

SOI: 1.1/TAS

DOI: 10.15863/TAS

ISSN 2308-4944 (print)

ISSN 2409-0085 (online)

№ 05 (73) 2019

Teoretičeskaâ i prikladnaâ nauka

Theoretical & Applied Science



Philadelphia, USA

**Teoretičkaâ i prikladnaâ
nauka**

**Theoretical & Applied
Science**

05 (73)

2019

International Scientific Journal

Theoretical & Applied Science

Founder: **International Academy of Theoretical & Applied Sciences**

Published since 2013 year. Issued Monthly.

International scientific journal «Theoretical & Applied Science», registered in France, and indexed more than 45 international scientific bases.

Editorial office: <http://T-Science.org> Phone: +777727-606-81

E-mail: T-Science@mail.ru

Editor-in Chief:

Alexandr Shevtsov

Hirsch index:

h Index RISC = 1 (78)

Editorial Board:

1	Prof.	Vladimir Kestelman	USA	h Index Scopus = 3 (38)
2	Prof.	Arne Jönsson	Sweden	h Index Scopus = 4 (21)
3	Prof.	Sagat Zhunisbekov	KZ	-
4	Assistant of Prof.	Boselin Prabhu	India	-
5	Lecturer	Denis Chemezov	Russia	h Index RISC = 2 (61)
6	Senior specialist	Elnur Hasanov	Azerbaijan	h Index Scopus = 6 (11)
7	Associate Prof.	Christo Ananth	India	h Index Scopus = - (1)
8	Prof.	Shafa Aliyev	Azerbaijan	h Index Scopus = - (1)
9	Associate Prof.	Ramesh Kumar	India	h Index Scopus = - (2)
10	Associate Prof.	S. Sathish	India	h Index Scopus = 2 (13)
11	Researcher	Rohit Kumar Verma	India	-
12	Prof.	Kerem Shixaliyev	Azerbaijan	-
13	Associate Prof.	Ananeva Elena Pavlovna	Russia	h Index RISC = 1 (19)
14	Associate Prof.	Muhammad Hussein Noure Elahi	Iran	-
15	Assistant of Prof.	Tamar Shiukashvili	Georgia	-
16	Prof.	Said Abdullaevich Salekhov	Russia	-
17	Prof.	Vladimir Timofeevich Prokhorov	Russia	-
18	Researcher	Bobir Ortikmirzayevich Tursunov	Uzbekistan	-
19	Associate Prof.	Victor Aleksandrovich Melent'ev	Russia	-
20	Prof.	Manuchar Shishinashvili	Georgia	-

ISSN 2308-4944



© Collective of Authors

© «Theoretical & Applied Science»

International Scientific Journal

Theoretical & Applied Science

Editorial Board:

Hirsch index:

21

Prof. Konstantin Kurpayanidi

Uzbekistan **h Index RISC = 8 (67)**

International Scientific Journal
Theoretical & Applied Science



ISJ Theoretical & Applied Science, 05 (73), 672.
Philadelphia, USA



Impact Factor ICV = 6.630

Impact Factor ISI = 0.829
based on International Citation Report (ICR)

The percentage of rejected articles:



ISSN 2308-4944



Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 16.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



SECTION 7. Mechanics and machine construction

Nurillo Raximovich Kulmurotov
Senior Lecturer to Department of Technology
Engineering, Navoi State Mining Institute, Uzbekistan,
nurillo.Kulmurotov.64@mail.ru

Sergey Karimovich Kaxarov
Senior Lecturer to Department of Technology
Engineering, Navoi State Mining Institute, Uzbekistan,

DYNAMIC STRESSED-DEFORMABLE STATE OF A PIECE-UNIFORM CYLINDRICAL LAYER (SHELL) WITH LIQUID FROM A HARMONIC WAVE

Abstract: The paper considers an infinitely long body-cylindrical shape, consisting of a finite number of coaxial viscoelastic layers surrounded by a deformable medium. The dependence of the dynamic stress-strain state of a piecewise-uniform cylindrical layer on a harmonic wave was investigated. The results were obtained in the form of numerical values of the voltage in the structure, called dependences on the wavelength.

Key words: cylinder, layer, wavelength, stress, fluid shell, plane strain, sewage, module, function, core, relaxation.

Language: Russian

Citation: Kulmurotov, N. R., & Kaxarov, S. K. (2019). Dynamic stressed-deformable state of a piece-uniform cylindrical layer (shell) with liquid from a harmonic wave. *ISJ Theoretical & Applied Science*, 05 (73), 101-110.

Soi: <http://s-o-i.org/1.1/TAS-05-73-17> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.17>

ЗАВИСИМОСТЬ ДИНАМИЧЕСКОГО НАПРЯЖЕННО-ДЕФОРМИРУЕМОГО СОСТОЯНИЯ КУСОЧНО-ОДНОРОДНОГО ЦИЛИНДРИЧЕСКОГО СЛОЯ (ОБОЛОЧЕК) С ЖИДКОСТЬЮ ОТ ГАРМОНИЧЕСКОЙ ВОЛНЫ

Аннотация: В работе рассматривается бесконечно длинное тело цилиндрической формы, состоящее из конечного числа коаксиальных вязкоупругих слоев, окруженных деформируемой средой. Была исследована зависимость динамического напряженно-деформируемого состояния кусочно-однородного цилиндрического слоя от гармонической волны. Получены результаты в виде числовых значений напряжения в конструкции, именующиеся в зависимости от длины волн.

Ключевые слова: цилиндр, слой, длина волны, напряжения, оболочка жидкости, плоская деформация, канализация, модуль, функция, ядро, релаксация.

Введение.

Развитие в последние годы системы подземных коммуникаций в сейсмически активных районах связано с проведением широких и полных исследований. К основным подземным сооружениям относятся системы водоснабжения и канализации, тоннели, подземные переходы, подземные выемки и подводные тоннели.

В настоящее время хорошо разработанными являются методики статического и динамического расчета одиночно уложенной трубы, которые без

всякого изменения применяются проектными организациями для расчета трубопроводов.

В работе рассматривается зависимость динамического напряженно-деформируемого состояния кусочно-однородного цилиндрического слоя от гармонической волны. Предполагается, что слоистый пакет представляет собой толстостенные и тонкостенные слои цилиндра [1-3]. При описании движения тонкостенных элементов используются уравнения теории таких оболочек, в основу которых положены гипотезы Крехгофа-Лява. Для толстостенных слоев

Impact Factor:

ISRA (India) = 3.117
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

SIS (USA) = 0.912
 ПИИЦ (Russia) = 0.156
 ESJI (KZ) = 8.716
 SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
 PIF (India) = 1.940
 IBI (India) = 4.260
 OAJI (USA) = 0.350

исходными являются уравнения линейной теории упругости [4,5].

Постановка задачи и методы решения. Рассматривается многослойное цилиндрическое тело с жидкостью. Нумерация слоев - произведение в порядке возрастания их радиусов

от $k = 1$ до $k = N$ (рис.1). Величине характеризующей свойства и состояние элементов соответствуют значения $j = 1, 2, 3, \dots, N$, где k - упругий слой заключен между $k-1$ и k -м слоями. Параметры внешней среды обозначены индексами $\kappa = N$ (рис.1).

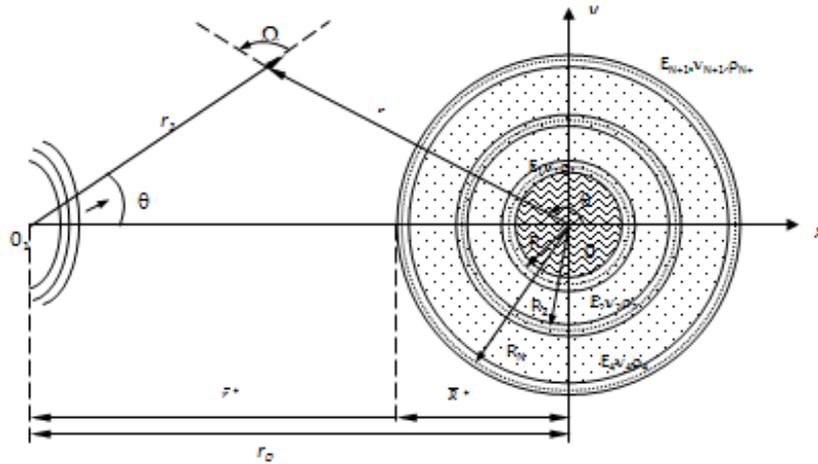


Рис.1. Дифракции волн на многослойном цилиндрическом теле.

В работе исследуется взаимодействие цилиндрической волны напряжения параллельно-слоистыми деформируемыми (упругими или вязкоупругими) слоями. Основные уравнения теории упругости для этой задачи о плоской деформации сводятся к следующему:

$$(\tilde{\lambda}_j + 2\tilde{\mu}_j) \text{grad div } \tilde{u}_j - \tilde{\mu} \text{rot rot } \tilde{u}_j + \tilde{b}_j = \rho_j \frac{\partial^2 \tilde{u}_j}{\partial t^2}, (j=2,4,\dots,N+1)$$

$$L \tilde{E} \tilde{u} = \frac{(1-\nu_0^2)}{E_0 h_0} \tilde{p} + \rho_0 \frac{(1-\nu_0^2)}{E_0} \left(\frac{\partial^2 \tilde{u}}{\partial t^2} \right), (k=1,3,\dots,N) \quad (1)$$

$$\Delta \phi_0 - \frac{1}{c_\infty^2} \ddot{\phi}_0 = 0,$$

Здесь $\tilde{\lambda}_j, \tilde{\mu}_j$ и \tilde{E}_k операторные модули упругости

$$\tilde{\lambda}_j f(t) = \lambda_{0j} \left[f(t) - \int_{-\infty}^t R_\lambda^{(i)}(t-\tau) f(\tau) d\tau \right],$$

$$\tilde{\mu}_j f(t) = \mu_{0j} \left[f(t) - \int_{-\infty}^t R_\mu^{(i)}(t-\tau) f(\tau) d\tau \right];$$

$$\tilde{E} f(t) = E_{01} \left[f(t) - \int_{-\infty}^t R_E(t-\tau) f(\tau) d\tau \right],$$

$$\beta_1^{(\kappa)} = \frac{\gamma_\kappa (1-\nu_\kappa^2) c_1^2 R_\kappa^2}{R_1}, \quad \beta_2^{(\kappa)} = \frac{R_\kappa^2 (1-\nu_\kappa^2) c_1^2 \rho_1}{h_\kappa R_1},$$

$$L = \begin{pmatrix} \frac{\partial^2}{\partial z^2} + \frac{1-\nu_0}{2R^2} \frac{\partial^2}{\partial \theta^2} & \frac{1+\nu_0}{2R} \frac{\partial^2}{\partial z \partial \theta} \\ \frac{1+\nu_0}{2R} \frac{\partial^2}{\partial z \partial \theta} & \frac{1+\nu_0}{2} (1+4a) \frac{\partial^2}{\partial z^2} + (1+a) \frac{\partial^2}{\partial \theta^2} \\ \frac{\nu}{R} \frac{\partial}{\partial z} & \frac{1}{R^2} \frac{\partial}{\partial \theta} - a(2-\nu) \frac{\partial^3}{\partial z^2 \partial \theta} - \frac{a}{R^2} \frac{\partial^3}{\partial \theta^3} \end{pmatrix}$$

$$\left. \begin{matrix} \frac{\nu_0}{R^2} \frac{\partial}{\partial z} \\ \frac{1}{R^2} \frac{\partial}{\partial \theta} - a(2-\nu) \frac{\partial^3}{\partial z^2 \partial \theta} - \frac{a}{R^2} \frac{\partial^3}{\partial \theta^3} \\ \frac{1}{R^2} + a \left(\frac{\partial^2}{\partial z^2} + \frac{1}{R^2} \frac{\partial^2}{\partial \theta^2} \right)^2 \end{matrix} \right\}$$

