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COMPARATIVE ANALYSIS OF ANXIETY INDICATORS OF FIRST YEAR CHOLERIC STUDENTS

Abstract. The article focuses on changing of the state and personal anxiety level of 17-year-old boys with different temperament types during the examination process. The effect of emotional stress on the state and personal level of student anxiety was determined by a scoring system with an express version of the questionnaire in three different situations: two months before the examination (ordinary days- OD), 30 minutes before the examination (BE) and 30 minutes after the examination (AE). It was found that the level of state and personal anxiety among all the types of first year students differs significantly. 17-year-old students (1 st year students) have a higher level of anxiety than other types of melancholic youth. Thus, examination stress of 17-year-old (1 course) melancholic-type students increased more sharply than personal anxiety level (PAL) and state anxiety (SA).

Keywords: state anxiety, types of central nervous system, choleric adaptation, temperament.

Introduction

In modern civilized conditions, violation of the relationship between man and nature¹, exposure to various irritants becomes an integral component of personal emotional stress², causing the development of serious functional dis-

¹ Aleksandrov A. G., Lukyanenok P. I. Changes in students' anxiety levels in the context of educational activity. Scientific education. Medical sciences, 2016. – No. 6. – P. 1–14; Hans Eysenck Number of personality dimensions: 16.5 or 3 taxonomic criteria for a paradigm // Foreign psychology, 1993. – Vol. 1. – No. 2. – P. 9–24; Kaluev A. V Problems of the Study of Stress-Related Behavior, – Kiev, 1999. – 127 p.

² Hans Eysenck Number of personality dimensions: 16.5 or 3 taxonomic criteria for a paradigm // Foreign psychology, 1993. – Vol. 1. – No. 2. – P. 9–24.

orders in the organism¹ and ultimately creating optimal conditions for the exposure of the organism to stress². It is shown that there is a close relationship between behavior, adaptation and other physiological processes and emotional stress³. In the central nervous system (CNS) disturbance of the dynamics of the processes of excitation and slowdown is involved in the formation of a number of emotional reactions in the body⁴.

Taking all of this into account, the purpose of this study is to detect changes in the level of physiological state and personal anxiety during the psycho-emotional activity of the examination process in 17-year-old students with different characteristics of the nervous system temperament.

Materials and techniques

32 male students aged 17 studying at the Faculty of Biology and Chemistry of the Ganja State University have undergone a course of psycho-physiological research. Of these, 4 were phlegmatic, 10 were choleric, 10 were sanguine and 8 were melancholic. Students were divided into groups according to different temperament types of nervous system and the purpose of the study. The study was conducted 2 months before the exam, 30 minutes before the exam and 30 minutes after the exam. The study examined the psycho-physiological state of various anxiety conditions. Healthy students were involved in the study on a voluntary basis. Before the beginning of the study, the types of the temperament of the nervous system of young people were determined by Eysenck Personality Questionnaire. State and personal anxiety (emotional tension)

¹ Shukurov F.A., Melikova N. Kh. Motivational activity of students and the level of anxiety in emotional stress // Russian Journal of Physiology named after V.I. I.M. Sechenov, 2004. – T. 90. – No. 8. – P. 124–125; Lila N.L. Features of adaptive influences of students with different individual–typological characteristics of mental activity and autonomic regulation of the body, Dis ... Candidate of Medicine, – Lugansk, 2015. – 147 p; Fedotov A.I. Stress of its aftereffect for humans and modern approaches to their elimination // Uspekhi fiziologicheskikh nauk, 2009. – V. 40. – No. 1. – P. 77–91.

² Aleksandrov A.G., Lukyanenok P.I. Changes in students' anxiety levels in the context of educational activity. Scientific education. Medical sciences, 2016. – No. 6. – P. 1–14; Filaretova L.N. Stress in physiological research // Russian Journal of Physiology named after I.M. Sechenov. 2010. – Vol. 96. – No. 9. – P. 924–935; Badmaeva D.G. Self-regulation of personal activity in stressful situations (on the example of examination stress): Dis ... Candidate of Psychological Sciences: – Krasnoyarsk, 2004. – 157 p.

³ Hayden E.P., Shankman S.A., Olino T.H. et al. Cognitive and temperamental vulnerability to depression: Longitudinal associations with regional cortical activity // Cognition & Emotion. 2008. – Vol. 22. – № 7. – P. 1415–1428; Bazanova O.M., Aftanas L.I. Individual EEG alpha activity analysis for enhancement neurofeedback efficiency: two case studies // Journal of Neurotherapy. 2010. – V. 14. – № 3. – P. 244–253; Bratsas C., Papadelis C., Konstantinidis E., Pappas C. Toward emotion aware computing: An integrated approach using multi-channel neurophysiological recording and affective visual stimuli // IEEE Trans. Inf. Technol. Biomed. 2010. – Vol. 14. – № 3. – P. 589–597.

⁴ Sudakov K.V. Individuality of emotional stress // Zhurn. nevrol. i psichiatr. 2005. – No. 2. – P. 4–12.; Shinichi S., Kuman H., Sakan U. Effects of effort and distress coping processes on psychophysiological and psychological stress responses // International Journal of Psychophysiology, 2003. – Vol. 47. – P. 117–128.

of 17-year-olds of different temperaments were assessed. The state and personal levels of anxiety according to the Spielberg-Hanin test in three different situations: ordinary days (OD), before the examination (BE) and after the examination (AE). The results were determined by a score system.

For statistical analysis taking into account the number of young people in the program SPSS (Statistical Package for Social Science) methods of «non-parametric» analysis were used.

Results and discussions

The results of a study of 17-year-old students showed that state and personal levels of anxiety (SPA) did not differ significantly between the types of temperament of OD students in this course (Table 1). Thus, according to the ANOVA-F criterion, since $P = 0.426$, the difference between types is not statistically significant. At the same time, the differences between the OD types are less when SPA is higher: 39.1 (sanguinic), 36.0 (phlegmatic), 35.2 (choleric), 34.3 (melancholic). This means that the differences between the different types of temperament of SPA in the OD were not statistically significant ($P > 0.05$). It can be concluded that the types of temperament of the 17-year-old OD have little impact on SPA.

As to those students, the difference in the level of anxiety between the types of BE SPA is not statistically significant ($P > 0.05$), since $P = 0.796$. However, it is noted that differences between the types are less than between the high SPA: 44.0 (sanguinic), 41.8 (choleric), 40.5 (phlegmatic), 40.3 (melancholic). The difference between the two independent types of BE SPA was also unclear. Thus, the differences between phlegmatic and choleric types, sanguine and melancholic types, and choleric and sanguine types as well as melancholic types are also inaccurate ($P > 0.05$). This indicates that there is no discernible difference between the different types of BE SPA temperaments of the first year students (table 1).

Similar regularities are also obtained in the AE results. Thus, the SPA did not differ significantly between AE types, and the difference between the types was not accurate, as $P = 0.901$ ($P > 0.05$). However, the differences between the types from the highest SPA to the lowest levels have shifted from the previous groups and are as follows: 43.0 (phlegmatic), 41.1 (melancholic), 40.0 (choleric), 40.0 (sanguinic). The comparison of AE SPA between the two independent types shows that the difference of the types is not statistically significant. This means that different temperament type of AE first year student did not affected by SPA.

At the next stage of the study, we compared the OD SPA students (Pic.1). These results showed that SPA only increased for melancholic (P0, 05), but there was no significant difference in other types ($P < 0.05$). Thus, in the case of phlegmatic type $P = 0.066$, choleric type $P = 0.074$ and sanguinic type $P = 0.075$, in the melancholic type it was $P = 0.025$. The comparison between these two groups showed that BE had a higher level of SPA for melancholic type of 17-year-old students. In other types, there was no significant difference between OD SPA and is AE SPA.

Table 1.

Period	Types	n	M	$\pm m$	min	max	P_p	P_c	P_s	P_{OD}	P_{BE}
State (OD)	Phlegmatic	4	36.0	1.6	32	40					
	Choleric	10	35.2	2.7	25	53	0.839				
	Sanguine	10	39.1	1.1	33	44	0.142	0.089			
	Melancholic	8	34.3	2.7	26	44	0.808	0.829	0.274		
	Total	32	36.3	1.2	25	53					
State (BE)	Phlegmatic	4	40.5	2.5	35	47				0.066	
	Choleric	10	41.8	3.1	30	64	0.945			0.074	
	Sanguine	10	44.0	3.0	24	62	0.240	0.393		0.075	
	Melancholic	8	40.3	2.2	30	49	0.808	0.965	0.237	0.025	
	Total	32	41.9	1.5	24	64					
State (AE)	Phlegmatic	4	43.0	2.7	36	49				0.068	0.068
	Choleric	10	40.0	2.1	29	48	0.454			0.201	0.438
	Sanguine	10	40.0	3.0	24	48	0.839	0.796		0.766	0.811
	Melancholic	8	41.1	2.3	30	50	0.683	0.633	0.965	0.034	0.228
	Total	32	40.7	1.3	24	50					
Personal (OD)	Phlegmatic	4	37.0	3.5	28	45					
	Choleric	10	33.9	3.0	20	53	0.635				
	Sanguine	10	39.6	1.6	30	46	0.539	0.063			
	Melancholic	8	36.3	3.0	27	47	1.000	0.633	0.460		
	Total	32	36.7	1.4	20	53					
Personal (BE)	Phlegmatic	4	43.0	2.5	37	49				0.068	
	Choleric	10	38.8	2.0	29	49	0.304			0.241	
	Sanguine	10	44.7	2.8	34	65	0.839	0.123		0.139	
	Melancholic	8	43.0	2.4	35	54	0.933	0.237	0.965	0.011	
	Total	32	42.2	1.3	29	65					
Personal(AE)	Phlegmatic	4	43.5	2.5	39	50				0.068	0.577
	Choleric	10	41.3	2.8	28	54	0.635			0.016	0.205
	Sanguine	10	41.7	2.2	29	48	0.733	0.912		0.574	0.523
	Melancholic	8	43.0	1.7	37	49	0.808	0.573	0.633	0.025	0.573
	Total	32	42.1	1.2	28	54					

1. p_p – phlegmatic type indicators (Mann-Whitney test);
2. p_c – choleric type indicators (Mann-Whitney test);
3. p_s – sanguine type indicators (Mann-Whitney test);
4. p_{od} – ordinary day indicators (Wilcoxon criterion);
5. p_{be} – before examination indicators (Wilcoxon criterion)

For the first year students, SPA was higher in AE group than in AG. The difference between the AE level of state anxiety and the OD SPA was not significantly different from other types except the melancholic type. Thus, $P = 0.068$ was in phlegmatic, $P = 0.201$ was in choleric, $P = 0.766$ was in sanguine, $P = 0.034$ was in melancholic. Although there is no significant difference between OD SPA and AE SHS in the first three types, there is a significant difference between AE SHS and OD SHS in melancholic ($P < 0.05$). OD AE SPA analysis shows that OD SHS is higher in students.

The comparison of BE and AE SPA of these students showed that there were $P = 0.068$ in phlegmatic, $P = 0.438$ in choleric, $P = 0.811$ in sanguine, $P = 0.228$ in melancholic. However, there was no significant difference between BE SPA and AE SPA in all four types, the difference was slightly higher than BE AE SPA.

In extreme and critical conditions, the problem of self-regulation of physiological functions is of great importance and due to the mobilization of the internal capacities of the person allows the person to adapt to the situation¹. There is no coincidence that 17-year-olds have high levels of anxiety in melancholy and choleric types. It is known that the temperament is based on the same indicators that have individual characteristics of conditional reflex activity, i.e. peculiarities of the nervous system. The combination of the three main characteristics of the nervous system (strength, equilibrium and mobility) is noted as the types of superior nervous activity of the nervous system. The English psychologist H. Eisen², who studied this information, suggests that there are strong and weak species according to I. Pavlova³. According to Pavlov, the extroverted and introverted personality types are very close to each other. The characteristics of extraversion and introversion depend on the congenital characteristics of the central nervous system, which balances the processes of excitation and delay. According to the classification of I. P. Pavlov, the indicators of personality temperament are extraversion, introversion and neuroticism. According to the classification, the increase in the level of anxiety in both types of BE and AE can be attributed to the type imbalance, but in 20-year-olds there was a difference in the phlegmatic, choleric and sanguine types.

¹ Fedotov A. I. Stress of its aftereffect for humans and modern approaches to their elimination // *Uspekhi fiziologicheskikh nauk*, 2009. – Vol. 40. – No. 1. – P. 77–91.; Hans Eysenck Number of personality dimensions: 16.5 or 3 taxonomic criteria for a paradigm // *Foreign psychology*, 1993. – Vol. 1. – No. 2. – P. 9–24.; Filaretova L. N. Stress in physiological research // *Russian Journal of Physiology named after I. M. Sechenov*. 2010. – Vol. 96. – No. 9. – P. 924–935.

² Badmaeva D. G. Self-regulation of personal activity in stressful situations (on the example of examination stress): Dis ... Candidate of Psychological Sciences: – Krasnoyarsk, 2004. – 157 p.

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The results of the study show that there is a significant difference in the levels of state anxiety among different types of 1st and 4th year students. Appropriate approaches to the nature of the types of the nervous system of students of different courses are recommended, which will prevent certain neurotic changes that may arise in them. Thus, based on the analysis of this study, the following results were obtained.

Result

1. In 17-year-old first course students, there is no significant difference between OD, BE, and AE SPA. Furthermore, the difference between the two independent types was not statistically accurate.

2. Only indicators of the melancholic type are statistically significant when comparing OD, BE and AE SPA in young people of the first course.

