

PSYCHOLOGY OF YEVHEN MILERYAN'S WORK:
BETWEEN UKRAINE AND ARMENIA

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Annotation.

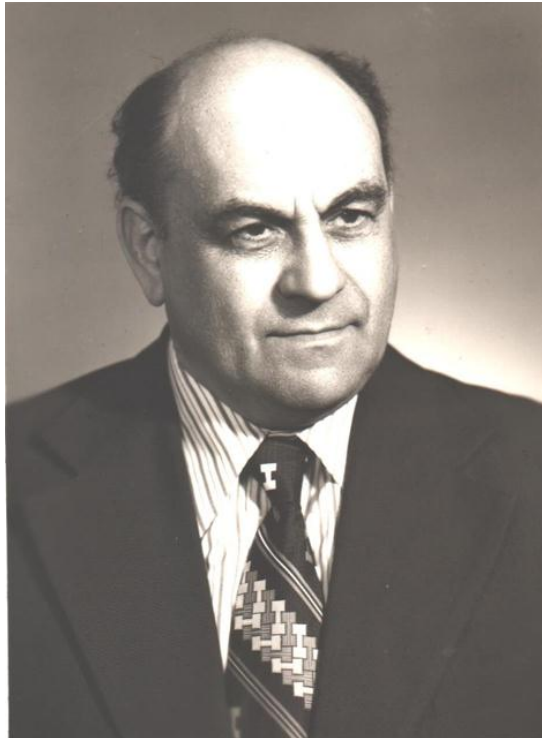
The article reveals the content and significance of multifaceted psychological Yevhen Oleksandrovykh Mileryan's research works (1913 - 1983) – creator of measuring, training, cognitive, experimental, control psychological equipment, numerous methods of psychological selection of pilots, operators, drivers, the use of which allowed to prevent emergencies and catastrophes occurrence caused by people involved in the management of technical systems of different levels of complexity. The main milestones of the way of Ukrainian and Armenian

scientist's life has been presented, to whose fate the trials of the World War II fell, variability of periods of creative self-realization and repressions, work in Ukraine and Armenia. This, in particular, the establishment of experimental workshops for the manufacture of psychological devices at the Research Institute of Psychology of the Ministry of Education of the USSR and creation in them the first "Device for demonstration of optical sensations and perception according to the course of psychology", that allowed to demonstrate the patterns of color mixing, the phenomena of contrast, including the phenomenon of marginal contrast and saturation, later - an electron-beam device for observing the dynamic picture of the spatial distribution of electric potentials, on the basis of which the activity changes of the cerebral cortex under the influence of various sound irritants in the presence or absence of attention directed at them have been studied, the bioelectrical activity of the brain during an electroconvulsive attack has been established. Documentary evidences and recollections of eyewitnesses about bullying and repressions against E.O. Mileryan, connected with the persecution of the all ukrainian in Ukraine in the early 70s of the XX century has been given. The period of the scientist's work in Armenia has been discovered, which includes the continuation of psychophysiological experiments to study the attention of children, clarification of functional changes in the electrical activity of the human brain under the influence of various factors, foundation of the psychological theory of general labor polytechnic skills formation, on the basis of which a new for its time technological system of vocational education was developed. The scientist created hardware-psychological methods for diagnosing individual psychophysiological features of a person, diagnostic installations and simulators to study the professional suitability of operators, pilots, drivers. He developed the concept of engineering and psychological expertise of quality and reliability assessment of the system "man-machine", psychological devices: apparatus for research of higher nervous activity, attentionmeter, electroencephalotopometer, emokoordininometer, device KM-3 for measuring the speed of reaction to complex signals, perceptometer, voluntograph for studying volitional efforts, thinking tachistoscope, complication apparatus, device for studying the professional suitability of drivers, training-problem electrical engineering constructors-simulators. It's been noted that Mileryan's unique contribution for the development of psychological science is the instrumental-psychological direction of combining scientific accuracy of measurements with creative solution of various psychological tasks that had put them before and after the military generations of the twentieth century.

Key words: psychological apparatus, ukrainian and armenian scientist, engineering-psychological expertise, professional suitability, psychophysiological experiments, hardware-psychological direction.

The importance of the scientific activity of the scientist-psychologist Yevhen Mileryan that has contributed for the development of psychological knowledge equally belongs to Ukraine and

Armenia. This is primarily the psychology of man in his relationship with the increasingly complicated technical world, created and constantly improved by man. From this point of view, we can say that this is the interaction of man with himself by means of tools created by him to improve his own life. However, any improvement is impossible without complicating these relationships, to the study and improvement of which Yevhen Mileryan devoted his entire life, full of stormy and dangerous events, creative ascension and humiliation, periods of leadership support and malicious hatred of their career successors at the Kiev Institute of Psychology, hopes for the triumph of reason and the disappointments of the totalitarian USSR, which at that time both Ukraine and Armenia were included as part of it.



In the photo: *Yevhen Oleksandrovykh Mileryan*

According to Dad's instructions

Yevhen Oleksandrovykh Mileryan was born on the 19th of April, 1913 (according to a new style) in Georgia in the city Poti. His Armenian family also had Slavic - Ukrainian roots, so in the difficult 20s of the twentieth century he moved to Ukraine, to Sumy region. His father, Oleksandr Mileryan, had a technical education in the field of mechanical engineering and encouraged his children to technical creativity.

Following his father's instructions and encouragement, Yevhen Mileryan graduated from the School of Factory Apprenticeship at the Sumy State Machine-Building Plant named after M. Frunze, where for two years, during 1930-1932, he had been working as a foundryman. Interest in this work was embodied in the future development of technology for optimizing the working

conditions of foundry production and their psychophysiological protection. Simultaneously, the beginning of the future scientist's career dates back to the period of genocide of the Ukrainian people - the artificially organized famine (Holodomor) of 1932-1933.

The daughter of the scientist, PhD in psychological sciences Vira Mileryan, characterizes this period of her father's professional development as follows: "The beginning of Yevhen Oleksandrovysh's professional biography fell on with one of the most difficult and tragic periods in the history of Ukraine: famine of 1932-1933. The country with the largest amount of arable chernozem, which had a deep tradition of agriculture and animal husbandry, was writhing in torment from the man-made famine. For life Yevhen Oleksandrovysh remembered the horrible pictures, which were revealed to him when he had visited the nearby villages. Swollen from hunger children and adults in houses deprived of life; corpses of people who did not reach the city, along the roads; the faces of women who went mad with hunger, though they by nature resisted death the longest. Cases of cannibalism were not uncommon. Cruelly starved also in the cities of Ukraine, including young smelters. The famine experienced by scientist in 1932-1933 left the trace for all life that inevitably occurs in people who have been in this state for a long time, have suffered and seen the starvation of others. This is a psychotrauma that is almost impossible to get rid of completely. Thinking about the causes of this tragedy, Yevhen Oleksandrovysh repeatedly came to the conclusion that millions of lives were paid for the predatory grin of the inhuman system and the pathological cruelty of the criminal who had headed it. In September 1932 E.O. Mileryan becomes a student of the faculty of physics and mathematics of Sumy pedagogical institute. The first year of study was difficult, extreme, on the verge of physical survival. The number of students was declining catastrophically. A lot of them went home trying to avoid starvation. But it caught up with many at home: in villages and cities. Yevhen Oleksandrovysh managed to survive only thanks to the support of good friends and relatives. But the horror of his famine remained in his memory for a lifetime"[1, c.10]. In the daughter's given description – the father's attitude to the deep-felt Holodomor of Ukrainians of 1932 - 1933, that was exterminating all those who by fate belonged or were involved in the Ukrainian nation. Eugene Milerian belonged and therefore suffered along with everyone, although in cities inhabited mainly by Russians or hybrid colonial population, the situation allowed them to survive.

