritual unity relations between spouses, that objectively leads to a catastrophic number razvodov. According to statistics, breaks up more than 40% of marriages [7]. The value of family and marriage among young people is practically absent [7, 8]. Lost and the traditional notion of parenthood. Raising children is perceived by many people as a heavy and unwanted burden. The consequence of these changes the consciousness of people becomes either the birth of "unwanted", unplanned children, who often live with the parents or social orphans become street children, or such children, the parents just get rid, interrupting the pregnancy, thereby encroaching on the lives though not born but of man. As a result, almost 60-ies of XX century we are actively talking about a demographic catastrophe, the decline in the birth rate. But no social programs, which is currently quite a lot yet to change the situation failed. Speaking about this aspect, we are discussing the problem, the British pediatrician and child psychoanalyst D.V. Winnicott [1] suggests that, despite the fact that parental love is an innate biological components, it is cultural and historical, changing phenomenon, influenced by social norms and values. Lost the value of childhood as an important period in the life of human society, and as an objective consequence - children cease to be valuable for their

parents. And even before getting married, people tend not to their birth. The desire of many modern people not focused on achieving success in the field of parenting, and the success in the implementation plan of the cult of life material well-being. But who is not a parent of his care, attention, unconditional love to the child will help him understand what he needed, valuable, and meaningful to them???!!! A special role here, of course, belongs to the mother. However, as noted by Suvorova O.V., Cheremisova I.V., Mamonova E.B. "the crisis of family values affects the parental attitude and parental attitude to the child, first of all, on the emotional relation to mother-to-child" [10].

3. Another crisis phenomenon typical for the modern family we highlight the many and varied challenges of childhood. The leveling of older spiritual and moral canons and standards of behavior objectively leads to significant violations in the field of behavioral manifestations of children: they have not formed a system of moral standards and patterns of behaviour; and children can not and do not want to coordinate their behavior with the system of rules and moral standards that exists in society. The worst thing is that it often leads not only to deformation of spirituality, morality of the child, numerous abnormalities in the development of his emotional, and behavioral areas, but also to the deviations in the intellectual development, up to organic, very serious pathologies.

4. The traditions of education in the family are violated. Not wishing to listen to the advice of the older generation, the recommendations of grandmothers and grandfathers who have the experience of educating their own children, young parents show amazing imagination in the matter of raising children. The most negative is that it affects the spiritual and moral development of the kids. Having no idea of the laws, features, mechanisms of education of spirituality, the morality of the child, and resorting to moralizing, reproaches, notations, instead of showing the child an example of spirituality and morality with his own relationships, the family often becomes simply unable to carry out this effective process. Institutions of public education, for example, pre-school educational organizations, can not radically change the situation and restore the traditional values of the family and upbringing in the family of children. Not able to solve this problem and socio-cultural space, media. As noted by O.M. Potapov [5], media topics of educational nature, primarily - problems of education of children in the family, climb rarely and haphazardly.

Is there a way out of this situation? No doubt – there!

The first thing, from our point of view, it is necessary to say, is about the organization of purposeful work on formation of motivation of parenthood to those who can and should physiologically be parents. We believe that only sustained effort, focused on comprehensive upbringing of absolute love for the child (even if it is in a distant projection) will allow to move towards solutions to these challenges.

Not less important is the organization of purposeful and systematic assistance in matters spiritual and moral formation of children to those families that already have children.

Development and experimental approbation of the program for parents to help them in the education of spirituality and morals of children in the family context we define for ourselves the purpose of our future activities. The emphasis will be on spiritual and moral education of children of secondary school age – of the age of transition from the youngest preschooler to the eldest and, from our point of view, the most favorable for the education of the heart and soul of the child.

#### References

1. Winnicot D.V. Conversation with the parents / Per. from English. M.N. Pochukaeva, V.V. Timofeev. – M.: Independent firm "Class", 1995. – 74 p.

2. Zenkovsky V.V. Problems of education in the light of Christian anthropology. – The wedge, the Fund "Christian life". – 2002. – P. 6 – 245.

