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The background features a blue-to-purple gradient with wavy, concentric lines. Three green spheres of varying sizes are scattered across the scene. The largest sphere is on the right side, partially cut off. Two smaller spheres are in the lower-left and lower-center areas. The overall aesthetic is scientific and mathematical.

$$R^2 \frac{1}{2} \frac{d\omega^2}{dt} = \frac{8\pi G}{c^4} \frac{I \dot{\omega}}{I_H}$$
$$\Omega = 4 \left(\frac{1+2A^2}{1-2A^2} - \frac{A^2 T^2}{A^2 T^2} \right) = A(1+4A^2 - 2A^2 T^2)$$
$$\frac{R^2}{2} \frac{d\omega^2}{dt} = \omega_p^2 \wedge \omega_p^2 = \omega_p^2 \wedge \omega_p^2 = \frac{a'}{ab} \frac{b+\pi b'}{7b^2} \omega^2 \wedge \omega^2$$
$$\left(\frac{V_r}{r} \right)^2 + \left(\frac{\partial V_z}{\partial z} \right)^2 + \left(\frac{\partial V_r}{\partial r} + \frac{\partial V_z}{\partial r} \right)^2 + \left(\frac{\partial V_\phi}{\partial r} - \frac{V_\phi}{r} \right)^2 + \left(\frac{\partial V_\phi}{\partial r} + \frac{\partial V_z}{\partial r} \right)^2$$
$$\frac{r^2}{c^2} \approx 10^{-10} \div 10^{-11}$$

Volume 12

Number 2

April - June
2023



Intellectual Archive

Volume 12, Number 2

Publisher : Shiny World Corp.
Address : 9200 Dufferin Street
P.O. Box 20097
Concord, Ontario
L4K 0C0
Canada

E-mail : support@IntellectualArchive.com
Web Site : www.IntellectualArchive.com
Series : Journal
Frequency : Every 3 months
Month : April – June 2023
ISSN : 1929-4700
DOI : 10.32370/IA_2023_2
Trademark : **IntellectualArchive™**

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Toronto, April - June 2023

THE RADIATIVE CORRECTIONS TO THE MAXWELL EQUATIONS

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and
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April 14, 2023

Abstract

The one-loop radiative correction to the photon propagator can be graphically represented by the Feynman diagram of the second order. The physical meaning of this diagram is the process $\gamma \rightarrow (e^- + e^+) \rightarrow \gamma$, where γ is denotation for photon, and e^-, e^+ is the electron-positron pair. It means that photon can exist in the intermediate state with the electron and positron as virtual particles. The photon propagation function based on such process with electron-positron pair e^-, e^+ is derived. The modified Lagrangian of electromagnetic field is derived supposing the modified Green function of photon. The Schwinger source methods of quantum field theory was applied. Then, the modified Maxwell equations are derived from the new Lagrangian.

1 Introduction

Maxwell's Equations, formulated around 1861 by James Clerk Maxwell, describe the interrelation between electric and magnetic fields. They were a synthesis of what was known at the time about electricity and magnetism, particularly building on the work of Michael Faraday, Charles-Augustin Coulomb, Andre-Marie Ampere, and others. These equations predicted the existence of Electromagnetic waves, giving them properties that were recognized to be properties of light, leading to the (correct) realization that light is an electromagnetic wave. Other forms of electromagnetic waves, such as radio waves, were not known at the time, but were subsequently demonstrated by Heinrich Hertz in 1888. These equations are the most elegant edifices of mathematical physics.

They are usually formulated as four equations and are usually expressed in differential form, that is, as partial differential equations involving the divergence and curl operators. They can also be expressed with integrals.

Albert Einstein developed special and general relativity to accommodate the invariant speed of light, a consequence of Maxwell's equations, with the principle that only relative movement has physical consequences. The equations are the unification of a theory for previously separately described phenomena: magnetism, electricity, light, and associated radiation.

2 The modified Maxwell equations

The one-loop radiative correction to the photon propagator can be graphically represented by the Feynman diagram of the second order. The physical meaning of this diagram is the process $\gamma \rightarrow (e^- + e^+) \rightarrow \gamma$, where γ is denotation for photon, and e^-, e^+ is the electron-positron pair. It means that photon can exist in the intermediate state with e^+, e^- virtual particles. The photon propagation function based on such process with electron-positron pair e^-, e^+ , was determined (Schwinger, 1973; 2018) from the effective emission and absorption sources.

The photon propagator involving the two-particle exchange process obviously leads to the modified Maxwell equations which are based on the new propagator. Let us here try to derive the more realistic Maxwell equations which are adequate to the more realistic photon propagator.

The vacuum amplitude involving the electron and positron exchange has been derived in the form (Schwinger, 1970; 1973; 2018; Dittrich, 1978):

$$\langle 0_+ | 0_- \rangle = -e^2 \int dM^2 I(M^2) d\omega_k A_1^\mu(-k) \left(g_{\mu\nu} + \frac{k_\mu k_\nu}{M^2} \right) A_2^\nu(k) \quad (1)$$

with

$$I(M^2) = \frac{4}{3} \frac{1}{(4\pi)^2} M^2 \left(1 + \frac{2m^2}{M^2} \right) \left(1 - \frac{4m^2}{M^2} \right)^{1/2}; \quad d\omega_k = \frac{d(\mathbf{k})}{2\pi^3} \frac{1}{2k^0}, \quad (2)$$

where $k^0 = +\sqrt{\mathbf{k}^2 + M^2}$.

Using the field strength in the momentum representation

$$F_{\mu\nu} = ik_\mu A_\nu(k) - ik_\nu A_\mu(k) \quad (3)$$

we get with $k = p + p'$

$$-\frac{1}{2} F_1^{\mu\nu}(-k) F_{2\mu\nu}(k) = M^2 A_1^\mu(-k) \left(g_{\mu\nu} + \frac{k_\mu k_\nu}{M^2} \right) A_2^\nu(k) \quad (4)$$

and after inserting of eq. (4) into eq. (1), we get

$$\langle 0_+ | 0_- \rangle = ie^2 \int \frac{dM^2}{M^2} I(M^2) \left(-\frac{1}{2} \right) F_1^{\mu\nu}(-k) id\omega_k F_{2\mu\nu}(k), \quad (5)$$

which leads directly to a space-time extrapolation which we formulate as an action expression

$$W = \int dM^2 M^2 a(M^2) \left(-\frac{1}{4}\right) F^{\mu\nu}(x) \left[\Delta_+(x-x', M^2) + C.T.\right] F_{\mu\nu}(x'), \quad (6)$$

where C.T. is appropriate contact term and

$$M^2 a(M^2) = \frac{4\pi\alpha}{M^2} I(M^2) = \frac{\alpha}{3\pi} \left(1 + \frac{2m^2}{M^2}\right) \left(1 - \frac{4m^2}{M^2}\right)^{1/2}. \quad (7)$$

The contact term can be determined by the physical normalization condition that the action appropriate to the real photons ($k^2 = 0$) must not be altered. This can be achieved by the combination

$$\Delta_+(x-x', M^2) - \frac{1}{M^2} \delta(x-x') = \frac{1}{M^2} \partial^2 \Delta_+(x-x', M^2) \quad (8)$$

which is transformed in the momentum space as

$$\frac{1}{k^2 + M^2 - i\varepsilon} - \frac{1}{M^2} = -\frac{k^2}{M^2} \frac{1}{k^2 + M^2 - i\varepsilon}. \quad (9)$$

Thus a more complete action for the electromagnetic field is given by the formula

$$W = \int (dx) \left[J^\mu(x) A_\mu(x) - \frac{1}{4} F^{\mu\nu}(x) F_{\mu\nu}(x) \right] - \int dM^2 a(M^2) \left(-\frac{1}{4}\right) \int (dx)(dx') \partial^\lambda F^{\mu\nu}(x) \Delta_+(x-x', M^2) \partial'_\lambda F_{\mu\nu}(x'). \quad (10)$$

In the last action the locality is lost. However, if we consider fields that vary slowly over the interval $1/M < 1/2m$, we can simplify (10) by substituting x for x' in the field structure. Then, using

$$\int (dx') \Delta_+(x-x', M^2) = \Delta_+(k=0, M^2) = \frac{1}{M^2} \quad (11)$$

together with

$$\int_{(2m)^2}^{\infty} \frac{dM^2}{M^2} a(M^2) = \int_{(2m)^2}^{\infty} \frac{\alpha}{3\pi} \frac{dM^2}{M^4} \left(1 + \frac{2m^2}{M^2}\right) \left(1 - \frac{4m^2}{M^2}\right)^{1/2} = \frac{\alpha}{\pi} \frac{1}{(2m)^2} \int_0^1 dv v^2 \left(1 - \frac{1}{3}v^2\right) = \frac{\alpha}{15\pi} \frac{1}{m^2}, \quad (12)$$

where we have used substitution

$$v = \left(1 - \frac{4m^2}{M^2}\right)^{1/2}, \quad (13)$$

we can replace the last term in W by

$$-\frac{\alpha}{15\pi} \frac{1}{m^2} \int (dx) \left(-\frac{1}{4}\right) \partial^\lambda F^{\mu\nu}(x) \partial_\lambda F_{\mu\nu}(x), \quad (14)$$

and in the considered limit the appropriate Lagrange function is

$$\mathcal{L} = \left(-\frac{1}{4}\right) \left[F^{\mu\nu} F_{\mu\nu} - \frac{\alpha}{15\pi} \frac{1}{m^2} \partial^\lambda F^{\mu\nu} \partial_\lambda F_{\mu\nu} \right]. \quad (15)$$

The final Lagrangian implies the modified Maxwell equations in the following form:

$$\left(1 + \frac{\alpha}{15\pi} \frac{1}{m^2} \partial^2\right) \partial_\nu F^{\mu\nu}(x) = J^\mu(x) \quad (16)$$

Since these equations are restricted to $\partial^2 \ll m^2$, the exact solution has no meaning. The approximate solution is as follows:

$$\begin{aligned} A_\mu(x) &= \left(1 - \frac{\alpha}{15\pi} \frac{1}{m^2} \partial^2\right) \int (dx') D_+(x-x') J_\mu(x') = \\ &= \int (dx') D_+(x-x') J_\mu + \frac{\alpha}{15\pi} \frac{1}{m^2} J_\mu(x). \end{aligned} \quad (17)$$

apart from a gauge term. The explicit expression of action corresponding to the extended potential A_μ is now given by the formula:

$$\begin{aligned} W &= \frac{1}{2} \int (dx) J^\mu(x) A_\mu(x) = \\ &= \frac{1}{2} \int (dx)(dx') J^\mu(x) D_+(x-x') J_\mu(x') + \frac{\alpha}{15\pi} \frac{1}{m^2} \frac{1}{2} \int (dx) J^\mu(x) J_\mu(x) \end{aligned} \quad (18)$$

and it implies the modification of the energy of two quasistatic charge-current distribution:

$$\begin{aligned} E_{int} &= - \int (d\mathbf{x})(d\mathbf{x}') J_a^\mu(\mathbf{x}) V(\mathbf{x}-\mathbf{x}') J_{b\mu}(\mathbf{x}') - \\ &= \frac{\alpha}{15\pi} \frac{1}{m^2} \int (dx) J_a^\mu(\mathbf{x}) J_{b\mu}(\mathbf{x}), \end{aligned} \quad (19)$$

where

$$V(\mathbf{x}-\mathbf{x}') = \frac{1}{4\pi|\mathbf{x}-\mathbf{x}'|} \quad (20)$$

3 Discussion

So-called Maxwell equations is system of basic laws or "postulates" which plays the same part in electrodynamics as Newton's "axioms" do in classical mechanics. Particularly, the correctness of these main postulates of macroscopic electrodynamics (like the correctness of Newton's axioms) can be substantiated in the most convincing way not by the inductive method (which is the only one that can be used in finding fundamental laws, but which, however, cannot give an absolutely strict proof of their correctness), but by agreement with experimental results of the entire complex of corollaries following from the theory and covering all the laws of a macroscopic electromagnetic field (Tamm, 1979).

Let us remark some words to the so called contact terms in eq. (6). So, source couplings that are inferred through space-time extrapolations of causal arrangements can always be supplemented by contact interactions. Unless additional physical considerations can be adduced, the contact terms remain arbitrary and may be omitted. But, when fields

replace sources such local interaction terms do have physical content; their existence must be recognized and related to the accompanying physical requirements. Since contact couplings in coordinate space appear as polynomial functions $F(\gamma p)$ of momenta in momentum space, the correct form of $F(\gamma p)$ supplements propagation function by a polynomial in $\gamma p + m$. Quadratic and higher powers of this convenient combination modify the propagation function by constant or polynomial functions of momenta (Schwinger, 1970; 2018).

The situation is different in the traditional quantum field theory. The widely known features of Quantum Field Theory is that it is plagued by divergences. This has traditionally been cited as the need for renormalization. However, renormalization is needed even if the theory is finite: divergences are not the cause for this procedure. Moreover, there are many unknowns at high energy because we have not yet explored all energies. Divergences are just one of these uncertainties. We have no way of knowing whether the divergences really occur or whether there is some compensating physics that makes a finite theory. But in the end, these unknowns do not matter. Because all unknown high energy physics is local when viewed at low energy, and because we measure the experimental values of the low energy constants as required by renormalization, all ultraviolet divergences are irrelevant for physics at ordinary energies (Donoghue et al., 2022).

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STOE plenum is real

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Abstract

The “plenum” in the Scalar Theory of Everything (STOE) is the component of the universe that is a continuous medium that interacts with matter particles. Because a medium is not directly detected in instruments, the question of its reality is controversial. This is linked with the question of whether quantum waves are real waves in the plenum or merely probability waves. The experiment to demonstrate the reality of the plenum as a component of the universe has been done. The conclusion is that the plenum is a real component of the universe.

keywords: aether, plenum, STOE.

1 Introduction

The ontology of the existence of a continuous medium that transmits changes such as waves has been a subject of interest whether discussing an aether or quantum waves. This is an issue primarily in Quantum Mechanics where waves may be real or merely probability calculations.

The Scalar Theory of Everything (STOE) suggests a causation model using a continuous plenum medium to cause forces on matter and hods which in turn cause the plenum to change [Hodge 2016, 2020]. The “walking drop” experiments appear to be hydrodynamic analogs of quantum mechanics at the macro level. The De Broglie Pilot wave hypothesis suggests the waves and

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2 THE EXPERIMENT

their medium are ontologically real and independent of an observer. These are called the “empty waves” (meaning real waves without matter) or “de Broglie waves”.

“Matter” in the STOE are corpuscles NOT de Broglie’s other quantum wave packets. The distinction is that our detectors measure the matter (STOE hods) and not the empty waves (STOE plenum).