E.O. Mileryan received higher pedagogical education at the Faculty of Physics and Mathematics of Sumy Pedagogical Institute (1932 - 1936). Immediately after graduating from this institution of higher pedagogical education during 1936 - 1939 he had been working as a teacher, senior lecturer of the course of higher mathematics and descriptive geometry of Uman teachers' Institute. In the same year, as the daughter of the scientist Vera Mileryan testifies, "another important event took place in his life. He married a classmate, the blue-eyed owner of luxurious braids the color of ripe rye, the beautiful Lyudmila Stenko, with whom he had been friends from the first course. She became his faithful friend who understood him, and the rear for all life.

Their relationship had always been filled with exceptional warmth and optimism. The young family was actively working in the pedagogical field, arranging their home" [1, c. 11].

Military tests of technical skill

In 1939, E.O. Mileryan was called up for military service to the tank troops under the command of General I.D. Chernyakhivsky, whose name is now the Ivan Chernyakhivsky National University of defense of Ukraine in Kyiv. He served in the 28th tank division of the Baltic special military district on the western border of Belarus (1939), and after the annexation of Lithuania by the Soviet Union in 1940 – in the forest massifs north of the city of Siauliai on the new border of the USSR with east Prussia. He studied the technical characteristics of soviet tanks and with the assistance and creation of the necessary conditions for this by General I. D. Chernyakhivsky he improved the technology of repair of their individual components and structural elements. During the retreat in 1941 of tank parts from the undeveloped new border of the USSR he was met by anti-tank fire from Soviet troops on the old border, where he was burning in a tank and received his first wound and contusion from soviet soldiers. After the detonation of the third tank under his command, E. Mileryan was taken out unconscious by the shooter Mykhailo Kupchenko, who thus saved his life. He recovered from injuries and contusions in 1943 and was selected for military and technical providing of the squadrons of offensive aircraft. He served at the aerodrome of base of his aviation part in Czechoslovakia until the end of World War II. After demobilization in 1946, he came to Kyiv to Ukraine, where at that time the Research Institute of Psychology organized by Hryhoriy Kostyuk under the Ministry of Public Education of the Ukrainian SSR began its work. The first director - the founder of this institute Hryhoriy Kostyuk, a mathematician by education, is attracted by the mathematical and engineering-psychological E. Mileryan's thinking , whom he hires as a researcher.

The need to create a new institute specialized in the field of psychology, in the first postwar months differed in E.O. Milerian's awareness from the officially defined need to study the problems of general, age, pedagogical psychology and psychophysiology. The opinion expressed by the scientist's daughter Vera Mileryan about the appointment of such an institution to the greatest extent conveys the attitude of the scientist to the needs of solving the burning public needs of that time: «In our opinion, the problem of psychological diagnostics and psychological assistance to millions of people was of special importance in the early postwar period.

The problem of post-war psychological maladaptation of millions of people, which arose under the influence of severe, long-term stress of the war years, acquired a large-scale character and exceptional significance after the war. According to relatives, "other people" were returning from the war, in whom it was psychologically difficult to identify those who went to the front or were deported to Germany. In personal transformations were manifested en masse: high levels of anxiety, aggression, conflict, inadequacy of response, chronic fatigue, difficulty adapting to a peaceful life and others » [1, c. 20 – 21]. Such was the thought that, in our opinion, largely reflects the social need for a newly created scientific institution, which was seen by E. O. Mileryan.

However, the reality was different, as well as the scales of scientific-psychological implementation of existing postwar opportunities. The need for scientific accuracy in the application and using of psychological knowledge, its technical implementation was remained unchanged.

The first psychological devices

On his own initiative and with the approval and support of the director GS Kostyuk, EO Mileryan creates and heads experimental workshops for the manufacture of psychological devices. Since 1947, E. Mileryan - Assistant for Department of Psychology of the Kyiv State Pedagogical Institute named after O.M. Gorky, Lecturer in General and Experimental Psychology of the Department of General Psychology of the Taras Shevchenko State University of Kyiv. EO Mileryan's students of that period were well-known future researchers in the field of psychological science - Petro Perepelytsia, Maya Oleksiyeva, Maya Vovchyk-Blakytina, Mykola Malkov, Oleksiy Gubko, Oleksiy Bratko-Kutynsky, Volodymyr Romenets and others [1, p. 24]. In 1948, E. Mileryan completed the development of the project "Device for demonstrating optical sensations and perception to the course of psychology", which allowed to demonstrate the patterns of color mixing, the phenomenon of contrast, including the phenomenon of marginal contrast, saturation, which was made in the same year in the Kiev experimental workshops at the Research Institute of Psychology of the Ministry of Education of the USSR.

From 1949 to 1952, E. Mileryan had been on research trips to Poland, Czechoslovakia, and the German Democratic Republic. Since 1952, he had been a senior researcher at the sensitivity laboratory, where he conducted electroencephalographic studies of the mechanisms of electroshock, which during that period became widespread in clinical psychiatry. From this work, the researcher created an experimental device – an electroencephalometer, which allowed to study different parts of the electrical activity of the brain. According to M.M. Lyla, the electroencephalometer is an "electron-beam device for observing the dynamic picture of the spatial distribution of electric potentials", on the basis of which changes in the activity of the cerebral cortex under the influence of various sound stimuli in the presence or absence of attention directed at them were investigated, the bioelectrical activity of a brain at electroconvulsive attack was established, typical pictures of pathological electrical activity of the brain in post-attack states and the effect of electroconvulsive attack on the brain " [9, c. 107].

During 1956-1976, E.O. Mileryan – head of the department of occupational psychology and polytechnic education, and from 1959 – head of the department of psychology of vocational training and labor of the research institute of psychology of the USSR, at the same time during 1947 – 1952 had been teaching at the departments of psychology of Kyiv University and Pedagogical Institute. In 1954 he defended his thesis for the PhD candidate degree in pedagogical sciences on the topic "Questions of the theory of attention in light of I.P. Pavlov's teachings on higher nervous activity", in 1969 - for the degree of doctor of psychological sciences on the topic "Psychology of the formation of general-labor skills".

The results of this doctoral study were published in the form of a monograph "Psychology of the formation of general-labor polytechnic skills" by the publishing house "Pedagogy" in 1973 [4].

In 1971, E. O. Mileryan was awarded the academic title of professor.

Persecution and repression in the early 70's of the twentieth century in Ukraine

"In the early 70's, – the scientist's daughter Vera Mileryan characterizes this period with due accuracy, – the institute of psychology was headed by doctor of philosophy, professor V.I. Voitko, who specialized in the field of sociology. The change of leadership for the institute and its staff turned out to be fatal. Very soon the dominance in the team of scientific interests, friendly, intelligent relationships changed to the struggle of ambition, the progression of conflict and aggression. Criteria that are far from the scientific environment and moral norms come to the fore. Unprecedented in its consequences of persecution, organized by Voitko V.I. with the active assistance of the Secretary of the Central Committee of the Communist Party of Ukraine from Ideology Malanchuk, rushed, first of all, on those who were, in essence, the founders of psychological science in Ukraine and successfully headed some of its directions" [1, p. 51].