E_{01} -модули Юнга; $\tilde{u} = \tilde{u}(u_r, u_\theta, u_z)$ - перемещение поверхности оболочки ($u_r = u; u_\theta = v; u_z = w$); $\tilde{u}_j(u_{rj}, u_{\theta j}, u_{zj})$ - вектор смещения толстых оболочек, r, θ, z, t - цилиндрические координаты; ϕ_0 - потенциал скорости идеальной жидкости; ρ_j - плотность материалов слоя; γ_κ - плотность материалов оболочки; \tilde{b}_j - объёмная сила ($b_j = 0$); $f(t)$ - непрерывная функция; $R_E^{(i)}(t-\tau)$, $R_\mu^{(i)}(t-\tau)$ и $R_\lambda^{(i)}(t-\tau)$ - ядро релаксации; λ_{0j}, μ_{0j} - мгновенные модули упругости слоя; E_{01} - мгновенные модули упругости оболочки.

Impact Factor:

ISRA (India) = 3.117
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

SIS (USA) = 0.912
 ПИИЦ (Russia) = 0.156
 ESJI (KZ) = 8.716
 SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
 PIF (India) = 1.940
 IBI (India) = 4.260
 OAJI (USA) = 0.350

Если слой заполнен вязкой жидкостью, тогда уравнение движение системы удовлетворяет уравнению Навье - Стокса.

Вектор перемещений среды представим в виде:

$$\vec{u} = \text{grad } \varphi + \text{rot } \vec{\psi} \quad (2)$$

В цилиндрических координатах (2) принимает следующий вид:

$$\begin{aligned} u_r &= \frac{\partial \varphi}{\partial r} + \frac{1}{r} \frac{\partial \psi_z}{\partial \theta} - \frac{\partial \psi_\theta}{\partial z}; \\ u_\theta &= \frac{1}{r} \frac{\partial \varphi}{\partial \theta} + \frac{\partial \psi_r}{\partial z} - \frac{\partial \psi_z}{\partial r}; \\ u_z &= \frac{\partial \varphi}{\partial z} + \frac{\partial \psi_\theta}{\partial r} + \frac{\psi_\theta}{r} - \frac{1}{r} \frac{\partial \psi_r}{\partial \theta} \end{aligned}$$

где φ – потенциал продольных волн;

$\vec{\psi} (\psi_r, \psi_\theta, \psi_z)$ – потенциал поперечных волн.

Потенциалы продольных и поперечных волн удовлетворяют следующей системе дифференциальных уравнений:

$$\begin{aligned} \nabla^2 \varphi - \frac{1}{c_p^2} \frac{\partial^2 \varphi}{\partial t^2} &= 0; \\ \nabla^2 \psi_z - \frac{1}{c_s^2} \frac{\partial^2 \psi_z}{\partial t^2} &= 0; \end{aligned} \quad (3)$$

$$\nabla^2 \psi_\theta - \frac{\psi_\theta}{r^2} + \frac{2}{r^2} \frac{\partial \psi_r}{\partial \theta} - \frac{1}{c_s^2} \frac{\partial^2 \psi_\theta}{\partial t^2} = 0;$$

$$\nabla^2 \psi_r - \frac{\psi_r}{r^2} - \frac{2}{r^2} \frac{\partial \psi_\theta}{\partial \theta} - \frac{1}{c_s^2} \frac{\partial^2 \psi_r}{\partial t^2} = 0$$

где

$$\Gamma_\kappa = 1 - \Gamma^c(\omega_\kappa) - i\Gamma^s(\omega); \quad \bar{c}_s^2 = c_s^2 \Gamma_\kappa \quad \bar{c}_p^2 = c_p^2 \Gamma_\kappa$$

$$c_p^2 = (\lambda + 2\mu) / \rho; \quad c_s^2 = \mu / \rho -$$

соответственно скорость продольных и поперечных волн. В случае плоской задаче из (3) дифференциального уравнения остаётся два уравнения, которые для слоистого тела принимают следующий вид:

$$\nabla^2 \varphi_j = \frac{1}{c_{pj}^2} \frac{\partial^2 \varphi_j}{\partial t^2}; \quad (j=1,2,\dots,N)$$

$$\nabla^2 \psi_j = \frac{1}{c_{\rho j}^2} \frac{\partial^2 \psi_j}{\partial t^2},$$

$$\left[1 + \frac{h^2}{12R_1^2} \right] \frac{d^2 V^{(k)}}{d\vartheta^2} + \frac{dW^{(k)}}{d\vartheta} - \frac{h_k^2}{12R_1^2} \frac{d^3 W^{(k)}}{d\vartheta^3} = \eta_1 \left[\frac{d^2 v^{(k)}}{dt^2} - g_k^{(1)} \right];$$

$$\frac{dV^{(k)}}{d\vartheta} + \frac{h_k^2}{12R_k^2} \frac{d^2 V^{(k)}}{d\vartheta^2} - W^{(k)} - \frac{h_k^2}{12R_k^2} \frac{\partial^4 W^{(k)}}{\partial \theta^4} =$$

$$\eta_k \left[\frac{d^2 v^{(k)}}{dt^2} - g_q^{(1)} \right],$$

где $\varphi^{(k)}$ и $\psi^{(k)}$ волновые потенциалы соответственно упругих сред; v -нормальные и тангенциальные перемещения оболочек, $g_{rk}^{(k)}$, $g_{\theta k}^{(k)}$ - действующие на

них нагрузки; $\Delta = \frac{d}{dr^2} + \frac{1}{r} \frac{d}{dr} + \frac{1}{r^2} + \frac{d}{d\theta^2}$ - оператор Лапласа в цилиндрических координатах (r ; θ);

$$\eta_1 = \frac{(1 - \nu_{2i}) c_1 \rho_1 R_1}{E_1}; \quad \alpha_j = c_2 \sqrt{\frac{\rho_j}{\lambda_j + 2\mu_j}} \quad \beta = c_1 \sqrt{\frac{\rho_j}{\mu_j}};$$

Здесь E_j ; ν_j ; γ_j ; h_j ; R_j ; ($j = 1, 2, \dots, N$) - модуль Юнга, коэффициент Пуассона, плотность материала, толщина и радиус j -го слоя соответственно.

Предполагается, что интенсивность линейного источника O изменяется во времени по гармоническому закону. На основе этой задачи можно выявить общий эффект близости источника. Также предполагается, что линейный источник (на рис.1) является непрерывным источником гармонических волн напряжения с угловой скоростью ω и амплитудой φ_j . Рассмотрим продольную волну, порождаемую продольным источником волн расширения, расположенным в точке \bar{O} . Потенциалы перемещения падающей волны расширения можно представить в виде:

$$\varphi_N^p = \varphi_{NO} i \pi H_o^{(1)}(\alpha_N \bar{r}) e^{-i\alpha r} \quad (4)$$

где $H_o^{(1)}$ - представляет собой расходящуюся функцию Ханкеля (первого рода нулевого порядка), а α - волновое число сжатия; $\alpha^2 = \omega^2 / c_s^2$; ω - круговая частота. Линия действия нагрузки составляет угол γ с осью.

Средняя плоскость системы показана на рис.1. Окружность $r = R_N$ разбивает плоскость $X-Y$ на «внешнюю» и «внутреннюю» области.

$$\Omega = \begin{cases} r > R_{j-1} - \text{внешняя область, } (j=1, 2, \dots, N) \\ R_{i-1} \leq r \leq R_i - \text{внутренняя область,} \end{cases}$$

Потенциал для внешней области можно представить в виде:

$$\varphi_N = \varphi_N^{(p)} + \phi_N, \quad \varphi_N^{(H)} = \phi_N^{(p)} + \phi_N \quad (5)$$

где $\phi_N^{(p)}$, $\phi_N^{(H)}$ - определяют невозмущенное поле напряжений, т.е. поле в отсутствии любой неоднородной поверхности; $\phi_N^{(H)}$, $\phi_N^{(H)}$ - поле напряжений, обусловленное наличием цилиндрической поверхности разрыва.

В работе [8] получено обобщение результатов Лэмба и найдено, что не возмущенное поле определяется

$$\varphi_N^{(p)} = F_1 \cos(\gamma - \theta_1) H_1^{(1)}(\alpha_N r_1) e^{-i\alpha r};$$

$$\psi_N^{(p)} = F_2 \sin(\gamma - \theta_1) H_1^{(1)}(\beta_N r_1) e^{-i\alpha r}$$

$$F_1 = ip / 4 \rho \omega c_p; \quad F_2 = ip / 4 \rho \omega c_{s2},$$

$$\alpha_N = w / c_{1N}; \quad \beta_N = w / c_{sN}; \quad i = (-1)^{1/2} \quad (6)$$

а величина $H_\mu^N(Z)$ является функцией Ханкеля первого рода и порядка μ . С помощью теоремы сложения Бесселевых функций [9] выражения (6) могут быть переписаны в виде:

$$\left. \begin{aligned} \phi_N^{(p)} &= \sum_{b=-\infty}^{\infty} [-F_1(-1)^m J_m(\alpha_N r) H_{m+1}^{(1)}(\alpha_m z) \\ &\times \cos(\gamma - m\theta)] e^{-i\omega t} \\ \psi_N^{(p)} &= \sum_{b=-\infty}^{\infty} [F_1(-1)^{m+1} J_m(\beta_N r) H_{m+1}^{(1)}(\beta_m z) \\ &\times \sin(\gamma + m\theta)] e^{-i\omega t} \end{aligned} \right\} (7)$$

где J_m - функция Бесселя первого рода порядка m .