The popular Copenhagen Interpretation of QM suggests the waves are merely probability, mathematical waves and are NOT real. De Broglie, Bohm, and now Hodge in the STOE suggest the waves are in a real medium. However, the STOE has the additional suggestion that the hod is also discrete - that is, not a high-energy kernel of a wave which is a singularity usually detected in quantum experiments. The Copenhagen Interpretation suggests light is a wave OR a particle. The STOE suggests light effects such as interference are due to a wave in the plenum AND a particle which causes the wave [Hodge 2012].

Croca et al. [2022] proposed several experiments to support the reality of the empty wave using Copenhagen Interpretation math. The perceived problem is to have an experiment that is not explainable in the Copenhagen Interpretation. They use several photons that may be treated as “bi-photons” (entangled such that they are calculated as one wave function).

The other effect that must be accounted is the “Hong-Ou-Mandel (HOM) effect demonstrated in an experiment by Alain Aspect where photons appear (are) coherent when emitted by a beam splitter. The STOE suggests the photons in a laser beam are coherent in the sense of this effect[Hodge 2012]. But this effect is discounted when the optical path lengths differ and a beam splitter is not used.

This paper shows the experiment [Hodge 2019] to support the STOE model of a ontologically, physically real plenum (aether) and hods(matter). That is, the plenum wave (empty wave) of a photon (coherent light – laser) is detected without additional photons by the difference between diffracted and interference of light on a screen pattern.

2 The experiment

The STOE model of a photon laser light need not have a Mandel dip which is necessary in Croca’s context, because the STOE experiment Hodge [2019] has only 1 optical path for each photon. Whether laser light is a series of

2 THE EXPERIMENT

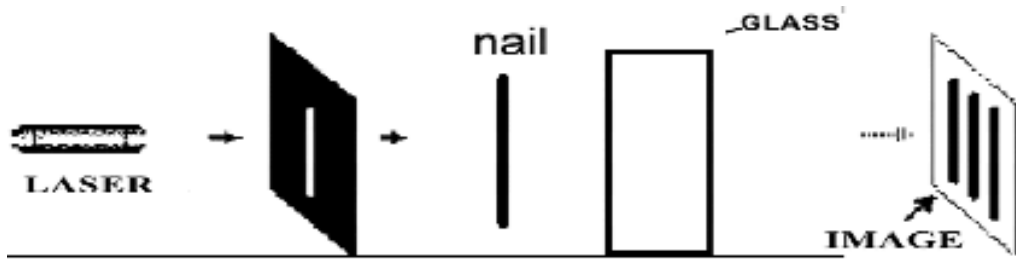


Figure 1: Diagram showing the experimental layout for the “without slit” pattern in Fig. 3.

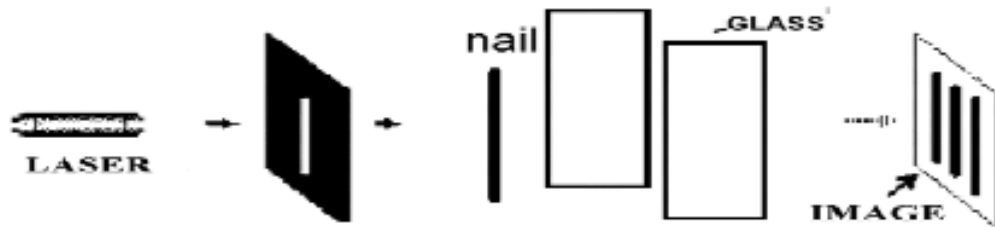


Figure 2: Diagram showing the experimental layout for the “with slit” pattern in Fig. 3.

single coherent photons in low intensity experiments or a group of photons as Mendal dip suggests is irrelevant. Neither is modeling a quantum particle or bi-particle necessary. All that is needed is that laser light thru slits produce diffraction and interference patterns. This experiment also rejects Copenhagen.

The last setup in Hodge [2019] is the start of this paper as shown in Fig. 1. This produces the diffraction pattern shown in Fig. 3 labeled “without slit”. This is the diffraction pattern of Hodge [2019, Fig. 3 b] with the addition of a nail blocking the central peak.

The second image for comparison is obtained by the setup shown in Fig. 2. This produces the interference pattern shown in Fig. 3 labeled “with slit”. This is the interference pattern of Hodge [2019, Fig. 3 d] with the nail blocking the central peak.

As in Hodge [2019], the slit in the glass plate is necessary to form the interference image without light passing through the slit. Figure 4 depicts

3 CONCLUSION

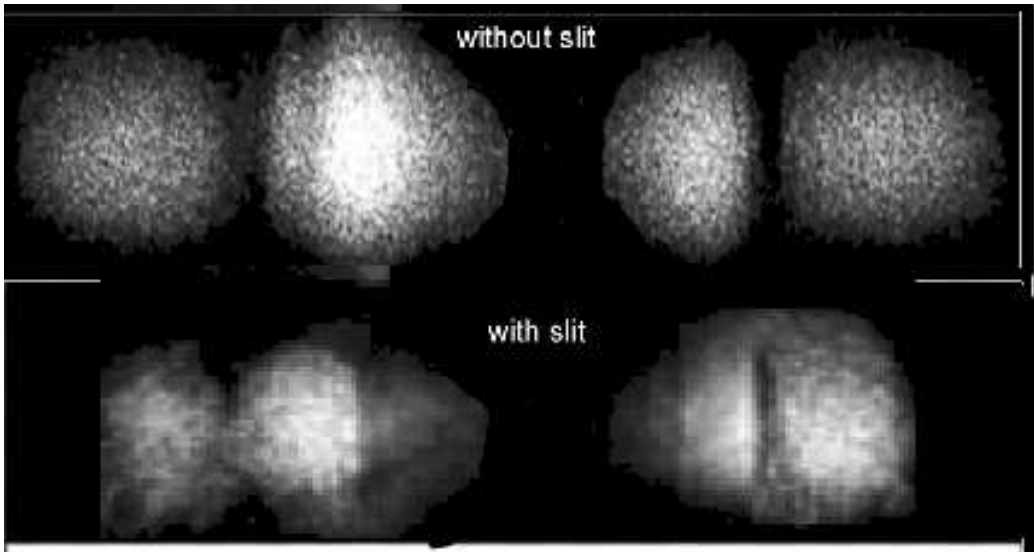


Figure 3: Photographs in 2 color showing the screen image of with a slit and without a slit.

the situation. The pattern before the glass mask is a diffraction pattern from the first mask Hodge [2019, Fig. 3 a]. The photon between the glass mask and the screen has been influenced by the presents of the slit in the glass plate after it has passed through the glass. This suggests a causative link [Hodge 2022] wherein the physical characteristic (width) of the slit has modified the path of the photon into an interference pattern. The screen pattern is real, the light is real, and therefore the “link” that changes the photon path is real.

3 Conclusion

Because a medium is not directly detected in instruments, the question of its reality is controversial. This is linked with the question of whether quantum waves are real waves in the plenum or merely probability waves. The experiment to demonstrate the reality of the plenum as a component of the universe has been done. The conclusion is that the plenum is a real component of the universe.

3 CONCLUSION

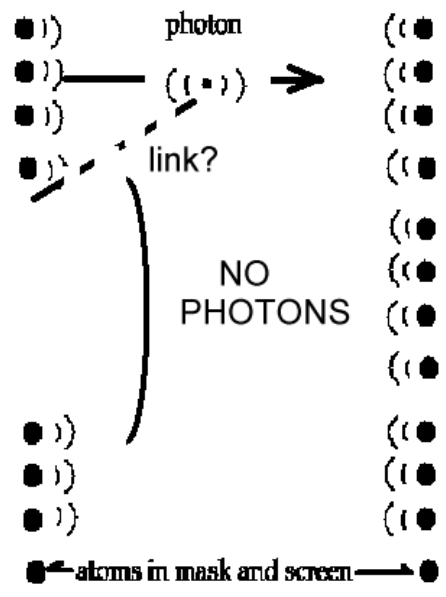


Figure 4: Diagram depicting the path of the photon relative to the slit.

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DOI: 10.32370/IA_2022.12_3

Comment: *A Solution to the Pioneer Anomalous Annual and Diurnal Residuals* by E. D. Greaves, et al., 2021 Progress in Physics, vol. 17, 2, p. 168

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Abstract

A comparison is made between Greaves, E. D., Bracho, C., Gift, S., and Rodrigues, A. N., 2021. *A Solution to the Pioneer Anomalous Annual and Diurnal Residuals*, Progress in Physics, vol. 17, 2, p. 168. and Hodge, J. C. 2006. *Scalar potential model of the Pioneer Anomaly*.arXiv: astro-ph/0612567v1. Both papers suggest the Pioneer Anomaly observation is due to the signal being modified by a characteristic of space that is influenced by the Sun and Earth. The papers differ by what that characteristic is and how it influences the signal. The former paper uses “energy density” (a scalar) which is proportional to distance (r^{-4}) from bodies. All the characteristics of the former paper were accounted in the original calculation of the Pioneer Anomaly. The latter paper used a vector proportional to r^{-2} , a gravitational force exerted on photons that was not accounted. The different treatment of r by the latter provides a more accurate treatment of the periodicities and all 10 anomalous characteristics of the Pioneer Anomaly. The conclusions of the former that the velocity of light is Galilean additive and the use of the “gravitational density” are not supported.

keywords: Pioneer Anomaly, STOE, Annual periodicity

1 Greaves (2021)

Greaves (2021) divides the calculation of the Pioneer Anomaly (PA) into two parts, the “constant” part and the annual and diurnal part. The “constant”

part attributes the anomalous acceleration a_P to differing speed of light at the Earth’s surface:

$$c_G = \frac{k}{\sqrt{\rho_G}} \quad (1)$$

where k is the proportionality constant and ρ_G is the energy density¹. The energy density due to a body is calculated as:

$$\rho_G = \frac{GM}{8\pi r^4} \quad (2)$$

where r is the distance from the center of mass of a body to a point in space, G is the Newtonian gravitational constant, and M is the gravitational mass of the body. Because of the r^4 in the denominator, the “... contribution of the moon and other planets was considered negligible.”

The gravitational field variation was accounted in the calculations (Anderson et al. 2002, section IV. A. “The programs treat the Sun, the Moon, and the nine planets as point masses in the isotropic, parameterized post-Newtonian, N-body metric with Newtonian gravitational perturbations from large, main-belt asteroids.”).

Further, energy density models were rejected (Anderson et al. 2002, section XI. A. “The effect of this interaction is a frequency shift that is proportional to the distance and the square root of the density of the medium in which it travels. ... However, these ideas have problems with known properties of the interplanetary medium that were outlined in Section VIII.”).

¹Both papers use ρ to represent a density. This paper uses a subscript G to indicate Greaves (2021) parameters and the subscript H to indicate Hodge (2006b) parameters.

Gravitational effects on the spacecraft were also considered and rejected (Anderson et al. 2002, section XI. B. “However, any universal gravitational explanation for the Pioneer effect comes up against a hard experimental wall. The anomalous acceleration is too large to have gone undetected in planetary orbits, particularly for Earth and Mars.”).

The annual and diurnal part attributes the variation to the Doppler residuals to Earth’s rotation and translation. However, the motion of the receiving stations and the Earth were included in the calculations (Anderson et al. 2002, section IV. F. “We included models of precession, nutation, sidereal rotation, polar motion, tidal effects, and tectonic plates drift. ”).

Therefore, Greaves (2021) is double counting the effect. The author of this paper suggests these effects were well known and accounted in the original work. That they were accounted is the reason the PA is so mysterious.

2 Hodge (2006b)

The Scalar Theory of Everything (STOE) explains many mysterious phenomena from diverse observational disciplines. The STOE is a self-consistent model that was devised based on observations including galaxy redshift (Hodge 2006a). Both Newtonian physics and General Relativity physics postulate a high level of a substance which bodies depress to cause gravity. The STOE suggests this is a plenum that is in the universe. All other galaxies and matter contribute to the plenum density ρ_H . The gradient of the ρ_H is the force of gravity that is a vector proportional to r^{-2} . This force and the Equivalence Principle describe the planetary orbits as Anderson et al. (2002) suggests. This force also modifies the energy of photons as the galaxy redshift model suggests. The gravitational effect on photons (gravitational redshift) was not modeled by Anderson et al. (2002).

Other models leave unanswered or poorly answered many characteristics of the PA such as the cosmological cH_0 connection, the Saturn encounter decrease, etc. Some predictions of the STOE in 2006 concerning the PA that no other model predicted have been published in 2009 and 2011 (Hodge 2013).

3 Conclusion

Both papers suggest the Pioneer Anomaly observation is due to the signal being modified by a characteristic of space that is influenced by the Sun and Earth. The papers differ by what that characteristic is and how it influences the signal. The Greaves (2021) paper uses “energy density” (a scalar) which is proportional to distance (r^{-4}) from bodies. All the characteristics of the former paper were accounted in the original calculation of the Pioneer Anomaly. The Hodge (2006b) paper used a vector proportional to r^{-2} , a gravitational force exerted on photons that was not accounted in the original calculation (Anderson et al. 2002). The different treatment of r by the latter provides a more accurate treatment of the periodicities and all 10 anomalous characteristics of the Pioneer Anomaly. The conclusions of Greaves (2021) that the velocity of light is Galilean additive and the use of the “gravitational density” are not supported.

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Issues of the Quality of the Forensic Expert Opinion and Some Forensic Errors

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Abstract

The concept of quality may be regarded as a composite structure comprising the support for the following elements: legal, scientific and technological, methodological, organisational, logistical. The quality of expert investigation is not an abstract concept; it actually exists and has a certain content that expresses substantial certainty, since it results in an expert opinion — judicial evidence. An expert opinion has a procedural (legal), scientific and technological aspects. The ‘quality of forensic examination’ concept therefore has a procedural (legal), scientific and technological content.

Key words: quality of expert opinion, court proceedings, expert errors, operational, gnoseological, errors of procedural character.

Introduction Thus, the very concept of ‘quality of forensic examination’ is composite and requires a comprehensive, systematic approach to its study [1, pp. 33–36; 3].

The concept of ‘quality’ is closely related to that of ‘efficiency’. It is generally remarked that an expert investigation should be complete, comprehensive, objective, etc., whereas an expert opinion should be complete, clear, consistent, coherent, informed, etc. Therefore, examining the efficiency of expert investigation and measures to improve it involves a simultaneous analysis of factors that raise the investigation quality and level, as well as reliability and validity of expert’s findings.