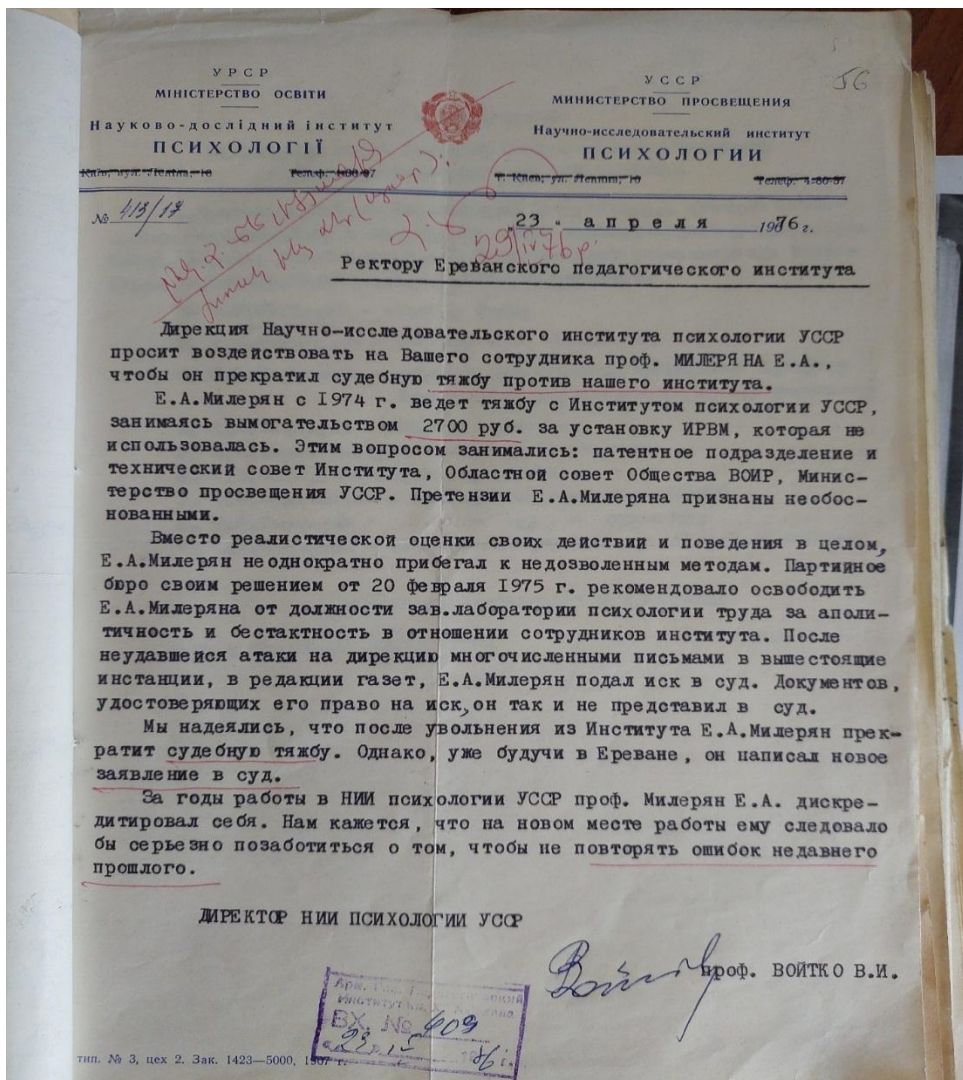
The fear of the then leadership of the Ukrainian SSR before Ukraine's withdrawal from the USSR once again led to intensified repressions against the manifestations of "Ukrainian bourgeois nationalism" and the dismissal of Hryhoriy Kostyuk, director of the Research Institute of Psychology. This dismissal initiated the persecution of scientists whom G.S. Kostyuk had hired. As a result, E. Mileryan was released in 1976 from the Research Institute of Psychology of the USSR by the newly appointed director V.I. Voitko with accusations of "apoliticalness and tactlessness" together with a group of leading Ukrainian psychologists, among them the deputy director of this institute Alexander Skripchenko, the head's assistant of learning psychology Ivan Sinitsa who without enduring persecution, died of a heart attack. Yevhen Mileryan's daughter, associate professor of the Medical and Psychological Faculty of the Bogomolets National Medical University in Kyiv, Vira Mileryan, testifies to the tragic consequences of her father's torture as follows: "Severe psychotrauma had inflicted on the scientist by the director of the Research Institute of Psychology V.I. Voitko and his henchmen shortened his life for many years. The system by the hands of his cynical performers caught up with the scientist at the end of his life" [1, p.54].

Doctor of psychological sciences, professor Myroslav Yosypovych Boryshevsky mentioned that the newly appointed deputy director for scientific research S.D. Maksymenko on the first day of his work on this position had taken out and put a bottle of vodka on his desk, opened it and started drink from it. In order to hide his tendency to constantly drink alcohol in the premises of the Institute of Psychology, as this could not be supported by the party bodies, the director and his deputy asked for it to be drunk in the apartments of the employees. So they got to the M. Y. Boryshevsky's apartment, who lived with his mother. The director of the Institute of Psychology V.I. Voitko and his deputy S.D. Maksymenko turned the feast organized for them into a drunken orgy: shouted, pounded their fists, shouted such obscene Russian curses that M.Y. Boryshevsky's mother could not stand it and told her son:

"They are bandits! Don't you see? Never bring them to our house again! ". The son had been following this maternal instruction throughout his later life, and therefore the place of daily drunks of V.I. Voitko and S.D. Maksymenko became more and more their offices at the Institute of psychology.

"After brutal discrimination, Professor EO Milleryan leaves the institute," – his daughter Vera writes about this period of the scientist's life. – The decision to leave the institute was not an easy one. Thirty of the most fruitful years of his life were devoted to the Institute of psychology. But he could not remain in an atmosphere of baiting and debauchery "[1, 51].

In the same year, E. Milerian moved to Armenia, where during 1976-1982. had been heading the sector of psychology of vocational education, psychology of labor and vocational education of the problem psychological laboratory, and in 1982 - 1983 – Professor of psychology department at the Armenian state pedagogical institute (Yerevan). The injustice of his dismissal from the research Institute of psychology in Ukraine he had been proving in the courts of the USSR, to which the then director of this institute V.I. Voitko [2] applied to the rector of the Yerevan pedagogical institute with the official letter: "We hoped that after release from the institute, Mileryan would complete the litigation. However, already being in Yerevan, he wrote new statements to the court ". We found this letter of the director of the Research Institute of Psychology of the Ministry of education of the USSR V. I. Voitko in the archive of the Armenian state pedagogical university named after Kh. Abovyan. This letter is published for the first time:



Letter of the Director of the Research Institute of Psychology of the Ministry of Education of the USSR of V.I. Voitko № 413/17 dated April 23, 1976. *Archive of Kh. Abovyan Armenian State Pedagogical University.*

The above letter of the director of the Research Institute of Psychology of the Ministry of Education of the USSR V.I. Voitko testifies to the illegal way of influencing the dismissed from the Kyiv Institute of Psychology E.O. Mileryan through a complaint against him to his current leadership - the rector of the Yerevan state pedagogical institute. Undoubted, in our opinion, is the uncertainty and hence the fear of the author of the letter before the consequences of his actions to release the scientist, his desire to prove in any way his own hypertrophied omnipotence and confidence in his impunity. Undoubted, in our opinion, is the uncertainty and hence the fear of the author of the letter before the consequences of his actions to release the scientist, his desire to prove in any way his own hypertrophied omnipotence and confidence in his impunity. V.I. Voitko's rudeness in relation to subordinate scientists was reflected in written, and not only in oral form, as his contemporaries mentioned, this is a humiliating direct accusation of E.O. Mileryan of

"extortion", in the absence of a "realistic assessment of their actions and behavior in general", the use of "prohibited methods", "discredited himself", "mistakes of the recent past", as if V.I. Voitko or his communist party patrons are the only ones who should allow or forbid a person to choose the methods of his own activity. By the way we have a duty to note that V.I. Voitko's judgment regarding unfoundedness of the amount mentioned in this letter for the installation of equipment has nothing to do with the competence of the rector of the Yerevan State Pedagogical Institute, to which this message is addressed. Simultaneously, the obvious goal of the author of the letter is to create an unattractive image of a kindly received scientist in Yerevan, although in fact E.O. Mileryan, fascinated by the creation of the hardware and psychological base of the Institute of psychology, spent his personal money on the production of non-standard details and samples, on the installation of equipment – from his own salary and had every reason to testify about the amounts spent and to demand their compensation in connection with the dismissal not on his initiative.