3. The concept of spiritually-moral development and education of the person citizen of Russia / comp. Danyluk A.Y., Kondakov A.M., Tishkov V.A. – M.: Education, 2009. – 24 p.

4. Lomov B.F. theory of the development of the child's mind  $\prime\prime$  Problems of development of psyche. – M., 1981. – P. 286 – 302.

5. Potapovskaya O.M. Pedagogical support of the family in matters of spiritual and moral education of children. – Moscow: Planeta, 2003. – 64 p.

6. Serebriakova T.A., Volgina V S., Khvorostinin N.In. "From babies to podgotovishek". The system is working on the development of socio-personal sphere of children of preschool age: a Handbook. – M.: INFRA-M, 2017. – 509 p.

7. Serebriakova T.A., Fazly E.P. Experimental study of the process of development of values related to family and marriage and University students // the Historical and socio-educational thought (Historical and Social educational ideas). -2015. -VOLUME 7. - No. 6. - part 1. - P. 199 - 204.

8. Serebriakova T.A., Knyazeva E.V. the study of motivation of parenthood at a young age and the results of its testing // Socio-humanitarian studies and technology. – 2016. – No. 4. – P. 83 – 89.

9. Serikova L.A. Scientific and historical background study of the problem of spiritually-moral education of the personality // the Historical and socio-educational thought. -2012.  $-N_{\rm P}$  6 (16) -P. 136 - 141.

10. Suvorova O.V., Cheremisova I.V., Mamonova E.B. Influence emocionalnoe interaction in the mother-attitude of older preschoolers // journal of Minin University. – 2017. – No. 1.

#### CATASTROPHE THEORY FOR THE ANALYSIS AND FORECASTING OF THE FOREST DYNAMICS

Ivanova N.S.

#### Botanical Garden of the Ural Branch of the Russian Academy of Sciences, e-mail: i.n.s@bk.ru

Forests maintained the climate and hydrological regime of the Earth throughout its pre-anthropogenic history [10]. Currently, forests occupy about 52% of the earth's surface. These ecosystems play a large role in the world carbon budget and its dynamics. However, the forest area is decreasing on all continents [9]. This tendency is due to the huge scale of timber harvesting and fires, so the problem of reforestation and conservation of forest resources is becoming more urgent [11].

We studied reforestation in the Ural Mountains (Russia) for more than 20 years [3, 5-7, 12]. Quantitative data on the structure of indigenous forests, cuttings and secondary ecosystems of different ages were obtained. These data served as the basis for constructing mathematical models. The aim of the modeling was to forecasting of forest ecosystem dynamics as the basis for sustainable forest management. The cusp catastrophe was chosen as the basis for building models. The cusp catastrophe is one of the seven elementary catastrophes. In biological and behavioral sciences, the so-called cusp catastrophe model has been applied most frequently, as it is the simplest of the catastrophe models [2]. It is summed by the equation:

$$\frac{dx}{dt} = -\frac{\partial F}{\partial x} \text{ or } \frac{dx}{dt} = -(x^3 + a \ x + b).$$
(1)

where F is the potential function that determines the energy characteristics of the system.

$$F(x,a,b) = \frac{1}{4}x^4 + \frac{1}{2}ax^2 + bx.$$
 (2)

In the process of constructing a generalized model for the formation of vegetation after harvest, we described the basic concepts and equations of Catastrophe Theory. A quantitative mathematical model that takes into account the features of the region and habitat for the dynamics of the vegetation of the Urals was built. This model allows you to make quantitative predictions of real situations. The existence of alternative lines of the succession dynamics of forests in the habitat was formalized within the framework of catastrophe theory. Quantitative methods for assessing the sustainability of reforestation were proposed [1, 4, 8]. One of these methods is the construction of potential functions. Local and global stability of the forest ecosystem is determined by type of the potential functions (presence of minima and maxima). Special studies are devoted to the study of the effect of control parameters on the growth of woody plants [8]. As a result, the critical thickness of the soil is determined, at

which the equality of the numbers of pine and birch on felling is observed. It was 27 cm for the southern taiga forests of the Middle Urals. Natural regeneration of pine predominates on shallow soils. Natural regeneration of birch dominates on powerful soils. As a result, various forests are formed on different soils. Calculations show a satisfactory agreement of theory and experimental data. It reflects the perspectives of the catastrophe theory for describing, analyzing and forecasting forest ecosystems dynamics, sustainability assessment and crises identification.