С другой стороны внешнее поле напряжений, обусловленное наличием цилиндрических неоднородностей, полностью определяется решениями уравнений (1), которые периодичны по θ и представляют собой волны, выходящие из удельной точки, которые имеют убывающие во времени амплитуды. Эти решения таковы:

$$\begin{aligned} \phi_N^{(p)} &= \sum_{b=-\infty}^{\infty} (A_{Nm} \sin(m\theta) + B_{Nvm} \times \cos(\gamma - m\theta)) \times \\ &\times H_m^{(1)}(\alpha_N r) e^{-i\omega t} \\ \phi_N^{(s)} &= \sum_{b=-\infty}^{\infty} (C_{Nm} \sin(m\theta) + D_{Nvm} \times \cos(\gamma - m\theta)) \times \\ &\times H_m^{(1)}(\beta_N r) e^{-i\omega t} \end{aligned}$$

где A_{Nm} , B_{Nm} , C_{Nm} и D_{Nm} - константы, подлежащие определению из контактных условий $r=R_j$ ($j=1, 2, \dots, N$). Построение формального решения не встречает принципиальных затруднений, но исследование такого решения требует огромного количества вычислений. Задачи сводятся к решению неоднородных алгебраических уравнений с комплексными коэффициентами.

$$[C]\{g\} = \{p\}$$

В случае, когда

$$E_1 = E_2 \dots = E_N, \rho_1 = \rho_2 = \dots = \rho_N \text{ и } v_1 = v_2 = \dots = v_N$$

получаем отверстия, находящиеся в безгранично упругой среде.

В этом случае граница свободна от напряжений. Неизвестные постоянные из (5) определяются по формулам:

$$\begin{aligned} A_{Nm} &= -\sin \gamma (-1)^m \Delta_{Nm}, B_{Nm} = \cos \gamma (-1)^m \Delta_{Nm}, \\ C_{Nm} &= \cos \gamma (-1)^m \Delta_{Nm}, A_{Nm} = \sin \gamma (-1)^m \Delta_{Nm} \end{aligned}$$

где

$$\begin{aligned} \Delta_{Nm} &= [F_1 H_{m+1}(\alpha_N \bar{Z}) \{E_{mk} K_{mk} - D_{mn} K_{mk}\} + \\ &+ [F_2 H_{m+1}(\beta_N \bar{Z}) \{H_{mk} K_{ma} - K_{ma} \bar{K}_{ma}\}] / \Delta_m; \\ \Delta_{Nm} &= [F_2 H_{m+1}(\alpha_N \bar{Z}) \{D_{mk} \bar{E}_{mk} - E_{mn} D_{mk}\} + \\ &+ [F_2 H_{m+1}(\beta_N \bar{Z}) \{\bar{K}_{mk} \bar{D}_{mk} - K_{mn} \bar{E}_{mk}\}] / \Delta_m; \\ \bar{\Delta}_m &= \bar{D}_{mk} K_{mn} - K_{mk} F_{mk}; \\ D_{Nm} &= [m^2 + m - \frac{\beta_N^2 R_N^2}{2}] J_m(\alpha_N R_N) - \\ &- X_N R_N J_{m-1}(\alpha_N R_N); \\ \bar{D}_{Nm} &= [m^2 + m - \frac{\beta_N^2 R_N^2}{2}] H_m^{(1)}(\alpha_N R_N) - \\ &- X_N R_N H_m^{(1)}(\alpha_N R_N); \\ E_{Nm} &= m(m+1) J_m(\alpha_N R_N) - \alpha_N R_N J_{m-1}(\alpha_N R_N); \end{aligned}$$

В этом случае окружное напряжение на поверхности полости сведется к следующему:

$$\begin{aligned} \sigma_{\theta\theta}(R_i, \theta, t) &= \frac{-4}{\pi} \beta^2 \mu \phi_0 \left(1 - \frac{1}{R^2}\right) \sum_{n=0}^{\infty} (-1)^n \epsilon_n H_n^{(1)}(\alpha_0) \times \\ &\times \bar{T}_n \cos n\theta e^{-i\omega t} \\ \bar{T} &= T_m(R_1) = [\alpha_1 R_1 H_{n-1}(\alpha_1 R_1) - H_{n-1}(\alpha_1 R_1) + Q_n(\beta_1 R_1)]^{-1}, \\ Q_n(\beta_1 R_1) &= (n^3 - n + \frac{1}{2} \beta^2 R_1^2) \beta_1 R_1 H_{n-1}(\beta_1 R_1) - \\ &- (n^2 + n - \frac{1}{4} \beta_1^2 R_1^2) \beta_1^2 R_1^2 H_n^{(1)}(\beta_1 R_1) / (n^2 - 1) \beta_1 R_1 H_{n-1}^{(1)} \times \\ &\times (\beta_1 R_1) - (n^2 - n + \frac{1}{2} \beta^2 R_1^2) H_n^{(1)}(\beta_1 R_1) \end{aligned}$$

$$\text{где } R^2 = C_{p1}^2 / C_{s1}^2.$$

Коэффициент концентрации напряжения $\sigma_{\theta\theta}^*$ здесь определяется, как отношение $\sigma_{\theta\theta}$ к $\sigma_{\bar{r}\bar{r}}$ возникают той же точке при условии отсутствия полости.

$$\sigma_{\theta\theta}^* \Big|_{r=R_1} = \frac{\sigma_{\theta\theta} \Big|_{r=R_1}}{\sigma_{\bar{r}\bar{r}} \Big|_{r=R_1}}$$

где $\sigma_{\bar{r}\bar{r}}$ определяется как функции $\phi^{(p)}$ в виде

$$\sigma_{rr} = i\pi \phi_0 \mu \alpha^2 \left[H_2^{(1)} \pi \phi \mu(\alpha r) + (1 - R^2) H_0^{(1)}(\alpha r) \right] e^{-i\omega t}$$

Перемещения вычисляются следующим образом:

$$u_{r1} = \sum_{n=0}^{\infty} \left[h_1 H_n^{(1)}(h_1 r) A_n \frac{n}{r} + H_n^{(1)}(t_1 r) \right]$$

$$u_{r2} = \sum_{n=0}^{\infty} \left[h_2 H_n^{(1)}(h_2 r) C_n + h_2 H_n^{(2)}(h_2 r) D_n \right] +$$

$$\left[L_n \left(\frac{n}{r} H_n^{(1)}(t_2 r) \right)_n + \frac{n}{r} H_n^{(2)}(t_2 r) M_n \right] \cos \theta,$$

$$u_{Q1} = - \sum_{n=0}^{\infty} \left[\frac{n}{r} H_n^{(1)}(h_1 r) A_n + t_1 H_n^{(1)}(t_1 r) B_n \right] \sin \theta$$

$$u_{Q2} = - \sum_{n=0}^{\infty} \left[\frac{n}{r} H_n^{(1)}(h_1 r) C_n + \frac{n}{r} H_n^{(2)}(h_2 r) D_n + \right.$$

$$\left. t_1 H_n^{(1)}(t_2 r) L_n + t_2 H_n^{(2)}(t_2 r) m_n \right] \sin \theta, \quad (8)$$

где $h_1 = p/c_{p1}, \quad t_1 = p/c_{s1},$
 $h_2 = p/c_{p2}, \quad t_2 = p/c_{s2},$ (9)

$\gamma = \frac{\mu_1}{\mu_2}$, тогда

$$\sigma^{(1)_{r1}} = \rho_2 C_{s2}^2 \sum_{n=0}^{\infty} \left\{ h_2^2 [(k_2^2 - 2) H_n^{(1)}(h_2 r) + 2 H_n^{(1)'}(h_1 r)] C_n + \right.$$

$$\left. + [(k_2^2 - 2) H_n^{(2)}(h_2 r) + 2 H_n^{(2)'}(h_2 r)] D_n \right.$$

$$\left. + \frac{n}{r} \left[t_2 H_n^{(1)'}(t_2 r) + \frac{1}{r} H_n^{(2)'}(t_2 r) \right] h_n \left[t_2 H_n^{(1)'}(t_2 r) - \frac{1}{r} H_n^{(2)'}(t_2 r) \right] M_n \right\} \cos \theta$$
 (10)

$$\sigma^{(1)_{r2}} = \mu_2 \sum_{n=0}^{\infty} \left\{ \frac{2n}{r} \left[\frac{1}{r} H_n^{(1)}(h_2 r) - h_2 H_n^{(1)'}(h_2 r) \right] C_n + \right.$$

$$\left. + \frac{2n}{r} \left[\frac{1}{r} H_n^{(2)}(h_2 r) - h_2 H_n^{(2)'}(h_2 r) \right] D_n \right.$$

$$\left. + \frac{1}{r^2} \left[e_2 r H_n^{(1)'}(e_2 r) - e^2 r^2 H_n^{(1)''}(e_2 r) - n H_n^{(1)'}(e_2 r) \right] L_n + \right.$$

$$\left. \frac{1}{r^2} \left[e_2 r H_n^{(2)'}(e_2 r) - e^2 r^2 H_n^{(2)''}(e_2 r) - n H_n^{(1)'}(e_2 r) \right] M_n \right\} \sin \theta$$
 (11)

$$C_{pi}^2 = \frac{\lambda_1 + 2\mu_i}{\rho_i}; \quad 2C_{ji}^2 = \frac{2\mu_i}{\rho_i}$$

$$\lambda_1 = \left[\frac{\lambda_1 + 2\mu_i}{\rho_i} - \frac{2\mu_i}{\rho_i} \right] \rho_1 = (C_{pi}^2 + 2C_{s1}^2) \rho_i$$

$$\lambda_2 = (C_{p2}^2 + 2C_{s2}^2) \rho_2 \quad \text{или} \quad \lambda_i = (C_{pi}^2 + 2C_{s1}^2) \rho_i$$

$$C_{ji}^2 = \frac{\mu_i}{\rho_i} \quad K_2^2 = \frac{C_{p2}^2}{C_{s2}^2} \quad (i=1,2)$$