Armenian colleagues stand up for the scientist

To protect E.O. Mileryan, involved in the suspicion of inclination to Ukrainian nationalism together with Ukrainian psychologists Hryhoriy Kostyuk, Oleksandr Skrypchenko, Ivan Sinitsa and others, who were dismissed and persecuted in Ukraine by director V.I. Voitko, armenian colleagues stood up for the scientist unanimously in Armenia. The evidence of this solidarity is a document signed by all responsible persons at that time of the initial leadership of the higher educational institution - Armenian State Pedagogical Institute named after Kh. Abovyan:

36

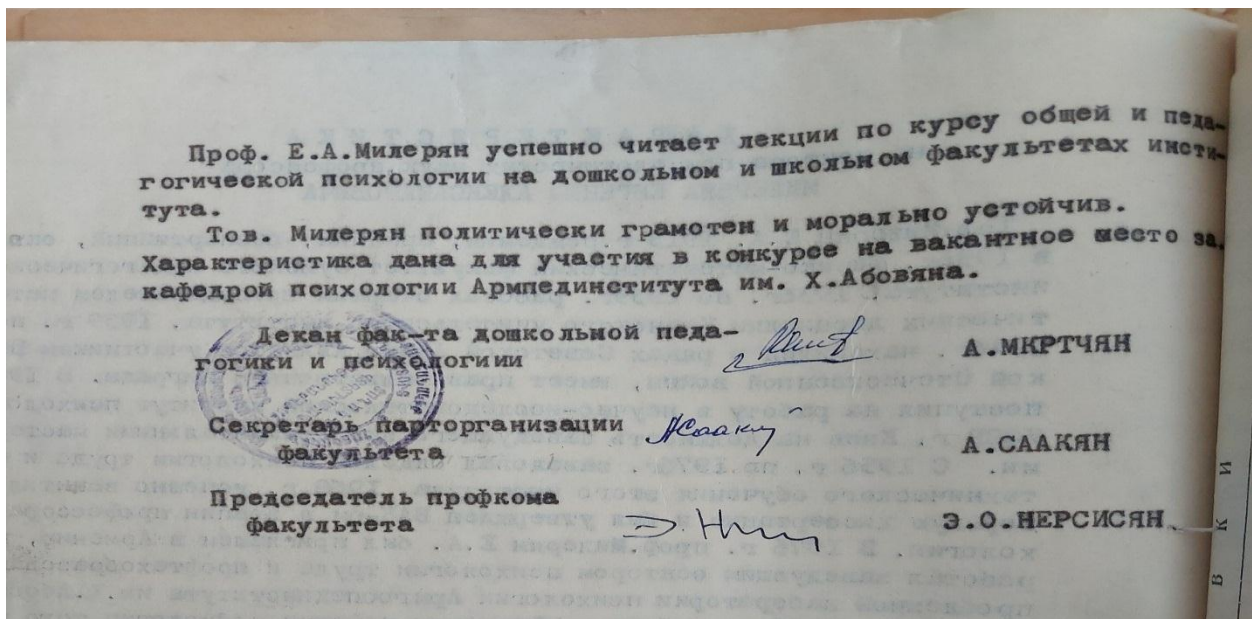
Х А Р А К Т Е Р И С Т И К А
на доктора психологических наук, профессора
МИЛЕРЯНА ЕВГЕНИЯ АЛЕКСАНДРОВИЧА

Тов. Милерян Е.А. 1913 г. рождения, армянин, беспартийный, окончил в 1936 г. физико-математический факультет Сумского педагогического института. С 1936 г. по 1939 г. работал старшим преподавателем математических дисциплин Уманского учительского института. В 1939 г. по 1946 г. находился в рядах Советской Армии, является участником Великой Отечественной войны, имеет правительственные награды. В 1946 г. поступил на работу в научно-исследовательский институт психологии УССР г. Киев на должность заведующего экспериментальными мастерскими. С 1956 г. по 1976 г. заведовал отделом психологии труда и политехнического обучения этого института. В 1968 г. успешно защитил докторскую диссертацию и был утвержден ВАК-ом в звании профессора психологии. В 1976 г. проф. Милерян Е.А. был приглашен в Армению, где работал заведующим сектором психологии труда и профтехобразования проблемной лаборатории психологии Армгоспединститута им. Х. Абовяна. С сентября 1982 г. избран профессором кафедры психологии того же института.

Проф. Милерян Е.А. имеет 151 научных трудов по вопросам общей и педагогической психологии, психологии труда и психологии профессионально-технического образования. Эти работы опубликованы в СССР, ГДР, Чехословакии, Болгарии, Англии, США и других странах.

Под руководством проф. Милеряна Е.А. успешно защищено семь кандидатских диссертаций. Он проявил себя, как весьма одаренный, высоко эрудированный, честный, дисциплинированный, морально устойчивый ученый, который является умелым руководителем творческих коллективов, успешно ведущих в Армении экспериментальную и теоретическую разработки актуальных проблем профессионально-технического образования.

Являясь пропагандистом психологических знаний проф. Милерян Е. часто выступает с лекциями для учителей, родителей, студентов, инженерно-педагогических работников. Систематически повышая свой идейно-политический уровень и научную квалификацию он принимает активное участие в работе научных съездов, конференций, симпозиумов. Был делегатом и руководителем тематических заседаний на I, II, III, IV, V съездах общества психологов СССР, неоднократно выступил с докладами на Международных психологических конгрессах, проходивших в СССР и за рубежом.



Documentary evidence of solidarity of Armenian colleagues with E.O. Mileryan in their desire to protect the scientist from persecution from the Research Institute of Psychology of the Ministry of Defense of the USSR. *Archive of Kh. Abovyan Armenian State Pedagogical University.*

As can be seen from the above document, Armenian colleagues protect E.O. Mileryan from political accusations ("politically literate") and ideological persecution ("morally stable"), whereas the "Moral Code of the Builder of Communism" [3] was a list of the principles of a single dominant communist morality at that time included in the program and statute of the CPSU, which applied to all inhabitants of the USSR, and especially the so-called "fighters of the ideological front" - scientific, pedagogical and pedagogical workers, regardless of membership in the CPSU, which were covered, as a rule, only management staff.

A few months before E.O. Mileryan's death, the characteristics for participation in the competition for the position of head of the department of psychology of the Armenian pedagogical institute named after Kh. Abovyan had been signed by rector L.A. Valesyan, secretary of the party committee M.S. Khachyatriyan and chairman of the trade union committee B.M. Makichyan:

Х А Р А К Т Е Р И С Т И К А

доктора психологических наук, профессора
МИЛЕРЯНА ЕВГЕНИЯ АЛЕКСАНДРОВИЧА

Тов. Милерян Е.А. 1913 года рождения, армянин; беспартийный, окончил в 1936 году физико-математический факультет Сумского педагогического института.

С 1936г. по 1939г. работал старшим преподавателем математических дисциплин Уманского учительского института. В 1939г. по 1946г. находился в рядах Советской Армии, является участником Великой Отечественной войны, имеет правительственные награды. В 1946г. поступил на работу в научно-исследовательский институт психологии УССР г.Киев на должность заведующего экспериментальными мастерскими. С 1956г. по 1976г. заведовал отделом психологии труда и политехнического обучения этого института. В 1968г. успешно защитил докторскую диссертацию и был утвержден ВАК-ом в звании профессора психологии. В 1976г. профессор Милерян Е.А. был приглашен в Армению, где работал заведующим сектором психологии труда и профтехобразования проблемной лаборатории психологии Армпединститута им.Х.Абовяна. С сентября 1982г. избран профессором кафедры психологии того же института и читал лекции на дошкольном и школьном факультетах.