3. While the difference between OD SPA and AE SPA in these young people is great in phlegmatic and sanguinic types and is low in choleric and melancholic types. Indicators of the phlegmatic type are considered statistically reliable compared to BE and AE SPA.

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Section 2. Geography

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MODELING IN THE SYSTEM OF ECOLOGICAL MONITORING OF RESERVOIRS

Abstract. The increasing scale of environmental pollution, including water bodies, by various technogenic substances is the reason for environmental monitoring and the development of criteria for assessing the state of the environment. This paper presents a mathematical model of the maximum permissible discharge into water bodies.

Keywords: pollution, water bodies, maximum permissible discharge, modeling.

The impact of man on the environment has sharply increased all over the world, and it has become apparent that the uncontrolled exploitation of nature leads to very serious negative consequences. The state of the biosphere changes under the influence of natural and man-made influences. However, there is a significant difference in the results of such actions: the state of the biosphere, which is constantly changing under the influence of natural causes, usually returns to its original state. And if we talk about the impact of man on the ecosystem, then it can lead to serious irreversible problems for certain subsystems of the natural environment.

Since environmental pollution is relatively "enclosed" within the territorial and economic regions, environmental monitoring is regional in nature. An indicator on the scale of the possible impact on the natural environment, where significant anthropogenic restructuring of the ecosystem is possible, is open water bodies. The water element of the environment largely determines the state of the environment as a whole. Therefore, it is very important to know the laws of pollution and their formation under the influence of natural and anthropogenic factors. One of the basic questions in this problem is the reaction of water resources to a changing anthropogenic load. Establishing the actual level of pollution of water bodies, which are complex objects of analysis, due

to their exceptional multicomponent nature and a wide concentration range of elements, heavy metals is one of the most serious problems, especially in natural ecosystems, since they migrate from one ecosystem object to another, accumulating and sometimes causing secondary pollution.

Under the influence of pollutants, there is a shift in the natural equilibrium of a multicomponent system, such as natural water. A water body “mobilizes forces” that counteract the violation of natural conditions and seek to return the entire system to its original state.

The process of distribution of pollutants in water bodies and streams can be represented by scheme 1 (Fig. 1), which includes three zones of the mixing section: I – the jet (inertial) zone of the initial mixing, II – the concentration equalization zone (three-dimensional diffusion of the pollutant occurs in it, and when shallow depth – two-dimensional); III – zone of complete mixing (the so-called longitudinal diffusion of the pollutant occurs in it). Thus, impurities that have fallen into one or another part of a river runoff or reservoir are carried away by the current and, under the influence of turbulent mixing, are distributed into adjacent stream jets. In this case, the impurities are diluted, as they move away from the place where the impurities enter the stream, their concentration gradually decreases and, in the presence of self-purification, approaches the background.

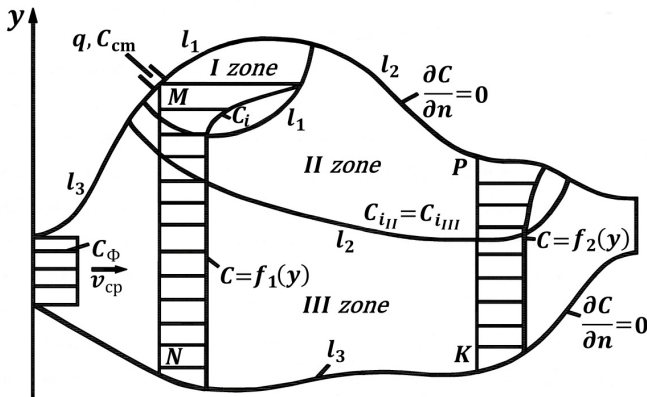


Figure 1. Schematic diagram of the distribution of wastewater for water bodies

Self-purification is carried out under the influence of biological processes by oxidation of dissolved and suspended in water substances dissolved in it oxygen. This process is the result of the life of a whole complex of aquatic organisms. The aquatic micro flora is very diverse: bacteria, viruses, bacteriophages, molds and algae. Microorganisms play an extremely important role in the process of self-cleaning of water bodies. Microbiological processes during

self-cleaning of water bodies occur as a result of bacterial nutrition, respiration and, finally, their death.

The change in the concentration of organic suspended solids is determined by two processes: precipitation and mineralization. As a result of the suspension of suspended solids in a pond, sludge is formed. In the sludge, as you know, there is a huge number of microorganisms (in 1 g of sludge up to 400–500 million microbes). Serobacteria are located in the surface layer of sludge. A number of benthic organisms – insect larvae, worms – feed on bottom silts and contribute to the transformation and mineralization of insoluble organic matter.

In order to partially eliminate future uncertainty, it is necessary to use mathematical forecasting. It consists in using the available information about the object of forecasting, mathematical processing of information by obtaining a relationship linking the characteristics with time or other independent variables and calculating the characteristics of the object at a given point in time for given values of other independent variables. The mathematical model for predicting water quality is based on the well-known semi-empirical equation of turbulent diffusion of pollutants:

$$\frac{\partial c}{\partial t} + v_x \frac{\partial c}{\partial x} + v_y \frac{\partial c}{\partial y} + v_z \frac{\partial c}{\partial z} = \frac{\partial}{\partial x} \left(D_x \frac{\partial c}{\partial x} \right) + \frac{\partial}{\partial y} \left(D_y \frac{\partial c}{\partial y} \right) + \frac{\partial}{\partial z} \left(D_z \frac{\partial c}{\partial z} \right) + \mu_c \quad (1)$$

To solve equation (1), it is necessary to specify boundary conditions, i.e. set of initial and boundary conditions. As the initial condition for equation (1), the initial (at $t = 0$) distribution of the impurity concentration is taken:

$$c = c(x, y, z, 0)$$

Boundary conditions (in the general case of the third kind) characterize the transport of matter through the surface restricting the flow. If q is the amount of substance transferred through a unit area of these surfaces per unit time, then at the boundaries of the studied object:

$$q_n = cv_n - D_n \frac{\partial c}{\partial n} \quad (2)$$

In the expressions (1), (2): c is the concentration of impurities averaged over time; v_x, v_y, v_z, v_n are the projections of the time-averaged flow velocities in the x, y, z, n directions, respectively (the XOY coordinate plane coincides with the free flow surface, z is the applicate, n is the internal normal to the boundaries of the reservoir); D_x, D_y, D_z, D_n are the turbulent diffusion coefficients in the directions x, y, z, n , respectively; μ_c is the rate of physicochemical transformations, which in some cases can be represented as:

$$\mu_c = f_1 c \quad (3)$$

where f_1 – is a parameter depending on the characteristics of physicochemical transformations.

In expression (2), the first term on the right-hand side determines the influx of impurities into the reservoir, due to the water velocities, and the second, the influx of impurities associated with the pulsation components of the actual velocities.

The distribution of impurities in ponds and watercourses from the moment they arrive should be considered as a single continuous process. In connection with the sufficient complexity of calculating the entire zone of influence of discharged effluents on the quality of natural waters, it is customary to consider three sections (Fig. 1). When studying the distribution of impurities in the zones marked in (Fig. 1), equation (1) can be used with certain assumptions. Due to the great complexity of solving system (1), (2) in engineering practice, simplified dependencies for conditionally selected mixing zones are most widely used.

Then, to calculate maximum permissible discharge (MPD) for the j -th polluting component:

$$MPD_j = g_s \frac{\widehat{C_s}(\widehat{C_{MPD}} + \widehat{C_{Ej}} - \widehat{C_{Fj}})}{100} - 3\sigma_{Bj}^2 \quad (4)$$

where g_s – parameter of the pollutant, $\widehat{C_s}$ – concentration of the j -th pollutant; $(\widehat{C_{MPD}} + \widehat{C_{Ej}} - \widehat{C_{Fj}})$ – background characteristic of water quality; σ_{Bj} – is the variance of the process.

After calculating the MPD, the materials on the substantiation of the MPD should be systematized and formalized. To conduct a more detailed comprehensive forecast of the degree of pollution and the dynamics of the accumulation of pollutants in water bodies, it is necessary to develop models for predicting changes in the ecosystem, taking into account possible forms of transition (migration) of pollutants. In our case, the hydrosphere is the atmosphere (evaporation from water to the atmosphere), the hydrosphere is the land surface (the bottom of rivers, lakes) is the transition from water to soil (filtration, “self-cleaning”, sedimentation to the bottom of water bodies). It is also necessary to take into account that one of the natural factors that can significantly change the concentration of chemical elements in enclosed bodies of water is the regime of precipitation. In dry years, due to a decrease in the water level, an increase in the concentration of chemical elements occurs, and in rainy years, on the contrary, their dilution occurs.

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Section 3. Pedagogy

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THE ROLE OF CRITICAL THINKING FOR INTELLECTUAL DEVELOPMENT OF VIETNAMESE STUDENTS

Abstract. The practice of improving the quality of higher education in Vietnam has been posing a request to innovate teaching and learning methods to develop the quality and capacity of students. In which, critical thinking is a practical tool to help them absorb knowledge and improve their thinking capacity, the ability to effectively solve the posed theoretical and practical problems. This article presents the concept of critical thinking, clarifies the role of critical thinking in the development of students' intelligence and proposes some basic strategies to develop their critical thinking through pedagogical activities, contributing to improving the quality of higher education in Vietnam today.

Keywords: critical thinking, students, Vietnam.

1. Introduction

In the document "Four pillars of education" published by Unesco (1972), which is considered as the foundation of modern education has affirmed: the first pillar is learning to know; The second pillar is learning to do; the third pillar is learning to live together; The fourth pillar is learning to be, all four pillars focus on the mission of education for learners. Accordingly, comprehensive education in the new period should be understood as training people capable of grasping and controlling knowledge, adapting to social changes.

To meet the practical requirements, the Vietnamese higher education system needs to focus for breakthroughs on active teaching methods, and have to be more flexible in creating learning styles to develop critical and creative learning skills for students. In addition to the equipped comprehensive scientific knowledge system, practical skills and other necessary qualities, it is especially important to develop thinking capacity, including critical thinking for students. Students need to build and develop critical thinking, be confident with their own abilities to adapt well to the requirements of practice. The issue of critical thinking, if concerned with the right direction, will play a great role in the intellectual development of students. Thereby, it helps

them absorb, accumulate knowledge and improve their analytical capacity, effectively solve the problems posed to meet the requirements of university education innovation and create high-quality human resources for society in the current international integration context.

2. Content of the research

2.1. Critical thinking concept

Critical thinking has a long origin in the history of human thought¹. The concept of critical thinking has been around for about 2,500 years, with ideas starting with the ancient philosopher Socrates (469–399 BC) and is still being developed today with many approaches and different interpretations.

John Dewey – an American philosopher, psychologist and educator gives an opinion: “Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends, constitutes reflective thought”². He calls critical thinking is “reflective thinking” and emphasizes the initiative of critical thinking, that is, when a person has critical thinking, they will ask questions themselves, find relevant information, ... rather than passive learning from others.

Edward Glaser said Critical thinking involves three things: (1) an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one’s experiences, (2) knowledge of the methods of logical inquiry and reasoning, and (3) some skill in applying those methods. Critical thinking calls for a persistent effort to examine any belief or supposed form of knowledge in the light of the evidence that supports it and the further conclusions to which it tends³.

Richard Paul: Critical thinking is the art of analyzing and evaluating thinking with a view to improving it⁴. He gives a model of critical thinking (The Critical Thinking Community) which can be presented in the following form: Critical thinkers routinely apply the intellectual standards (Clarity – Accuracy – Relevance – Logicalness – Breadth – Precision – Significance – Completeness – Fairness – Depth) to the elements of reasoning (Purposes – Questions – Points of view – Information – Inferences – Concepts – Implications – Assumptions) in order to develop intellectual traits (Intellectual – Humility Intellectual – Autonomy Intellectual – Integrity Intellectual Courage – Intellectual Perseverance Confidence in Reason – Intellectual Empathy Fairmindedness)⁵.

¹ The Foundation for Critical Thinking. A brief history of the idea of critical thinking, 1997. URL: <http://www.criticalthinking.org/pages/a-brief-history-of-the-idea-of-critical-thinking/408>

² Dewey J. *How We Think*. Lexington, MA: D. C. Heath and Company, 1910. – P. 9.

³ Glaser E. *An Experiment In the Development of Critical Thinking*. – New York, NY: Bureau of Publications, Teachers’ College, 1941. – P. 5–6.

⁴ Paul R., Elder L. *The Miniature Guide to Critical Thinking Concepts and Tools*. Dillon Beach: Foundation for Critical Thinking Press, 2010. – P. 4.

⁵ *Ibid.* – P. 21.

Bassham. G: “critical thinking is the general term given to a wide range of cognitive skills and intellectual dispositions needed to effectively identify, analyze, and evaluate arguments and truth claims; to discover and overcome personal preconceptions and biases; to formulate and present convincing reasons in support of conclusions; and to make reasonable, intelligent decisions about what to believe and what to do”¹.

In Vietnam, when talking about critical thinking, Nguyen Canh Toan and Nguyen Van Le ranked critical thinking as the third of the four ranks of thinking in terms of independence: dependent thinking; independent thinking; critical thinking; creative thinking. They have affirmed: “The capacity of thinking is the evaluation standard for workers in this intellectual century. Critical thinking (good thinking) not only helps to do well in school, but also helps to become a good citizen in making smart, conscious, thoughtful decisions, to find innovative solution, optimal for all social problems required”².