Methods of Catastrophe Theory allow to identify and predict crises in the development of forest ecosystems, which is very important for the management of bioresources. Modern models can be used to assess the desired trajectory and to estimate recovery rate or to forecasting possible scenarios. The methods of Catastrophe Theory are universal and can be used for all forests of the world and other ecosystems.

#### References

1. Bystrai G.P., Ivanova N.S. Approaches to the Modelling of Forest Vegetation on the Base of the Theory of Catastrophes // Agrarian bulletin of Ural (Agrarnyj vestnik Urala).  $-2010. - N_{\odot} 2. - P.75-79.$ 

2. Grasman R., Van Der Maas H., Wagenmakers E-J. Fitting the Cusp Catastrophe in R: A cusp Package Primer // Journal of Statistical Software. – 2009. – Vol. 32. – № 8. – P. 1-27. doi. org/10.18637/jss.v032.i08.

3. Ivanova N.S. Methods for the classification of mountain forests in the Southern Urals // Russian Journal of Forest Science (Lesovedenie). – 2000. – № 4. – P. 16-21.

4. Ivanova N.S. Methods of the Estimation of Stability of Reforestation // International Journal of Applied and Fundamental Research. 2013. №2. http://www.science-sd.com/455-24167

5. Ivanova N.S. Recovery of Tree Stand After Clearcutting in the Ural Mountains // International Journal of Bioresource and Stress Management. – 2014. – №5. – P. 90-92. doi:10.5958/j.0976-4038.5.1.017

6. Ivanova N.S., Zolotova, E.S. Ecological space of forest type in the montains of Middle Urals // Modern problems of education and science (Sovremenniye problemy nauki i obrazovanija). – 2015. – №3. doi: 10.17513/spno.123-19372.

7. Ivanova N.S., Zolotova, E.S. Impact of timber harvesting on vegetation in the Ural Mountains // International Journal of Bio-resource and Stress Management. – 2017. – № 8. – P. 167-174. doi: 10.23910/IJBSM/2017.8.1.1797

8. Ivanova N.S., Bystrai G.P., Ohotnikov S.A., Zolotova E.S. Model of forests age-restoration in the Zauralsky hilly piedmont province // Modern problems of education and science (Sovremennye problemy nauki i obrazovaniya). 2011. № 4. http://www.science-education.ru/98-4754

9. Keane R.E., Holsinger L.M., Mahalovich M.F., Tomback D.F. Evaluating future success of whitebark pine ecosystem restoration under climate change using simulation modeling // Restoration Ecology. – 2017. – №25. – P. 220–233. doi:10.1111/rec.12419.

10. Korotkov V.N. Basic concepts and metods of restoration of natural forests in Eastern Europe // Russian journal of ecosystem ecology. -2017. - Vol. 2. - N $_{2}$  1. - P. 1-18 doi: 10.21685/2500-0578-2017-1-1.

11. Maiti R., Rodriguez H.G., Ivanova N.S. Autoecology and Ecophysiology of Woody Shrubs and Trees: Concepts and Applications. John Wiley & Sons, 2016. – 352 p.

12. Zolotova E.S., Ivanova N.S. Typological research of clear cutting in Zauralsky hilly piedmont province // Izvestiya of Samara Scientific Center of the Russian Academy of Sciences. – 2012. – Vol. 14. – No. 1 (4). – P. 1016–1019.

## EUROPEAN JOURNAL OF NATURAL HISTORY № 1, 2018