Проф.Милерян Е.А. имеет около 150 научных трудов по вопросам общей и педагогической психологии, психологии труда и психологии профессионально-технического образования. Эти работы опубликованы в СССР, ГДР, Чехословакии, Болгарии, Англии, США и других странах.

Под руководством проф. Милеряна Е.А. успешно защищено семь кандидатских диссертаций. Он проявил себя как эрудированный, честный, дисциплинированный, морально устойчивый ученый.

Он принимает активное участие в работе научных съездов, конференций, симпозиумов, был делегатом и руководителем технических заседаний на I, II, III, IV, V съездах общества психологов СССР, неоднократно выступал с докладами на Международных психологических конгрессах, проходивших в СССР и за рубежом.

Характеристика дана для участия в конкурсе на вакантное место зав. кафедрой психологии Армпединститута им. Х.Абовяна

РЕКТОР ИНСТИТУТА
СЕКРЕТАРЬ ПАРЛАМЕНТА
ПРЕДСЕДАТЕЛЬ ПРОБЛЕМНОЙ

Л.А.ВАЛЕСЯН
М.С.ХАЧАТРЯН
Б.М.МАКИЧЯН

24.08.83

Characteristics of E.O. Mileryan dated August 24, 1983. *Archive of Kh. Abovyan Armenian State Pedagogical University.*

In the last years of his life, the scientist had been hastening to summarize research materials on the creation of a system of vocational training in the most innovative at that time electricity sector, which was published in the monograph "Technological system of vocational training of secondary vocational students", published by the Yerevan publishing house "Luys" in 1985 after the scientist's death. And although the general well-being of the scientist had been deteriorating, together with

his daughter he prepared and participated in the VI All-Union Congress of the Society of Psychologists of the USSR, which took place on August 18-22, 1983 at Lomonosov Moscow State University, where both made a presentations. E.O. Mileryan had been coming to his family living in Kyiv from Armenia on vacation, which was no longer rest and recovery, but intensive treatment, the struggle of the family and Kyiv doctors for the life of the scientist. But despite all the efforts, E.O. Mileryan died on November 5, 1983, and was buried in the forest cemetery in Kyiv.

Psychological equipment of Yevhen Mileryan

During his intensive research activity E.O. Mileryan conducted psychophysiological experiments to study the attention of children, to determine the functional changes in the electrical activity of the human brain under the influence of various factors and taking into account the results substantiated the psychological theory of formation of general labor polytechnic skills, on the basis of which a new for its time technological system of vocational education was developed [4, 5].

The scientist created instrumental and psychological methods for diagnosing individual psychophysiological characteristics of man, as well as a complex of diagnostic installations and simulators to study the professional suitability of operators, pilots, drivers [6, 7]. He developed the concept of engineering-psychological examination of the assessment of the quality and reliability of the functioning of the system "man-machine", psychological devices: apparatus for the study of higher nervous activity, attentimeter, electroencephalotopometer, emocoordinometer, apparatus KM-3 for measuring the speed of response to complex signals, device "IRVM-2", perceptometer, voluntograph for the study of volitional efforts, thought tachistoscope, complication apparatus, device for studying the professional suitability of drivers, educational-problematic electrical constructors-simulators. In particular, as noted by the daughter of the scientist Vira Mileryan, the device "IRVM-2" in combination with psychodiagnostic techniques (method of studying visual perception, dynamic eye gauge) were included in the arrangement of a mobile psychological laboratory mounted in the bus "LAZ" [1, p. 47]. Colleagues from the Armenian state pedagogical university named after Kh. Abovyan still remember the tragic case of a trolleybus falling from a bridge over the river Razdan in Yerevan. To prevent future tragedies, Professor Yevhen Mileryan achieved equipment of psychological laboratory in the Yerevan trolleybus park to examine drivers before boarding. The "Psychological passport of the car" created by scientists was used at the Lviv bus plant and the Arkhangelsk sea trade port. E.O. Mileryan substantiated the psychological and technological reconstruction of the main conveyor of the Kyiv Motorcycle Plant. His works were published outside the former Soviet Union - in China, Germany, Britain, Czechoslovakia, Poland and other countries of the world.

Here is a list of the main works of E.O. Mileryan, which reflect the diversity of scientific research of the scientist and hardware-psychological approaches, important for further implementation, taking into account the constant development of technological capabilities: «Problemele teorici atenciti in lumina jnvataturii Jui I.P. Pavlov despre activitate nervoasa superionara»// *Annalele*

rom-sov.seria Pedagogic-psihologia.1954;

Electrical activity of the cerebral cortex with attention to sound stimuli " // Questions of psychology. 1955. №2; "Attention and it's upbringing in children." K., 1955; ; "Formation of senior students' ability to apply knowledge of the laws of electric current in practice" » // *"Acta Psychologica singa"*, China / in Chinese /, 1958; author's certificate for the invention "Electron-beam device for observing the dynamic picture of the spatial distribution of electric potentials". 1959; «Zur Frage der politechnischen Fähigkeiten im älteren Schulalter» // *Informationsmaterial aus der pädagogischen Literatur der Sowjet Union und der Länder der Volksdemokratie*, Verlag "Volk und Wissen", Berlin, 1959; «Zur Frage der politechnischen Fertigkeiten der älteren Schüler» // *"Berufsbildung"*, 1959; «Involuntary and voluntary attention» // *"Psychologie in 1959 the Soviet Union"*, London; "To the question of polytechnic skills of high school students" / in Romanian // *Analele Române Sovietice*, Pedagogik, Psychologie. 1959; «Die psychischen Besonderheiten bei der Übertragung von Tätigkeiten» // *"Berufsbildung"*, Berlin, 1960; "About the effect of exercise on the value of the spatial threshold of tactile discrimination" (in spivavt.) // Questions of psychology. 1961. №3; "Psychological selection of pilots" (ed.). K., 1966; author's certificate of the invention "Ustrie for the advancement of professional accessibility of the drivers in motor transport" ("IRVM-2"). 1969; "Psychology of formation of general labor polytechnic skills". Moscow, 1973; "Emotional and volitional components of operator reliability" // Essays on the psychology of operator work: Collection. Moscow, 1974; "Essays on the psychology of the operator (edited)". Moscow, 1974; "Psychological problems of vocational education" (ed.). Yerevan, 1977; copyright certificates for inventions: "Simulator for training drivers". 1979, "Educational electrical problem constructors-simulators". 1981; "Technological system of vocational training of secondary vocational students" (co-authored). Yerevan, 1985. Literature about E.O. Mileryan continues to be supplemented with new publications. The main ones are as follows: E.A. Mileryan (Obituary) // Questions of psychology. 1984. № 2 [8]; Lilya M.M. Ukrainian psychologists - participants in hostilities in the Second World War (1939-1945) K., 2003; E.A. Mileryan Psychology of labor and vocational education: Selected scientific works / Compiled by V.E. Mileryan. - K.: NPP "Interservice", 2013. - 290 p. [1]; Lilya M.M. E.O. Millerian is the founder of professional psychological diagnostics. A young scientist. № 9.1 (36.1). September, 2016 [9, p. 106 - 110]; V.V. Fisherman. Mileryan Yevhen Oleksandrovykh // Encyclopedia of Modern Ukraine: electronic version [website] / ch. editor: I.M. Dziuba, AI Zhukovsky, M.G. Zheleznyak and others; NAS of Ukraine, NTS. Kyiv: Institute of Encyclopedic Research of the National Academy of Sciences of Ukraine, 2019.

http://esu.com.ua/search_articles.php?id=67613[10].