Tran Thi Tuyet Oanh said: “Critical thinking is the human assessment ability, expressing the human interaction with the surrounding world. Critical thinking is one of the ways to open up human intellectual potential, it acts as internal force, is the basis for creative activities leading to the discovery of new knowledge”³.

Do Kien Trung affirmed:

- Critical thinking as a field of perception provides subjects with skills to apply reason to identify, analyze and evaluate arguments effectively.
- Identify and overcome prejudices of individuals and groups.
- Present arguments clearly and convincingly to support claims.
- Seek rational and convincing decisions about what we believe and what we do⁴.

Le Hai Yen gives a definition: critical thinking “is a thought with consideration and consideration to arrive at a reasonable decision when understanding or implementing a problem”⁵.

Duong Thi Hoang Oanh and Nguyen Xuan Dat: critical thinking “emphasizes the logical, dialectical, argumentative aspect to find one or more better solutions towards the truth of knowledge, towards the right and the real”⁶.

¹ Bassham G. Critical Thinking: A Student’s Introduction. 5th ed.– New York: McGraw-Hill, 2012.–P. 1.

² Nguyen Canh Toan, Nguyen Van Le, Chau An. Arousing creative potential. Education Publishing House. Hanoi, 2004.– P. 60–61.

³ Tran Thi Tuyet Oanh. “Form critical thinking for students in the process of teaching in college”. Journal of Education, 2009.– No. 213.– P. 14–16.

⁴ Do Kien Trung. “Solutions to shape a critical thinking style”. Journal of Development and Integration, 2012.– No. 4.– P. 67.

⁵ Le Hai Yen. Teach and learn to think. University education,– Hanoi, 2008.

⁶ Duong Thi Hoang Oanh, Nguyen Xuan Dat. Applied Critical thinking. Ho Chi Minh: Vietnam National University Ho Chi Minh city, 2015.– P. 20.

Although there are many different understandings, but the above studies all emphasize the importance of logic, the dialectic of arguments, to effectively solve the problem in order to reach the truth of knowledge. Accordingly, it is possible to generalize the main approaches when studying critical thinking as follows:

- Type of thinking oriented towards personal problem solving;
- The process of analyzing, evaluating, arguing to negate or confirm the problems;
- “Thinking about thinking” or in other words expresses reflection in subject thinking;
- In terms of approaching competencies, skills and manipulations should be deployed.

From the research on the above critical thinking of domestic and foreign authors, the author concedes that:

Critical thinking is thinking that specifies, analyzes, evaluates and investigates information with a positive skepticism, then argues and proves that argument with verifiable information to produce a final conclusion is convincing, consistent with practice and logic law, in order to solve the raised problems.

Thus, in essence, critical thinking is a dialectic thinking process, including the analysis and evaluation of an existing information from other perspectives, contributing to the clarification and affirmation of the authenticity of the problem. In the process, inference often takes place in an open way, the number of solutions is unlimited, including the construction of scientific conditions, views and ideas to reach at the correct conclusion about the problem posed.

2.1. The role of critical thinking for Vietnamese students

Firstly, critical thinking contributes significantly to promoting the activeness and initiative in students' awareness.

Critical thinking students will actively ask questions, find relevant information by themselves to answer problems rather than passively receive answers from others. With the encouragement, support and encouragement from teachers, they actively overcome the threshold of timidity, fear, inferiority complex or psychological “inertia” to boldly, confidently present and defend political opinions, at the same time, to equip themselves with necessary skills, especially “soft skills” such as problem solving skills, communication skills, creativity ...

In addition, the fact that students actively ask many questions about issues of concern and are looking for solutions will promote their independent thinking, critical thinking and creative thinking. As Albert Einstein once said: “The important thing is not to stop questioning”¹. “Questioning, regarded among the most powerful tools”², the more questions learners ask, the more flexible their

¹ Einstein A. “Old man’s advice to youth: Never lose a holy curiosity”. Life Magazine, 2 May, 1955. – P. 64.

² Santos L.F. “The role of critical thinking in science education”. Journal of Education and Practice, 2017. – Vol 8(20). – P. 159.

minds will be, the more they will understand faster on that matter. Students with high creativity often know how to overcome their “shadow”, get out of the path of thinking to ask questions that need answers. These questions are not criticisms or criticisms as some people often understand, but simply questioning, surveying and commenting on the problem in many different dimensions. Thereby, they will have scientific skepticism, want to explore, like to observe, know how to ask and answer opposite and different questions; at the same time, find all relevant information to verify opinions, reinforce their beliefs in the knowledge acquired in the learning process, work as well as in life.

Secondly, critical thinking helps students mobilize all of their own knowledge and wisdom to have a comprehensive and accurate view on issues of concern.

Critical thinking is a stage in the cognitive process. Therefore, students often use this operation to collect and process information to come to a logical conclusion. In addition, critical thinking is always *continuous* because in the thinking process, students must rely on accumulated knowledge, experience and personal beliefs to analyze issues that need to be criticized; from which infer to arrive at further and more logical conclusions. Inference plays a special role in critical thinking, because both inference and deductive evaluation have positive meanings. An argument is often built on assumptions called axioms. From this set of axioms, the author of the argument applies formal logical theories to deduce and to reach on a conclusion. Critical thinking helps students evaluate arguments, whether they can be accepted or rejected.

In essence, the set of axioms is built on the basis of the accumulated knowledge of the argumentator. Thus, if the inference does not violate formal logic, the conclusion will be correct if the axiom is correct. On the contrary, if the inference is erroneous logic without basis, the conclusion is false and will become “sophistry”. Therefore, in critical thinking, the ability to reason is the key factor. Students who have critical thinking often have good inference to quickly detect the nature of the object, especially its shortcomings and limitations. “Critical thinking plays a role as a prosecutor, pointing out common deficiencies in the thinking process and providing explanations for an optimal possible choice”¹. In this aspect, it can be said that critical thinking is a measure of each student’s learning, cognitive and working capacity.

Thirdly, along with independent thinking, critical thinking plays a role as a foundation for students to develop their creative thinking.

In science, critical thinking is considered the starting point of all inventions. There will be no creative thinking and creative activities without critical thinking and critical capacity. According Nguyen Canh Toan: “To have a creative mind, you must have a critical mind. If you want to be critical, you must have an independent spirit. Indeed, to create a new product better than the old one, the critical

¹ Do Kien Trung. “Solutions to shape a critical thinking style”. Journal of Development and Integration, 2012. – No 4. – P. 67.

mind helps to evaluate the product, derived from our independent thinking”; “Creative thinking develops from independent thinking, critical thinking”¹. Critical thinking is an essential step leading to creative thinking. Critical thinking helps students to have a positive view, avoid the wrong, the bad, the obsolete to aim for the new, more progressive, better, more perfect, more useful on the path of non-stop creation. Therefore, a student will benefit society when they truly learn to become someone with independent thinking and creative ability.

With critical thinking methods, students must always be ready to brainstorm, reason and evaluate. Before accepting any opinion, students must actively analyze and evaluate the problem. That process helps them form, consolidate and develop independent and critical thinking. They constantly have to think about all the factors involved, seeking new information beyond what’s already been revealed. Furthermore, students must consider problems in many different dimensions, have a holistic view and have to predict the possibilities that may happen in the future; that is, it is necessary to be able to think creatively. Therefore, independent thinking and critical thinking are the foundation and with knowledge and experience accumulated into a system, students will have conditions to develop their creative thinking. The “combination of critical thinking and creative thinking creates a very effective thinking system. It naturally makes the learner’s thinking process more effective”².

2.3. Some strategies to develop critical thinking for Vietnamese students today

Firstly, train students skills of finding evidence to protect the right, reinforcing confidence through the system of questions suggested by teachers and the tasks assigned to students.

Examination and evaluation of differing opinions and the ability to find evidence, debate and problem-solve in learning are fundamental elements of critical thinking. Therefore, developing critical thinking for students needs to train them the skill of considering completeness and having basis in arguments. Lecturers need to build a system of questioning problems in each lecture in a reasonable way and effectively design learning tasks.

Teachers need to carefully prepare the types of questions, suitable situations such as: questions that require them to solve conflicts within the matter itself, or to compare problems, prove problems, explain new phenomena, systematically and generalize problems,... The effectiveness of class time may depend on the teacher’s ability to ask questions at the right time and the right way. The problems raised may allow students to respond in different ways, but require them to think independently in a certain approach and method. Accordingly, teachers must elicit and guide students to answer in the right direction in

¹ Nguyen Canh Toan, Nguyen Van Le, Chau An. Arousing creative potential. Education Publishing House. – Hanoi, 2004. – P. 60–61.

² Baron J. B., Sternberg R. J. Teaching thinking skills. Theory and Practice, Vietnam – Belgium Project, 2000. – P. 36.

terms of both content and method. At the same time, teachers should not interrupt students' opinions, but respect, facilitate and encourage them to actively participate in problem solving. In each step, teachers must create habits for students to reason closely and with grounds. The questions are posed in turn, in order towards the analysis of objects from concrete to abstract. Arguments and explanations must focus on critical thinking; through model, structure, and concrete examples, learners will grasp abstract concepts.

The most important thing in developing students' critical thinking is to practice problem reasoning. During the lessons, teachers need to pay attention to designing tasks so that students can practice reasoning and find the basis for their arguments. "Lessons should be designed in a way that supports students in classroom practices to do interpreting, analyzing, evaluating, questioning, inferencing, explaining, arguing, and self-regulating¹.

In order to get the correct arguments, students must understand the basis for arguments. These are logical inferences, concepts, rules, formulas. Therefore, teachers need to design learning tasks so that through the implementation of those tasks, students can practice reasoning, practice skills in finding evidence, and reinforce their beliefs.

Secondly, create opportunities for students to debate through discussions, class discussions with system of deliberate exercises.

Critical thinking is a form of thinking that has its own characteristics. Critical thinking is formed and developed on the basis of basic thinking manipulations such as analysis, synthesis, comparison, abstraction, generalization, concretization, systematization, inductive, deduction. Therefore, the practice of analyzing, synthesizing and comparing thinking operations is a very important factor to develop students' critical thinking. In order to evaluate learning problems, students must know how to analyze them to see the right and wrong place of that argument. After synthesizing the knowledge related to the problem, they must compare solutions to choose the best arguments. Therefore, teachers need to let students *discuss* to see the pros and cons of each argument. Without analyzing, synthesizing, comparing, generalizing, the evaluation and choice of arguments of students are just guesswork, lack of basis, not create confidence for them.

Lecturers need to develop students' critical thinking in a conversational environment through problematic situations to give them an opportunity to consider, research, evaluate opinions, ideas, and problem solving method. When they think critically, they recognize, correctly understand, and criticize other people's misconceptions; at the same time allows testing own concepts. From there, students boldly answer questions and ask questions to ask the teacher, ask classmates, find something hidden behind the views and give it discussion and debate. On that basis, lecturers evaluate each way of solving problems of students.

¹ Ngo Vu Thu Hang, Nguyen Thi Lien. "Critical thinking: why it is needed to develop for Vietnamese students and what are the challenges?" HNUE Journal of Science. Educational Sciences, 2017. – Vol. 62(12). – P. 31.

In addition, in order to develop students' critical thinking, it is necessary to create more free learning environments in discussion and debate. They will come up with ideas, problem-solving ways and decisions to defend their opinion. Therefore, teachers need to support students during discussions, need to resolve arguments that take place, creating a happy atmosphere in the classroom. A happy, sharing atmosphere will help teachers and students work more effectively. The small group collaborative teaching method is very suitable for this practice. Because, learning tasks will be solved not by individuals but by the cooperation and cooperation of members in a group. In that process, students are exchanged, discussed, asserted themselves in groups, creating a democratic atmosphere in the classroom; at the same time, they are trained to be independent, autonomous and able to express and reason problems. The cooperation is reciprocal, creating a sense of community and discipline. Accordingly, not only the students' critical thinking has been trained, but their collaborative working skills have also been enhanced. With such a teaching method, it is possible to inculcate knowledge while developing students' thinking naturally, without force or imposition, thereby creating confidence and motivation for them to explore new knowledge.

Thirdly, help students eliminate false information, irrelevant information by strengthening the system of questions, intentional exercises of teachers.

Knowing to recognize the shortcomings and mistakes in arguments is one of the most important points of a critical thinker. Detecting and overcoming mistakes is a regular job, always happening in the learning process. These mistakes can lie in the learner's own arguments, also in other people's arguments to which learners have access. In order to detect and correct mistakes in the learning process, students must consider, evaluate, clearly indicate the basis of correct arguments, and know how to eliminate false or unfounded arguments, through trains and develops critical thinking.

During class hours, teachers should take time for students to present their ideas or problem solving ways. In the solutions that the students give, there are many correct ways, but also many of the ideas given are not reasonable. However, teachers need to respect students' opinions, and at the same time create conditions for them to check their own arguments and teachers also need to find out the reason for that reasoning through the question "why?".

3. Conclusion

Critical thinking plays a great role in students' cognitive and practical activities. Equipping and developing their critical thinking will improve their level of awareness, practice scientific thinking methods, right direction for their creative learning activities, and overcome the limitations of their ways. wear down passive thinking and traditional teaching methods. At the same time, to promote their dynamism, activeness and creativity in studying and working in the future, thereby contributing to improving the quality of higher education and training in Vietnam today.