Элементы матрицы [C] имеют следующий вид:

$$C_{13} = -\frac{1}{b} [nH_n^1(h_1 b) - h_1 b H_{n+1}^1(h_1 b)];$$

$$C_{14} = -\frac{1}{b} [nH_n^{(2)}(h_2 b) - h_2 b H_{n+1}^{(2)}(h_2 b)];$$

$$C_{15} = \frac{n}{b} H_n^{(1)}(t_2 b);$$

$$C_{16} = \frac{n}{b} H_n^{(2)}(t_2 b);$$

$$C_{21} = \frac{n}{b} H_n^{(1)}(h_2 b);$$

$$C_{22} = -\frac{n}{b} [nH_n^{(1)}(t_1 b) - t_1 b H_{n+1}^{(1)}(t_1 b)];$$

$$C_{23} = -\frac{n}{b} H_n^{(1)}(h_2 b);$$

$$C_{24} = -\frac{n}{b} H_n^{(2)}(h_2 b);$$

$$C_{25} = -\frac{1}{b} [nH_n^{(1)}(t_2 b) - t_2 b H_{n+1}^{(1)}(t_2 b)];$$

$$C_{26} = -\frac{1}{b} [nH_n^{(2)}(t_2 b) - t_2 b H_{n+1}^{(2)}(t_2 b)];$$

$$C_{31} = \gamma \left\{ \left[K_1^2 - 2 + \frac{2(n^2 + n + n_1^2 b^2)}{b^2} \right] \times \right.$$

$$\left. \times H_n^{(1)}(h_2 b) - \frac{2h_1}{b} H_{n-1}^{(1)}(h_1 b) \right\};$$

$$C_{33} = -\left\{ \left[K_1^2 - 2 + \frac{2(n^2 + n + n_1^2 b^2)}{b^2} \right] \times \right.$$

$$\left. \div H_n^{(1)}(h_2 b) - \frac{2h_2}{b} H_{n-1}^{(1)}(h_2 b) \right\};$$

$$C_{34} = \gamma \left\{ \left[K_1^2 - 2 + \frac{2(n^2 + n + n_1^2 b^2)}{b^2} \right] \times \right.$$

$$\left. \times H_n^{(2)}(h_2 b) - \frac{2h_{21}}{b} H_{n-1}^{(2)}(h_2 b) \right\};$$

$$C_{32} = \gamma_1 * \frac{2n}{b^2} [(n-1)H_n^{(1)}(t_1 b) - t_1 b H_{n+1}^{(1)}(t_1 b)];$$

$$C_{35} = -\frac{2n}{b^2} [(n-1)H_n^{(1)}(t_2 b) - t_2 b H_{n+1}^{(1)}(t_2 b)];$$

$$C_{36} = -\frac{2n}{b^2} [(n-1)H_n^{(2)}(t_2 b) - t_2 b H_{n+1}^{(2)}(t_2 b)];$$

$$C_{41} = \gamma_1 * \frac{2n}{b^2} [(n-1)H_n^{(1)}(h_1 b) - h_1 b H_{n+1}^{(1)}(h_1 b)];$$

$$C_{43} = \frac{2n}{b^2} [(k-1)H_n^{(1)}(h_2 b) - h_2 b H_{n+1}^{(1)}(h_2 b)];$$

$$C_{44} = -\frac{2m}{b} [(l-1)H_n^{(2)}(h_2 b) - h_2 b H_{n+1}^{(2)}(h_2 b)];$$

$$C_{42} = -\left\{ \frac{e_1^2 b^2 - 2n^2}{b^2} H_n^{(1)}(e_1 b) + \frac{e_1}{b} [H_{n-1}^{(1)}(e_2 b) - \right.$$

$$\left. - H_{n+1}^{(1)}(e_2 b)] \right\}$$

$$C_{45} = -\left\{ \frac{e_2^2 b^2 - 2n^2}{b^2} H_n^{(1)}(e_2 b) + \frac{e_2}{b} [H_{n-1}^{(1)}(e_2 b) - \right.$$

$$\left. - H_{n+1}^{(2)}(e_2 b)] \right\}$$

Impact Factor:

ISRA (India) = 3.117
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

SIS (USA) = 0.912
 ПИИЦ (Russia) = 0.156
 ESJI (KZ) = 8.716
 SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
 PIF (India) = 1.940
 IBI (India) = 4.260
 OAJI (USA) = 0.350

$$C_{46} = \left\{ \frac{e_2^2 b^2 - 2n^2}{b^2} H^{(2)}_n(e_2 b) + \frac{e_2}{b} \left[H^{(2)}_{n-1}(e_2 b) - H^{(2)}_{n+1}(e_2 b) \right] \right\} \quad C_{51} = C_{52} = 0,$$

как C_{33} по $C_{53} = -C_{33}$ с аргументом,
 $C_{53}(h_2 b) = -C_{33}(h_2 b).$

$$C_{53} = \left[K_2^2 - 2 + \frac{2(n^2 + n - h_2^2 \alpha^2)}{\alpha^2} \right] H^{(1)}_n(h_2 \alpha) - \frac{2h_2}{\alpha} H^{(2)}_{n-1}(h_2 \alpha);$$

$$C_{54} = \left[K_2^2 - 2 + \frac{2(n^2 + n - h_2^2 \alpha^2)}{\alpha^2} \right] H^{(2)}_n(h_2 \alpha) - \frac{2h_2}{\alpha} H^{(2)}_{n-1}(h_2 \alpha);$$

а в случае $C_{55}(t_2 \alpha) = C_{55}(t_2 b)$

$$C_{55} = \frac{2n}{\alpha^2} \left[(n-1)H^{(1)}_n(t_2 \alpha) - t_2 \alpha H^{(1)}_{n+1}(t_2 \alpha) \right];$$

$$C_{56} = \frac{2n}{\alpha^2} \left[(n-1)H^{(2)}_n(t_2 \alpha) - e_2 \alpha H^{(2)}_{n+1}(t_2 \alpha) \right];$$

$$C_{61} = C_{62} = 0$$

$$C_{62} = (h_2 \alpha) = -C_{43}(h_2 b)$$

$$C_{63} = \frac{2n}{\alpha^2} \left[(n-1)H^{(1)}_n(h_2 \alpha) - h_2 \alpha H^{(1)}_{n+1}(h_2 \alpha) \right];$$

$$C_{64} = \frac{2n}{\alpha^2} \left[(n-1)H^{(1)}_n(h_2 \alpha) - h_2 \alpha H^{(1)}_{n+1}(h_2 \alpha) \right];$$

$$C_{65}(t_2 \alpha) = -C_{45}(t_2 b);$$

$$C_{65} = \frac{t_2^2 \alpha^2 - 2n^2}{\alpha^2} H^{(1)}_n(t_2 \alpha) + \frac{t_1}{\alpha} \left[H^{(1)}_{n-1}(t_2 \alpha) - H^{(1)}_{n+1}(t_2 \alpha) \right];$$

$$C_{66} = \frac{t_2^2 \alpha^2 - 2n^2}{\alpha^2} H^{(2)}_n(t_2 b) + \frac{t_1}{\alpha} \left[H^{(1)}_{n-1}(t_2 \alpha) - H^{(1)}_{n+1}(t_2 \alpha) \right];$$

Таким образом, можно найти элементы матрицы [C] для любого порядка

$$\bar{E}_{mk} = m(m+1)H_m^{(1)}(\alpha_N R) - \alpha_N R_m H_{m-1}(\alpha_N R);$$

$$H_{mk} = -m(m+1)J_m(\beta_N R) - \beta_N R_m J_{m-1}(\beta_N R);$$

$$K_{mk} = -m(m+1)H_m(\beta_n R_n) - \beta_n R_m H_{m-1}(\beta_n R);$$

$$\bar{K}_{mk} = -m(m^2 + m - \frac{\beta_n^2 R_n^2}{2}) - J_n(\beta_{m/n} R_{n/n-1}) + \beta_{n/n-1} R_m J_{m-1}(\beta_n R_n);$$

$$\bar{K}_{mk} = -m(m^2 + m - \frac{\beta_n^2 R_n^2}{2}) - H_m(\beta_n R) + \beta_n R_m H_{m-1}(\beta_n R);$$

Наиболее очевидным критерием оценки детерминированного состояния является выбор “коэффициента концентрации” (напряжений, деформаций и т. д.). Основные цели данной работы:

а) исследование перераспределения напряжений, обусловленного наличием полости или включения;

б) изучение влияния места расположения источника возбуждения на его распределения.

В соответствии с такими задачами коэффициенты концентрации напряжений K_{1N} , K_{2N} , K_{3N} и K_{4N} определяются напряжением:

$$\left[\frac{\bar{\sigma}_n}{\sigma^{(p)}_{1n}}, \frac{\bar{\sigma}_{2n}}{\sigma^{(p)}_{2n}}, \frac{\bar{\sigma}_{1n}}{\sigma^{(p)}_{2n}}, \frac{\bar{\sigma}_{2n}}{\sigma^{(p)}_{2n}} \right] = (K_{1n}, K_{2n}, K_{3n}, K_{4n})$$

Здесь $(\bar{\sigma}_{1n}, \bar{\sigma}_{2n})$ и $(\sigma^{(K)}_{1n}, \sigma^{(K)}_{nN})$ - главные напряжения, определяемые соответственно потенциалами (φ, ψ) и $(\varphi^{(p)}, \psi^{(p)})$.

Главные напряжения связаны с компонентами плоского напряженного состояния следующими соотношениями [10].

$$\sigma_{1,2} = 0,5 \left\{ (\sigma_{rr} + \sigma_{\theta\theta}) \pm \left[(\sigma_{rr} - \sigma_{\theta\theta})^2 + 4\sigma_{r\theta}^2 \right]^{1/2} \right\} \quad (12)$$

также можно определить коэффициент концентрации энергии деформации, определяемый выражением:

$$(\psi_N / t_n^{(p)})_{r=R_n} = S_n / S_n^{(p)} = K^{(n)}_s \quad (13)$$

где S и $S^{(H)}$ - функции плоскости энергии деформации для одной и той же точки, связанные

с потенциалами перемещений (φ_1, ψ) и $(\varphi^{(n)}, \psi^{(n)})$. Плотность энергии деформации выражается через главные напряжения:

$$E_N = \left[\sigma_{1n}^2 + \sigma_{2n}^2 - 2\nu_n \sigma_{1n} \sigma_{2n} \right] / (2E_n), \quad (14)$$

где E_N и ν_n соответственно модуль Юнга и коэффициент Пуассона.