Guidelines for the future

Work in the multifaceted E.O. Mileryan's researches became a factor in the continuous growth of requirements for psychological development of man, the main means of which the scientist

determines education in its professional dimensions. Thus, revealing the problem of skills in the early 70's of the twentieth century, the scientist notes the development of "mechanization, automation, chemicalization", as well as the fact that "the widespread use of electronics, computers, cybernetic devices, as well as the other latest scientific and technical achievements fundamentally changes the nature of work" [1, p. 58]. This stage of social development even in circumstances of the former USSR, which accounted for the most productive period of E.O. Mileryan's life and research, was a natural embodiment of the psychohygienic idea of Ivan Sikorsky, published on January 11, 1887 at the convention of domestic psychiatrists in the report "Problems of neuropsychological hygiene and prevention". Its essence is that mental work will inevitably eliminate the physical and mental stress of man in this regard will increasingly complicate human existence. Thus, IO Sikorsky notes, "what used to be produced by human muscles is now being developed by a dead machine, and the previous handyman is turned by the inexorable demand of life for mental work. The work itself with the help and assistance of machines requires from a person tedious strain of attention to not lagging behind and march in lockstep with the deadly mechanism. The demand for mental work has grown to an extraordinary degree, and human relationships have become extremely complicated in the struggle for physical and moral existence" [11, p.3 - 4]. A century after this stability of civilizational development had been expressed and justified by Ivan Sikorsky, Yevhen Mileryan had to develop theoretical foundations and instrumental-psychological methods of preparing young people for those types of work that did not exist before: operator, pilot, driver.

E.O. Mileryan attaches the utmost importance to the education and training for young people, paying attention to the complex interaction of knowledge, skills and abilities in their unity. The stormy discussion of that time, neither then nor later, did not solve this problem either methodologically, theoretically or practically - all the discussants remained at their own level of understanding. As if in pursuit of the last dispute within the former USSR with its collapse, the problem is renamed to the latin by etymology of the concept of competencies, which necessarily includes knowledge, skills and abilities, but does not exhaust this concept and even more so does not contain a comprehensive solution to the problem. The result of the discussion, generalized by E.O. Mileryan, is the understanding of ability as a conscious successful performance of an action based on knowledge, and skills - as a repetition of the same action, which thus acquires the properties of automatism. That is, according to the ideas of that period, skill is the primary embodiment of existing knowledge in effective action, and skill is an automated skill. "Knowledge, - the scientist concludes, - is inextricably linked not only with skills but also with abilities. However, if in relation to skills knowledge is used only in the process of their formation, then the action is performed on the basis of the developed stereotype, which eliminates the need to solve any mental problems, then the skills are characterized by the application of knowledge also at the stage of functioning" [1, p. 62].

On this basis, Yevhen Mileryan defines skill as "knowledge in action" that allows you to act successfully in changing conditions. The property of knowledge is its generalization, and the property of action is a single concreteness, which after the completion of the action forms an experience.

E.O. Mileryan stands for the parallelism of functioning of both skills and abilities: "strongly opposing to the theory of transformation of skill into ability, we don't mind at the same time the possibility of abilities development in the process of skills functioning" [1, p.65]. Principle grounded by the researcher has the important psychological significance that the basis of the organization of a certain system of mental actions, the use of which provides the implementation of certain goals, is education in combination with the functioning of all without exception, the skills and practical use of available knowledge and abilities of human experience.

Complicating the conditions of activity improves the skills, "becoming a means of achieving new goals, further development of abilities and enrichment with new experience. Thus, skills development is not related to automation in general. This proves the failure of assertion that the ability is an automated and improved skill "[1, p.66]. The value of this approach consists in the discovery by scientists of the personal structure of skills, which is embodied in the newly introduced by

E. O. Mileryan concept of skillful activity. The psychological specificity of skillful activity lies in its awareness, which includes the relationship with the conditions and means of achieving this goal. Mandatory features of skillful actions as components of skillful activity are planning, predicting the progress of its implementation and control over the implementation of these actions.

An important conclusion of the scientist is to determine the direction of improving the content and methods of teaching young people, which consists in the taking into account the essential differences in the nature of knowledge, skills, abilities and specificities of their development. Methods should promote the formation of automatisms that function as part of skills. At the same time, skills are objective criteria by which a person can be determined to have certain abilities.

Mental representation of an object that must be created, belongs to the skills necessary for work. The image in which the purpose of work is embodied, is a sample by which the measure of achievement of the planned purpose and at the same time the regulator of labor activity is estimated. The completeness and clarity of the idea of the purpose of work determines the nature of human labor actions, but the skill can be manifested in different ways of action, ending with the same result.

Among the most important problems of pedagogical psychology E.O. Mileryan calls the transfer of knowledge, abilities and skills to other conditions, whereas no education system can provide the formation of specific skills appropriate to the situations in which young people will find themselves in the future. Each transfer usually begins with attempts to apply the acquired knowledge and skills to the conditions of the new task. And only after the young person is convinced of the impossibility

of solving it in a way known to him, there is a return to baseline conditions, that is to the conditions existing before the start of work. There is a comparison of known and unknown features of the task, which requires the transfer of skills. At this stage it is necessary to use generalization in the form of knowledge, but if they are lacking, young people are forced to return again to the initial conditions of the problem and attempts to solve it are repeated. In the case of successful application of the transferred skills, the attitude to work changes - it begins to attract the pleasure from creative overcoming difficulties.

The psychological readiness of youth to master technical thinking, imagination, memory, attention and creative attitude to work requires a technological system of education, which, however, cannot be universal and equally suitable for all professions. The technological system makes sense to use only for professional preparation for the conditions of complete mechanization and automation of production processes. In each case, such a system needs experimental verification.

Skills in the E.O. Mileryan's psychological and pedagogical concept is a special ensemble of personality traits that is created and manifested in the process in a certain way of organized activity. Of all the activities, his research attention is attracted to the professional activities, the full preparation of which requires, according to the scientist, combining the efforts of psychologists, sociologists, physiologists, hygienists and representatives of all other sciences, the subject of which includes educating young people in work.

A special place in the psychological heritage of E.O. Mileryan belongs to the substantiation of ideas that are of inalienable importance for the future of man in his interaction with the means created by him to improve the conditions of his life. These include technical equipment, in the use of which, together with the implementation of the mentioned improvement, hide the risks of dangers, that their source is person himself. "The available management experience of modern technology, - says in this regard E.O. Mileryan, - clearly shows that the mistakes made in the analysis of the causes of malfunctions in energy, transport, industrial and other systems, often lead to inadequate actions of operators, which lead to accidental and sometimes catastrophic consequences "[1, p.89].

The leading role of man in the use of technology, rather than the technique used by man, is the subject of essays on the labor psychology of operator - an expert of technical means, which operates them. In them, the scientist first of all attracts attention to the emotional and volitional component of the reliability of the operator, determines the structural and functional features of the operator's activity, summarizes the results of psychological study of the work of operators in various areas of their efforts - in industry, on transport, in military affairs.

E.O. Mileryan creates a classification of operators by the following main groups: « (1) operator-technologist who performs the functions of monitoring, control and regulation of various technological processes in order to maintain them within the limits set by the program; 2) operator-dispatcher, whose responsibilities include the reception and processing of information, as well as solving problems related to the organization of air, rail and water transport;

3) operator of remote teleoperation by moving objects (control of radio means of airplane, torpedo, rockets, guided projectile, etc. ; 4) the operator who directly controls the moving object on which he is (pilots, drivers of locomotives, electric locomotives, drivers of ships, trams, trolleybuses, cars and other types of vehicles) "[1, p. 94]. The essential properties of operator activity, which are the basis of this classification, have not changed and can be supplemented, but their most important significance for the future consist in the idea of distinguishing between the work of operators. The scientist makes a psychological distinction of efficiency of methodical teaching methods of operators, defines the basic modes of their work: educational and training, minimal, optimal and extreme, provides data from his theoretical and experimental study of the psychology of human labor and extreme mode, the relationship of psychological and physiological indicators of its reliability under stress and ways to increase it.