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Section 4. Political Science

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HOLOCAUST EDUCATION: THE CASE OF ALBANIA

Abstract. The holocaust is the most widely documented Genocide in all long history of cruelty, revealing the full range of human behavior, from horrific acts of hatred to extraordinary courage. This part of history raises profound questions about the human condition, making Holocaust education ideal for stimulating independent research in a whole range of phases and core subjects. The Holocaust symbolizes the most humane sense of the Albanians, which pushed the nation to save the Jews from expulsion by the occupying forces in the extermination camps in Europe. Albania has been known for centuries for a long history of friendship with the Jewish people, so Albanian youth must become aware of this part of history, but not only they should know the scary history of Nazism, so as not to repeat. Anti-Semitism should be taken into account by Albanian education, in general, to be used as a guiding instrument of education, in support of the legal and punitive authorities in their efforts to detect and crack down effectively, on Anti-Semitic attacks. This article provides a brief overview of some of the issues relating to how the Holocaust can be taught and learned about.

Keywords: Holocaust, Education, Anti-Semitism, teaching, Albanian, Courage.

Introduction

Humanity entered the 21st century, in the shadow of the Holocaust, this phenomenon still revolves around the world¹. Traces of this hatred unfortunately have not yet disappeared. Starting from 2004, in Albania, on the “Remembrance Day” activities of scientific, academic, commemorative, and reflective character take place. Albania of these tragic years shows that Anti-Semitism is not inevitable and that there can be a real agreement between a nation and a minority that lives in it. The reason for choosing this topic comes out of a desire

¹ The Holocaust and the United Nations Outreach Programme. Discussion Papers Journal, United Nations New York, 2009.– P. 3.

to remember a part of Jewish history but even of human history, marked by tragic martyrs, persecution, and exoduses. Their memory is a moral obligation that we have towards the people to human dignity, insults, persecution of innocent people, of mass extermination of a race. The content of the data and records of the history of the Jews shows us a variety of sources and extremely extensive: archival documents, periodical press Jewish and non-Jewish press, evidence and information collected directly, etc. Often, interest in the Jewish past and the Holocaust is greeted with tension and referred to with contempt as “*an imported way for Jews*”. Defenders of “*do not forget to forget*” see the dark painful past as an unjust insult to national history and memory and as a threat to the identity and future of the nation, and therefore they attack the defenders of “*do not forget to*” *you remember*”. The story of the Holocaust is above all a human story, which speaks of people or rather of a people. The young people acquaintance and meetings with the “*survivors*” or the witnesses of the time who were present at the events of the Holocaust, their daily life, and their reality, should serve as a basis for better didactic work and most meaningful on the part of educators. The genocide of the Jewish people by the Nazi regime and its collaborators, the Holocaust or Shoah, compelled the world to develop both a new vocabulary to describe the atrocities and a new vision of universal human rights to ensure that such crimes would not be repeated. The unique events of the Holocaust have universal significance¹.

1. A noble purpose and motivation for advancing the education of the Holocaust

The Holocaust must be understood in its own right and for its contributions to understanding genocide more generally. In other words, for education Holocaust to contribute to the prevention of such atrocities, it must be understood in its historical specificity and more generally in its sociological and philosophical universality as a genocide. Effective education Holocaust may make an important contribution, but it must be situated within sound models of education, seeking attitude change, and responsible political and geopolitical conduct². Preventing genocide is a noble purpose and motivation for advancing the Holocaust, if not a realistic concrete outcome or goal for education Holocaust in isolation. The scholar has to help to clarify the relationship between the individual elements in the sequence, drawing links between knowledge and attitudes, attitudes and behaviors, and behaviors and effects when the empirical evidence justifies it. And those links must be adequately theorized, or to put the task less abstractly, research can help us to understand and to express the nature of the relationship between these separate elements. Those

¹ Ian Davies, *Teaching the Holocaust: Educational Dimensions, Principles and Practice*, Bloomsbury Publishing Plc, 2000. – P 8.

² Stevick Doyle, *How does education about the Holocaust advance global citizenship education?* 2018. – P. 5.

relationships, such as that between knowledge and attitudes, can be complex, and often vary from culture to culture¹. For example, the case of Albania. Historical facts claim that Albania was at that time the only European country that had officially opened its doors to thousands of Jews of different nationalities. Whoever managed to enter our land found refuge, hiding, and salvation! These two peoples during the long history of coexistence, from antiquity to the tragic facts of 1933–1945, have shown that they can cope with the difficulties in which they occurred. These women, these men, and children show that then it was, as it is today, possible to act with courage, honesty, and generosity even in the most difficult of circumstances. During one of humanity's darkest chapters, when millions of Jews, were rounded up across Europe, many Albanians put up a fight to save strangers. They risked their lives to shelter displaced Jewish families under Italian and later German, occupation during the Holocaust. Many Albanians took refugees into their homes despite the risks and the cost, passing their guests off as family members to keep them safe.

We hope the memories of the past help us to build a more secure future! It is certainly not easy to talk about Jewish identity as national identity is intertwined with a religious one, and moreover, Jews have lived in different parts of the world. Therefore research by professors and students should focus on Albania, based on data from Jews in our lands during the Ottoman Empire; the Monarchy of Ahmet Zog and Victor Emmanuel III, the occupation by the Nazis², and then the fate of this community in Albanian territory. In this part of history it is important to address in more depth the cooperating governments, which we're aware of the entry of Jews into Albania, which did not prevent their arrival, on the contrary, allowed the concealment of identity, and recently did not give them the lists that demanded the Nazi authorities³!

This point is not to be taken lightly: for students to take action to prevent an atrocity, they must believe that it is wrong. For this reason, learning must encompass cognitive learning and the moral evaluation of events, together with an understanding of the kinds of civic action, individually and collectively, that can be taken to achieve positive global ends that are consistent with our universal values.

1. 1. The testimony of the survivors

Understanding the peculiarities of Albanian Jewish history in relation to the Shoah has become one of the main interests of scientific scholars and we think that, for students of history and social sciences, it is important to understand and delve into this past. It took decades to reach a full understanding of the Jewish genocide and to build coherent historiography of this important event.

¹ Stevick Doyle. How does education about the Holocaust advance global citizenship education, 2018. – P. 5.

² Shaban Sinani. Hebrenjtë në shqipëri. Prania dhe shpëtimi, Naimi, – Tiranë, 2009. – P. 31.

³ Apostol Kotani. Shqiptarët dhe hebrenjtë në shekuj, – Tiranë, 2007. – P. 17.

Shoah survivors play a central role in reconstructing its history, giving content to memory, remembrance, and educational work. Testimonies and encounters with surviving individuals serve as a central axis in transmitting historical events and memory to future generations. Today, awareness and recognition of events require a renewed sense of ethical responsibility from all members of our society, especially during this new wave of anti-Semitism that is spreading across Europe¹.

Professors and psychologists in Europe agree that it is important to teach ethical values early on to younger and younger classes, and as a result, they develop education programs suitable for all ages. We believe that all young people are able to cope and learn about Shoah history with an age-appropriate approach. But what are the pedagogical principles that should guide education against Anti-Semitism? An appropriate educational program should be created for each age group in order to allow the study of different aspects of the human history of that era. This process should contribute to the internalization of these values hoping, in building an individual moral identity and ultimately in a more just society. The student's encounter with the past and its ethical dilemmas will be internalized over the years and will help shape their personal identity and ethics. But what are the key issues to consider when teaching about this complex past?

The challenge of learning to act in threatening and difficult circumstances is a challenge that needs to be addressed. Students must first be able to perceive that something problematic is happening or could happen. Perception requires attention and awareness. Then, students must make the moral judgment that what is happening is wrong. Societies struggle to develop but must maintain such a moral consensus. The more advanced a problem is, the more obvious it is and the more difficult the counteraction can be. Thus, the necessity of moral consciousness must develop beyond reactions to obvious problems – although these are critical – and be built towards the proactive prevention of new problems.

The phenomenon of the Holocaust and the rescue of the Jews in Albania is not an issue we should be proud of, but seek an explanation of how it was possible that the poorest people in Europe, left without a government and occupied for years, achieved to turn into a model for the protection of an endangered breed. The years that covered the period 1928–1945 are those in which Anti-Semitism developed violently and horribly in many parts of the world, with the exception of Albania. Albania of these tragic years shows that Anti-Semitism is not inevitable and that there can be a real agreement between a nation and the minority living in it. In the museum of Jerusalem, Yad Vashem, the Jewish people have honoured 63 Albanians who protected the Jews, honouring them

¹ Stefania Lucamante. *L'eredità 'indispensabile' di Primo Levi: da Eraldo Affinati a Rosetta Loy tra storia e finzione*, DEP, – No. 29. 2016. – P 8.

with honorary titles. The main purpose of the decision to build Yad Vashem was to create a memorial to preserve the memory of the six million Jews, victims of the Holocaust. Yad Vashem is the only project of its kind in the world. He honours the individuals who saved the Jews during the war. Since 1963, he has been tasked with awarding

“*The Righteous Among the Nations*” Prize to a commission chaired by a judge of the Supreme Court of Israel, whose task is to scrutinize all documents on the Cases it examines. The Yad Vashem Memorial Museum of the Holocaust and the Israel Memorial Museum have also institutionally commemorated Albania’s role in rescuing Jews during a time of public endangerment. Since 1997, the US Congress has adopted three resolutions honouring the Albanian people. Their stories unquestionably represent a valuable and effective educational tool and this effort to know the “*Righteous*” is unique in the world¹.

Conclusion

The genocide of the Jewish people by the Nazi regime and its collaborators, the Holocaust or the Shoah, forced the world to develop a new vocabulary to describe atrocities and a new vision of universal human rights in an effort to ensure that such crimes would not be repeated.

The following decades demonstrated that genocide and crimes against humanity were indeed issues of global concern, and efforts to prevent them must be a joint, global commitment. A key dimension of this effort is education. The Holocaust must be understood on its own and for its contributions to understanding genocide in general. In other words, education in this field can contribute to the prevention of such atrocities, it must be understood in its historical specificity and more generally in its sociological and philosophical universality as a genocide.

To achieve these goals, Holocaust education is being adopted worldwide with the support of local communities, national governments and global organizations such as UNESCO, which is responsible for “*promoting Holocaust remembrance through education*”, according to resolution 34 C/61 of its General Conference, and the United Nations, whose General Assembly resolution on Holocaust remembrance (60/7) encourages Member States “*.to develop educational programmers that will inculcate future generations with the lessons of the Holocaust in order to help prevent future acts of genocide*”².

Enriching history with real human faces, understanding the complexity of the human being, helps a lot in preventing the risk of trivializing the theme and making it a one-dimensional theme. These should be the premises of all our educational work in Albania.

¹ URL: <https://www.yadvashem.org>

² URL: <https://unesdoc.unesco.org/ark>

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ALBANIA-USA RELATIONS: IMPACT ON DEMOCRATIC DEVELOPMENTS FOR NATO ACCESSION

Abstract. On its way to democratization, except to economic and political reforms, Albania also developed an active foreign policy, where it began to activate political and economic relations with European countries, Euro-Atlantic organizations and to consider membership in the OSCE, NATO or the EU as a key and consistent priority of its foreign policy. The object of study in this paper is the role that Albanian foreign policy has played in promoting stability, security and prosperity, like as assistance that USA gave Albania (until then without a previous democratic experience), in its efforts for acceleration democratic reforms and meeting the membership criteria, likewise the assistance to improve the quality of these reforms, in the stability and sustainability of democratic achievements in Albania. Special role in this paper we will dedicate Albania's relations with the United States established since 1991, President Bush's visit, USA investments in Albania, the support of American governments to improve democratic institutions, rule of law, like as the American contribution with all the capacities for Anti-Terror Coalition, cooperation with the USA in the context of Adriatic Charter etc.

Keywords: Reform, Democratization, USA, Albania, NATO.

Introduction

Until 1990, the Albanian state had no relations with the United States. Diplomatic and consular relations between the two countries were established on December 4 1922, when the extraordinary envoy and the Plenipotentiary Minister Uliksa Grant-Smith, presented his credentials to the Albanian government. These relations were interrupted in 1939, when Italy occupied Albania and took control of Albania's foreign affairs. Relations were reset again on March 15, 1991, with the signing of the Memorandum of Understanding in Washington¹. Relations with the USA were very important for Albania's membership in NATO, so in the early 1990s, Albanian diplomats at the UN began to moderate their attitude toward the USA. At the end of April of the same year, the Albanian government, declared Albania's interest in re-establishing diplomatic relations with the USA. In June and August 1990, Albania Permanent Mission to the UN in New York, held meetings with USA officials to determine the modalities of how to restore diplomatic relations (signing a Memorandum). There were also

¹ A Guide to the United States' History of Recognition, Diplomatic, and Consular Relations, by Country, since 1776. – Albania. URL: <https://history.state.gov/countries/albania>

discussions about the validity of the agreements signed during the year's '20 and '30, part of which was left power.

February 22, 1991, was signed the Memorandum, with request of the American side, while on March 23, 1991, in Albania arrived a group of State Department officials, for the procedures for opening the US Embassy in Tirana. In June, the US appointed its envoy to Albania. On October 1, 1991, the US Embassy was opened in Albania, and in December arrived the first US Ambassador William Ryerson¹.

Mechanisms that have influenced the democratization process in Albania

In June 1991, USA Secretary of State James Baker visited Albania. Baker promised USA support and encouraged democratic developments in Albania, underlining that the future of bilateral relations underlining that the future of bilateral relations would be greatly influenced by the development of the democratization process. His visit had three purposes: first, the normalization of USA-Albania relations and the growing interest of American diplomacy for Albania, in a tense and explosive situation in the Balkans (riots in the former Yugoslavia); second, pressure on the Albanian politics in power at that time to continue with the reforms for the democratization of the country and conversion in a market economy and support for the opposition. third, to show support for the Albanian people².