In the legal literature, less attention is given to the concept of ‘quality’. For example, I. P. Kononenko defines the quality of a forensic expert opinion as ‘a totality of legal, scientific and technological properties, which comply with the law and other regulations governing the conduct of forensic examination, and of instructional research rules applicable to a forensic expert opinion as judicial evidence’ [2, pp. 31–40; 4]. This definition is not objectionable on the whole. It makes it evident that quality describes outputs of a (forensic examination) system operation at its individual stages, i.e. a ‘finished product’, whereas efficiency describes the entire system, showing how this system functions in accordance with the tasks and objectives it was intended to address upon its creation. Some of these tasks are focused on delivering a product of a certain quality (such as giving an informed opinion); others refer to a procedure for the operation or to the process itself (such as timeliness of forensic examination). However, both are intended to deliver a certain result that reflects the degree of system efficiency.

It seems reasonable to conclude that efficiency is a broader category than quality and encompasses the latter.

Quality indicators of expert investigation are closely related to efficiency indicators of expert investigation.

Quantity indicators of efficiency ‘quality’ in an expert’s activities include:

1. Indicator of achieved objective of establishing evidence. It represents the ratio between the number of questions posed and resolved. Those questions are regarded as resolved to which answers have been given in a categorical (positive or negative) form, since such answers always contain actual data of evidentiary value. Resolved questions should also include those the answers to which have been given in conditionally categorical, alternative or

probabilistic forms, since conclusions containing such findings may be used to develop investigative leads. Only those questions should be regarded as unresolved the answers to which contain the wording 'resolving this question was not possible.'

2. Number of forensic errors made by an expert. This indicator is derived by comparing findings of initial and repeat examinations, forensic examinations and case files of concluded proceedings (in which a final verdict or judgement has been passed), as well as by reviewing the supervised proceedings, and by monitoring outgoing expert opinions arranged at an expert institution. Here, high quality implies minimising expert's errors or their complete elimination.

In a general view the expert error can be defined as inappropriate to the objective reality judgement of the expert or his action which do not lead to the solution of problems of expert research, or erroneous judgement which represent result of a diligent error. It distinguishes an expert error from a crime against justice which the expert can make. The problem of expert errors is practically undeveloped. The correct solution of a problem depends on possibilities and readiness of experts (I.Q., knowledge, skills and abilities, other features of the expert personality) [5].

At the same time the reason of an erroneous conclusion of the expert is not always a consequence of wrong actions of the expert. His research can be carried out faultlessly, and the drawn conclusions entirely correspond the received results, but if the initial data for examination were erroneous or investigated objects forged, etc., the conclusion of the expert in aspect of truth establishment in the case will be erroneous [6].

The analysis of expert practice allows revealing and classifying errors which are allowed at carrying out the judicial-ballistic examinations. By the nature they are not homogeneous and can be related to such kinds of errors: the operational; the gnoseological; the procedural.

Operational - connected with infringement of the established requirements to the sequence of actions of the expert and to conclusion arranging. They are characteristic almost for all investigation phases, in greater deal are met in practice of beginning experts. The essence of the given sort of errors of the expert in practice is characterised by the following factors: wrong instructions in the text of conclusions of materials receipt or the decision making dates, file number, etc.; absence of results of research on one of the questions.

Gnoseological errors - connected with the solution of problems by the expert, their occurrence depends on many reasons: from theoretical and practical preparation of the expert,

his experience, especially while carrying out the complicated judicial-ballistic researches which are seldom met in expert practice; from a scientific development of separate positions of judicial-ballistic examination and, eventually, from mental abilities of the expert. In their turn, gnoseological errors can be subdivided into logic and actual (subject) [7].

Logic ones are "the errors connected with infringement in substantial intellectual acts of laws and rules of logics, and also with incorrect application of logic methods and operations".

Actual, or subject, errors – the deformed idea of the relation between subjects of the objective world.

In practical activity of the expert gnoseological errors appear in such factors: In a wrong estimation in unified system of coincidence significance, and also the character of divergences; In a wrong estimation of informativeness of the revealed indications which coincide.

The given kind of errors is the most typical for identification judicial-ballistic examinations. It is explained by the complexity of the trace-making mechanism and the process of revealing and considerable subjectivity of an estimation of the common general and personal signs of traces of the weapon on the shot shells and sleeves.

Errors of procedural character – consist in infringement by the expert of a procedural mode and procedure of expert investigation. They include: Expert's going out the limits of his competence, in particular, his intrusion into sphere of legal character; Giving conclusions on the questions the decision of which does not demand special knowledge; Unreasonable, not enough motivated conclusions or conclusions' substantiations reached not by results of research, but by the criminal case materials; Discrepancy of the size of the carried out research and answers of the expert to the questions put to it; Non-observance of the rules of the expert conclusion arranging established by the law, in particular absence of necessary requisites in a conclusion; Giving the preventive offers which are based on unreasonable special knowledge of the expert [8].

Characterising the above-stated kinds of errors it is possible give the following examples. At the solution of questions connected with the establishment of the time of shots, and also at an establishment of carrying out of shooting from the weapon after last cleaning, experts-ballists fall outside the limits of their competence, do not involve experts of physical and chemical researches, and build the conclusions only by auxiliary signs. At research of the fire-arms, especially self-made, experts not to the full extend according to a technique, conduct

experimental shooting, solving the question of suitability of the weapon to shots and its reliability, but the fighting properties of the weapon are not investigated [9].

The reasons of errors of the expert can be a double nature: objective i.e. those which do not depend on the subject of expert research (expert), and subjective, that root in a way of thinking and (or) actions of the expert. The exhaustive list of objective and subjective errors in criminalistic literature it is not given.

The typical reasons of objective errors are the following: Malfunction of equipment's; Unfitness and not conformity of criminalistic materials to research requirements, etc.

The subjective reasons of errors:

Professional incompetence of the expert. It can be expressed in ignorance of modern expert techniques, inability to use certain means of research and to apply the most effective method in a certain situation. Professional oversights of the expert: negligence, carelessness. Influence of materials of the case, including conclusion of the previous examination, etc [10].

Expert errors can be revealed: At check by the expert of a course and results of research on any of its stages and especially at the stages of synthesising and a formulation of conclusions; At check of a course and results of research by the head of expert establishment or subsections; At an estimation of the conclusions by the inspector and court and in some other cases [11].

Working out of the questions of expert errors in judicial-ballistic examination and their prevention, for a long time demands fundamental scientific studying.

Conclusion It should be noted in summary that, in our opinion, setting up a system of reliable legal protection for a forensic expert as a participant in legal proceedings and a source of expert opinion would preclude (to a large extent) any potential physical or psychological pressure and would have a correspondent impact on the quality of investigation and validity of its findings.

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Origin, Emergence, Formation, Development, and Current State of Organized Crime in Ukraine

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Abstract

The Criminal Code (hereinafter CC) of the Ukrainian SSR (§2, Art.41) only once provided for a crime committed by an organized group as an aggravating circumstance in any crime till 1989 [1]. At the close of 80-s and in 90-s especially the country faced a fast-growing and serious challenge from organized crime that caused a classifying circumstance - a commission by an organized criminal group (hereinafter OCG) amended in 20 articles, the Special Part, CC. Regulations, Session of the Supreme Court and Methodical Instructions, the Ministry of Interior did not give an appropriate definition of OCG. As a result law enforcement and, first of all, the Ministry of Interior agencies did not have strict legislative acts to define OCG from traditional groups of criminals. All the cited above could not but adversely affect the struggle against organized crime.

According to the statistical data for 1991-2023, annual Reports on combating organized criminal groups, the Ministry of Interior the status of organized crime is as follows.

Key words: investigated, organized crime, criminal activities, organized criminal groups, rather latent.

Introduction The number of OCG investigated increased from 371 to 960, i.e. 2.6 times. The number of cases opened jumped from 1843 to 7744, 4.2 times. The number of OCG members prosecuted rose from 2980 to 4074 (by 36.6%) between 1995-2000.

We opened a very small number of crimes committed by corrupt OCG that totaled from 1.2% to 5,5% of the general number of OCG investigated during the cited above period.

By organized crime indexes different Ukrainian regions varied in their places greatly enough between 1995-2000. At the end of 2000 the places taken by the regions corresponded to the crime indexes more.

Organized crime manifested itself in all regions. The highest level was registered in Dnipro, Zaporozhje, Lugansk, Hmelnizck, Kharkov, Odessa, Zakarpatje, Zhitomir, Sumy, Kherson, Ternopol, and Cherkassy regions including the Autonomous Republic of Crimea and the city of Kiev.

Between 1994-2023 among all the OCG investigated the groups of two members averaged 27.4% of three - 27.8%, from 4 to 10 members - 42% and above 10 - 2.7%. Thus, more than a half of all the OCG investigated made up groups of 2 - 3 members. The decrease in the number of small OCG during 1999- 2000 can be considered a step forward taken by law enforcement. However, it should be taken into consideration that the cited above decrease was not great as the number of small OCG exceeded 50% in 2000. Among all OCG investigated between 1994 – 20023 the groups existed during a year averaged 71.4%, nearly 2 years - 23.7% from 3 to 6 - 4.8%, above 6 years - 0.1%.

By territory OCG can be classified as follows. Between 1994 - 2023 OCG committing crimes within a city averaged 40.9%, within a district - 27%, within Ukraine - 18%, within the CIS - 5.7% and the groups established international relations - 2.4%. Thus about 70% composed groups engaged in local activities and investigated by law enforcement agencies.

By ages OCG members of 14 - 15 years old averaged 0.9% in 1994 - 2023; at age of 16 – 17 – 4.3%, 18 – 24 – 32.1%, 25 - 29 - 23.2%, 30 - 39 - 26.3%, 40 - 49 — 11.2% and above 50 - 3.5% in 1994 - 2023. The cited above figures were stable enough during the analyzed period.

By social status unemployed criminals prevailed averaging 54.9% of the total number of

OCG members in 1994 - 2023. At the same time the cited above number multiplied 2,2 times. Workers averaged 16.3%, white-collar workers - 7.8%, students - 2.3%. The cited above structure coincides with the structure of social status of all individuals committed crimes in Ukraine. It is significant that the average number of different rank officials, which committed crimes as members of OCG did not exceed 9.1% in the cited above period.

Among OCG members habitual criminals made up 17.3%. The cited index nearly equals the respective figures as to all criminals. 6.2% were criminals having served term. At that the number of the cited above individuals decreased considerably between 1994 - 2023.

The roles fulfilled by OCG members were principles in the first degree (70.9%), organizers (24.3%), accomplices (3.9%) and abettors (0.9%).

By the degree of gravity, the crimes by OCG investigated in 1994 - 2022 underwent considerable changes. At the beginning of the analyzed period 63.6% of the crimes were not grave. The rest (36.4%) were grave crimes. In 2000 the situation was quite the contrary.

Among OCG crimes investigated the most spread crimes were theft of private (averaged 22.1% in 1990 - 2022), state and community (16.4%) property, private property extortion (7.6%), grand larceny of state or community property (7.3%), armed robbery (5%), crimes related to drugs, psychotropics and precursors (4.2%). Each of other crime kinds averaged less than 4% of all the crimes of the category under discussion.

Overwhelming majority of OCG crimes were of general criminal character. Only 15.9% of all crimes were committed by OCG under different economic activities. At the same time committed in government and administrative agencies crimes totaled 1.4% [2].

The effectiveness of anti-organized crime struggle considerably depends on comprehensive study of the phenomena. Manifesting itself in different ways crime is part of social life subjected to various regularities. The regularities should be studied, on the one hand, to improve legislation on organized crime combat under new political and economic conditions and on the other hand, to arm law enforcement officers with an appropriate tool to solve definite problems under investigating crimes committed by organized criminal groups (hereinafter OCG) [3].

The analysis of OCG activities allowed establishing tendencies of their rise and development. They are as follows. OCG penetrate economy to accumulate capital quickly under subsequent legitimizing assets in the most profitable branches. The process of integration between OCG of general criminal and economic character causes modus operandi of most

crimes changed that no doubt, affects the methods of investigation. OCG usually commit not isolated economy-related crimes, but the complex of the former. The cited above is a ground to conclude that OCG develop original crime know-how aimed at obtaining huge and stable profits, on one hand, and on the other one, minimizing risk for organizers to be prosecuted. It is of great importance to analyze know-how of different crimes committed by OCG; mechanisms of recreating OGP functions and “cadre” under losing several or most members; standard and recurrent acts committed by OCG members, who are guided by the common OCG’s values, including norms of behavior spread in ‘criminal world’. The aggregate of norms cited above forms some behavior rules. It is necessary to comprehend the former to facilitate crimes forecasted, prevented and investigated. The cited above rules often combine behavior rules accepted in criminal community and norms of cynical criminal business and shadow economy. It is of great use to study and systematize these rules for combating organized crime [4].

The work presented is the first attempt to examine norms and standards of OCG behavior under their different activities. The specificity of the research lies in sociological approach to the problem of behavior norms and standards in OCG. The former manifests itself, first, in the subject of the research, second, in the complex of methods used by the researcher to collect primary social information and third, in the aggregate of categories and context of theories used for interpreting data and developing explanatory models.

The main hypothesis lies in that, first, some common rules of OCG members’ behavior exist and second, the rules form three heterogeneous groups depending on origin and localization of the former.

The first group is to some extent a normative and ideological infrastructure relevant to criminal community on the whole. The former is a system of external regulators of criminal behavior. Being a set of ideologies and institutions in criminal community the infrastructure is a tradition of long standing formed and developed during decades of years.

The second group is a system of regulators within a group. It includes leadership and administration of a group, structuring and assigning roles, presence of internal sanctions and other. In the presence of OCG empirical diversity it is evident that there are some tendencies, common rules for organizing a group, becoming a leader including the leadership, OCG members’ attitude to people, law enforcement officers and other. The third group is

technologies of criminal activities. Technologies are meant standard ways of commission, so-called criminal know-how. At that standardization of criminal activities also manifests itself within an OCG.

The complex of quantity and quality methods was used to prove the cited above hypothesis. To establish the standard of OCG the researchers applied F#2, the statistic processing of card file (in total 1386 cards) in program environment SPSS; fulfilled monograph research of 11 OCG groups, conducted 7 focus-groups with the operative officers and investigators, Kyiv Administrative Department on Organized Crime Combat, the Ministry of Interior and chiefs of economic related crime strike forces of different Ukrainian regions (31 people in total), conducted surveys on criminal institutions (174 respondents) and group dynamics (117 individuals convicted OCG members).