A promising idea of E.O. Mileryan is justification of the need for a psychological passport of the machine based on the results of creating and applying a comprehensive methodology of engineering and psychological measurement and quality assessment of technical systems in relation to the average capabilities of people who control them. Indeed, if each more or less complex industrial product is necessarily accompanied by a technical passport outlining the basic parameters of its working, operating and other characteristics, and for industrial workers are assigned qualification ranks or classes that certify their ability to perform tasks of a certain complexity using appropriate equipment, then it becomes a necessity the providing of optimal accordance of human properties to the characteristics of the technology it uses. The scientist proposes to consider the connection between the class of the technical system and the class of the operator who serves it to be proved. Therefore, the higher the class of the technical system, the lower the requirements for the person, which allows more people to manage it reliably and effectively. As a result of raising the class of technical systems, it will be possible to involve any healthy person in their management.

At the same time, E.O. Mileryan pays special attention to the development of theoretical approaches and methods of psychological selection for high-complexity operator activities - candidates for flight schools of the Air Force. The scientist denies the expediency of using of such selection of tests such as methods of assessing flight abilities, emotional, volitional and moral and characterological properties of the personality, noting that foreign psychologists in the application of "personality tests" also did not achieve the desired results.

In particular, the properties of the personality revealed in this way on the basis of psychoanalytic concepts are not crucial in the combat effectiveness of the pilot. Insignificant results have been obtained by american psychologists in their attempts to create and apply empirical tests. Testing by foreign aviation psychologists of a large number of projective tests led them to the conclusion that the best method of studying personality today is conversation [1, p. 154],

and the greatest predictability is inherent in such hardware techniques, "which simulate the working conditions of the pilot" [1, p. 162].

The scientist theoretically substantiated and experimentally tested for systematic application "Methods of testing the capacities to formation and restructuring sensorimotor abilities", "Methods of testing the distribution and switching of attention", "Methods of testing sensorimotor coordination and emotional stability", "Methods of measuring the speed of response to complex signals". "Methods of testing visual perception in difficult conditions", "Methods of testing the recognition of objects by their shape", "Methods of testing the memorizing of instrument readings", "Methods of testing volitional efforts" and others. Thus it was created a set of new at that time, original and quite effective methods of psychological selection of candidates for flight schools, re-certification of flight crew to reduce flight accidents, accidents and catastrophes related to the characteristics of human factors.

Predicting the future, E.O. Mileryan calls a promising problem of psychological selection of crew of aircraft and spacecraft.

Among the most large-scale problems, the scientist pays much attention to the development of a technological system of vocational training of students of secondary vocational schools. Its basis is mastering general technical knowledge, skills and abilities. The technical means of this system was developed under the leadership of E.O. Mileryan was series of problem designers-simulators for solving educational and production problems problem electrical constructors-simulators "Single-phase transformer", "DC machines", "Three-phase alternator", "Universal collector electric motor", "High-frequency converter", "Magnetic starters". Along with the formation of standardized accuracy of thinking and movements necessary for dealing with technical devices, E.O. Mileryan notes the important role of the creative nature of learning, due to which there is a positive attitude to work.

Particular attention is paid by researcher to the psychology of work of drivers and, first of all, the psychological components of improving the quality, reliability and efficiency of work of transport drivers. The scientist considers this work in a triad of interaction: the driver - the car - the road, and the dyad "driver - transport equipment", according to E.O. Mileryan, is subject to engineering and psychological examination, the subject of which is the quality of this system. Psychological study of the professional activity of the driver includes structural and functional features of this work, the initial link of which is the function of active purposeful monitoring. Components of this activity are the ability to actively observe, analyze and summarize the data of the process, which is managed, the ability to integrate the resulting data into a holistic, clearly differentiated image or situation model . Practical sensorimotor actions provide embodiment of the previously developed program of regulation and management of the technical system. Their quality is characterized by indicators of accuracy, speed, coordination of movements and their consistency with the previously developed program.

The researcher determines the basic modes of work of the driver, individual features of human behaviour in extreme working conditions, psychological causes, in particular mental states as a factor in road accidents, – moods, experiences, emotions, feelings, emotions and passions, as well as psychological incompatibility of drivers involved in the road situation.

The scientist distinguishes between two strategies of driver behaviour – the strategy of caution and risk strategy. Thus, E.O. Mileryan found that with the acquisition of greater experience, drivers became more careful, protecting themselves from various surprises: even moving along the main street, they gave way to the driver who was leaving the secondary street; moved mainly at low speeds; stopped the car in case of blindness; increased the distance in the case of increasing speed. Thus, drivers who followed the strategy of caution, foresaw the course of events and the possible consequences of their actions.

Instead, the strategy of unjustified risk was manifested in the fact that the driver drives the car at maximum speeds at the reduced to a minimum distances, in difficult conditions, despite the danger, tries to speed up the movement of the car to pass a dangerous area or obstacle. At-risk drivers do not tolerate slow driving, brake only in extreme cases, create dangers for other road users. As noted by E.O. Mileryan, the predisposition to unjustified risk is more typical of young, emotionally excitable drivers, which are characterized by aggressive and uncontrolled type of behaviour [1, p. 258 - 259].

The generalization of research data led the scientist to the conclusion that the least reliable are drivers aged 18 - 24 years; the greatest possibility of accidents – during the first 4 years of driving experience, at the same time during the first year of work drivers commit 2 - 3 times more accidents than after 3 years of work; dangerous for the driver age is 25 - 29 years; the least number of accidents was recorded in drivers with 10 - 15 years of experience aged 30 - 45 years [1, p. 262]. Thus, with increasing age and driving experience, the accident rate decreases significantly, as the psychological properties necessary for safety are developed – emotional stability, prudence, restraint.

To the complex of methods of psychological selection and re-certification of drivers developed by E.O. Mileryan, which includes their theoretical substantiation, experimental verification and perennial application include:

1. Methods of testing the dynamic eye gauge of drivers.
2. Methods of testing the capacity to form and restructure sensory abilities.
3. Atentiometric method of attention diagnostics.
4. Methods of testing visual perception.
5. Methods of assessing the driver's ability to work.
6. Simulator for driver training and objective assessment of their professional skills.
7. Experimental installation for psychological study of the driver-operator's activity.

Prospects for improving the system of professional training of drivers E.O. Mileryan foresaw in –

the introduction of mastering knowledge about their own psycho-physiological characteristics, including - the dynamics of the formation of sensorimotor abilities; reaction rate, factors influencing it; regular features of vision: field of view, its peripheral and central part, the volume of the field of view, visual thresholds, eye gauge; light adaptation, light glare; features of color perception in the morning and in the evening; illusions of perception; natural features of hearing; attention, its types; the fatigue impact; exposure to drugs, alcohol, drugs.

Thus, the unique contribution of E.O. Mileryan to the development of psychological science is the hardware-psychological direction of combining the scientific accuracy of measurements with the creative solution of those various psychological problems, which put them before the military and postwar generations of the twentieth century. The industrial optimum achieved by the contemporaries of the scientist outlined the psychological measurements of human capabilities, which have remained completely unrealized and which put similar tasks for future researchers, the solution of which will have the latest technical embodiment.

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ԱՄՓՈՓՈՒՄ
ԵՎԳԵՆԻ ՄԻԼԵՐՅԱՆԻ ԱՇԽԱՏԱՆՔԻ ՀՈԳԵԲԱՆՈՒԹՅՈՒՆԸ
ՈՒԿՐԱԻՆԱՅԻ ԵՎ ՀԱՅԱՍՏԱՆԻ ՄԻՋԵՎ
ԲՈԼՏԻՎԵՅ Ս.Ի. ԿԱՐԱՊԵՏՅԱՆ Վ.Ս.