Решения (4) и (5) определяют комплексные напряжения. Следовательно, функции плоскости энергии деформации имеют вид:

$$(T + i \operatorname{Im} T) e^{2i\alpha r} = \left[(\operatorname{Re} T)^2 + (\operatorname{Im} T)^2 \right]^{1/2} e^{-i(2\alpha r - \alpha_i)}$$

$$(T^{(p)} (\operatorname{Re} F^{(p)} + i \operatorname{Im} T^{(p)})) e^{2i\alpha r} = \left[(\operatorname{Re} T^{(p)})^2 + (\operatorname{Im} T^{(p)})^2 \right]^{1/2} e^{-i(2\alpha r - \alpha)}$$

где

$$\alpha_{1n} = \arctg(\operatorname{Im} T / \operatorname{Re} T), \quad \alpha_2 = \arctg(\operatorname{Im}(T^{(p)}) / (\operatorname{Re} T^{(p)})).$$

Таким образом, величина

$$K_m = \left[\frac{(\operatorname{Re} \bar{S})^2 + (\operatorname{Im} \bar{S})^2}{(\operatorname{Re} \bar{S}^{(p)})^2 + (\operatorname{Im} \bar{S}^{(p)})^2} \right]^{1/2} e^{i(\alpha_{1n} - \alpha_{2m})} \quad (15)$$

не зависит от времени и является комплексной. В качестве меры концентрации можно выбрать величину [17]

$$S_c = / K_m / = \left[\frac{(\operatorname{Re} \bar{S})^2 (\operatorname{Im} \bar{S})^2}{(\operatorname{Re} \bar{S}^{(p)})^2 + (\operatorname{Im} \bar{S}^{(p)})^2} \right]^{1/2} \quad (16)$$

Заметим, что

$$S_{cn} = S_c(\theta, \nu_n, \gamma_n, \alpha_n; Z, \alpha_n, R_n, \eta_n).$$

Числовые результаты и предельный случай волн с большой длиной. Для исследования концентрации напряжений на

Impact Factor:

ISRA (India) = 3.117
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

SIS (USA) = 0.912
 ПИИЦ (Russia) = 0.156
 ESJI (KZ) = 8.716
 SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
 PIF (India) = 1.940
 IBI (India) = 4.260
 OAJI (USA) = 0.350

свободной поверхности воспользуемся абсолютными значениями комплексной величины и соотношениями (15) и (16). Величина комплексной функции зависит от волнового числа α , угла θ расстояния \bar{r} , коэффициента Пуассона, соотношения модулей Юнга $E^* = E_1/E_2$, соотношения плотностей $\rho^* = \rho_1/\rho_2$, геометрических параметров R_1 и R_2 . Если все характеристики (рис.1) механической системы одинаковы ($E_1=E_2=\dots E_n$; $\rho_1 = \rho_2 = \dots = \rho_n$; $\nu_1 = \nu_2 = \nu_3 = \dots = \nu_n$), тогда рассматривается задача взаимодействия цилиндрических волн с цилиндрическими полостями. Основные соотношения приведены в (1). В частном случае полученные решения для полости совпадают с решениями [12]. Результаты расчетов концентрации напряжения приведены на рис. 2. Из анализов численных результатов рис. 3. видно, что α , R_1 и n концентрации напряжений ободной поверхности совпадают. В частном случае рассмотрим взаимодействие волн с жестким включением тогда на границе $r = R_1$ ставятся следующие условия:

$$u_r = U \cos \theta \quad u_\theta = U \sin \theta, \quad (17)$$

$$(\pi R_1^2 \rho \ddot{U}_{\text{вкл}}) = \int_0^{2\pi} (\sigma_{rr} \cos \theta - \sigma_{r\theta} \sin \theta) \Big|_{r=R_1} R_1 d\theta, \quad (18)$$

где $\rho_{\text{вкл}}$ - плотность включения.

Определены перенос и поворот включения как жесткого целого с помощью выражений:

$$U = -\frac{\eta}{\alpha} e^{-i\alpha z} [F_1 \cos y H_2(\alpha_1 Z) J_1(\alpha_1 R_1) - C_1 H_1(\beta_1 R_1) + F_2 \cos y H_0(\alpha_1 Z) J_{-1}(\alpha_1 R_1) + F_2 \cos y H_0(\beta_1 Z) J_{-1}(\beta_1 R_1) - \beta_{N-1} H_{-1}(\alpha_1 R_1) + C_{-1} H_{-1}(\alpha_1 R_1)];$$

$$V = -\frac{\eta}{R_N} e^{-i\alpha z} [-F_1 \sin y H_2(\alpha_1 Z) J_1(\alpha_1 R_1) + F_2 \sin y H_2(\beta_1 Z) J_1(\beta_1 R_1) - A_1 H_1(\alpha_1 R_1) + D_1 H_{-1}(\beta_1 R_1) + F_1 \sin y H_0(\alpha_1 Z) J_{-1}(\alpha_1 R_1) + F_2 \sin y H_0(\beta_1 Z) J_{-1}(\beta_1 R_1) + A_{-1} H_{-1}(\alpha_1 R_1) + D_{-1} H_{-1}(\alpha_1 R_1)];$$

$$\theta = -\frac{4\eta}{\alpha^2} e^{-i\alpha z} [F_2 \sin y H_1(\alpha_1 Z) \{J_0(\beta_1 R_1) + \frac{2}{\beta_N R_N} J_{-1}(\beta_1 R_1) + D\{H_0(\beta_1 R_1) + \frac{2}{\beta_N R_N} H_{-1}(\beta_1 R_1)\}];$$

где U, V - перемещения в направлениях соответственных и y, θ -угол поворота, $\eta = \rho_{cp}/\rho_{вкл}$.

Решения уравнения (17) выражаются через функции Бесселя и Ханкеля 1-го и 2-го рода n -го порядка.

Особый интерес представляет случай неподвижного включения, т.е. $\eta=0$. Для такого включения условия на $r = R_N$ имеют вид:

$$U = V = \theta = 0, \quad u_r = u_\theta = 0.$$

Можно проверить, что от движения включения удерживается силами X и Y в направлениях соответственно x и y и моментом M в плоскости x - y , которые определяются формулами

$$\bar{X} = P \beta^2 R_n^2 \cos \gamma (g+h) e^{-i\omega t}$$

$$\bar{Y} = P \beta^2 R_n^2 \sin \gamma (-g+h) e^{-i\omega t}$$

$$\frac{M}{R_N} = -P \beta^2 R_1^2 \sin \gamma H_1(\beta_1 Z) \frac{\alpha_1 R_1 H_{-1}(\alpha_1 R_1) e^{-i\omega t}}{V_0}$$

где $\alpha = P/R_{n1}$ $\alpha_1 = (1-\nu_1^2)/(2\alpha_1 R_1)$,

$\alpha_2 = (1+\nu_1^2)/\beta_1 R_1$.

$$g = \frac{1-\nu_1}{4\alpha a} H_2(\alpha z) \left[\frac{\beta a H_1^1(\beta a) - H_{-1}(\beta a)}{V_1} + \frac{1}{2\beta a} H_1(\alpha z) \left[\frac{H_1(\alpha a) - \alpha a H_1(\alpha a)}{V_1} \right] \right],$$

$$h = \frac{1-\nu_1}{4\alpha a} H_{02}(\alpha z) \left[\frac{\beta a H_{-1}^1(\beta a) - H_{-1}(\beta a)}{V_{-1}} + \frac{1}{2\beta a} H_0(\beta z) \left[\frac{\alpha a H_{-1}^1(\alpha a) - H_{-1}(\alpha a)}{V_{-1}} \right] \right],$$

Приведены некоторые графики природы перераспределения напряжений около поверхности разрыва. На рис.2 даны графики коэффициента S_c как функции $\alpha_1 R_1$ для различных значений η и γ .

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	ПИИЦ (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

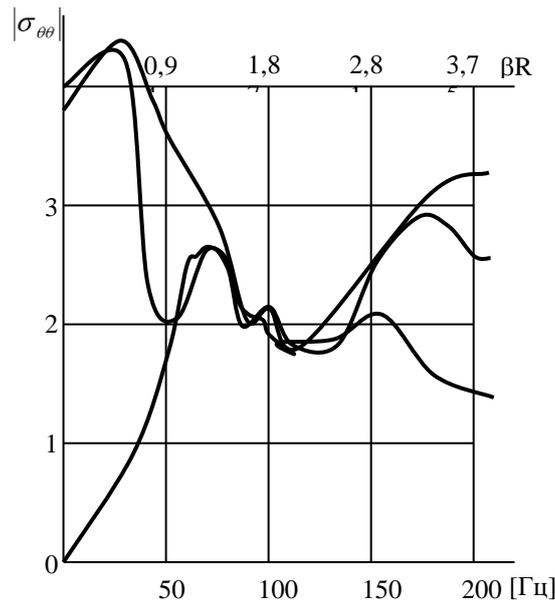


Рис.2. Влияние частоты колебаний волны на величину напряжений в характерных точках поверхности $\theta = 0, 45, 90, 135$

Видно, что радиальные напряжения при высоких волновых значениях почти в три раза больше, чем $\sigma_{\theta\theta}$.

Эти графики показывают, что при заданных η и θ имеется значение $\alpha_1 R_1 = \xi$, которое

максимизирует величину S_c . Исследовано распространение волн от источника \bar{O} (рис.1) в цилиндрических координатах \bar{r} и $\bar{\theta}$. Изучена зависимость $|\sigma_{\bar{r}\bar{r}} / \sigma_{\bar{\theta}\bar{\theta}}|$ от $\alpha \bar{r}$ при $\nu = 0,25$ (без цилиндрического тела).

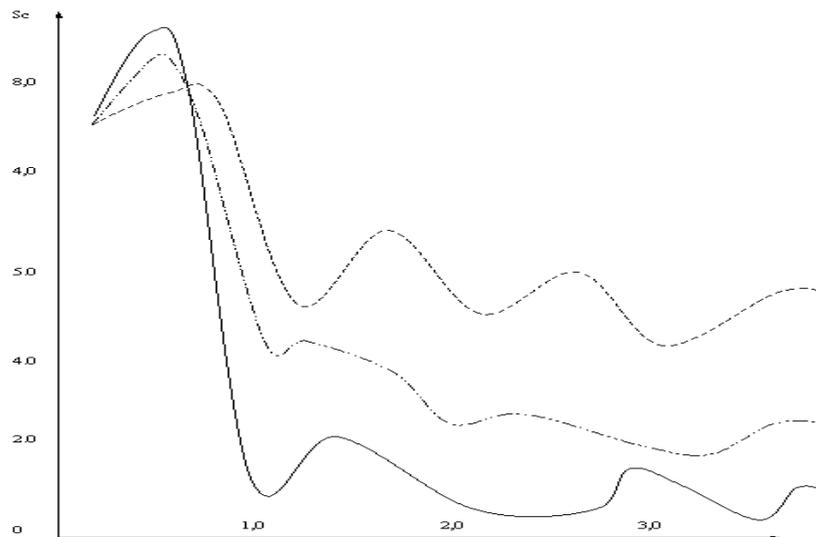


Рис. 3. Зависимость коэффициента концентрации энергии от волнового числа ($\nu=0.25$).