Proceeding from the data obtained the researchers propose the following conclusions and propositions:

1. On the whole the research confirms the hypothesis about presence of three kinds of norms and traditions regulating criminal activities committed by OCG members. The traditional “thieves’ concept” and complex of criminal institutions constitute an ideological infrastructure. OCG can be classified according to their attitude to the general standards including “thieves’ law”, criminal hierarchy, “common funds”, “criminals’ meetings” and other.
2. Overall, the research doesn’t confirm the opinion of definite part of law enforcement officers and criminologists that an “ideology” and old criminal tradition do not exist anymore. It is more correctly to state that selected by different OCG old norms are under transformation now. During the research, it was established that a number of convicted criminals felt need for “thieves’ law” and “life according to criminal norms”.
3. The research confirmed that depend upon its type (“centralized” or “democratic”) OCG has specific internal norms (rules of behavior) and standards (models of behavior) including general and specific requirements to an organizer and other members according to their statuses and roles, particular behavior style of OCG members in public environment.
4. The analysis of OCG members’ opinion reveals that their leaders apply more often modern management styles including autocratic, democratic and populist (charismatic).
5. The survey results are evidence of the fact that criminal organizers often use strict autocratic management style while OCG members prefer a democratic or charismatic one. OCG members are observed not to satisfy with their leaders as to spoils system

and interpersonal attitudes (presence of “favorites” and all the rest) along with organizers’ behavior at the stage of preliminary investigation. 6. The interview and survey data confirmed that OCG organizers would like to have appropriate planning and preparation of operations, reliable information about participators, strict control of OCG members’ behavior, the right to impose sanctions against delinquents and settle disputes by force measures. The respondents tell about a high level of distrust among OCG members. 7. The important ones are the materials dealing with the process of involving an individual in criminal activity, the rules of choosing candidates to OCG members, adaptation of individuals to OCG requirements, aiming OCG members at choice of a victim and reaction of victim’s behavior, attitude of OCG leader and members to the law enforcement. 8. As rule habitual criminals become members of OCG characterized by general criminal orientation and mostly engaged in usurpation of property. To settle any problems some leaders of the cited above groups establish close corrupt relationships with representatives of the law enforcement (criminal investigation agencies and organized crime strike forcers). 9. Economy-oriented OCG commit crimes by using attributes of an enterprise (a business subject) in different spheres including trade, banks, insurance companies and other. As a rule, committed by these OCG definite crimes are some kind of means to acquire huge profits illegally. A peculiarity of economy oriented OCG is that these groups commit crimes against property under mask of lawful deals. At that from the outside crimes is taken as contract default. Financial and “buffer” firms play key part in money laundering. 10. Investigating crimes committed by OCG law enforcement officers experience active resistance of the former, which use different means and measures: a) crushing, concealing, masking or falsifying evidence; b) creating unfavorable external conditions to investigation; c) creating unfavorable internal conditions to investigation; d) direct influence on investigators [5].

Conclusions The cited statistic data are evidential that by their traits most OCGs investigated between 1991-2023 do not differ much from traditional criminal groups. There are grounds to state that in Ukraine organized crime is rather latent.

To investigate crimes and combat organized crime It is of paramount importance for law enforcement practitioners to know the rules of OCG members’ behavior and methods applied under different circumstances for taking appropriate law and organizational decisions.

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Modern Threats to the Financial and Economic Security of Aerospace Enterprises

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Abstract

The study provides an analysis of modern challenges and conditions in which Ukrainian business operates during hostilities, and their impact on accounting and tax activities. An analysis of laws and regulatory documents developed by the state for the functioning and improvement of the situation of enterprises affected by hostilities was carried out. Scientific publications and monographic editions, magazine articles and materials of scientific and practical conferences became the methodological basis of the research. Content analysis of scientific periodicals was used during the research; comparative critical analysis of existing approaches and methods of analysis of financial stability and tax burden; analysis of economic activity of enterprises in the aerospace industry; statistical methods of analysis. The main hypothesis of the study was the assumption of the possibility of restoring the country's production potential due to the introduction of the latest accounting and tax technologies of digital transformation of Ukraine, national projects for the development of entrepreneurship, digital interaction platforms for business relocation assistance. Using the example of an enterprise belonging to the aviation industry, the influence of social and behavioral challenges on the accounting and tax activities of this enterprise, namely: on calculations with the budget, the amount of profit and on calculations of labor remuneration, was investigated. Measures to improve business promotion under martial law are proposed.

Key words: socio-behavioral challenges, accounting and tax activity, business entities, entrepreneurial activity under martial law.

Introduction

The industry of Ukraine in 2023 feels the consequences of military actions, which caused the economic downturn, production stoppage, increase in unemployment and budget deficit. On the part of the state, at the legislative level, measures have been introduced to protect the interests of individual entrepreneurs working within Ukraine and to provide "tax holidays" for medium and large enterprises. Such realistic objective circumstances actualize the study of the impact of modern socio-behavioral challenges and their impact on the effectiveness of the accounting and tax activities of enterprises, and to introduce measures to improve the accounting and tax activities of enterprises in the conditions of martial law.

Update on issues of economic security of business

The impact of socio-behavioral challenges on accounting and tax activities can be carried out due to external and internal factors that directly affect the economic state of the country as a whole and individual business entities, and due to changes in tax legislation. Ukrainian enterprises have been suffering from the war for the past year. Due to constant active fighting and shelling in the East and South of Ukraine, many enterprises were damaged or destroyed [9].

According to research by the Kyiv School of Economics for March 2023 [8] regarding direct physical damage to Ukraine from the consequences of the war, the loss of business assets amounts to at least 11.3 billion dollars. USA and continue to grow. Another 8.7 billion dollars. The USA has direct losses in the agricultural sector as a result of the war. In total, at least 426 large and medium-sized private enterprises, as well as state-owned enterprises, plus tens of thousands of small private enterprises, have been damaged or destroyed since the beginning of the war. However, it is impossible to say definitively, since complete information will become available only after the end of the war and the liberation of all occupied territories. Direct damages include: 1). Loss of fixed assets; 2). Loss of unfinished capital investments; 3). Loss of stocks of finished goods and intermediate materials.

The main conclusions regarding enterprise losses according to studies of the Kyiv School of Economics [8]: 1). Enterprise assets are the third largest item of direct infrastructure damage. It accounts for about 10% of the total amount of losses. 2). In terms of industries, metallurgy was the most affected. In particular, two enterprises were destroyed, which are the largest in the list of damaged/destroyed — Azovstal and MMK named after Ilyich. 3). In terms of regions, the Donetsk region was the most affected, accounting for almost half of the total amount of direct losses of enterprises.

The Law of Ukraine "On Amendments to the Tax Code of Ukraine and other legislative acts of Ukraine regarding the application of norms for the period of martial law" [2] contains radical changes regarding the single tax, reduction of VAT and excise duty on fuel, tax incentives for big business and charity. In order to stabilize fuel prices, benefits have been provided, namely, the rate of value added tax on fuel has been reduced from 20% to 7%, and the excise tax has been abolished. Not only sole traders will be able to pay a single tax on the simplified taxation system, but also large enterprises at new rates. The law provides that for the

period of martial law, the annual income limit for taxpayers in the 3rd group of the single tax has been increased from 7,600,000 hryvnias to 10 billion hryvnias, and there are no restrictions on the number of employees. The rate will be 2% of the turnover, regardless of the type of activity (the exception is activities related to excise goods, gambling business, currency exchange and extraction and sale of minerals, banks, insurance companies, FOP pawnshops, non-resident legal entities, etc.). VAT will not be charged or paid for this period. FOPs of 1.2 groups have the right not to pay a single tax. This norm is voluntary. During the martial law and 3 months later, fines and interest are not collected from the EUV, and inspections are not carried out. Fuel given to the military, forcibly seized for the needs of the state, or given as humanitarian aid is also exempt from paying taxes and excises. Also, in 2022, enterprises located in the territory of active hostilities will not pay environmental tax. Licenses for excise goods are extended. That is, licenses will not be canceled if the next payment for the license has not been paid or its term has expired. Obligations regarding the payment of regular payments and the extension of the validity of the license within 30 days after the end of martial law.

The Law of Ukraine "On Protection of the Interests of Subjects of Submission of Reports and Other Documents During the Period of Martial Law or a State of War" [3] provides that during the period of martial law or a state of war, as well as within three months after its termination, natural persons, natural persons - entrepreneurs, legal entities are not subject to administrative and/or criminal liability for non-submission or late submission of reports and/or documents.

According to the Law of Ukraine "On Amendments to the Tax Code of Ukraine and other legislative acts of Ukraine regarding the peculiarities of taxation and reporting during the period of martial law" [4], tax audits are not initiated, and audits that have been initiated are stopped.

The state also introduced an information section in the Diya Portal [1] about state and donor programs, private initiatives to support entrepreneurs in war conditions, which will help save business, jobs and support the economy of Ukraine. Under the initiative of the Ministry of Economy, with the support of the Ministry of Digital Transformation of Ukraine and the national project for the development of entrepreneurship and export Diya.Business, SE "Prozorro.Prodazhi" launched a digital interaction platform for business relocation assistance.

The official website of the eRobota program has been launched, where you can familiarize yourself with the terms of participation for each grant competition and submit an application for receiving a grant from the state. This money will enable anyone with the desire, skills and plan to start their own business or expand their business. A credit program was introduced for companies that, because of the war, need additional financing for the implementation of export contracts.

The introduction of such steps by the legislation had positive consequences: 1). Stabilization of fuel prices. In the first months of the full-scale invasion in many regions of Ukraine, the cost of fuel was very high, but due to the abolition of the excise tax on the reduction of the VAT rate from 20% to 7%, prices fell again and became more stable. 2). Support of small business, as FOP groups 1 and 2 have the right not to pay the Unified tax. 3). Support for business entities that, due to military actions, are unable to pay the ESR on time, because during the state of war and 3 months later, fines and interest are not collected from the ESR, and checks are not carried out. 4). Job support is provided by the state paying the employer compensation in the amount of the minimum wage for 2 months. 5). Provision of grants and financial assistance for enterprises and additional lending for exporting enterprises - revitalizes the country's economy and export activity.

Analysis of economic security threats to Ukrainian business

According to research by the National Bank of Ukraine [6], which was conducted in the form of a survey of company managers in the 1st quarter of 2023, business entities have certain positive forecasts regarding doing business during the war. Business, despite active hostilities and shelling of civilian infrastructure, continued to mitigate negative expectations both regarding its own development and the dynamics of production volumes of goods and services in Ukraine in the next 12 months. At the same time, inflation estimates and exchange rate expectations improved. The index of business expectations of enterprises (IBI) increased to 91.2% compared to 83.5% in the 4th quarter of 2022. The improvement of assessments occurred in enterprises of almost all types of economic activity, except for construction and trade.

Business significantly mitigated the negative expectations regarding the dynamics of the volume of production of goods and services in Ukraine in the next 12 months. The balance of responses was "minus" 16.7% compared to "minus" 32.3% in the IV quarter. Despite the softening of respondents' assessments of the current financial and economic condition of their

own enterprises for the third consecutive quarter, the overall assessment remains negative: the balance of responses was "minus" 16.9% compared to "minus" 19.3% in the IV quarter.

At the same time, respondents' expectations regarding changes in the financial and economic condition of enterprises have come close to the equilibrium level: the balance of responses is "minus" 2.5% (in the IV quarter - "minus" 11.5%). Companies in the extractive industry expect improvement in the next 12 months; agricultural enterprises forecast their financial and economic status at the current level; the rest of the respondents (with the exception of construction enterprises) moderated their negative expectations.

For the first time in a year, respondents expect an increase in the volume of product sales, including on the foreign market: the balances of answers – 2.8% and 2.0%, respectively (in the IV quarter of 2022 – “minus” 7.3% and “minus” 6.3%, respectively). High interest rates remain the most significant obstacle to attracting new loans - 48.1% of responses. At the same time, there is an increase in the influence of the complexity factor of the document processing procedure - by 23.4%.

Such studies revealed certain problems related to the activities of business entities and the impact on accounting and tax activities. For example, high lending rates for business. This issue is very important for accounting and tax activities, because without credit, enterprises cannot purchase goods, equipment, and restore damaged assets. This, in turn, will affect the size of the company's profit and tax payments to the budget.

Based on the data of the enterprise, which is territorially located in the Kharkiv region and whose activity profile belongs to the aviation industry, we will determine the impact of socio-behavioral challenges on the accounting and tax activities of this enterprise: on calculations with the budget, the amount of profit and on calculations of wages. The enterprise under study suffered from military actions, part of the assets were destroyed, but the enterprise resumed its work in the summer of 2022.

The concept of regulation of economic security of business

In 2020 and 2021, the enterprise carried out its usual activities and received a profit, made calculations with the budget and with wages. In 2022, the company received almost 3 times less profit, this was affected by the destruction of the company's assets (fixed assets, finished products), damage to buildings and workshops, and a decrease in orders. A decrease in payroll accounts indicates a reduction in the number of employees.

Analyzing the given indicators, it can be stated that the economic condition of this enterprise has worsened, but it continues its activity. Since this company belongs to a rather narrowly specialized industry, a significant increase in the revenue part of the company's budget is possible under the conditions of the introduction of the latest technological tools for accounting and tax policy, the cessation of hostilities and significant investment flows into the aviation industry of Ukraine. The most important thing now for aviation industry enterprises is to organize the effective work of qualified specialists who are ready and able to work in new economic conditions. A very promising project for the further development of an enterprise of this profile, in particular, is the creation of industrial parks on their significant territories.

Conclusions and proposals.

The difficult economic situation in the country caused by the war has a significant impact on Ukrainian business and its accounting and tax activities. An analysis of laws and regulatory documents developed by the state for the functioning and improvement of the situation of enterprises affected by hostilities was carried out.

Development and revitalization of business is one of the most effective ways to replenish the country's budget through the payment of taxes and the recovery of Ukraine's economy. Therefore, I suggest: 1). Abolition of optional taxation with a single tax for individual entrepreneurs of groups 1 and 2 and VAT for group 3, and the introduction of preferential taxation only for regions located in the area of hostilities (the list of such regions is submitted by the VRU), as well as the preservation of benefits for business entities affected by hostilities, regardless of their location. 2). Cancellation of payment of the single tax and income tax (for entrepreneurs of the 3rd group) for a period of up to six months for business entities opening small and medium-sized businesses. 3). Continuation of measures that have already been introduced by the state, such as: preferential taxation of fuel, moratorium on checks by regulatory bodies, stimulation of employment of internally displaced persons.

As for the enterprises of the aerospace industry, it is precisely now that such business entities have significant chances to overcome the crisis situation and bankruptcy thanks to effective management decisions and a new approach to management affairs. An important step should be the restoration of the research and development technology bureau with the appropriate developer certificates. This opens the way to a completely new and very promising direction for the company. A very promising project for the further development of the

enterprise is the creation of a specialized industrial park. Dnipro has 5 such parks, while Kharkiv has none yet. With the successful organization of the work of such an industrial park, it will annually provide 600-700 million hryvnias to the city budget, and will also form a platform for the implementation of innovative technologies and additional jobs.