Հոգվածում բացահայտվում է Եվգենի Ալեքսանդրովիչ Միլերյանի (1913 - 1983 թթ.) բազմակողմանի հոգեբանական աշխատությունների բովանդակությունը և նշանակությունը. ինչը թույլ է տվել կանխել բարդության տարբեր մակարդակների տեխնիկական համակարգերի կառավարման մեջ ներգրավված մարդկանց կողմից առաջացած արտակարգ և աղետների առաջացումը: Ներկայացվել են ուկրաինացի և հայ գիտնականի կյանքի ճանապարհի հիմնական հանգրվանները, որոնց ճակատագրին են արժանացել Երկրորդ համաշխարհային պատերազմի փորձությունները, ստեղծագործական ինքնաիրացման և ռեպրեսիաների շրջանների փոփոխականությունը, աշխատանքը Ուկրաինայում և Հայաստանում: Սա, մասնավորապես, ԽՍՀՄ կրթության նախարարության հոգեբանության գիտահետազոտական ինստիտուտում հոգեբանական սարքերի արտադրության փորձարարական սեմինարների ստեղծումը և դրանցում առաջին «Սարքը օպտիկական սենսացիաների և ընկալման ցուցադրման համար՝ ըստ ընթացքի. հոգեբանություն», որը թույլ է տվել ցույց տալ գունային խառնուրդի օրինաչափությունները, հակադրության երևույթները, ներառյալ սահմանային հակադրության և հագեցվածության երևույթը, ավելի ուշ՝ էլեկտրական պոտենցիալների տարածական բաշխման դինամիկ պատկերը դիտարկելու էլեկտրոնային ճառագայթային սարքի հիմքի վրա:

Ուսումնասիրվել են գլխուղեղի կեղևի ակտիվության փոփոխությունները ձայնային տարբեր գրգռիչների ազդեցությամբ, դրանց վրա ուղղված ուշադրության առկայության կամ բացակայության դեպքում, հաստատվել է ուղեղի բիոէլեկտրական ակտիվությունը էլեկտրաջղածման ժամանակ: Կան փաստաթղթային ապացույցներ և ականատեսների հիշողություններ Միլերյանի նկատմամբ բռնաճնշումների մասին՝ կապված 20-րդ դարի 70-ականների սկզբին Ուկրաինայում իրականացվող հետապնդումների հետ: Հայտնաբերվել է գիտնականի կողմից հայաստանում իրականացված աշխատանքները, որոնք ներառում են երեխաների ուշադրությունն ուսումնասիրելու հոգեֆիզիոլոգիական փորձերի շարունակությունը, տարբեր գործոնների ազդեցության տակ մարդու ուղեղի էլեկտրական գործունեության ֆունկցիոնալ փոփոխությունների պարզաբանումը, հոգեբանական տեսության հիմքերը: Ուշագրավ է ընդհանուր աշխատանքային պոլիտեխնիկական հմտությունների ձևավորումը, որի հիման վրա մշակվել է մասնագիտական կրթության ժամանակակից տեխնոլոգիական համակարգ: Գիտնականը ստեղծել է ապարատային-հոգեբանական մեթոդներ՝ անձի անհատական հոգեֆիզիոլոգիական առանձնահատկությունների, ախտորոշիչ կայանքների և սիմուլյատորների ախտորոշման համար՝ օպերատորների, օդաչուների, վարորդների մասնագիտական համապատասխանությունն ուսումնասիրելու համար:

Նա մշակել է «մարդ-մեքենա» համակարգի որակի և հուսալիության գնահատման ինժեներական և հոգեբանական փորձաքննության հայեցակարգը, հոգեբանական սարքեր՝ ավելի բարձր նյարդային գործունեության հետազոտման ապարատ, աչքաչափ, էլեկտրաէնցեֆալոտոպոմետր, էմոկոորդինոմետր, ռեակցիայի արագությունը չափող սարք KM-3: Բարդ ազդանշաններին, պերցեպտոմետրին, կամային ջանքերն ուսումնասիրելու կամային կամավորագրաֆին, մտածողության տախիստոսկոպին, բարդացման ապարատ, վարորդների մասնագիտական համապատասխանությունը ուսումնասիրող սարք, ուսուցում-խնդիր էլեկտրատեխնիկական կոնստրուկտոր-սիմուլյատորներ: Նշվել է, որ հոգեբանական գիտության զարգացման գործում Միլերյանի եզակի ներդրումը չափումների գիտական ճշգրտությունը գործիքային-հոգեբանական ուղղությունն է զուգակցելու հոգեբանական տարբեր խնդիրների ստեղծագործական լուծման հետ, որոնք առաջադրվել էին նաև 20-րդ դարի ռազմական գիտությունների առաջ և հետագայում ևս այդ խնդիրները լուծելու համար:

Բանալի բառեր՝ հոգեբանական ապարատ, ուկրաինացի և հայ գիտնական, ինժեներ-հոգեբանական փորձաքննություն, մասնագիտական համապատասխանություն, հոգեֆիզիոլոգիական փորձեր, ապարատային-հոգեբանական ուղղություն:

РЕЗЮМЕ

ПСИХОЛОГИЯ ТРУДЫ Е. МИЛЕРЬЯНА.

МЕЖДУ УКРАИНОЙ И АРМЕНИЕЙ

БОЛТИВЕЦ С.И., КАРАПЕТЯН В.С.,

В статье раскрывается содержание и значение комплексных психологических работ Евгения Александровича Милерьяна (1913 - 1983). что предотвратило возникновение аварийных ситуаций по вине людей, задействованных в управлении техническими системами разного уровня сложности. Были представлены основные вехи жизни украинско-армянского ученого, судьба которого постигла испытания Второй мировой войны, вариативность периодов творческой самореализации, репрессий, работы в Украине и Армении. Речь идет, в частности, о создании экспериментальных семинаров по производству психологических устройств в Научно-исследовательском институте психологии Министерства образования СССР, на которых, согласно процессу, был продемонстрирован первый «Устройство для оптических ощущений». «Психология», позволившая показать закономерности смещения цветов, явления контраста, в том числе явление граничного контраста и насыщенности, позже наблюдать динамическое изображение пространственного распределения электрических потенциалов на основе электронного луча. Изучение изменений активности коры головного мозга при наличии или отсутствии к ним внимания под воздействием различных звуковых раздражителей подтвердило биоэлектрическую активность головного мозга при электросудорожной терапии. Есть документальные свидетельства очевидцев репрессий Е.О. Милерян и преследованием в Украине в начале 70-х годов 20 века.

Был открыт период работы ученого в Армении, который включает в себя продолжение психофизиологических экспериментов по изучению детского внимания, объяснение функциональных изменений электрической активности мозга человека под воздействием различных факторов, составляющих основу психологической теории. Развитие общих рабочих политехнических навыков, на основе которых разработана современная технологическая система профессионального образования. Ученый создал аппаратно-психологические методы диагностики индивидуальных психофизиологических особенностей человека, диагностическое оборудование и тренажеры для изучения профессиональной пригодности операторов, пилотов, водителей. Разработал концепцию инженерно-психологической экспертизы оценки качества-надежности системы «человек-машина», психологические приборы: прибор для исследования высшей нервной деятельности, офтальмометр, электроэнцефалометр, эмокоординатор, измерительный прибор КМ-3. комплексные сигналы, перцептометр, волонтер-волонтер для изучения произвольных усилий, тахистероскоп мышления, усложняющий аппарат, устройство для изучения профессионального соответствия водителей, учебно-тренировочные электротехнические конструкторы-тренажеры. Было отмечено, что уникальным вкладом Миллеряна в развитие психологической науки является инструментально-психологическое направление сочетания научной точности измерений с творческим решением различных психологических задач, которые ставились перед военными поколениями XX века.

Ключевые слова: психологический аппарат, украинско-армянский ученый, инженерно-психологическая экспертиза, профессиональная переписка, психофизиологические эксперименты, аппаратно-психологическое направление.