In November 1991, the Albanian Prime Minister Ylli Bufi, visited the US where he met some senior officials like as: Undersecretary of State for Political Affairs, Arnold Kanter; members of the Chamber of Foreign Affairs and Foreign Relations Committee in Senate; officials of the Department of Treasury, Trade, Agriculture and the WB, also signed an agreement with OPIC, which aimed to guarantee American investment in Albania. Opposition leader S. Berisha also visited the USA twice and managed to gain American support, as much as the American Ambassador in Tirana, W. Ryerson, participated in opposition rallies³.

Coming the Democrats in power followed by a very fruitful Albania-US relationship, as the Democrat government saw American support as a guarantee of the country's security and independence, in case of a possible conflict in Kosovo and as a balance to the support that the Italian government of Bettino Craxi made to the socialist party. The USA approach was strategic, as in the conflict in the former Yugoslavia (Croatia and Bosnia), Albania was seen as a

¹ 28 Vite nga rivendosja e marrëdhënieve diplomatike me SHBA-të 15 mars 1991. Ministria për Evropën dhe Punët e Jashtme, Zyra e Shtypit. URL: <https://punetejashtme.gov.al/28-vite-nga-rivendosja-e-marredhenieve-diplomatike-me-shba-15-mars-1991>

² Vladimir Cicani. Albanian-American relations the past and the future, University of Nevada, Las Vegas August, 2002. — P. 38.

³ Dhimitër Binaj. An analysis of United States-Albanian security relations in light of the War on Terrorism, Naval Postgraduate School, Monterey, 2004. — P. 46–47. URL: https://tile.loc.gov/storage-services/master/frd/frdcstdy/al/albaniacountryst00zick/albaniacountryst00zick_djvu.txt

factor of stability and a partner in USA commitment in the region not only in providing its territory in support of military missions, but also the influence that Berisha's government could have on Kosovo Albanian leaders, to avoid such a situation. Albania could serve American interests in the region, certainly in terms of internal stability and economic development, therefore, the American aid to Albania has been unsparing in all political, economic and more powerful dimensions in military aid¹.

Work plan of the Ministry of Foreign Affairs, regarding Albania's relations with the USA, for 1992, it focused in several directions:

- In political terms, institutionalization of political contacts at all levels, holding regular consultations with the USA side on the situation in the region; coordination with the American congressmen who had created the Albanian lobby in the American Congress; invitations to active congressmen on the issue of Albania; Invitations to USA Congressional and Senate Observer Representatives in the March 1992 Election; the opening of the Albanian embassy in Washington and the appointment of the Albanian ambassador there; also, high-level visits to the USA.

- In economic terms, preparation of information with indicators of the Albanian economy that would reflect the possibility of Albania to attract foreign investors, including American ones; attempt to remove Jackson Vanik amendment, concluding the agreement and determining the status as the most favoured nation in trade for the USA getting a state loan; assistance to USA state agencies that have assistance programs for Albania (USAID, VOCA, IESC, USIA, Peace Corps); improving the activity of the Albanian-American trade association in Washington, etc.

- In military terms it was planned: consolidation of relations in the military area, visit of the Albanian military to the USA; the arrival of American warships in Albanian ports.

- In terms of education, schooling of Albanian students and specialists in the USA; the operation of the agreement between the University of Oklahoma and the University of Tirana, opening of business schools in Albania in cooperation with the USA Department of Commerce².

As part of the partnership program that the USA developed with Central and Eastern European countries, to help them reform the army in January 1993, Albanian Ministry of Defence and US European Command sign the bilateral agreement, while in October 1993 a Memorandum of Understanding was signed which contributed to the increase of bilateral cooperation in the field of defence between the two countries. In January 1995, bilateral defence consultations on defence and security issues were held in Tirana. The UAV unit was stationed

¹ Vladimir Cicani, quoted book *Albanian – American Relations ...*, – P. 40–41.

² Work plan over our country USA, Asian countries, File A/6. – No. 11. – Year 1992. Ministry of Foreign Affairs, Directory III, sheets 2–4.

at Gjader air base (some countries had refused its presence in their territory, among them NATO members) that would serve reconnaissance missions in Bosnia in support of UN peacekeepers¹.

Assisting in the consolidation of democracy in Albania has been a fundamental objective for the United States, therefore, they were very engaged in the conduct of the 1996 elections. With their funds, USA supported the training of Albanian observers, also encouraged the participation of observers from other countries, including the OSCE. The US embassy itself even participated in election monitoring².

After the fall of communism, USA was confirmed as the only power in the world and its role focused on helping to democratize the countries of Central and Eastern Europe and in particular Albania, which owes much to its assistance in its democratic journey. The two countries have signed and ratified a number of agreements: a treaty to prevent the proliferation of weapons of mass destruction and promoting defense and military relations; Adriatic Charter and an agreement on non-surrender of persons to the International Criminal Court. The United States has also supported Albania's goal of EU and NATO membership and have assisted him in efforts to strengthen democratic institutions and the rule of law; to promote sustainable growth, with broad economic base; like as for the country's integration into European and Euro-Atlantic structures³. Albania-USA bilateral relations characterized by cooperation on defence and security issues, based on Albania's strategic position and its role in regional security; in the belief that the USA nurtured for the essential role that military reform played in transforming the societies of Eastern European countries, like as the role that the State Department could play in building democratic institutions through cooperation with their defence institutions⁴. Regarding bilateral economic relations, trade between them occupied a small volume and was carried on in a few kinds of goods and services. Albania imported food, vehicles and machinery from the USA, and computer and electronic equipment, and exported minerals there, fuel and oil, agricultural products, shoes and textiles, a part of which he exported free of charge within the program of the General System of Preferences. Also, both countries, have also signed a

¹ Dhimitër Binaj. An analysis of United States-Albanian security relations in light of the War on Terrorism, Naval Postgraduate School, Monterey, 2004. — f. 49.

² Commission on Security and Cooperation in Europe, The Albanian Parliamentary Elections of 1996, Tuesday, June 18. 1996. — f. 8; * The Jackson Venik Amendment refers to a provision in the Article IV of the U.S. Trade Act of 1974, through which it was intended to put pressure on communist countries for human rights violations.

³ U.S Department of State, Bilateral relations fact sheet. bureau of european and eurasian affairs september 19, 2019. URL: <https://www.state.gov/u-s-relations-with-albania>

⁴ Dhimitër Binaj, quoted book An analysis of United States-Albanian security ..., — P.48–49. URL: <https://ia803000.us.archive.org/10/items/annalysisofunite109451314/annalysisofunite109451314.pdf>

bilateral investment treaty¹. The currently, in Albania conduct their economic activity about 150 American businesses or Albanian-American joint ventures operating mainly in the field of trade, industry and agriculture, in the main cities of Albania, such as Tirana, Durrës or Vlora².

The status of Albania-USA relations is considered excellent. While Albanians are known for their pro-American sentiments, these relationships have been raised to the level of partnership (Joint Statement on the Albania-USA Strategic Partnership signed April 20, 2015) which aims to improve on mutual priorities such as security, rule of law, energy, etc. Except President Bush (young), four USA Secretaries of State have also visited Albania: Madeleine on February 19, 2000; Colin Powell, on May 2003; Hillary Clinton on November 1, 2012 and John Kerry on February 14, 2014³. In 2003, a number of agreements were signed and ratified between Albania and the United States, together with a Treaty on the Prevention of the Proliferation of Weapons of Mass Destruction.

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² Bilateral Relations. Albanian Embassy in United States of America. URL: <http://www.ambasadat.gov.al/usa/en/bilateral-relations>, aksesuar më 03.07.2020.

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Section 5. Physics

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DETERMINING THE COEFFICIENTS OF HEAT- TEMPERATURE CONDUCTIVITY AND HEAT CAPACITY OF CORE SAMPLES OF THE NOVOSAMARSKY DEPOSIT

Abstract. In this work, a method for determining the hydrodynamic parameters of rocks in the study of wells is used, as well as a method for determining the thermophysical parameters of rocks. The results of the coefficients of thermal and thermal diffusivity and heat capacity of rocks of the Novosamarskoye field, which can be used in the design of hydrothermal wells, are presented.

Experiments to determine the thermophysical properties were carried out on samples made from core samples according to GOST 21153.0–75 "Mountain rocks. Sampling and General Requirements for Physical Test Methods".

The main purpose of this work is to determine the coefficients of thermal and thermal diffusivity and heat capacity of core samples from different sampling locations along the depth of the Novosamarskoye field.

The tasks in connection with this goal are:

- 1) Acquaintance with the methods for determining the thermophysical parameters of rocks, the equipment used for conducting experiments;
- 2) Obtaining results and correlation between thermal properties and porosity of rocks.

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ОПРЕДЕЛЕНИЕ КОЭФФИЦИЕНТОВ ТЕПЛО-, ТЕМПЕРАТУРОПРОВОДНОСТИ И ТЕПЛОЕМКОСТИ ОБРАЗЦОВ КЕРНА НОВОСАМАРСКОГО МЕСТОРОЖДЕНИЯ

Аннотация. В данной работе использован метод определения гидродинамических параметров горных пород при исследовании скважин, так же использован метод определения теплофизических параметров горных пород. Приведены результаты коэффициентов тепло-, температуропроводности и теплоемкости горных пород Новосамарского месторождения, которые могут быть использованы при проектировании гидротермальных скважин.

Эксперименты по определению теплофизических свойств проводились на образцах, изготовленных из керна по ГОСТ 21153.0–75 «Породы горные. Отбор проб и общие требования к методам физических испытаний».

Основной целью данной работы является определение коэффициентов тепло-, температуропроводности и теплоемкости образцов керна с разных мест отбора по глубине залегания Новосамарского месторождения.

Задачами, в связи с указанной целью являются:

- 1) Ознакомление с методиками определения теплофизических параметров горных пород, используемое оборудование для проведения экспериментов;
- 2) Получение результатов и корреляция между термическими свойствами и пористостью горных пород.

Введение

Коэффициенты теплопроводности, температуропроводности и теплоемкости являются одними из самых важных факторов, связанные с бурением, цементированием и последующей эксплуатацией скважины. Но при этом необходимо достичь точных и простых методов определения теплофизических свойств горных пород. Для достижения решений таких задач существуют лаборатории по исследования кернавого материала.

Для определения теплопроводности в лабораторных условиях часто используют ГОСТы и литературу для литологических разностей, но следует отметить, что литологический состав горных пород не является надежным критерием. Это связано с тем, что для одного и того же литологического состава коэффициент теплопроводности изменяется в широком диапазоне. В качестве примера, коэффициент теплопроводности глин составляет от 0.6 до 2.76, песчаника от 0.8 до 4.2, известняка от 0.84 до 3.45 Вт/м*К и т.д. В данной работе измерение теплофизических параметров образцов горных пород производились в лабораторных условиях при комнатной температуре и атмосферном давлении.

Метод определения теплофизических параметров горных пород, используемое оборудование для проведения экспериментов.

Теплопроводность, температуропроводность и теплоёмкость горных пород были измерены на 200 сухих и водонасыщенных образцах керна (интервал глубины отбора образцов составляет 1511–1925 м). Размеры образцов составляют: диаметр 30 мм и высота 30 мм.¹

Для измерения тепловых свойств керна используется технология бесконтактного оптического сканирования. Этот метод основан на сканировании поверхности образца сфокусированным подвижным источником тепла в сочетании с датчиком температуры. Оптическое сканирование обеспечивает возможность регистрации распределения теплопроводности λ и температуропроводности α вдоль каждого образца с пространственным разрешением около 1 и 1,5 см соответственно.

Технология оптического сканирования имеет следующие преимущества по сравнению с другими методами измерения тепловых свойств для наших целей:

1) высокая точность (1,5%) измерений теплопроводности в диапазоне 0,2... 50,0 Вт (м К)⁻¹ для сухих и флюидонасыщенных пород;

2) высокая точность (2,0%) измерений температуропроводности в диапазоне $(0,1... 5,0) \times 10^{-6}$ м² с⁻¹ для сухих и насыщенных жидкостью образцов горных пород;

3) одновременное определение компонентов тензора теплопроводности и диффузионной способности для каждого исследуемого образца горных пород;

4) многочисленные неразрушающие измерения на цилиндрических или плоских поверхностях кернов без какой-либо дополнительной механической обработки;

5) измерения тепловых свойств на водонасыщенных образцах осадочных пород с высокой пористостью без разрушения образцов;

¹ ГОСТ 21153.0–75 «Породы горные. Отбор проб и общие требования к методам физических испытаний».

6) запись тепловых распределение электропроводности и температуропроводности вдоль линии сканирования для каждого исследуемого образца породы, чтобы учесть неоднородность породы;

7) время измерения (от 10 до 30 с) для каждого образца.

Пористость и плотность образцов горных пород определяли с использованием метода водонасыщенности с основной погрешностью $\pm 0,005$ и 5 кг м^{-3} . Образцы высушивали при температуре 105°C в течение 48 часов в специальной печи (см. рис. 1.). После, при помощи вакуума (сатуратора) образцы насыщались водой в течении 12 часов (см. рис. 2.).



Рисунок 1. Шкаф сушильный ШС-80–01 (200°C)

Предназначен для получения и поддержания внутри рабочей камеры с высокой точностью температуры, необходимой для проведения работ в медицине и в лабораториях различных промышленных предприятий. Рабочая камера выполнена из нержавеющей стали, объемом камеры 80 литров.