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Methodological Foundations of Historiographic Research of the Postwar Ukrainian SSR Industry (1946-1965)

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Abstract

The article analyzes the methodological foundations of the historiographic research of the postwar Ukrainian SSR industry (1946-1965).

The author substantiates the use of hermeneutics as the main philosophical approach and proves the necessity of applying a list of historical and conditionally special historiographical principles and methods.

Keywords: historiography, methodology, postwar reconstruction, industry, Ukrainian SSR

Historiographic research is a form of reflection on the historical knowledge development. Recently, the range of tasks of historiographical analysis has expanded significantly. In addition to the question “what knowledge has been obtained as a result of the activities of historians and thinkers?”, we also ask ourselves “how was this knowledge obtained?” [1]. Among the variety of approaches, our choice was guided by the fact that in the course of research it is necessary to interpret hundreds of historiographical sources, to comprehend their meaning, “inner content” and to understand “why exactly?”, what guided the author, what motivated him when creating a particular scientific work. That is why we have chosen hermeneutics as our main philosophical approach. It is primarily important to us because the process of understanding is imagined as a movement along the so-called hermeneutic circle. On the one hand, the text of a source is considered in relation to the historiographical moment, that is, the socio-political, ideological, and economic situation, the circumstances in which the historian was at the time of creating his work [2]. On the other hand, the text reflects the scientific level of both a particular historian and the entire historical science at a certain stage of development. Presenting a text from these two perspectives, moving from the general to the particular and back again, is a movement in a hermeneutical circle. This is the main essence of the hermeneutic approach in historiographic research. This theory is also important because it

considers the text as a “frozen language” (F. Schleiermacher) [5], as a “fact” (M. Heidegger) [3]. The text is a kind of mirror that reflects both the subjective and psychological characteristics of its author and the level of historical science, as well as the specifics of the time and place [4, p. 160].

The current level of development of historical science comprises in the methodology the principles, logical forms, structures and techniques of research that contribute to the knowledge of the subject essence and the factual data interpretation. The methodological guideline of the study is the proven principles of historiographical analysis, which provide for the need to reveal the socio-political conditions of the development of historical science, the socio-political foundations of the authors’ concepts, their methodological attitudes and source base. The author proceeds from the fact that traditionally the methodology of historiography has been tasked with establishing continuity in the development of historical thought; determining the criteria for identifying the main historiographic facts; identifying the relationship between historiographic fact and source; stating the objective contribution of historians and their works to the formation and development of historical science; cognition of the general, special and individual in historiographic facts and other historiographic material; identifying criteria for periodization based on objective and subjective criteria. This resulted in the use of the fundamental principles of historicism, objectivity, systematicity, comprehensiveness, and continuity (succession).

When applied to historiography, historicism means the need to consider historical science as generated by the conditions of historical development of society. This principle requires a historiographer to study a historical work in the specific historical conditions of its appearance, to evaluate the author’s merits in comparison with the previous, not the subsequent level of historical knowledge. In the content of the principle of historicism, attention should be paid to the recognition of any direction of changes in social reality (progressive, regressive, cyclical, stagnant), the intrinsic value and self-sufficiency of any stage of historical development.

Traditionally, scientific objectivity is proclaimed as the most important methodological principle in scientific research. It should be recognized as fair that a number of modern researchers criticize it, since objectivity is rather an end than a means of historical reality cognition, while this cognition inevitably bears the imprint of the era and environment in which the researcher works, which leads to a certain bias and dependence on the political situation. At

the same time, the desire to adhere to this principle is an important condition for the success of scientific research. Speaking about the principle of objectivity, it should be noted that objectivity does not mean complete detachment of the researcher from the subject under study. Scientific passion, the desire to serve the truth, realizing that it is fundamentally unattainable within a single work, is an integral part of objective historical research. Adhering to this principle, we defend the researcher's right to manifest his or her personality, which was formed in a certain historical era, in his or her work.

Since historiographical research cannot do without assessments of historiographical facts and sources, the value approach is of great importance. It allows for the realization of the social functions of historical science: educational, prognostic, scientific and cognitive, and the function of social memory. It should be recognized that this principle is subordinate to the principles of objectivity and historicism

In the subject of our study, systemic features are expressed quite intensively. The scientific mastery of the history of the industrial development of the Ukrainian SSR in the postwar twenty years (1946-1965) is a structure ordered in a certain way. It is characterized by systemic effects – the emergence of new properties that arise as a result of the interaction of elements within the whole (change in the historiographical situation, expansion of the source base, evolution of historical concepts, schemes and theories, quantitative increase in the cognitive activity of historians of science – historiographical facts). Thus, it is natural to adhere to the principle of systematicity in the study, which makes it possible to find out against the general background of the development of historiography the degree of study of certain special topics and problems, to establish the main factors of their scientific comprehension. In addition, the structure of more developed historiographical knowledge indirectly contributes to a deeper understanding of its initial periods.

The rules of systematicity, which focus on a comprehensive study of the problem, prompted the author to take into account the achievements of not only Soviet and national scholars, but also the scientific research results of representatives of the Ukrainian diaspora, Western European and American historical scholars, and contemporary Russian historians. The principle of comprehensiveness, which is inextricably linked to the principles of systematicity and objectivity, plays an important role in solving the research tasks of the study. It determined the desire to identify and study as many sources as possible that contain information about the

results of scientists' cognitive activity in the field of research on the history of industrial development of the Ukrainian SSR in the postwar twenty years (1946-1965).

The unconditional obligation of the scientific research is to adhere to the principle of continuity (succession), which applies to the consideration of events and phenomena in the historiographical process on the basis of temporal sequence, identifies continuity in the change of periods, continuation or replacement of old knowledge with new ones, and establishes the relationship between them. In fact, this approach makes it possible to put forward proposals for further research on a certain range of issues.

The second component of the methodological apparatus of the thesis is a system of techniques aimed at solving certain tasks – research methods.

The modern theory of historiography distinguishes between methods of specific historiographic analysis and methods of historiographic synthesis [5, p. 29]. Historiographic analysis allows to understand the origins and main stages of the development of knowledge about the industrial development of the Ukrainian SSR during the postwar twenty years (1946-1965), to distinguish the contribution of several generations of specialists in various fields of humanities and, above all, historians to this process. This requires a set of conventional scientific operations to establish the motives and circumstances of the creation of scientific works, to determine their nature and range of issues, the scope and levels of their source base. An important condition for historiographical analysis is consistent adherence to methodological principles, and its ultimate goal is to study historical concepts, theories, and schemes. Synthesis, i.e. the reproduction of a historiographical process or a certain situation, is carried out on the basis of the analysis results. Thus, analysis and synthesis are universal methods of historiographical research that make it possible to create holistic information about the formation and functioning of historical knowledge.

The chronological method facilitates the study of historiographical facts from the standpoint of an interconnected process, allows comparing individual historiographical periods, and studying the objective patterns of accumulation and deepening of historiographical knowledge on the problem under study.

An important role in the set of methodological tools of the study is played by the problem-chronological method and system-structural analysis. The problem-chronological method is used to critically evaluate the positive features and shortcomings of the existing

scientific work. This helped to identify the main trends in the scientific understanding of specific historical problems, highlighted the course and main milestones of the historical thought movement. Systematic and structural analysis allowed, on the basis of a systematic arrangement of historiographical sources, to single out from their diversity the most typical and scientifically significant works for their time and the issues under study, that is, those in which the movement of historical thought was manifested through the solution of scientific problems.

Through the use of comparative historical, analogical, and typological methods, historical works are viewed as historiographical phenomena that are in a range of other historiographical phenomena. By comparing the scientific knowledge of the first historiographic periods with the last, comparing the different researchers' views, it is possible to identify the same features or differences, advantages or disadvantages in them.

The diachronic method made it possible to identify qualitative changes in the object of study over time, to establish the moments of their occurrence. The criterion of objective conditions for the development of the object under study is taken as the initial one when applying the periodization method.

The retrospective method is of some importance, the essence of which is to study the process of movement of the researcher's thought from the present to the past: studying elements of the old and reconstructing on their basis those that took place in the history of events and phenomena. Retrospection made it possible to use the level of modern historical science to study its state in the past.

A special place in historiographical research is occupied by the biographical method, since it deals with the life and work of the authors of the works. Appealing to the elements of this method helps in the attempt to personify historical thought, including through the use of documents of personal origin.

The application of hermeneutics as a philosophical approach, the use of modern principles and research methods contributes to obtaining reliable scientific knowledge about the process of studying the industrial development of the Ukrainian SSR in the postwar twenty years (1946-1965), as well as about the historical background and specifics of the emergence and development of the research subject.

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Ukrainian National Stylistics of Stage Vocabulary of Modern Children's Musical

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Abstract

The article is devoted to the issue of the reflection of Ukrainian national stylistics in the productions of children's musicals on the stages of domestic theaters in 2010-2020s.

It was revealed that the appeal to the traditions of folk culture takes place in the context of the leading modern trends in stage art, thanks to the synthesis of which a unique color of the artistic image of the performance is achieved.

The research revealed that the most important cultural and artistic principles of the Ukrainian national stylistics of the stage vocabulary of the modern children's musical are the reproduction of a living tradition and the author's directorial approaches to the interpretation of folklore forms. In some cases, the representation of the Ukrainian folk tradition in a historically authentic form is characteristic, but mostly the directors emphasize a certain stylization and conventionality of the national color - traditional elements are used to create the atmosphere of a folk tale in a modern interpretation. Characteristic stylistic coloring is achieved by using authentic material, folk chants, dances, elements of traditional Ukrainian decor, creating well-known folklore images.

Keywords: children's musical, Ukrainian national stylistics, folk images, traditional culture.

Актуальність дослідження. Специфіка і тенденції розвитку сценічного мистецтва в Україні перших десятиліть XXI ст. визначили тяжіння вітчизняного дитячого мюзиклу до інтеркультурності та націоналізації водночас. Інтеркультурність проявилася в опануванні міжнародних основ мюзиклу, як одного з основних жанрів західного музично-театрального мистецтва, що посприяло затвердженню певних канонів у дитячих мюзиклах, створених вітчизняними авторами та постановках закордонних дитячих мюзиклів на українській сцені. Націоналістичні тенденції проявилися в пріоритетності традицій національного музично-драматичного театру, які посприяли формуванню та затвердженню художньо-естетичної своєрідності вітчизняного дитячого мюзиклу.

Актуальність дослідження зумовлена важливістю теоретизації засобів відображення української національної стилістики в сценічній лексиці дитячого мюзиклу в постановках вітчизняних режисерів 2010-2020-х рр.

Аналіз публікацій. Протягом останнього десятиліття українськими мистецтвознавцями, театрознавцям та музикознавцями (А. Бондаренко [1], О. Оганезова-Григоренко [9], Б. Струтинський [10], Д. Вакуленко [2], І. Зайцева [3], С. Манько [6], М. Мельник [7], Ю. Коваленко [4] та ін.) приділено неабияку увагу дослідженню різноманітних питань, пов'язаних з розвитком мюзиклу в сценічному мистецтві України.

На основі історіографічного аналізу можемо констатувати, що проблематика дитячого мюзиклу на сучасному етапі лишається малодослідженою. Серед висвітлених в окремих дослідження та публікаціях аспектів назвемо наступні: специфіка співвідношення музичної і театральної складових в українському дитячому мюзиклі (А. Стьопіна) [11], використання новітніх режисерських технологій в процесі створення сучасних дитячих мюзиклів (М. Харченко та М. Крипчук) [12], історія постановок перших дитячих мюзиклів в Україні (Х. Новосад-Лесюк) [8], режисерське втілення сучасного дитячого мюзиклу згідно з запитами та інтересами молодшого глядача як представника сучасного інформаційного суспільства (О. Шевельова) [13] та ін.

Одним із невисвітлених аспектів розвитку сучасного дитячого мюзиклу в Україні є звернення постановників до традиційної народної культури.

Мета статті – виявити специфіку української національної стилістики сценічної лексики дитячого мюзиклу в постановках вітчизняних театрів 2010-2020-х рр.

Виклад основного матеріалу. Мистецтво, що виховує, відрізняє чистота та піднесеність почуттів. Ознайомлення дитини з шедеврами світової культури відповідно до вікових та психологічних особливостей дитячої аудиторії виховує цивілізованість та інтелігентність.

Сценічне мистецтво в цілому та мюзикл як один із його популярних жанрів наділений власним методом навчання – драматизацією, завдяки якій дитина активно сприймає отримані знання, сутність та сенс твору. Дитячий мюзикл, сповнений драматизацією розвиває розум та уяву, виховує почуття, сприяє розвитку співчуття, моральності, виховує здатність перевтілюватися в інших, жити їх життям, відчувати їх емоції.

На думку О. Шевельової, «режисура дитячого мюзиклу потребує комплексних міжгалузевих рішень та знаходиться у стадії експерименту з притаманними їй пошуками органічного синтезу оновлених засобів виразності, використанням сучасних надбань

мистецької науки і практики» [14, с. 2]. Цілком погоджуючись з дослідницею, наголосимо на тому, що якщо структура творчої індивідуальності артиста мюзиклу є репрезентантом вокально-музичної, акторської, пластичної жанрової комунікації (за О. Оганезовою-Григоренко) [9, с. 9], то режисер дитячого мюзиклу, окрім вільного орієнтування в провідних світових та вітчизняних тенденціях сценічного мистецтва в цілому та розвитку жанру мюзиклу зокрема, повинен добре розумітися на дитячій психології, вподобаннях, запитах і потребах саме сучасної дитини.

У цьому контексті досить цікавим підходом характеризуються дитячі мюзикли, постановники яких звертаються до української національної стилістики.

Так, наприклад, постановниками Коломийського академічного обласного українського драматичного театру ім. І. Озаркевича, в репертуарі яких дитячий мюзикл представлено виставою «Бременські музиканти» за мотивами однойменної казки братів Грім (режисер-постановник В. Борисяк, художник-постановник М. Янський, художник по костюмах С. Зінець, балетмейстер М. Воротняк прем'єра 2001 р.), «День народження Кота Леопольда» А. Хайта в переладі Б. Жолдака (режисер А. Цибульський, сценографія та костюми Ю. Гнатенко, балетмейстер М. Воротняк, прем'єра 2008 р.), «Кидин дім» С. Бедусенка (режисер-постановник С. Якубовський, балетмейстер М. Воротняк, прем'єра 2009 р.), одним із найвідоміших варіантів інсценування дитячої народної казки «Коза-дереза» М. Лисенка за мотивами народної казки (режисер-постановник С. Кузик, художник-постановник О. Сенюк, балетмейстер М. Воротняк, прем'єра 2013 р.) та ін. основний акцент зроблено саме на національній складовій, що спостерігається в музиці, хореографії, художньому оформленні та костюмах, навіть колористика мюзиклів відповідає прадавнім уявленням українців. Дослідники стверджують, що «праукраїнці виражали світоглядні поняття «життя-смерть», «світло-темрява» та космічну велич світобудови зрозумілою системою кольорів: білий-чорний, білий-червоний, білий-чорний-червоний, жовтий-червоний-синій тощо, бо в цих підсистемах сконцентрована основна життєдайної сутності світу» [5, с. 51]. Сценографія вищезазначених мюзиклів засвідчує акцентування художників саме на українському колористичному коді.