Используя подходящие разложения для функции Ханкеля, можно показать, что

$$\lim_{\alpha \rightarrow 0} y = \frac{P \sin \gamma}{\frac{\alpha_N^2}{\beta_N^2} + 1} \left\{ \frac{1 - \nu_N}{2} [H_2(\alpha_N z) + H_0(\alpha_N z)] - [H_2(\beta_N z) - H_0(\beta_N z)] \right\}$$

$$\lim_{\alpha \rightarrow 0} \bar{x} = \frac{P \cos \gamma}{\frac{\alpha_N^2}{\beta_N^2} + 1} \left\{ \frac{1 - \nu_N}{2} [H_2(\alpha_1 z) - H_0(\alpha_1 z)] - [H_2(\beta_1 z) + H_0(\beta_1 z)] \right\}$$

$$\lim_{\alpha \rightarrow 0} \bar{M} = 0$$

На следующем примере рассмотрим взаимодействие цилиндрических волн с

Impact Factor:

ISRA (India) = 3.117
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

SIS (USA) = 0.912
 ПИИЦ (Russia) = 0.156
 ESJI (KZ) = 8.716
 SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
 PIF (India) = 1.940
 IBI (India) = 4.260
 OAJI (USA) = 0.350

цилиндрическим слоем (граничные условия на контакте слоя $r = R_2$) и свободной поверхности ($\nu = R_1$).

Из общих решений получим решения для $n=1,2$. Численные результаты приведены на рис. 3. Из рисунка 3 видно, что концентрация напряжения существенно зависит от места расположения источника гармонических волн.

Из этого $\alpha_1 P_1 = 2$ значения результаты статического и динамического напряженного состояния отличаются коренным образом при близких $r_0/D=2$ расстояниях источника. Теперь рассмотрим некоторые предельные случаи. Здесь приведены результаты для отверстия. Если в уравнении (1) r_0 стремится к бесконечности, то можно воспользоваться асимптотическими разложениями функции Ханкеля для больших значений аргумента

$$\lim_{r_0 \rightarrow \infty} \sigma_{\theta\theta} \Big|_{r=R_1} \approx 4 \left[1 - \frac{1}{k^2} \right] \sum_{m=0}^{\infty} C^{m+1} \epsilon_{n1} S_m \cos e^{-i\alpha}$$

где α - конечное.

Это выражение полностью совпадает с выражениями, полученными [6] для плоской падающей волны. Определяя асимптотическое статическое решение, получим

$$\lim_{\alpha \rightarrow 0} \sigma_{\theta\theta} \Big|_{r=R_1} \approx 4 \left[1 + \left(\frac{R_1}{r_0} \right)^2 + \frac{4}{r_0} \cos \theta \right] \times \sum_{m=2}^{\infty} \left(-\frac{R_1}{r_0} \right)^{m-2} (m-1) \cos m\theta,$$

где r_0 - конечное. Это решение точно совпадает с решением статической задачи.

Отличие полученных в настоящей работе результатов от результатов обычной задачи о дифракции волны оправдывает их учет во многих практических задачах.

Таблица 1.

R_1/r_0	3	4	5	50	60	80
Θ , град	60°	70°	90°	90°	90°	90°
$ \sigma_{\theta\theta}^* $	1,541	1,536	1,525	1,414	1,416	1,416

В таблице 1. приведены концентрации напряжений в зависимости от R_1/r_0 при различных значениях θ . Видно, что максимальное напряжение $|\sigma_{\theta\theta}^*|$ в цилиндрическом теле возникает при $\theta = 30^\circ$

$$(\sigma_{\theta\theta}^* = \sigma_{\theta\theta} / \sigma_{\bar{k}\bar{k}}).$$

При $R_1/r_0 > 50$ воздействие цилиндрического источника раскладывается как плоская волна, т.е. можно не учитывать радиус кривизны волны.

Выводы.

1. Задача дифракции гармонических волн в цилиндрическом теле решается в потенциалах перемещений. Потенциалы перемещений определяются из решений уравнения Гельмгольца. Произвольные постоянные определяются из граничных условий, которые ставятся между телами.

В результате поставленная задача сводится к системе неоднородных алгебраических уравнений с комплексными коэффициентами, которые решаются методом Гаусса с выделением главного элемента.

2. Контурные напряжения $\sigma_{\theta\theta}$ на свободной поверхности цилиндрических тел достигают своего максимального значения в

$$Q = \begin{cases} \frac{\pi}{2} & \text{при воздействии поперечных волн} \\ \frac{\pi}{4} & \text{при воздействии продольных волн} \end{cases}$$

Контурные напряжения $\sigma_{\theta\theta}$ при воздействии поперечных гармонических волн на 15-20% больше, чем при воздействии продольных волн.

3. Когда источник гармонических волн

находится на расстоянии пяти радиусов ($r > 5R$) от цилиндрического тела, высокочастотный характер изменения контурных напряжений $\sigma_{\theta\theta}$, воздействующих на внутреннюю свободную поверхность, хорошо аппроксимировать решением для плоской ($r > \infty$) волны. Далее все значения приближаются к одной и той же асимптоте.

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

References:

1. Guz, A. N., Kubenko, V. D., & Cherevko, M. A. (1978). *Difraktsiya uprugix voln.* (p.307). Kiyev: Naukova dumka.
2. Safarov, I. I., & Umarov, A. O. (2014). Vozdeystviye prodolnix i poperechnix voln na silindricheskiye sloi s jidkostyu. *Vestnik Permskogo universiteta. Matematika. Mexanika. Informatika, Vip.3(26)*, pp. 69-75.
3. Safarov, I. I., Axmedov, M. S., & Umarov, A. O. (2014). Dinamicheskiye napryajeniya i smesheniya vblizi silindricheskoy podkreplenny polosti ot ploskoy garmonicheskoy volni. *Yejemesyachniy nauchniy jurnal «Prospero» (Novosibirsk), №3*, pp. 57-61.
4. Safarov, I. I., Teshayev, M. K., Boltayev, Z. I., & Nuriddinov, B. Z. (2017). Of Own and Forced Vibrations of Dissipative Inhomogeneous Mechanical Systems. *Applied Mathematics, 8*, pp.1001-1015.
5. Safarov, I. I., Teshayev, M. K., Boltayev, Z. I., & Akhmedov, M. S. (2017). Damping Properties of Vibrations of Three-Layer Viscoelastic Plate. *International Journal of Theoretical and Applied Mathematics, 3(6)*: 191-198.
6. Safarov, I. I., & Boltayev, Z. I. (2017). Propagation of Natural Waves in Extended Cylindrical Viscoelastic Panels. *International Journal of Emerging Engineering Research and Technology Volume 5, Issue 10*, pp.37-40.
7. Safarov, I. I., Akhmedov, M., & Umarov, A. (2017). *Own vibrations of toroidal shell with flowing liquid.* (p.177). Lambert Academic Publishing (Germany).
8. Safarov, I. I., Akhmedov, M. S., & Buronov, S. (2017). *Method of finite elements in the calculations of pipelines.* (p.225). Lambert Academic Publishing (Germany).
9. Safarov, I. I., Teshayev, M. K., & Boltayev, Z. I. (2017). *Distribution of harmonic waves in expansion plastic and cylindrical viscoelastic bodies.* (p.218). Open Science Publishing Raleigh, North Carolina, USA.
10. Safarov, I. I., Boltayev, Z. I., Axmedov, M. S., & Rajabov, O. (2017). Numerical solution of the problem on the impact plane non-stationary elastic waves by a cylindrical body. *Discover 2017,53, (256)*. April, pp.255-265.
11. Safarov, I. I., Marasulov, A., Akhmedov, M. S., & Shodiyev, Z. O. (2017). Voltage Deformable State Parallel Arrangement of Cylindrical Pipe with a Liquid under Harmonic Loads. *Case Studies Journal ISSN (2305-509X)-Volume 6, Issue-1-Jan-2017*, pp. 36-47.
12. Safarov, I. I., Akhmedov, M. S., & Rajabov, O. (2017). About the Natural Oscillations Viscoelastic Toroidal Shell with the Flowing Fluid. *World Wide Journal of Multidisciplinary Research and Development (WWJMRD), 3(7)*.
13. Rashidov, T. R. (1973). *Dinamicheskaya teoriya seysmostoykosti slojnix sistem podzemnix soorujeniy.* (p.182). Tashkent: Fan.
14. Mau, M. (1963). Dinamicheskiye napryajeniya i smesheniye v blizi silindricheskoy poverxnosti razriva ot ploskoy garmonicheskoy volni sdviga. *Prikladnaya mexanika, perevod s angliyskogo, t.30, ser Ye, № 3*, pp.117-126.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIIHЦ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 20.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Hikmatillo Hoshimov
Researcher of
Institute of archeology
hikmatbox@mail.ru

NEW DATA ON THE ABSOLUTE CHRONOLOGY OF KELTEMINAR CULTURE BASED ON THE MATERIALS FROM THE SITE OF AJAKAGYTMA

Abstract: This article reports new absolute chronology from samples collected in cultural layers excavated by the joint Uzbek-Polish-French International Expedition at the site of Ajakagytm, located on the southeastern part of the Kyzylkum desert. As a result of these research, the Neolithic cultures of Kelteminar can be anticipated of ca. 700 years (6400-6350 BC) and it can be therefore framed in the same period of the early agricultural Neolithic culture of Dzhejtun in south Central Asia.

Key words: Neolith, Kelteminar culture, Ajakagytm site, chronology.

Language: Russian

Citation: Hoshimov, H. (2019). New data on the absolute chronology of Kelteminar culture based on the materials from the site of Ajakagytm. *ISJ Theoretical & Applied Science*, 05 (73), 111-117.