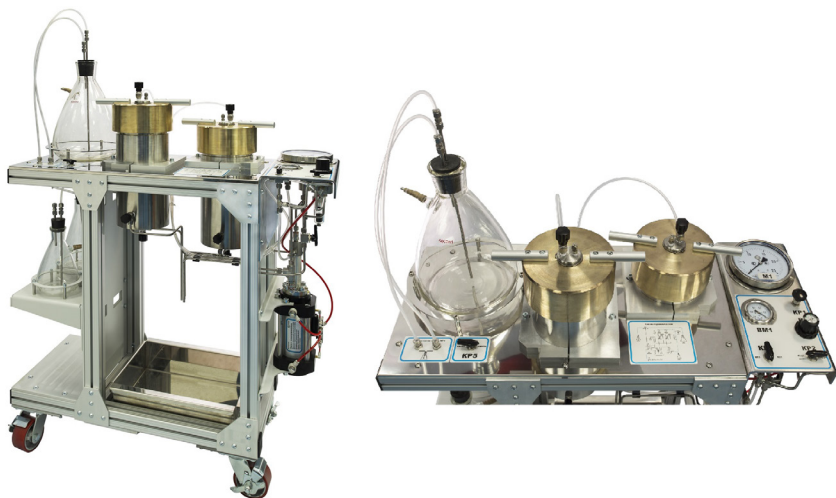


Рисунок 2. Установка для насыщения образцов керна (Сатуратор)

Сатуратор предназначен для насыщения образцов керна жидкостью (пластовой водой или ее моделью, нефтью, керосином и др.) в соответствии с ГОСТ 26450.1–85. Прибор комплектуется двумя камерами насыщения, вакуумным и пневматическим насосами и позволяет осуществлять последовательное вакуумирование образцов керна и жидкости и донасыщение образцов при повышенном или атмосферном давлении.

Для измерения тепловых свойств поверхности образцов были высушены мягкой тканью, после этого наносили тонкий слой эмали (около 25 микрон) на поверхность образца. Расслоение эмали на поверхности образца породы предотвращает чрезмерное испарение воды при измерении тепловых свойств, которое длилось от 1 до 1,5 мин. Измерения на водонасыщенных образцах повторяли три-четыре раза, чтобы проверить, изменяется ли состояние насыщения при оптическом нагреве. Во время проведения экспериментов общей продолжительностью 12–15 мин результаты не изменились, что указывает на то, что состояние насыщения не зависит от нагрева в этот период времени.

Получение результатов и корреляция между термическими свойствами и пористостью горных пород;

Исследованные породы характеризуются большим диапазоном термических свойств.

Теплопроводность сухих ($\lambda_{\text{сух}}$) и водонасыщенных пород ($\lambda_{\text{насыщ}}$) составляет от 0,65 до 5,40 Вт/(м К) и от 1,57 до 5,59 Вт/(м К) температуропроводность соответственно. Температуропроводность горной породы ($\alpha_{\text{сух}}$ и $\alpha_{\text{насыщ}}$) составляет от $0,55 \times 10^{-6}$ до $3,17 \times 10^{-6}$ м²/с от $0,55 \times 10^{-6}$ до $2,58 \times 10^{-6}$ м²/с для сухого и водонасыщенного состояния образцов горных пород. Теплоёмкость составляет $(0,94... 2,87) \times 10^6$ Дж/(м³ К) для сухих пород и $(1,55 ... 3,77) \times 10^6$ Дж/(м³ К) для водонасыщенных пород. Значения плотности составляют $(1,60... 3,42) \times 10^3$ кг/м³ и $(1,93... 3,44) \times 10^3$ кг/м³ для сухих и водонасыщенных пород. Диапазон пористости составляет 0... 36,8%. Основные теплофизические параметры образцов керна, полученные в ходе лабораторных исследований, можно увидеть в (таблице 1):

Полученные данные показали, что для изучения корреляции между тепловыми и другими физическими свойствами горных пород важно использовать параллельные плоскости залегания, это необходимо для того, чтобы минимизировать влияние микротрещин, которые практически не меняют показания пористости, но могут существенно нарушать значения теплопроводности. Эти микротрещины могут быть вызваны путём извлечения кернового материала из скважины или иметь эти микротрещины по природе происхождения. Из полученных данных можно увидеть, что тесная корреляция между $\lambda_{\text{сух}}$ и пористости наблюдается на известняковых породах, песчаниках и доломитных породах¹.

¹ Кларк С.П. «Справочник физических констант горных пород», – Москва, 1969 г. – 542 с.

Таблица 1. – Средние значения теплопроводности, температуропроводности, теплоёмкости, плотности и проницаемости сухих и насыщенных образцов

Глубина, м	$\lambda_{\text{сух}}, \text{Вт}/(\text{м К})$	$\lambda_{\text{насыщ}}, \text{Вт}/(\text{м К})$	$\alpha_{\text{сух}}, \text{м}^2/\text{с}$	$\alpha_{\text{насыщ}}, \text{м}^2/\text{с}$	$\rho, \text{кг}/\text{м}^3$	$C_{\text{сух}}, \text{Дж}/(\text{м}^3 \text{ К})$	$C_{\text{насыщ}}, \text{Дж}/(\text{м}^3 \text{ К})$	П, %
1511–1718	0,65–3,22	1,58–2,04	0,67–1,52	0,58–0,73	2,05–2,36	0,94–2,32	1,55–3,19	16,6–36,8
1720–1925	0,88–3,04	2,09–3,02	0,55–1,29	0,74–1,3	2,34–2,64	1,45–2,42	2,14–3,42	1,95–13,1

Таблица 2. – Уравнение регрессии для каждого вида корреляции горных пород

Тип корреляции	Известняк	Доломит	Песчаник
$\lambda_{\text{сух}} = f(\Pi)$	$\lambda_{\text{сух}} = -0,052\Pi + 2,61$ (R = -0,96)	$\lambda_{\text{сух}} = 0,0015\Pi^2 - 0,15\Pi + 4,7$ (R = -0,83)	$\lambda_{\text{сух}} = 2,52e^{-0,0308\Pi}$ (R = -0,84)
$\lambda_{\text{насыщ}} = f(\Pi)$	$\lambda_{\text{насыщ}} = -0,028\Pi + 2,65$ (R = -0,82)	$\lambda_{\text{насыщ}} = 4,87e^{-0,018\Pi}$ (R = -0,72)	$\lambda_{\text{насыщ}} = -0,029\Pi + 2,66$ (R = -0,78)
$\lambda_{\text{сух}}/\lambda_{\text{насыщ}} = f(\Pi)$	$\lambda_{\text{сух}}/\lambda_{\text{насыщ}} = 0,89e^{0,0216\Pi}$ (R = 0,92)	$\lambda_{\text{сух}}/\lambda_{\text{насыщ}} = 0,024\Pi + 0,99$ (R = 0,73)	$\lambda_{\text{сух}}/\lambda_{\text{насыщ}} = 1,045e^{0,0183\Pi}$ (R = 0,82)
C = f (Π)	C = -0,028Π+2,21 (R = -0,77)	C = -0,033Π+2,53 (R = -0,50)	C = -0,019Π+2,22 (R = -0,70)
$\alpha_{\text{сух}} = f(\lambda_{\text{сух}})$	$\alpha_{\text{сух}} = 0,57e^{0,282\lambda_{\text{сух}}}$ (R=0,96)		
$\alpha_{\text{насыщ}} = f(\lambda_{\text{насыщ}})$	$A_{\text{насыщ}} = 0,44e^{0,295\lambda_{\text{насыщ}}}$ (R=0,93)		

Исходя из полученных данных теплопроводность можно оценивать как 2.52 Вт/(м К) для известняков, 2.59 Вт/(м К) для песчаников и 4.7 Вт/(м К) для доломитов.

Уравнения регрессии приведены в (таблице 2). Тип уравнения регрессии был выбран для каждого поля корреляции, чтобы соответствовать наибольшему значению коэффициента корреляции (R).

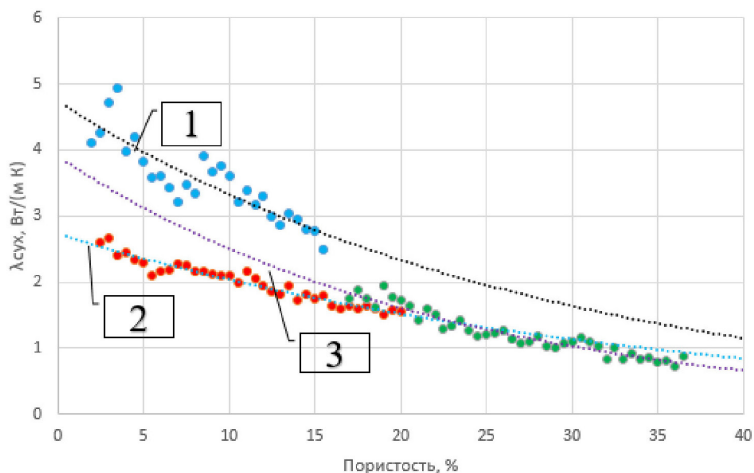


Рисунок 3. Корреляция между теплопроводностью сухих горных пород и пористостью. Линии регрессии для разных типов пород: 1) доломит; 2) песчаник; 3) известняк

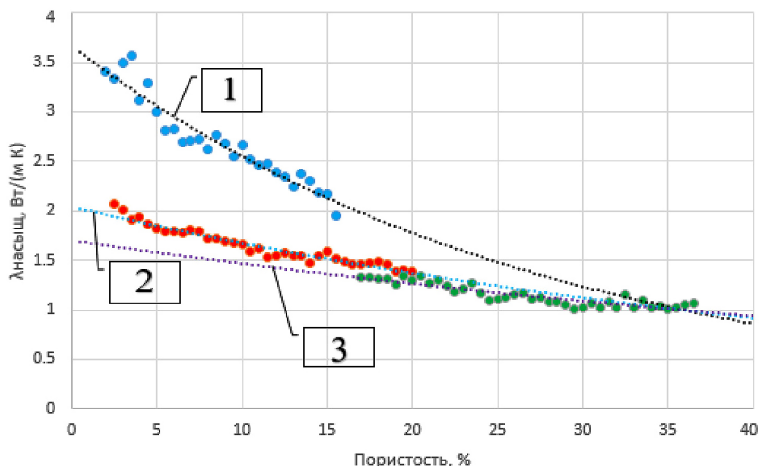


Рисунок 4. Корреляция между теплопроводностью насыщенных горных пород и пористостью. Линии регрессии для разных типов пород: 1) доломит; 2) песчаник; 3) известняк

Коэффициенты корреляции водонасыщенных образцов (см. Рис. 4) ниже, чем для сухих образцов. Это можно объяснить меньшим значе-

нием теплопроводности минерального состава скелета и жидкости (теплопроводность составляет около 0,024 Вт /м К) для воздуха, около 0,60 Вт/м К). Содержание иных видов литологического состава, например, глины также существенно нарушает эту корреляцию в образцах керна насыщенных водой.

Поэтому для водонасыщенных пород другие факторы – содержание минералов с высокой теплопроводностью, различие в геометрии пористой среды и содержания глины – могут значительно повлиять на значение пористости. Тем не менее корреляция между теплопроводностью и пористостью в целом близка для сухих и водонасыщенных образцов.

Из рисунков 3 и 4 видно, что корреляции между коэффициентами теплопроводности и пористости и регрессии весьма схожи для разных типов пород, когда пористость достаточно высока (при $\Pi > 15\%$) и содержание минералов с высокой теплопроводностью не является существенным.

Так же наблюдается корреляция между теплоёмкостью образцов и пористостью (см. Рис 5.). Коэффициенты корреляции составляют $-0,77, -0,57, -0,70$.

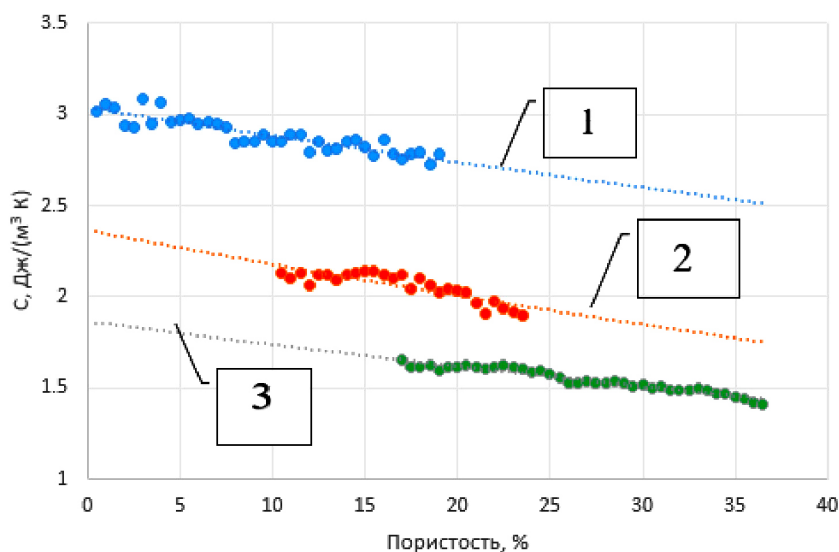


Рисунок 5. Корреляция между теплоёмкостью и пористостью. Линии регрессии для разных типов пород: 1) доломит; 2) песчаник; 3) известняк

Высокая корреляция между теплопроводностью и температуропроводностью наблюдается тогда, когда все типы пород объединены в одну статистическую выборку (см. рис. 6). Поскольку значения теплопроводности и температуропроводности связаны величиной $\alpha = \lambda/C$, эти данные позволяют оценить закономерности вариаций теплоёмкости для изучаемых

типов пород. Из (рис. 4) видно, что зависимость температуропроводности от теплопроводности не линейна.