Національна стилістика переважає і в мюзиклі «Пригоди барона Мюнхгаузена в Україні» О. Коломійцева за мотивами роману у новелах «Пригоди барона Мюнхгаузена»

Р.Е. Распе, повісті українського письменника І. Січовика та українсько-німецько-турецького фольклору, постановку якої було здійснено на сценах Полтавського театру ім. М.В. Гоголя (прем'єра 23 грудня 2012 р.) та Одеського академічного українського музично-драматичного театру ім. В. Василька (прем'єра 2016 р.). Цей мюзикл є одним із небагатьох випадків, коли композитор та автор лібрето є також і режисером-постановником та яскравим прикладом нового прочитання класичного літературного першоджерела.

Лишивши головного героя – німецького барона Карла Фрідріха Ієроніма фон Мюнхгаузен, автор переносить його не лише в нові географічні умови, але й змінює століття – замість XVIII ст. на XIX ст. За сюжетом легендарний німецький барон чарівним чином опиняється на українській землі, знайомиться з традиціями і культурою народу, а також допомагає запорізьким козакам врятувати з турецького полону дівчину Галю. У мюзиклі основними є дві сюжетні лінії – пригоди барона та історія кохання Степана та Галі, яких розлучили вороги (автором цієї лінії є О. Коломійцев).

Сценографія вистави – певний умовний простір, населений історичними персонажами, відомими персонажами українського епосу та історичних дум: селянами, чумаками, запорізькими козаками, ворожками, відьмами, русалками, чортами та ін. стилістично відсилає до повісті М. Гоголя «Вечори на хуторі біля Диканьки».

Зважаючи на жанровий різновид мюзиклу та адресування в першу чергу дитячій аудиторії (8+), основою ідею вистави є перемога добра над злом. При цьому справжнім злом автор мюзиклу вбачає не темні сили (Чорт, конотопська відьма Варвара та ін.), які спочатку чинять барону Мюнхгаузену, Степану та його другу Дмитру перешкоди, а потім реально допомагають рятувати Галю, а турецький султан.

Масштабна постановка гранд-мюзиклу, в якій зайнятий весь склад акторської трупи, являє собою яскраве видовище відповідно до основних жанрових характеристик. Вистава вирізняється оригінальністю трактування сюжету, музичним текстом, що поєднує в собі різноманітні стилі від фольк-року до трешу, багатими костюмами, майстерністю акторської гри (Барон Мюнхгаузен – Б. Чернявський, Варвара – М. Томм, Степан – А. Редько, Галя – Т. Беленька), танцями з використанням української, німецької і східної хореографічної лексики (балетмейстер П. Івлюшкін), барвистими світловими ефектами та ін.

Одним із яскравих сучасних українських дитячих мюзиклів, створених за народними мотивами є мюзикл «Жив собі пес» (композитор В. Назаров, лібрето П. Мага). У 2017 р. його постановку на сцені Київського академічного театру опери і балету для дітей та юнацтва здійснив режисер-постановник і композитор В. Назаров у співпраці з диригентом Є. Воронко, хормейстром-постановником А. Масленніковою, художником-постановником Л. Нагорною та балетмейстром-постановником С. Коном.

Постановка починається зі своєрідної увертюри – української народної пісні «Ой там, на горі», яку виконують сім дівчат, вбраних в національні костюми – відповідно до такої жанрової специфіки мюзиклу як інтерактивність, основну частину пісні вони виконують безпосередньо в глядацькій залі, а у фіналі підіймаються на сцену (куліси закриті, по центру, на авансцені, стоїть дерев'яна лавка, біля неї лежить мішок; ліворуч на сцені стоїть віз). Художнє оформлення вирішено Л. Нагорною з дотриманням української традиційної народної стилістики: на заднику намальовані селянські хатки з солом'яними дахами, по центру задньої частини сцени розміщено велику декорацію – зелене дерево з яблуками і грушами, а на передній частині сцени стоїть велика сіра будка пса Сірка – невеличкий дерев'яний тип з обох боків сцени уособлює поділ між селянським двором і лісом.

Цікаво вирішено костюми зооморфних персонажів – пса та вовка. Художник з костюмів вдягнув пса в світлі штани і жилетку з темно-сірими м'якими чоботями, отороченими хутром і кофтиною також кольору. Образ селянського пса на прив'язку доповнює обірваний металевий ланцюг, який вільно закріплено на шиї. На голові – шапка-вушанка, зі «стоячими» вухами, додатково оздоблена хутром. Костюм Вовка – сірі хутряні шаровари, коричнева шкіряна куртка, з рукавами, отороченими хутром та велика хутряна шапка створюють образ українського гетьмана, який доповнює срібний ланцюг з медальйоном у формі капкана. Свита Вовка – дві вовчиці, які вдягнуті в так ж костюми.

Постановку цього мюзиклу в 2017 р. В. Назаров здійснив і на сцені Дніпровського національного академічного українського музично-драматичного театру ім. Т. Г. Шевченка в співпраці з балетмейстером В. Івлюшкіним та художником-постановником Б. Голодницьким. Постановка, в якій збережено неповторний колорит українського

фольклорного села, святковий піднесений настрій, яскравий візуальний мізансценічний ряд та ширий гумор в сучасному інтерпретуванні відомого народного казкового сюжету, все ж відчутно відрізняється від київської не лише акторською грою (В. Крачковський – Пес Бровко, В. Мойсеєнко – Вовк, О. Петровська – Казкарка, Н. Ніколаєва – Господиня Пса, Д. Прищепо – Господар Пса, О. Коваленко – Злодій, А. Кизь – Злодійка), а й сценографічним рішенням. Художник Б. Голодницький хоча в цілому й наслідує концепцію Л. Нагорної, все ж репрезентує власне авторське бачення, що проявляється зокрема в колористичному вирішенні костюмів зооморфних персонажів та декорацій (на тлі темно-синього задника зі стилізованими під модерновий мультфільм хмаринками, встановлено поміст у вигляді лісу зверху якого розкинулися невеличкі, ніби лялькові сільські харки, млин та церква).

Власне прочитання відомого сюжету про українського пса представлено в мюзиклі «Жив був пес» у постановці колективу Полтавського академічного музично-драматичного театру імені М.В. Гоголя (композитор В. Ковтун, лібрето О. Коваленко за мотивами народної казки, режисер-постановник В. Шевченко, художник-постановник І. Кліменченко, балетмейстер-постановник С. Мельник, прем'єра 2017 р.). Спеціально адаптуючи казку для дитячої аудиторії, автори вводять нових персонажів – Ведмедя (С. Жмурко), Лисичку (О. Галатченко), Вовчицю (А. Жмурко), Білочку (Ю. Орлова) та інших жителів казкового лісу. Певні трансформації відбулися і з головними та другорядними персонажами: пес Сірко у виконанні Г. Продайки та Вовк у виконанні С. Озерянка розігрують історію справжньої дружби, Грицько (О. Бородавка) та Марися (Л. Кретова), а також кумасі Ганна і Оріся у виконанні Л. Козир та Н. Савченко надають постановці додаткового комедійного забарвлення і динамізму. Органічне поєднання зовнішньої яскравої форми з точним художнім змістом, дає можливість точного проживання конкретики запропонованих обставин ролі.

Основних меседжів цього мюзиклу кілька: дружба – це найголовніше в житті; ніколи не пізно усвідомити свою помилку; навіть злодія можна перевиховати.

Костюми і сценографію І. Кліменченко робить яскравими та легкими для дитячого сприйняття – для зооморфних персонажів розроблено плюшеві костюми з штучним хутром, для селян та циган – відповідно традиційне українське та циганське вбрання. Згідно з сюжетом, художнє оформлення постановки ілюструє казковий ліс

(декорації ялинки), подвір'я (величезна собача будка) та селянську хату (з двох боків сцени розміщено стіни з вікнами, прикрашені посудом та рушниками, під якими стоять дерев'яні лавки, у центрі – великий стіл-віз з колесами, позаду якого великий місток із хмизу). На чорному заднику – аплікації у вигляді хмаринок та селянських хаток.

Таким чином основна частина планшету сцени лишається вільною для виконання танців та масових сцен.

Популярність мюзиклу посилюється популярністю героїв мальованого мультиплікаційного фільму режисера Е. Назарова «Жив-був пес» (перша назва «Собаче життя»), створеного в 1982 р. за мотивами двох народних східно-слов'янських казок про вовка в гостях у пса та вовка, який в змові з псом викрадає дитину і віддає її псу, щоб той отримав їжу від хазяїна (цей сюжет надзвичайно популярний на Україні). Вовк і пес стали одними з найулюбленіших персонажів сучасної української народної культури.

Умовою формування національного українського дитячого мюзиклу є надання яскравої видовищності як фактору, що пов'язує його з сучасними тенденціями сценічного мистецтва. Досягненню видовищності українського дитячого мюзиклу сприяють всі складові елементи синтетичної цілісності: розгортання захопливого сюжету; образний поетичний текст; яскраві костюми; супровід музичного ряду яскравою сценічною дією, досконала виконавська інтерпретація, режисерська концепція, сценографія, художнє оформлення.

Український дитячий мюзикл характеризує заломлення найважливішої особливості західного прообразу, що полягає в своєрідності особистості артиста, в творчій індивідуальності якого взаємодіють суміжні театральні та музичні спеціальності – драматичний актор, танцюрист, музикант.

Перспективним напрямком вітчизняного дитячого мюзиклу в тематичній сфері є казково-фантастичний, відтворення національної літературної спадщини та традиційного українського фольклору.

Висновки. Дослідження виявило, що звернення до традицій народної культури постановниками дитячих мюзиклів на сучасному етапі відбувається в контексті провідних тенденцій сценічного мистецтва перших десятиліть ХХІ ст., завдяки синтезу яких досягається унікальний колорит художнього образу вистави.

Найважливішими культурно-художніми принципами української національної стилістики сценічної лексики дитячого мюзиклу є відтворення живої традиції та авторські режисерські підходи до інтерпретації фольклорних форм. В деяких випадках характерним є репрезентації української народної традиції в історично-достовірному вигляді, але здебільшого постановники підкреслюють певну стилізованість та умовність національного колориту – традиційні елементи використовуються для створення атмосфери народної казки в сучасному трактуванні. Характерне стилістичне забарвлення досягається засобами використання автентичного матеріалу, народних наспівів, танців, елементів традиційного українського декору, відтворенням відомих фольклорних образів.

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History of Everyday Life as a Component of the School History Course

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Abstract

The article is devoted to the analysis of the history of everyday life as a component of the school history course. The author infers that mastering knowledge about the everyday life of people of another historical era allows us to avoid a simplistic and schematic attitude to the past. At the same time, a specific feature of school history in the first decades of the twenty-first century is the direct connection of historical local history with the events of everyday life in the past. The study of the history of everyday life makes it possible to illuminate the life of both a social group, a stratum, an individual family, and the entire state and civilization. The main subject of studying the history of everyday life is ordinary people's everyday life, changes in their lives and changes in themselves that occur in time and space. The history of everyday life is the core of social history, as it considers human life as a subject of the historical process. Its study creates opportunities to better understand social processes and changes in society around the world.

Key words: anthropology, historiography, history of everyday life, everyday history, social history

The history of everyday life is one of the modern trends in the development of historical science, which was formed in the second half of the twentieth century in the process of formation of the so-called new history. This field studies the conditions of life, work, and leisure (everyday life, living conditions, diet, treatment methods, social adaptation), as well as the factors that influence the formation of consciousness and norms of behavior, socio-political preferences, etc. of the vast majority of the population (“ordinary people”) of a country in a given historical period. The history of everyday life is the history of those without whom there could be no history, but who for historians have remained mostly “nameless” and “silent” in history.

The field of historical research called “history of everyday life” appeared in Western European historiography in the 1960s. The prerequisite for its establishment was the activity of such representatives of the French historiographical *Annales school* as M. Bloch, L. Febvre, J. Le Goff, F. Braudel, and others. The term “everyday life” itself, as a separate definition, was introduced into scientific circulation by F. Braudel in his work *Material Civilization and*

Capitalism [1]. The philosophical platform or basis for its emergence in historical science was formed by the works of E. Husserl, A. Schütz, P. Berger, T. Lukman, G. Rickert, N. Elias, G. Garfinkel, A. Sikurel, and others. These representatives of historiosophical thought defended the humanistic concept of history, in which the main place was given to an average person. In addition to the *Analles school*, the history of everyday life is becoming a significant area of research in German, Italian, and American historiography.

The institutionalization of this field was completed in the early 1990s in Germany. In 1993, a specialized periodical called *Historical Anthropology. Society. Culture. Everyday Life*, which aimed to study history through the prism of the ordinary people's lives. This approach was called the "history of mentalities" or "ethnological social history."

The history of everyday life is characterized by its interdisciplinary connection with such sciences as sociology, ethnology, cultural studies, psychology, etc. This circumstance greatly expands the scope of historical research, makes it multidisciplinary, and affirms its complex, and generalizable nature. As a result, new methodological approaches and principles of studying the historical past are being developed in historical science, including human-centeredness (social anthropology), psychologization of history, and others. In addition, a new range of issues related to macro- and microhistory has been outlined. All this should be considered the result of the progressive thought of historians of different generations and schools [5].

The history of everyday life in modern historical science is understood as a branch of anthropologically oriented historical science that studies a certain section of the interaction of social space and time, the sphere of human life, in the course of which people communicate directly and indirectly (through cultural objects) as the sum of billions of destinies throughout its development. This data has common features that can be classified at different levels: national, regional, individual, etc.

The history of everyday life is the history of those who are invisible to the big history, who are included in the historical process as ordinary people. Thus, central to the analysis of everyday life are the life problems of those who have remained nameless in history. "Structures of everyday life" include everything that makes up a person's life: his or her conditions, needs (food, housing, clothing, medicine), and the possibilities of satisfying them. It also includes the entire range of relevant relationships, actions, desires, ideals, customs and traditions, value

orientations that regulate human behavior, individual and collective practices, and forms of communication. Individuals appear as both actors and creators of history, those who actively produce and reproduce the socio-political realities of the past.