Soi: <http://s-o-i.org/1.1/TAS-05-73-18> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.18>

НОВЫЕ ДАННЫЕ ПО ХРОНОЛОГИИ КЕЛЬТЕМИНАРСКОЙ КУЛЬТУРЫ (ПО МАТЕРИАЛАМ СТОЯНКИ АЯКАГЫТМА)

Аннотация: Данная статья посвящается результатам определения абсолютной хронологии материалов, полученных из культурных напластований недавно открытой стоянки Аякагытма. Памятник расположен в юго-восточной части Кызылкумов, на восточном берегу одноименного озера. Исследования проводились Узбекско-Польско-Французской международной экспедицией (1996-2012 гг.) В статье подробно анализируется история изучения вопроса и приводятся новые данные по хронологии Кельтеминарской неолитической культуры. В результате этих исследований хронология Кельтеминарской неолитической культуры удревнена на 700 лет. Таким образом, Кельтеминарская культура по датировки сопоставима с раннеземледельческой неолитической культурой Джейтун на юге Средней Азии.

Ключевые слова: стоянка Аякагытма, Кельтеминарская культура, хронология.

Introduction

Неолит - эпоха перехода от присваивающего хозяйства (охоты и собирательства) к производящему (земледелие и скотоводство), основанного на одомашнивании животных и окультуривании растений. Этот процесс, продолжавшийся в течении нескольких тысячелетий (XV-III тыс. до н.э.) в Центральной Азии, выражается не только в появлении новых моделей общества, номадизма и оседлости, а также сопровождается важными изменениями в области техники производства орудий труда и, вероятно, в эстетических представлениях (Brunet, 2005a. -P. 109-117; 2011b. -P. 198-201). В эпоху неолита он ведет к появлению новых культурных

стоянок сложившихся вокруг трех главных очагов, находящихся на современных территориях Казахстана, Узбекистана, Таджикистана, независимо от очагов, локализованных на Ближнем Востоке или Китае. Эта новая историческая культура, которая появляется в Центральной Азии начиная с эпохи раннего голоцена, сопровождается многочисленными взаимодействиями между группами племён в эпоху мезолита, неолита, энеолита и бронзы в Центральной Азии (Brunet, 2007. -P. 255-259).

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

Materials and Methods

Кельтеминарская культура, главным образом, локализована в Узбекистане, а именно в пустыне Кызылкум, со значительным ее географическим расширением (Узбекистан, южный Казахстан, северный Туркменистан). Памятники Кельтеминарской культуры обнаружены в регионе дельты Аму-дарьи (или Акчадарья) архео-этнографической экспедицией Хорезма, которой руководил С. П. Толстов (Толстов, 1958; 1960; 1963) в конце 1930 г., которые датировались IV-III тысячелетиями. Новые открытия, осуществленные на этой территории (Виноградов, 1960. -С. 63-81; Вактурская, 1959. -С. 39-69; Исламов, 1963. -С. 34-40; Гулямов и д-р., 1966. -С. 21-116; Виноградов,

1968. -С. 25-134; 1981. -С. 64-135; Виноградов, Мамедов, 1975) позволили А.В. Виноградову предложить для этой культуры более широкую подробную датировку (VI-II тысячелетия); которая имела контакты с различными неолитическими племенами Северной и Южной Азии (Формозов, 1951. -С. 7-11; Виноградов, 1957. -С. 36-40; Итина, 1959. -С. 19-24; Виноградов, 1968. -С. 153-158; Крижевская, 1968. С. 86-87; Brunet, 2005b. -Р. 98-102) на перекрестке степей и оазисов.

Стоянка (Рис.1.) была обнаружена узбекско-польской экспедицией, под руководством К. Шимчака и М. Хужаназарова. Ее исследования проводились в первых пяти сезонах с 1996 по 2003 гг. (Шимчак, Хужаназаров, 2006).

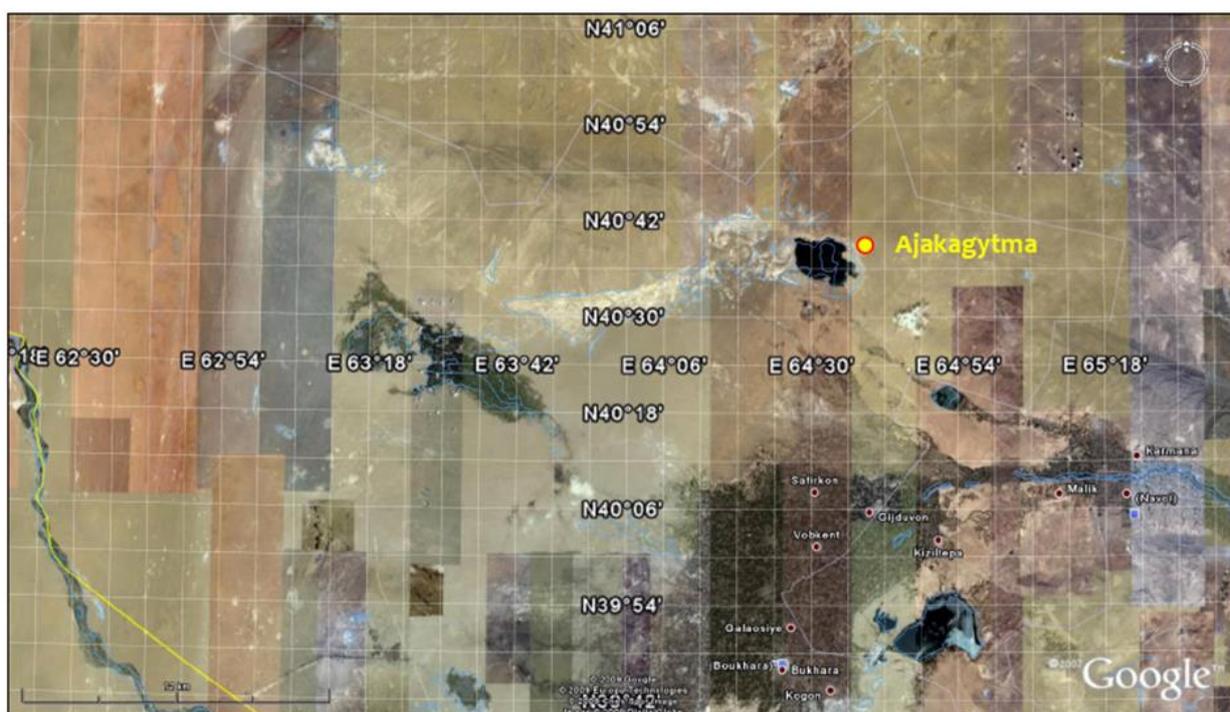


Рис.1. – Карта расположения стоянки Аякагытма

С 2005 по 2012 гг. археологические исследования ввела Узбекско-Французская экспедиция. Было открыто более, чем 500 новых археологических пунктов, помеченных и интегрированных в программу ГИС (Г. Давтян, Х. Хошимов). Эти данные позволяют нам проследить динамику заселения в этих регионах, особенно заселение в неолитическую эпоху (VII-IV тысячелетия), что было связано с изменениями палеонтологии (изменение направления рек или дельт).

Результаты работ Узбекско-Французской экспедиции MAFANAC (Французская археологическая экспедиция по неолитизации в Центральной Азии), в пустыне Кызылкум, особенно в дельте Акчадарья, позволили нам

выявить несколько аспектов этой культуры, и высказать предположения о происхождении и динамике развития Кельтеминара, влиянии на подвижность и образ жизни групп и технические традиции, стратегию эксплуатации территории и управление ресурсами, обсудить вопросы по палеоэкологии и палеоклимата.

Вопрос хронологии Кельтеминарской культуры остается спорным, не до конца решенным и в наши дни. Поэтому предлагаем, в свете новых данных по изучению Кельтеминара и динамике его эволюции, выдвинуть гипотезу о существовании фазы энеолита этой культуры. Кроме того, изучение микротомографии Аякагытма (Рис.2.), в совокупности с аэрофотосъемкой и функциональными методами исследования этой

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	ПИИЦ (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

территории, дает нам возможность восстановить хронологию последовательности развития этой культуры и таким образом, определить пути передвижения групп племен.



Рис. 2. – Общий вид памятника

Большинство стоянок Кельтаминарской культуры локализовано в зонах, в настоящее время пустынных и подвергнутых сильной эрозии бывшими дельтами, вблизи палеозер и рек, осушенных мест, которые в данное время, еще прослеживаются современной аэрокосмической съемкой (Brunet, Dabien-Francfort, 2012. -Р. 160-161). Таким образом, в пустыне Кызылкум насчитывается более тысячи стоянок данной культуры.

Следовательно, датировка стоянок Кельтаминарской культуры остается ограниченной и часто недостаточной для того, чтобы установить абсолютную хронологию этой культуры. А.В. Виноградов имел ограниченное количество анализов, полученными методом C^{14} . Он предложил новую хронологию Кельтеминарской культуры, разделенную на три этапа (Виноградов, Мамедов, 1975. -С. 212-230; Виноградов, 1981а. -С. 131-133): ранняя или

Дарьясай (VI тысячелетие), подкрепленная двумя датировками, происходящими из стоянки Учаши 131 ($6630 \pm 100-915$ и 6590 ± 130 - GFN 916; Виноградов и др., 1977. -С. 267-269); Жанбас - шестью датами, полученными на стоянке Толстов, датированной между концом V - первой половиной IV тысячелетий (Виноградов, 1981. -С. 86) и поздняя, относительно датированная III - началом II^{ого} тыс. до н.э.

Стоянка Аякагытма предоставила богатую археологическую коллекцию - около 50 000 каменных артефактов (Рис.3). Было получено за восемь сезонов много экземпляров глиняной посуды, украшений, продукции костной индустрии, образцы фауны и палеоботаники. Технологическое и типологическое изучение артефактов подтверждает принадлежность стоянки Аякагытма к кругу Кельтеминарской культуры, особенно к ее ранней фазе (Brunet, 2005а).

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIIHЦ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350



Рис.3. – Артефакты из стоянки Аякагытма

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

В них выделяются:

-микропластинчатая и пластинчатая индустрия, в основе техники микрорезца (притупление края, треугольники и рогатая трапеция) или в деталях: выемчатые орудия в большинстве;

-глиняная посуда, в тесте которой имеется примесь растительных и минеральных добавок, в большинстве своем не орнаментированная, маленькие и средние горшки сферической, открытой формы;

-украшения, состоящие в основном из подвесок в виде маленьких белых галек.