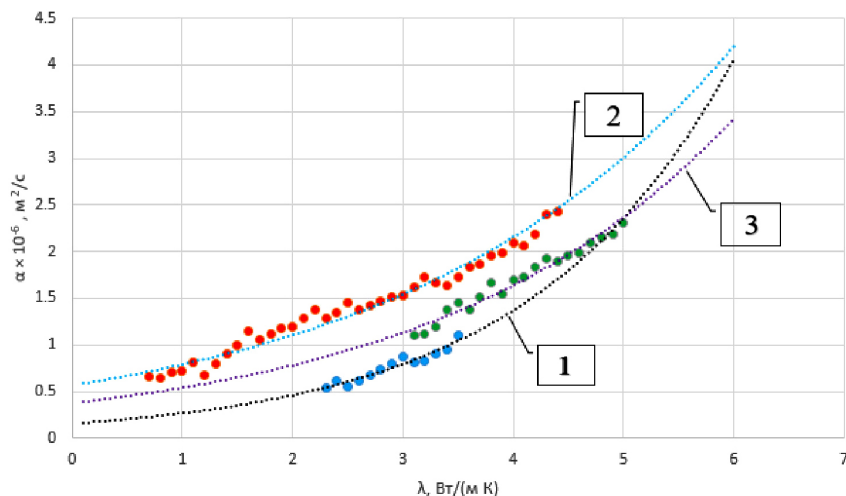


Рисунок 6. Корреляция между температуропроводностью и теплопроводностью. Линии регрессии для разных типов пород: 1) доломит; 2) песчаник; 3) известняк

Заключение

Теплопроводность породы и статистические параметры, которые были установлены на основе комбинации экспериментальных данных по теплопроводности пород и теоретического моделирования эффективной теплопроводности неоднородных сред, оказались различными для доломита, песчаника и известняка.

Тесная корреляция между отношением $\delta\lambda = \lambda_{\text{сух}}/\lambda_{\text{насыщ}}$ и пористостью была установлена для всех изученных пород. Уравнения регрессии очень похожи для разных типов пород, что позволяет предположить возможный универсальный характер корреляции для разных осадочных пород.

Разработка данных петрофизических исследований, предоставляет ценную информацию для определения плотности теплового потока и теоретическое моделирование процессов тепломассопереноса и построения тепловых моделей.

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Section 6. Philology and linguistics

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BACKGROUND OF THE CURRENT LANGUAGE SITUATION IN THE REPUBLIC OF IRELAND AND THE IMPACT OF NATIONALISM ON IT

The Irish language is one of the three Gaelic languages that form a branch of Indo-European family together with Scots Gaelic and Manx. The language has been spoken in Ireland for at least two thousand years and records of its literature stretch back to about the year 800 AD¹.

To analyze the language situation in Ireland, it is necessary to consider the historical facts that influenced it, in particular nationalism. In the IX century, the inhabitants of Ireland, as well as the entire population of the British Isles faced aggression from the Scandinavian Vikings. The conquerors destroyed cities and monasteries where manuscripts containing the best examples of Irish literature were kept. Many literary monuments were lost forever to posterity. People who lived in constant fear of military invasion stopped creating poems and hymns. During these years, there was a decline in Irish culture, including writing. However, close contact with the conquerors also contributed to the fact that the Irish language began to include many Scandinavian words. Representatives of the local intelligentsia not only created new works, but also worked to restore the old ones. However, this work was interrupted by the invasion of the Anglo-Norman invaders, who brought many elements of English and French to the territory of Ireland. In the XIV century, the English made a number of attempts to stop the spread of the Irish language among the nobility². Large feudal lords who claimed political power were forced to switch to English. Ordinary Irishmen continued to use the familiar language.

During the same period, the literary Irish language was formed, which became more and more distant from the vernacular form. The political and social

¹ "Irish language", Encyclopedia Britannica, accessed: March 24, 2020. URL: <https://www.britannica.com/topic/Celtic-languages/Irish>

² Ibid.

movements that proclaim love to the Irish culture, language and history, and a sense of pride for Ireland and for the Irish are called Irish nationalism¹.

Nationalism is an ideology and policy direction, the fundamental principle of which is the thesis about the value of the nation as the highest form of social unity, its primacy in the state-forming process. As a political movement, nationalism seeks to create a state that covers the territory of the nation and protects its interest². Hans Kohn in his work "The idea of nationalism: A study in its origins and background divides nationalism into ethnic and political, as a rule, both forms of nationalism are present in the nation³. In Ireland, nationalists are fighting for the independence of Northern Ireland from Great Britain. The members of the nation share a common heritage, language, religion, traditions, history, common origin, and emotional attachment to the motherland. All together they form one people⁴. One of the directions of the Irish nationalism is the revival of the Irish national language.

The history of Irish nationalism and Irish language continues to attract attention of the researchers all over the world. Modern researchers agree that the origins of Irish nationalism should be found in Ireland during the period of Protestant rule (the time of reign of Henry VIII, Edward VI, Elizabeth I)⁵. At that time there the question of language is rising. For many centuries, the British Isles were a linguistic mix of local dialects (Germanic or Celtic in origin). It is only in the modern era that people driven by nationalistic interests have created the "languages" of the peoples of England, Ireland, Scotland and Wales. The need for a single national language appeared when ordinary citizens became an important component of the state; the need for a written and spoken language appeared only when these citizens, as expected, began to read and write in it⁶.

The nationalism and problems of the Irish language are closely connected with the history of colonization of Ireland by the English dated back to the XII century. The Irish Kingdom of the late XVII – early XVIII centuries was

¹ "Irish nationalism", Wikipedia. The free encyclopedia, accessed :March 02, 2020. URL: https://en.wikipedia.org/wiki/Irish_nationalism

² Jan Penrose. "Nations, states and homelands: territory and territoriality in nationalist thought". Nations and Nationalism 8(3). Asen 2002. – P. 277–297. URL: <http://users.telenet.be/vze/bachelorpaper/Artikels/Penrose%28J.%29.%2;> URL: [0Nations,%20states%20and%20homelands.pdf](http://users.telenet.be/vze/bachelorpaper/Artikels/Penrose%28J.%29.%2;)

³ Hans Kohn. The idea of nationalism: A study in its origins and background (Toronto (Ontario): Collier books, 1969). – 419 p.

⁴ Anthony D. Smith. Nationalism and modernism: a critical survey of recent theories of nations and nationalism (London: Routledge, 1998), – 268 p. URL: <https://milliyyet.info/wp-content/uploads/2015/11/Anthony-D.-Smith-Nationalism-and-Modernism.pdf>

⁵ Morgan O. Kenneth. The Oxford History of Britain (Oxford: Oxford University Press, 1984). – 252 p.

⁶ Benedict Anderson. Imagined Communities, Reflections on the Origin and Spread of Nationalism (London: VERSO, 2001). – 115 p.

a striking example of a territory where religious and political battles did not cease. Since the middle of the XVI century, after the victory of the new reformation religion – Anglicanism in neighbouring England, the British began to actively develop and subdue the island, including, at times, taking the form of a struggle with Catholicism, which was popular among the native Irish. The Irish Catholic uprisings of 1641–1653 and 1689–1691 were suppressed, and the Anglican power was finally established on the island¹. Together with the Anglican power the English language power started. From the XVI century, the English began a large scale colonization of Ireland. This caused the flight of the local aristocracy and clergy – the most educated people of the time. Along with them they carried away book culture and literary traditions. These events led to the fact that printing did not have time to develop in Ireland, which in all other European countries served as the main impetus for the flourishing of the national language.

At the end of the XVII century, the conquerors moved to more drastic measures. The Irish no longer had the right to write or speak publicly in their native language. In parallel, the local population was deprived of their other rights related to religion, trade, and Irish people repeatedly tried to get rid of English rule, but another attempt at such an uprising led to the fact that in 1798, Ireland lost its political and cultural autonomy. In order to take a higher position in society, young Irishmen were forced to abandon the language of their grandfathers and fathers and learn English². As A. T. Q Stewart mentions in his work “The shape of Irish History”, the incompleteness of the conquest laid the foundation for the “Irish question” – a complex of political and socio-economic problems that defined Anglo-Irish relations until the XX century³.

The second half of the XVIII century proved to be a period of growth in Ireland, in industry, in population and in national identity. In 1740, Ireland hit one of the lowest points in its often bleak and bloody history. The Great Famine swept across Europe and nowhere did it strike harder than amongst the poor of Ireland. This was a very important point in the process of spread of the Irish language and its revival among the population of the Republic of Ireland⁴. However, out of darkness came a spark of light. This time Ireland had a better organised and more efficient social structure that could at least attempt

¹ Sean Cronin. Irish nationalism: A history of its roots a. Ideology (Dublin: Acad. press, 1980). – 240 p.

² Stephen Small. Political Thought in Ireland, 1776–1798. Republicanism, Patriotism, and Radicalism (New York: Oxford University Press., 2002). – 230 p.

³ Stewart A. T. Q. The shape of Irish History (Belfast: Blackstaff Press, 2001). – 209 p.

⁴ Joseph McCullough. A pocket history of Ireland. Dublin: Gill Books (Hume Avenue, Park West, 2010). – 146 p.

to respond to the crisis. The victims of the Great Famine built famine roads in return for food. They are still visible today and are often used by hikers¹.

Irish nationalism is one of the most original in Europe. It developed as a large and a heterogeneous social movement for several hundred years. Irish nationalists from religious and political points of view were never united. They were often defeated in the struggle for independence. Together with these defeats the Irish language had declined. The Republic of Ireland is considered as a nation and a nation-state, whereas Great Britain is only a nation in the broad sense of the word, consisting of at least four Nations in the etymological sense: the English, the Northern Irish, the Scots, and the Welsh². As for a nation and a nation-state the question of the national language revival is relevant for the Republic of Ireland. In any state and any country the human communication activity inside the society is one of the main features of the broader concept, culture. The human communication activity includes the speech activity and all these concepts are based on the language. The approach to the study of nationalism proposed by E. Hobsbawm in his work "Language, culture and national identity", states that nationalism is closely related to socio-economic factors, and it has undergone major changes as a result of the "cold war". Hobsbawm agrees that national languages play an important role in the discourse of nationalism³.

Speaking about the Republic of Ireland, the Irish nationalism and the Irish culture it is necessary to trace the birth, development, extinction, revival and its development again after the revival. One of the reasons for the language revival is that along with the loss of language, Irish people can lose their established ideas about morality, the significance of the past, present, and future. The language is really at the stage of its creation but once it gets into the sphere of education, it becomes widespread. National languages and identities are in a complex dialectical interaction.

Existence of the Irish nationalism is closely connected with the Irish language. To conduct the Irish language revival it is necessary to observe its historical roots and the cradles of the language appearing. From the ancient times Rome had got a great influence on other empires almost all over the world. The exception of this influence was the Republic of Ireland, especially in the

¹ Joseph McCullough. A pocket history of Ireland. Dublin: Gill Books (Hume Avenue, Park West, 2010). – 163 p.

² Ernest Gellner. Nations and nationalism, Thought and Change (Chicago: Chicago University Press, 1964). – P. 147–148. URL: https://www.academia.edu/5189761/Ernest_Gellner_and_Contemporary_Social_Thought

³ Eric John Ernest Hobsbawm. "Language, culture and national identity", Language, culture, & national identity 1996. – P. 33–43. URL: http://www.jimelwood.net/students/grips/lan_culture/hobsbawm_1996_language_culture_and_national_identity.pdf

linguistic question of the local language (despite Britain was under the pressure of Rome culture)¹.

It is widely known that the Republic of Ireland has got a so called geographical isolation from the other countries even nowadays, so certainly at that times when the Roman Empire was in its power, Irishmen were far from the borders of the Roman Empire. Anyway there was a continuous contact with both Roman Britain and Roman Gaul². As Paul Russel supposes in his work "An Introduction to the Celtic Languages", the result of this closed relation between Ireland and the Rome Empire the Irish language started to exist and develop.

During the long colonization the Republic of Ireland had been under the pressure of the British government and, of course, the linguistic side of the daily Irishmen's life was affected. The so called "relations" between the British language and the Irish language had got a significant role when the Celtic (*Gaelic*) languages came and received their own sound and written system and when the unite way of communication and especially the way of writing on the British Isles (including the Republic of Ireland) start to use the Roman letters. As the result of strong force in the impact on the local language of the British government in Ireland the popularity level of the Irish language according to the work "Celtic Linguistics / Ieithyddiaeth Geltaidd: Readings in the Brythonic Languages" by linguist T. Arwyn Watkins started to decrease³.

From the VII till the IX century the Old Irish period was. Donald MacAulay in his work "The Celtic Languages" believes that during this time the Irish language had got the widest distribution in the country. This period is also known as so-called Vikings' page in the Irish history. By the end of the Vikings' invasion in the Republic of Ireland there were lots of settlements around the Republic where the North speech had been heard that led to the urbanisation in such areas like Limerick, Dublin, and Wexford⁴.

Historically the confrontation between the main role between the Irish and the English language as the first one in the Republic of Ireland continued until the late XIX century. All the native population of the Irish-speaking areas such as the *Béarra* peninsula of West Cork, for example was divided in two groups according to the faith. Mainly all those who were involved in heavy physical activity were local Irish-speaking Catholics, and the engineers and managers were English-speaking Protestants.

¹ Rivet A.L.F and Colin Smith. The Place-Names of Roman Britain (London: B.T. Batsford 1979. – 120 p.

² Jane Stevenson. The Beginnings of Literacy in Ireland (Dublin: PRIA, 1989). – 65 p.