The proposed approach encourages historians to study a country (people) of a certain period to first show the way people lived (at the level of specific individuals, not the whole society), what surrounded them, how everyday life evolved, and then explain the relationship with economic and political life in order to come to worldview conclusions about the humanity (inhumanity) of a society. The fate of a person in a particular society is the most objective criterion for the humanity of a state [2].

Using the history of everyday life in the study of historical reality helps students to better appreciate the role and importance of evolutionary forms of society, the place of all its elements in their interaction, not just opposites; to consider the influence of external factors of development, which are often decisive in the life of certain peoples. This approach shifts the emphasis from the history of various forms of confrontation (revolution) to the history of ordinary people; from the history of political activity of the “powers that be” to social history, or rather, socio-cultural history, which focuses on people and social groups formed by them in accordance with their ideas about the world and life [4].

Everyday history is an unsystematized form of learning about the world that has a mosaic structure. It contains a variety of knowledge about the past, illusions, perceptions, opinions (views) built up by popular science and fiction literature, journalism, art, mass media, oral history, and direct personal life experience of a person, which serve as its sources. In their daily activities, people are guided by exclusively pragmatic goals. Therefore, we can assume that ordinary (everyday) historical consciousness is dominated by everyday life. Its cognitive component is ordinary knowledge about the past, which is practical in nature. It is the result of a person’s direct personal life experience generated by his or her interaction with the outside world. In the everyday historical consciousness, the events of everyday life in the past are most often retained, which is its specific feature. After all, people have always been interested in and wanted to feel how a city dweller or a villager lived several centuries ago, what books their ancestors read, what they dreamt about, what from the treasury of human wisdom has stood the test of time. The history of everyday life itself draws attention to the process of humanizing everyday life, the psychologization of everyday life, the attitude of a person to everyday

problems, to the government, the state, and society in general through the prism of personal perception of living conditions [3].

Such a “living” history allows us to see the development of society in the interconnection of generations, in the vitality and active role of centuries-old traditions. Acquiring knowledge about the everyday life of people of another historical era allows us to avoid a simplistic, and schematic attitude to the past. At the same time, a specific feature of school history in the first decades of the twenty-first century is the direct connection of historical local history with events of everyday life in the past. The study of the history of everyday life makes it possible to illuminate the life of both a social group, a stratum, an individual family, and the entire state and civilization. The main subject of studying the history of everyday life is ordinary people’s everyday life, changes in their lives and changes in themselves that occur in time and space. The history of everyday life is the core of social history, as it considers human life as a subject of the historical process. Its study creates opportunities to better understand social processes and changes in society around the world.

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Main Directions of Corrective and Developmental Work to Overcome Specific and Permanent Violations of Writing Skills in Dysgraphia of Younger School Age Children

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Abstract

The article examines the main directions of corrective and developmental work to overcome violations of writing skills in dysgraphia in children of primary school age. It has been proven that the organization of corrective work to overcome writing and reading disorders of primary school age children in logopoint is based on the implementation of general didactic and special principles. It is emphasized that the method proposed in the study is effective and can be successfully used in the practice of corrective and developmental work among elementary school children.

Key words: speech activity, dysgraphia, experiment, phonetic principle, morphological principle, speech, disorder, technique.

At the current stage of the creation of a new Ukrainian school, the problem of forming a harmonious personality takes on special importance. This is due to the development of a democratic system, the imitation of the philosophy of humanism and the formation of a person of a new era on this basis. It is time to focus attention on new priorities and values, establish a person's self-worth, determine his uniqueness and inimitability.

The language and speech of an individual as an important component of life

competence reflect not only the ability of communication, interaction, self-affirmation, self-realization, but also are an indicator of its intellectual, cultural, moral-ethical, social development.

One of the most important tasks facing education, in particular, a special school, is the preparation of a child with psychophysical disabilities for a full life in modern socio-economic conditions. The importance of the school in solving this problem is decisive. Therefore, the foundation of knowledge, abilities, and practical skills necessary for further understanding of educational material is laid here, moral traits and qualities are formed, the ability of schoolchildren to master knowledge independently, interest in learning and creative activity is awakened.

Signs of impaired speech development have a greater impact on various aspects of a child's life, affecting his activities, behavior and physiological functions. All this also negatively affects the development of writing skills. As you know, speech activity is a system that includes four types of speech acts: listening (impressive speech), speaking (expressive speech), reading and writing. Reading and writing are included as equal elements in the concept of "written speech". Writing in a broad context is a complex mental act, a secondary form of language, the distinctive feature of which is that, unlike other higher mental functions, it appears later in the mental world of a person.

The oral form of language, as well as the written form, are a kind of temporary connections of the second signaling system. Unlike spoken language, written language is formed only under the conditions of purposeful learning, its mechanisms are established during the period of learning grammar and are improved in the process of further learning.

Therefore, written speech is the process of recoding the content of thinking from a mental code through the mediation of a sound link (oral speech before recording or internal speech) to a graphic code of letters. The process of combining code elements is called an alphabet, and the elements themselves are called letters. The basic concepts of written communication are the alphabet, graphics and orthography [4]. The writing process itself is analyzed as a multi-level system, a complex systemic and free mental process, a complex form of human mental activity.

Writing is a meaningful act, which itself is arbitrarily constructed in the process of special conscious learning. This is a rather complex skill that requires the integration and coordination of various functional systems. That is why the process of mastering it is definitely nothing else than the establishment of new connections between the word that we hear and pronounce, the word that we see and write down. So, writing cannot be tied only to speech, to systematic and arbitrary processes of perception, or to the motor sphere [4].

Writing demonstrates a symbolic system of anchoring speech, which in turn allows, with the support of graphic elements, to transmit information at a distance and fix it in time. This kind of speech, which is addressed to a sufficiently large circle of readers, is devoid of situationality and involves mastering the skill of sound-letter analysis, the ability to logically and grammatically correctly convey one's thoughts, analyze what is written and improve the

form of expression [4].

In turn, written speech is represented by four systems of signs (handwritten uppercase, handwritten lowercase, printed uppercase, printed lowercase, printed uppercase, printed lowercase), which in many cases graphically differ significantly from each other. Thus, the child must learn various symbols that mean the same phoneme [5].

But still, there are other statements that testify that, unlike oral speech, writing has significant conventional and rigid rules of orthography. Thus, the use of different orthographic variants of pronunciation in oral speech does not affect the recording in any way.

In this regard, writing as a method of recoding demonstrates a set of rules that regulate the transition from one system of symbols to another, from sound speech to written speech. Ukrainian writing itself belongs to alphabetic writing systems. The alphabet provides a transition to symbols of higher orders and promotes the development of abstract thinking, making speech and thinking objects of knowledge. But only writing made it possible to go beyond the limited spatial and temporal framework of speech communication, as well as preserve the influence of speech even in the absence of one of the partners [4].

If we consider the Ukrainian alphabetic writing system, we can conclude that it includes operations of symbolization (designation of sounds by letters) and the procedure of modeling the phonetic structure of a word with the help of graphic signs. In this connection, in alphabetic writing, a sign symbolizes one sound (sometimes two sounds). Therefore, Ukrainian spelling is based on several principles, among which the fundamental and most generally accepted are: phonetic (phonemic), morphological (etymological) and traditional (historical) [4].

Let's consider the *phonetic principle of writing*, which is the basis of graphics. The essence of its main idea boils down to the fact that the letter designation fully corresponds to the phonemes that are heard in the word (words are written as they are heard and pronounced). And in order to master the phonetic principle of writing, the child needs to master the basic operations of writing: sound analysis; correlation of sound with letter and correlation of letter with cinema [4].

If we consider an example in which a child, in the process of mastering these operations, makes mistakes in words that are written down according to the phonetic principle, then such mistakes are considered temporary, associated with certain stages of mastering these operations. Also, during this period of time, it is allowed that the child can skip, rearrange and add extra letters to words. During a short period of time, the child stops making such mistakes. But still, if the child continues to skip vowels and consonants when they coincide, to replace letters that denote sounds that are close in terms of acoustic and articulatory signs, or to replace letters that are similar in spelling, this indicates that the child has difficulties in learning basic operations of writing. Such errors should be equated with pathological errors that require special speech therapy correction [4].

At the same time, the main meaning of the *morphological principle* of writing is that during writing, the constancy of the letter designation of morphemes (prefixes, suffixes,

endings) remains unchanged, despite the fact that in different phonetic conditions they are pronounced and heard differently. Most spelling rules are based on this principle. When there is a discrepancy between pronunciation and spelling, the choice of letter is determined by a certain spelling rule. The traditional principle of writing preserves the historical old spelling of words, which does not correspond to modern pronunciation and the morphological principle, so it can still be called historical.

At the beginning, the writing process begins with an impulse, a motive, an idea. A person understands and knows what he writes for: to record, to pass it on to another person, to save information for a certain time, to encourage someone to act, etc. In his thoughts, a person brings to life a plan of written expression, a meaningful program, and a sequence of thoughts. The initial thought corresponds to a certain structure of the proposition. As a result, the child must maintain the correct order of writing the phrase while writing, and focus on what he has already written and what he has to write.

And thus, each such proposition, which must be written down, is divided into its word components, since the boundaries of each word are marked in writing. The motivational level of writing is provided by the frontal cortex of the brain. Connecting them to a functional system of writing ensures the creation of an idea that is maintained with the help of internal speech. Accumulation of information in the memory is ensured by the integral activity of the brain. Automated hand movements are the final stage of the difficult process of translating oral speech into writing. This is preceded by a complex activity that completes the final stage [1].

The conducted research showed that the writing of children with dysgraphia is dysontogenetically formed (according to the hierarchy of basic requirements for the development of writing). Children demonstrate dysgraphic errors of all kinds, differing in number, type, nature, and persistence. They are caused mainly by a violation of mental functions (attention, auditory-speech memory, optical-spatial representations), operational components of thinking (sound-letter and syntactic analysis, auditory control and self-control), as well as a low level of development of children's linguistic knowledge and skills, which are the basis of learning the phonetic principle of writing.

Based on the structure of dysgraphic disorders in younger schoolchildren, specialists, namely workers of speech therapy centers, work out the directions, content and strategy of corrective influence on the damaged links of speech activity, develop a corrective and developmental methodological complex of speech therapy work to overcome dysgraphic children's disorders. One of the main methods used by speech therapists in their work is experimental and formative training.

When developing corrective programs, the methodological position is taken into account that writing is a conscious action from the very beginning, which is arbitrarily built in the process of special conscious learning.

Learning awareness can be achieved only through exercises, when, according to G. Lublinska, "children also acquire the basics of certain educational skills, the basics of the method of independent educational work: the ability to analyze and generalize, compare and

establish the difference, specify the rule and draw general conclusions. This is how schoolchildren acquire the basics of the future style of any mental activity" [6].

Therefore, the success of forming writing skills of children largely depends on the application of such a system of practical exercises, as a result of which children develop a purposeful observation of language facts, the ability to analyze, compare and differentiate words according to their sound-letter composition and lexical-grammatical meaning.

Along with this, children of primary school age need to develop the ability to easily "recognize" words by semantics, sound content, graphic representation, and motor action; to control oneself in the process of performing exercises, which will contribute to improving literacy. That is why the development of a certain methodical system of special exercises in order to provide a solid foundation for the development of writing skills of children is a necessary condition for the specialist's work.

When developing this system of practical exercises, the level of development of such mental processes of children as auditory and visual perception, auditory and visual memory and attention, as well as the typology of dysgraphic errors, revealed in the diagnostic study, is taken into account. Given the fact that a significant part of dysgraphic phoneme-graphic errors is the result of a systemic violation of child's auditory functions and operations in general, the corrective training method is aimed at the gradual formation of these functions and operations during the performance of special tasks at each stage of training [2].

At the time of corrective and formative training, it is necessary to take into account the pedagogical and psychological prerequisites that are basic for the formation of literacy in writing:

- 1) formation of adaptation, communication and discipline skills in the conditions of corrective subgroup classes unusual for children by drawing their attention to such phenomena as the ability to listen to the speech therapist, respect each other, reason about the importance and expediency of such classes, therefore, the development of independence of children and increasing motivation to study;

- 2) planning tasks due to their gradual complication;

- 3) constant alternation and variability of exercises; the use of various types of support (visual, verbal, graphic, computer technologies), game techniques for the purpose of transfer and practical implementation of acquired knowledge in new speech situations, forming a dynamic stereotype in accordance with a certain acquired skill;

- 4) a dialogic form of education that ensures the development of not only independence, but also the child's creative activity;

- 5) development of visual and figurative, logical, verbal thinking, analytical and synthetic activity, successive and simultaneous analysis, synthesis;

- 6) development of visual-spatial gnosis, mnesis and praxis; causal relationships, working memory, perception, voluntary attention;

- 7) development of "sense of language".

When developing the content of speech therapy correctional and developmental work to overcome dysgraphia of primary school children, it is necessary to take into account the requirements for knowledge, abilities and skills that must be formed from the subject "Ukrainian language" of the corresponding class.

Correctional work, as a rule, is carried out on the basis of the school speech therapy unit, in accordance with the procedure for providing speech therapy services in the education system, according to the programmed content, but taking into account the individual characteristics and abilities of the children.

Group and individual classes are the main form of organizing corrective work to overcome writing and reading disorders in the conditions of the school logopoint. The size of the group, depending on the requirements of the correctional program and the needs of the children, is determined by the speech therapist. Classes with children are held in the hours free from lessons, group classes are held twice a week, individual classes are held once a week.

The organization of corrective work to overcome writing and reading disorders of primary school age children in logopoint conditions is based on the implementation of general didactic and special principles: systematic approach, gradual complication of tasks and speech material, clarity, individual approach, strength of knowledge, abilities and skills, ensuring maximum speech activity, comprehensive approach, substitution, development, accessibility [7].

The speech therapy class consisted of 3 parts: the introductory part, the main part and the final part. Specialists highlight the main areas of corrective work:

- development of auditory attention and control;
- improving the phonemic differentiation of speech sounds and learning their correct letter designation;
- improvement of sound analysis skills;
- correction of speech defects;
- improving the skills of arbitrary language analysis and synthesis (syllable structure of words, structure of sentences);
- improvement of syntactic and morphological generalizations, morphological analysis of words;
- improvement of visual-spatial perception, memory, visual analysis and synthesis;
- formation and improvement of fine differentiated movements of the hand, visual-motor coordination, visual and manual control;
- clarification of speech notation of spatial relationships.

For each direction, didactic games and game exercises, tasks are selected as an indispensable attribute of the educational process in primary school. Didactic games are used in classes to overcome writing and reading disorders of children of primary school age in the conditions of the school logopoint in accordance with the specified directions of corrective and developmental work.

Therefore, taking into account the outlined requirements when drawing up a corrective and developmental program will ensure its efficiency and effectiveness when applied in the practice of corrective and developmental work among children of primary school age to overcome writing and reading disorders in the conditions of a school speech therapy unit.

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Peculiarities of the Manifestation of Psychotrauma in Younger School Age Children in Military Conditions

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Abstract

The article highlights an urgent problem faced by children of primary school age (the second period of childhood) - the experiences of war psychotrauma. The concept of trauma, psychotrauma in medical and psychological aspects is considered, the differences and similarities of these concepts are determined in the article. Examples of both foreign and domestic scientists are given regarding the specifics of experiencing psychotraumatic situations concerning primary school age, attention is focused on the impact of psychotrauma on the individual development of a growing personality. The article provides indicative methods and stages of a psychologist's work with younger schoolchildren with the focus on the practical component.

Key words: trauma, psychotrauma, stress, post-traumatic stress disorder, children of primary school age, military conditions, experiences, psychocorrection methods.

Незважаючи на велику кількість досліджень щодо попередження та психокорекції травматичного стресу у людей різної вікової категорії, проблема вивчення впливу окремих видів травматичних переживань на особистість дитини, дослідження щодо переживання травматичного стресу молодших школярів саме в умовах воєнного стану вивчались недостатньо.

Психологічні наслідки травматичного стресу можуть мати своє продовження в посттравматичному стресовому розладі, що виникає, як затяжна або відстрочена реакція на ситуації, пов'язані з серйозною загрозою для життя або здоров'я індивіда. Відповідно до сучасних поглядів на травматичний стрес та його прояви, в психічній сфері особистості відбуваються зміни, що проявляються в усіх аспектах життєдіяльності школяра.

В результаті повномасштабної агресії російської федерації на території України, постраждали щонайменше 1399 дітей. Про це повідомляє виконавча директорка Дитячого фонду ООН (ЮНІСЕФ) Кетрін Рассел на своїй сторінці у Twitter. А потребують психологічної підтримки більше ніж 15000 українських дітей [14].

На сучасному етапі дослідження щодо переживання, подолання посттравматичного стресу у дітей в Україні досліджували І. Біла, Л. Волинець, Н. Гусак, В. Зливков, З. Кісарчук, І. Луценко, І. Марціновська, Я. Омельченко, О. Федан, В. Чернобровкіна, А. Ямпільта ін.

Походження терміну «травма» пов'язують з науковою діяльністю З. Фрейда, який і запропонував психоаналітичне розуміння травми. Зігмундом Фрейдом була створена перша психоаналітична теорія травми, яка «характеризується тим, що сама ситуація травми має глибоке афективне відображення у несвідомому людини та постійно активується у психічній діяльності, а тому призводить до невротичних розладів» [10, с. 56].

Як зазначає І. Марціновська, «... причиною травмування є не сама ситуація травми, а сприйняття цієї ситуації людиною та як результат – роздвоєння Его, що посилює травматичну тривогу, розширює травматичне фантазування» [5, с. 226]. Акцентуємо увагу на тому, що поняття «травма» розглядається як в медичному аспекті, так і у психологічному. Звернемося до словникових джерел та з'ясуємо визначення поняття «травми» в медичному аспекті. Так, в енциклопедичному словнику знаходимо визначення поняття травма «пошкодження тканин організму людини або тварини з порушенням їх цілісності і функцій, викликане зовнішнім впливом» [9, с. 367]. Л. Царенко психотравму пропонує визначати, як «порушення цілісності та функцій психіки людини, викликане зовнішнім впливом на нього» [11, с. 25].

Дослідження американського науковця-психолога Р. Лазарус дозволили здійснити новий погляд на поняття травматичного стресу, так, автор зазначає, що «травматичний стресовий розлад – це непсихотична відстрочена реакція на травматичний стрес (такий як, природні і техногенні катастрофи, бойові дії, перебування на території бойових дій, тортури, зґвалтування і т.п.). Деякі з відомих дослідників стресу, здебільшого ігнорують поняття ПТСР, як і інші розлади, в аспекті можливих наслідків стресу, обмежуючи поле уваги дослідженнями особливостей емоційного стресу» [13, с.188].

Група вчених, досліджуючи розлади психіки в процесі постійного впливу стресу на людину, зазначає, що «первинні розлади, що виникають при емоційному стресі в різних структурах нейрофізіологічної регуляції мозку, призводять до зміни нормального функціонування систем організму. Емоційні стреси за своїм походженням, зазвичай, є соціальними, і стійкість до них у різних людей різна. Стресові реакції на психосоціальні труднощі - це інтегративна відповідь на когнітивну їх оцінку і емоційне збудження» [12, с. 85-92]. Відповідно до сучасних поглядів, стрес стає травматичним, коли результатом впливу стресора є порушення в психічній сфері за аналогією з фізичними порушеннями. «У цьому випадку, відповідно до існуючих концепцій, порушується структура самості, когнітивна модель світу, афективна сфера, неврологічні механізми, що керують процесами навчання та пізнання світу, системою пам'яті, емоційною сферою людини. Стресором в таких випадках виступають травматичні події, екстремальні кризові ситуації, ситуації загрози життю для самого себе або значущих близьких. Такі події передусім порушують почуття безпеки індивіда, викликаючи переживання травматичного стресу, психологічні наслідки якого різноманітні» [8, с. 18].

Розглянемо психологічні особливості та поведінкові реакції дітей, які стали свідками травмуючих подій та отримали психотравму, яка вплинула на розвиток зростаючої особистості:

«1. Почуття незахищеності та безпорадності... Діти сприймають світ як джерело непрогнозованих та загрозованих подій.

2. Тривожність за майбутнє, постійне очікування «поганого», страх змін... Очікування «поганого» у дітей в основному проявляється в настороженості та в остраху змін.

3. Сором, низька самооцінка і почуття провини... знижене відчуття особистісної значимості, почуття приниження гідності.

4. Гнів, агресивність. У травмованих дітей фрустровані базисні потреби безпеки, захищеності та самоповаги.

5. Відчуження та ізолюваність від навколишньої фізичної і соціальної дійсності. Травмована дитина схиляється до усамітнення, поглинаючи у спогади, пов'язані з травмою.

6. Невиплакане горе. Невиплакані горе та смуток – важливі характеристики травми (втрата близької людини, уявлення про себе, надії тощо)... Часто єдиним доступним дитині способом вираження емоцій виявляється плач. Якщо дорослі блокують вихід емоцій, у дитини залишається два напрямки вправління: приховати травматичні переживання, емоційно відгородитися від навколишнього світу, замкнутися в собі; або ж вдатися до реакцій протесту – гніву, агресії, регресивної поведінки та ін.

7. Травматичні ігри і повторювані дії. Травматичні ігри повторюють певний епізод травми.

8. Деформація картини світу. Травма спотворює картину світу дитини, тому вона бачить світ як джерело зловісних подій, ворожості, виникає почуття незахищеності та безпорадності. Така картина світу позбавляє людину свободи вибору, блокує його життєві сили.

9. Проблеми уваги, пам'яті, навчання. Невиплаканий травматичний досвід – психологічно незавершене явище, тому і несе в собі тенденцію постійної актуалізації. Ця актуалізація - досить болісний процес, тому більша частина життєвої енергії дитини, спрямована на опір та подолання хворобливих емоцій. Це, відображається на пізнавальній активності та впливає на рівень засвоєння знань.

10. Різноманітні страхи (виконують захисну функцію). На різних вікових етапах дитині властиві «нормативні страхи». Невротичні страхи, що виникли в результаті

травми, мають надмірну панічну інтенсивність та тривалість у часі, мають деструктивний характер.

11. Травматичні сновидіння та порушення сну. Сновидіння можуть відтворювати те, що трапилося повністю або із певними змінами, що характеризується негативними емоційними проявами (вигуки, бурмотіння, плач, ходіння під час сну та т.п.). Часто дитина не може відновити жахливе сновидіння.

12. Психосоматичні порушення. У травмованої дитини зустрічаються: логоневроз, енурез, бронхіальна астма, нейродерміти та ін. Тому корекція травматичного досвіду дитини є вкрай важливою» [6, с. 221-222].

Під час переживання дітьми травматичного стресу великого значення набуває емоційний стан і поведінка оточуючих їх значущих дорослих, перш за все батьків. «Якщо члени сім'ї не діляться, не вербалізують свої переживання та емоції з приводу травмуючої ситуації, вводять табу на всі розмови; є дисфункціональні відносини в родині, в якій виховується травмована дитина – ці фактори підвищують ризик виникнення посттравматичного стресового розладу у дітей та підлітків, а також впливають на важкість та тривалість перебігу травматичного стресу» [7, с. 38]. Тому важливо сформувати у членів сім'ї, а також у інших значущих в житті дитини дорослих розуміння її стану, єдність поглядів на характер необхідної їй допомоги.

Т. Малихіна досліджуючи технології корекційно-розвивальної роботи з дітьми вказує, що «коли несприятливі впливи мають тривалий характер, то вони згубно впливають на розвиток дитини. Посттравматичний розлад без психолого-педагогічних та медичних впливів в більшості випадків набуває хронічного перебігу. При цьому спостерігається формування патохарактерологічних особливостей та засвоєння деформованих норм суспільної поведінки; розвиток особистісної патології, як наслідок затяжних депресивних станів, відбувається формування психогенного розвитку особистості» [4, с. 26-27].

Науковцями Н. Макарчук, О. Хованова, Т. Хирна досліджувалась клінічна картина переживання травматичного стресу дітьми і визначено, що діти які перебували у зоні військового конфлікту характеризуються такими проявами: «депресія, тривога, почуття неспроможності, нездатність до планування, зниження продуктивності у повсякденних справах. У дітей можуть бути стерті афективні розлади та порушення

соціалізації особистості. Відзначаються агресивні та асоціальні поведінкові епізоди, різноманітні варіанти делінквентної та кримінальної поведінки в поєднанні з асоціальними особистісними рисами» [3, с. 69].

Таким чином, ми бачимо, що де б географічно не відбувався воєнний конфлікт, самі події та реакції людей однакові. Інтенсивний страх, тривога, розгубленість і безпорадність є одними з ключових емоційних станів у дітей, які проживають в умовах воєнного конфлікту. Реагування дитини на травматичну подію багато в чому залежить як від розвиненості нервової системи, психологічної зрілості, так і від рівня когнітивних здібностей і темпераментальних особливостей [2, с. 68].

У дослідженні Ліса Г. Джейкокс, Одра К. Ленглі, Крістін Л. Дін представлено аналіз динаміки вираженості емоції страху в дітей, які зазнали психологічної травми в дошкільному та молодшому шкільному віці внаслідок трагічних подій. Згідно з отриманими даними «психологічні наслідки для дітей багато в чому визначалися особливостями нових стосунків дитини з навколишнім світом, що склалися в неї після екстремальної ситуації. Було зроблено такі висновки: у дітей, які перебували в екстремальній ситуації, як у гострий, так і у відтермінований період (від 1 до 3 років) простежувалися ознаки гострої посттравматичної симптоматики, спостерігалися труднощі в когнітивній, емоційній та поведінковій сферах. З'явилася агресія, порушилися нормальні форми поведінки, знизилася навчальна мотивація, посилилися соматичні розлади» [1, с. 112-113].

Для дітей, які переживають травматичний стрес, характерні труднощі, зумовлені порушенням регуляційного компонента вищої нервової діяльності, (а саме: недостатність уваги, незрілість мотиваційної сфери, загальна пізнавальна пасивність і знижений самоконтроль), а також порушення операційного компонента (тобто зниження рівня сформованості певних психічних функцій, моторні порушення, зниження працездатності).

Психологи, які працюють з молодшими школярами щодо подолання переживання травматичного стресу, здійснюють роботу у три взаємопов'язані етапи:

- 1) навчання молодших школярів прийомам та методам подолання хвилювань, підвищеної тривожності;

2) формування необхідних навичок, умінь, знань щодо підвищення результативності своєї діяльності.

3) розвиток особистісних якостей молодших школярів, самооцінки та мотивації.

Провідними науковцями та психологами-практиками пропонуються наступні методи роботи з учнями молодшого шкільного віку, які переживають травматичний стрес:

1. Релаксація. Розслаблення тіла, підготовка до психічної діяльності, звільнення від зайвого психологічного напруження.

2. Концентрація. Зосередження на сенсорних імпульсах (слух, зір, тактильна та вібраційна чутливість, нюх), на власних емоціях, почуттях і переживаннях.

3. Музика. Музика, що заспокоює та відновлює, дає змогу знизити емоційну напруженість.

4. Ігротерапія. Застосовується для релаксації, зниження фізичної напруги, тривожності. Покращує моральне самопочуття, підвищує рівень самовпевненості.

5. Тілесна терапія. Дозволяє розслабити м'язові затиски, напругу, тривожність.

6. Арт-терапія. Актуалізує страхи. Дозволяє формувати дрібну моторику, зменшує напругу та тривожність. Розвиває віру в свої сили; прийняття дитини такою, якою вона є; не можна не квапити, не сповільнювати ігровий процес; враховується принцип поетапного занурення і виходу з травмуючої ситуації; початок і кінець занять мають бути ритуальними, щоб зберегти у дитини відчуття цілісності та завершеності заняття; гра не коментується дорослим; у будь-якій грі дитині пропонується можливість імпровізації.

Висвітлена проблема є актуальною й нагальною з урахуванням реалій українського суспільства та привертає увагу до професійної підготовки майбутніх психологів для такої соціальної практики як середня освіта.

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Translation of title, authors names, abstract and references into author's language

ОСОБЛИВОСТІ ПРОЯВУ ПСИХОТРАВМИ У ДІТЕЙ МОЛОДШОГО ШКІЛЬНОГО ВІКУ ЗА УМОВ ВОЄННОГО СТАНУ

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Анотація. В статті висвітлюється нагальна проблема, з якою стикається дитина молодшого шкільного віку (другий період дитинства) – переживання психотравми, що пов'язано з воєнним подіями в країні. Розглядається поняття травми, психотравми в медичному та психологічному аспектах, визначається їх відмінність та схожість. Наводяться приклади розвідок науковців як зарубіжних, так і вітчизняних, щодо особливостей переживання психотравмуючих ситуацій дотично до молодшого шкільного віку та акцентується увага на впливі психотравми на індивідуальний розвиток зростаючої особистості. В статті подаються орієнтовні методи та етапи роботи психолога з молодшими школярами, де акцент робиться на практичну компоненту.

Ключові слова: травма, психотравма, стрес, посттравматичний стресовий розлад, діти молодшого шкільного віку, військовий стан, переживання, методи психокорекції.

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Видання здійснене у партнерстві з Українським інститутом когнітивно-поведінкової терапії та фондом «Швейцарське бюро співробітництва в Україні» Львів, 2015. 217 с.

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