³ Arwyn T. Watkins, Celtic Linguistics / Ieithyddiaeth Geltaidd: Readings in the Brythonic Languages (Amsterdam: Festschrift: Hardcover John Benjamins Publishing Company, 1990). – 12 p.

⁴ Mac Aulay Donald. The Celtic Languages (Cambridge: Cambridge University Press, 1992). – P. 11–13.

According to Martin J. Ball and Nicole Müller work “The Celtic languages” at that time a small number of educated Irish speakers joined the professional and middle classes and those who brought up their children with love to the Irish language and tried to save it while going through this cultural and economic change was extremely small¹.

Continuing to speak about the linguistic situation in the Republic of Ireland in the first half of the XIX century it is necessary to mention that during this period there was the harsh decrease of the number of Irish-speakers as monolingual. The language had spread among the population and by the mid-XIX century the population of the island had become bilingual. This bilingual population had been absorbed into the economy sphere, the education sphere and others. The Irish-speaking society was influenced by their English-speaking colleges, so as a result the Irish-speaking population became almost completely English-speaking population².

¹ Martin J. Ball and Nicole Müller. *The Celtic languages* (New York: Routledge, 2010). – 161 p.
URL: <https://b-ok.cc/book/973830/fd7804>

² Ibid.

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SOCIO-CRITICAL THOUGHT IN THE HISTORY OF PHILOSOPHY, ITS GENESIS

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СОЦИАЛЬНО-КРИТИЧЕСКАЯ МЫСЛЬ В ИСТОРИИ ФИЛОСОФИИ, ЕЕ ГЕНЕЗИС

Философское мышление генетически связано с потребностью в критическом отношении к привычному для нас мнению, кажущемуся общепринятым знанию, всем известной истине. В природе философского отношения к миру лежит сомнение в том, что вещи таковы, какими кажутся. За видимым многообразием вещей и явлений первые натуралисты увидели единство, независимо от того, считали ли они объединяющее начало чем-то материальным или некой абстракцией и идеальностью. Уже в самом термине «философия» содержится претензия на способность быть свободным и критически относиться к мудрости, то есть знанию.

Но подлинным апофеозом критицизма по праву считаются труды Сократа, который фактически был вынужден обратиться к обществу с критикой тех мнений, универсализация которых создала базу для софистики и релятивизма. Но тем самым было подорвано и могущество классических мудрецов, игравших столь значимую роль в традиционном обществе. Ориентация традиционных обществ на традицию, с одной стороны, влечет за собой отсутствие исторического динамизма и развития новаторства, а с другой стороны, обеспечивает стабильность, неизменность, устойчивость цивилизации.

Традиционному обществу противопоставляется современное общество, которое именуется то, как индустриальное, то, как рациональное, то, как либеральное, то, как техногенное¹. Важнейшим признаком современного общества является ускоренный научно-технический прогресс. Часто техногенное общество отождествляется с западной цивилизацией. Научно-техническое развитие делает ее динамичным обществом, вызывая часто на протяжении жизни нескольких поколений радикальные изменения социальных связей и форм человеческого общения. Для этого общества характерно наличие в культуре ярко выраженного слоя инноваций, которые постоянно взламывают и перестраивают культурную традицию. Традиционное и техногенное общества отличаются друг от друга исторически сложившимися системами ценностных приоритетов. Идея преобразования мира и подчинения человеку природы была доминантой в культуре техногенного общества, важнейшей составляющей того «генетического кода», который определял само существование и эволюцию данного общества. В традиционных обществах деятельностное отношение к миру оценивалось с иных позиций. Принципу преобразующего деяния, сформулированному в европейской культуре, противостоит принцип невмешательства в протекание природных процессов, свойственный восточным культурам. Данный принцип выступал особым способом включения индивида в социальные структуры, выражал установку на адаптацию к сложившейся социальной среде, исключал стремление к ее целенаправленному преобразованию. О важной роли рациональности в культуре, а также о рациональности как главной ценности европейской культуры, говорили и писали многие исследователи. Так, К. Поппер², разделив все общества на закрытые и открытые, отождествил закрытое общество с традиционным, так как оно основывается на существовании жестких предписаний, необсуждаемой системе ценностей, на непосредственных межчеловеческих и межгрупповых контактах. К этому типу наиболее подходят восточные культуры. Главным условием прогресса в познании и в решении социальных проблем является наличие в культуре особой традиции рационального обсуждения всех существующих традиций, осознания их предпосылок и возможностей, выявления их положительных и отрицательных сторон в той или иной конкретной ситуации, модификации в результате критической дискуссии.

М. Вебер производит классификацию обществ на различные виды в соответствии с типом социального действия, преобладающего в обществе³. Он выделяет четыре вида действия: целерациональное, ценностно-рациональное, аффективное и традиционное. Соответственно в традиционном обществе, к которому относятся культуры Востока, ведущими являются аффек-

¹ Уэбстер Ф. Теории информационного общества. – М., 2004.

² Поппер К. Открытое общество и его враги. – М., 1992. – Т. 1.

³ Вебер М. Избранные произведения. – М., 1990.

тивное и традиционное действия, а в индустриальном – целерациональное и ценностно-рациональное. Традиционное общество основано на вере в священность и законность издревле установленных порядков. Важным признаком индустриального европейского общества, по М. Веберу, является господство формально-рационального начала. Неслучайно М. Вебер располагает их в порядке возрастающей рациональности. Он убежден, что рационализация социального действия есть тенденция самого исторического процесса. И хотя этот процесс протекает не без помех и отклонений, европейская история, а также вовлечение других, неевропейских цивилизаций на путь индустриализации, проложенный Западом, свидетельствует о том, что рационализация есть всемирно-исторический процесс. М. Вебер приходит к выводу, что рационализация – это судьба Европы, которой невозможно избежать. Рационализация есть результат соединения целого ряда исторических факторов, предопределивших направление развития Европы. «Действительно, – пишут Д. Реале и Д. Антисери, – если остальным компонентам греческой культуры можно найти аналоги у других народов Востока, достигших высокого уровня цивилизации раньше греков (верования, религиозные культы, ремесла, политические институты, военные организации), то, касаясь философии, мы не находим ничего подобного или даже просто похожего»¹.

Выражая доминирующее среди западных мыслителей представление об основополагающем значении для истории человечества развития философской мысли, Ортега-и-Гассет считал, что провозглашенное Сократом приращение философскому разуму главенствующей роли в жизни людей «является тайным ключом к европейской истории, без которого наше прошлое и настоящее остаются непонятными иероглифами»².

Под духовностью, или «духовным обликом Европы», Э. Гуссерль понимает «явленность философской идеи, которая имманентна истории Европы». По мнению немецкого феноменолога, западная культура рождена как прорыв в мифологическом сознании, совершенный в Древней Греции. Именно там возникло новое восприятие и самовосприятие внешней действительности, «новый тип установки индивида по отношению к окружающему миру. Как следствие возникает совершенно новый тип духовной структуры, быстро развивающийся в системно замкнутую культурную форму; греки называли ее философией»³. Возникновение философии в данном значении проявляется как изначальный феномен духовной Европы.

«Для классического греческого мира это была идея бытия, единого субстанционального, божественного, отнюдь не пантеистически бесформенного, но данного и воплощенного в пластические формы. На ее место

¹ Реале Д., Антисери Д. Западная философия – от истоков и до наших дней. – СПб., 1994.

² Ортега-и-Гассет Х. Что такое философия? – М., 1991. – С. 26.

³ Гуссерль Э. Кризис европейского человечества и философия / Культурология. XX век: Антология – М., 1995. – С. 303.

христианское средневековье поставило понятие божества, источника всей действительности, неограниченного властелина человеческого существования, однако требовавшего свободного повиновения себе и преданности. С эпохи Возрождения это высшее место в интеллектуальной жизни стало занимать понятие природы...XVII столетие концентрировало мировоззрение вокруг понятия законов природы, а век Руссо сконструировал на этой основе «природу» как идеал, абсолютную ценность, мечту и требование жизни. Вместе с тем в конце эпохи преобладающее значение получает центральное понятие личного душевного «Я»...Весь XIX век при разнообразии своих духовных движений не выдвинул такой всеобъемлющей, господствующей идеи. Лишь на пороге XX столетия широкие слои интеллектуальной Европы стали объединяться на новом основном мотиве мировоззрения: понятие жизни выдвинулось на центральное место...»¹.

Философию часто обозначают как самосознание европейской культуры. Именно философией и в философии осуществляется процесс осознания целостности культуры во взаимосвязи всех ее частей. «Только в философии сознание сознает себя как само себя осуществляющее, как посредством самого себя становящееся: только в философии достигает оно конца своего пути, только в ней оно завершает свое самоосуществление»².

Философия и рефлексивное мышление стали плотью и кровью западного общества, подлинным самосознанием Европы. На это указывает и та ответственность, которую возлагают западные мыслители на философию за духовный кризис, охвативший европейский мир. Хайдеггер отмечал социальную значимость философии следующим образом. «Во время своего исторического развития народы задают себе всегда очень много вопросов. Но только один вопрос: «Почему вообще есть сущее, а не, наоборот, ничто?» предрешил судьбу западного мира, и именно начиная с ответов, которые давали досократовские философы две с половиной тысячи лет назад»³.

Причину кризиса современной культуры философы однозначно связывают с потерей философией своей подлинной цели, с утратой истинного смысла. Э. Кассирер, как и А. Швейцер, видит причину упадка и кризиса культуры в утрате философской связи с жизнью и пишет: «Швейцер видит в нашей культуре серьезные духовные и этические пробелы, упрекает современную философию за то, что она не разглядела этих пробелов достаточно рано и не предупредила нас»⁴. «Философия является тем функци-

¹ Зиммель Г. Конфликт современной культуры/ Культурология. XX век: Антология. – М., 1995. – С. 381–382

² Кронер Р. Самоосуществление духа / Культурология. XX век: Антология. – М., 1995. – С. 257.

³ Хайдеггер М. Разговор на проселочной дороге. – М., 1991. – С. 147.

⁴ Кассирер Э. Лекции по философии и культуре/ Культурология. XX век: Антология. – М., 1995. – С. 113.

онирующим мозгом, от нормальной работы которого зависят истинность и здоровье европейской духовности. Человечество высшей человечности, человеческого разума нуждается, поэтому в истинной философии». Только философия способна рациональными средствами найти выход из духовного кризиса и осуществить свою роль – «встать самой на правильный путь и тем самым вывести на него подлинное человечество»¹. Концепции самобытности оформляются в противовес рациональному и индивидуалистическому Западу, из отталкивания от него и выделения некоего противостоящего ему общего духовного начала. «В Африке – сплывающая дробь тамтама, импульсивные ритмы танца в освещенной костром саванне или на специально расчищенной поляне в джунглях. В Европе – монотонно-размеренное тиканье часов, противопоставляющий людей друг другу шелест хрустящих купюр, машиноподобный темп иступленно-маниакального «делания денег», бизнеса, риска. В Африке – гуманизм обычая предков, идиллия гармонии с природой, коллективизм, взаимопомощь и сочувствие людей друг другу. В Европе – социальные антагонизмы, конфликты, агрессия, расхищение ресурсов природы, угнетение и дискриминация человека человеком»².

Причину утраты доминирующего положения философии на Востоке Г.В.Ф. Гегель усматривает в том, что принцип свободы, основной принцип всемирной истории, не был полностью реализован в восточной культуре. «Восточные народы еще не знают, что дух или человек как таковой в себе свободен; так как они не знают этого, то они не свободны; они знают только, что один свободен...»³. Таким образом, одна и та же функция – культуруобразующая – в различных культурах может быть реализована разными способами. Философия выполняет культуруобразующую функцию в отношении западноевропейской культуры, так как рациональность является базовой и преобладающей установкой на Западе, что нашло отражение в рационализации образа жизни, типа поведения и стиля мышления европейского человека. «Такое смешение, осложненное отмиранием критической способности человека, породило не только постсовременный эклектизм, перекликающийся с воинственной несерьезностью всякого культурного акта, но и ползучий обскурантизм, усиливающийся господством полужнания... Критика – это утверждение Другого. Я критикую – значит – я существую. В другом. Критика есть не что иное, как модус обретения, начала, жизни»⁴.

¹ Кассирер Э. Лекции по философии и культуре/ Культурология. XX век: Антология. – М., 1995. – С. 318–319.

² Андреев И.Л. Является ли африканец «европейцем наоборот»? // Вопросы философии. – 1999. – № 11. – С. 51.

³ Гегель Г.В.Ф. Лекции по философии истории. – СПб., 2000. – С. 71.

⁴ Фокин С. Предисловие / Делез Ж. Ницше – СПб., 1997. – С. 8.

Таким образом, можно заключить, что критический взгляд на мир становится в обществах западного типа крайне важным элементом этих обществ. Они отличаются от традиционных тем, что уровень критического мышления существенно превосходит все предыдущие формы. В современном обществе возрастает значимость критической мысли. Развитие критического отношения к традиции на определенном этапе привело к мировоззренческому и методологическому плюрализму. Оказывается, существует немалое количество способов определения целей и индивидуальных ценностей, его включения в теоретические конструкции и обыденное сознание. Возникает широкий спектр взглядов и точек зрения на природу и смысл справедливости, совместить которые в рамках одной теории невозможно. Критическое мышление представляет собой не только благо, но и особую технологию, фундирующую как отдельного человека, так и весь социум. Для того чтобы традиция сохраняла свою действенность и не подменялась имитацией, необходимо искать и находить новые возможности ее рационального обоснования.

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