Conclusion

В результате раскопок проведенных экспедицией МАФАНЭК, обнаружены многочисленные очаги и печи. В Аякагытма удалось собрать значительное количество частиц древесного угля, имеющих хорошую сохранность. Таким образом, получены результаты датировок 38 образцов методом радиоуглеродного анализа. Наиболее точные даты относятся к периоду между 6400 и 6350 гг. до нашей эры (между 7375±40 BP - Lyon7241 и 7170±50 BP - Beta 267000), то есть это соответствует началу VII тысячелетия. Эта дата на 700 лет древнее, чем идентифицированная дата на соседнем Учаши 131. Этот памятник датируется 5400 лет до н.э. - середина VI тысячелетия (между 6370±40 BP - Beta 288874 и 6310±40 BP - Beta 310839), что позволяет получить наиболее точную хронологию неолитических культурных слоев, идентифицировавшихся с Аякагытмой и датировать их более ранней фазой Кельтеминара: конец VII - середина VI тысячелетия. Эти даты, в масштабе стоянки Аякагытма, привязаны к слоям, выявленных в различных жилых зонах (площадь сжигания, обжига глиняной посуды, расщепления кремня, изготовление украшений).

Геологические, седиментологические, палеоэкологические и экологические исследования, проводившиеся в пустыне Кызылкум Е.Д. Мамедовым и И. Н. Степановым способствовали уточнению хронологической интерпретации, выдвинутой советскими археологами (Виноградов, Мамедов, 1975. С. 237-252; Виноградов, 1981. С. 19-40). Это вызвало сомнения некоторых исследователей, которые требуют уточнить предварительные результаты, полученные недавно Узбекско-Французкой экспедицией. Наши результаты исследований, полученные с привлечением данных геоархеологии, геоморфологии, седиментологии, гранулометрии, палеоботаники и археозоологии, свидетельствуют о существовании влажного климата в голоцене, но главным образом, о присутствии значительных пустынных полей около этих прилегающих зон тугая, вдоль рек и

вокруг озер. Эти результаты побуждают нас предположить существование микроклиматических изменений, ведущих к образованию разнородных экологических условий в масштабе региона; последние изменения экосистемы, в контексте Кызылкумов (Brunet, Debaine-Francfort, 2012. -P. 166-167).

Действительно, нам представляется, что Зарафшанский регион, где очень много неолитических поселений Кельтеминарской культуры (Виноградов, 1981; Гулямов и др., 1966; Хужаназаров и др., 2005), Сагаганской культуры (Джуракулов, Холматов, 1991), позволяет допустить появление культуры Кельтеминар на основе местных мезолитических племен (Brunet, 2005. -P. 97-102). Не исключено и влияние северного Зауралья. Именно в этом регионе, в низовьях Зарафшана, известно наибольшее число поселений (Аякагытма, Учаши 84, 85, 131, 159, Ходжагумбас и т.д.), причем в ранние фазы (конец VI - середина VI тысячелетия), включая Лявлякан.

Во второй фазе, которая продолжается до конца IV тысячелетия, расширяется зона заселения Кельтеминарских племен, в целом: Кызылкумы заселяются полностью, частично территории Казахстана и Туркменистана (Виноградов, 1968; 1981. С. 78-89, Brunet, Debaine-Francfort, 2012. -P. 164-165). Результаты наших гео-археологических разведок в этом регионе, а также материалы Джанбас-кала 5, 10 и Таджики-Казган 2, 3, 6, 10 позволяют предположить существование энеолитического слоя в этой зоне. Последние данные изучения материалов, указывают на характерные следы технической традиции и стилистики Кельтеминарских элементов. Поэтому эти стоянки, на основе изучения археологического материала были отнесены, к третьей - последней фазе энеолита, IV-III тысячелетия до н.э. Эти материалы зафиксированы в таких регионах, как дельта Аякагытма (Виноградов, 1981. С. 68-70), Махандарья (Тузкан; Исламов, 1963), озера Лявлякан (Виноградов, Мамедов, 1975), средний и верхний Зарафшан (Аванесова, Джуракулова, 2008. С. 23). Все эти данные позволяют высказать мнение о постепенном интегрировании поздних групп Кельтеминара с племенами степной бронзы, о чем свидетельствуют недавние исследования (Brunet, 2011. -P. 195, 197-198).

Памятники Кельтеминарской культуры представляют одно из наиболее важных неолитических обществ Центральной Азии по своему географическому (Узбекистан, южный Казахстан, северный Туркменистан) и хронологическому (VII-III тыс. до н.э.) периодам и их связями с различными группами на территории северной и южной Азии.

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHH (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

References:

1. Avanesova, N. A., & Dzhurakulov, M. D. (2008). *Drevneyshie nomady Zeravshana // Kul'tura nomadov Tsentral'noy Azii* (Materialy Mezhdunarodnoy konferentsii. Samarkand, 22-24 noyabrya 2007 g.) Samarkand.
2. Brunet, F. (2005). Pour une nouvelle étude de la culture néolithique de Kel'teminar *H Paléorient. № 31-2, 2005a*.
3. Brunet, F. (2005). *La néolithisation en Asie centrale // Les marges : débitrices ou créatrices ? La mise en place du Néolithique et de ses prolongements à la périphérie des « foyers » classiques*. Paris, 2005b.
4. Brunet, F. (2007). *De l'imitation à l'emprunt dans les sociétés néolithiques et chalcolithiques d'Asie centrale: Ouzbékistan – Turkménistan - Iran // Mobilités, immobilismes. L'emprunt et son refus*. Paris.
5. Brunet, F. (n.d.). *Diffusion de techniques et interaction culturelle en Asie centrale et méridionale du Paléolithique supérieur au Chalcolithique // Transferts et interactions dans la très longue durée en Asie centrale et méridionale (Atelier PA-55), 4ème Congrès international du Réseau Asie et Pacifique*. Paris, 2011. http://www.reseau-asie.com/userfiles/rile/a02bninet_diffusions_tech_niques.cultures.pdf
6. Brunet, F. (n.d.). Comment penser la néolithisation en Asie Centrale L'émergence de nouveaux modèles de sociétés entre sédentaires et nomades *H Paléorient. №37-1, 2011b*.
7. Brunet, F., Debaine-Francfort, C. (2012). *L'espace temporairement apprivoisé : étude de cas (Ouzbékistan, Chine) // L'archéologie à découvert*. Paris.
8. Vanberg, B. I., Glushko, E. V., Tsvetinskaya, E. A. (1998). *Landschaftno-arkheologicheskoe issledovanie evolyutsii Prisarikamyshskoy del'ty Amudar'i s ispol'zovaniem distantsionnykh metodov // Rossiyskaya arkheologiya, № 1*. Moscow.
9. Vakturtskaya, N. N. (1959). *O poezdke v yuzhnye Kyzyl-kumy v 1955 g. // Poezdki v yuzhnye Kyzyl-kumy v 1955 g. // Materialy Khorezmskoy ekspeditsii. Vyp. 1 (Polevoe issledovanie Khorezmskoy ekspeditsii v 1954-1956 gg)*. Moscow.
10. Vinogradov, A. V. (1968). *Neoliticheskie pamyatniki Khorezma*. Moscow.
11. Vinogradov, A. V., & Mamedov, E. D. (1975). *Pervobytnyy Lyavlyakan: Etapy drevneyshego zaseleniya i osvoeniya vnutrennikh Kyzylkumov*. Moscow.
12. Vinogradov, A. V. (1981). *Okhotniki i rybolovy Sredneaziatskogo mezhdurech'ya*. Moscow.
13. Vinogradov, A. V., Itina, M. A., & Yablonskiy, L. T. (1986). *Drevneyshie naseleniya nizoviy Amu-Dar'i. Arkheologo-paleantropologicheskoe issledovanie*. Moscow.
14. Vinogradov, A. V. (1957). *K voprosu yuzhnykh svyazyakh Kel'taminarskoy kul'tury. SA. №1*, Moscow.
15. Vinogradov, A. V. (1960). *Novye neoliticheskie nakhodki Khorezmskoy ekspeditsii AN SSSR v 1957 g. // Materialy Khorezmskoy ekspeditsii. Vyp. 4 (Polevoe issledovanie Khorezmskoy ekspeditsii v 1957 g)*. Moscow.
16. Vinogradov, A. V., Mamedov, E. D., & Sulerzitskaya, L. D. (1977). *Pervye radiouglerodnye daty dlya neolita Kyzylkumov. SA. №4*. Moscow.
17. Dzhurakulov, M. D., & Mamedov, E. D. (1986). *Geologiya arkheologicheskikh pamyatnikov Zeravshana: kamenny vek*. Tashkent.
18. Dzhurakulov, M. D., & Kholmatov, N. U. (1991). *Mezolit i neolit srednego Zarafshana, Sazaganskaya kul'tura*. Tashkent.
19. Formozov, A. A. (1951). *K voprosu o proiskhozhdenii andronovskoy kul'tury. Kratkie soobshcheniya, № 39*. Moscow.
20. Gerasimov, I. P. (1978). *The Past and Future of The Aral and The Caspian Sea // The Environment History of the Near and Middle East Since the Last Ice Age*. New-York.
21. Gulyamov, Y. G., Islamov, U. I., & Askarov, A. (1966). *Pervobytnaya kul'tura i vznikovenie oroshaemogo zemledeliya v nizov'yakh Zarafshana*. Tashkent.
22. Islamov, U. I. (1963). *Mnogosloynnaya stoyanka Keltaminarskoy kul'tury v nizovykh Zarafshana. IMKU, № 4*.
23. Itina, M. A. (1959). *Pervobytnaya keramika Khorezma // Trudy khorezmskoy arkheologo-etnograficheskoy ekspeditsii. T. IV (Keramika Khorezma)*. Moscow.
24. Khudzhazarov, M., Szymczak, K., & Brunet, F. (2005). *Some Neolithic and Early Bronze Age Finds from Makhandaria Region. Istoriya Uzbekistana v arkheologicheskikh i pis'mennykh istochnikakh*. Tashkent.
25. Krizhevskaya, L. Y. (1968). *Neolit Yuzhnogo Urala*. Leningrad.

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

26. Letolle, R., & Mainguet, M. (1998). *Grands lacs d'Asie*. Paris.
27. Lisitsyna, G. N. (1978). *Stanovlenie i razvitie oroshaemogo zemledeliya v Yuzhnoy Turkmenii*. Moscow.
28. Lyonnet, B. (1996). *Sarazm (Tadjikistan). Céramiques (Chalcolithique et Bronze Ancien)*. Mémoires de la Mission Archéologique Française en Asie Centrale, tome VII. Paris.
29. Szymczak, K., & Khudzhanazarov, M. (2006). *Exploring the Neolithic of the Kyzyl-Kums: Ayakagytma "the Site" and other collections*. Warsaw.
30. Tolstov, C. P. (1958). *Trudy Khorezmskoy arkheologo-etnograficheskoy ekspeditsii, II* (Arkheologicheskie i etnograficheskie raboty Khorezmskoy ekspeditsii 1949-1953 gg.). Moscow.
31. Tolstov, C. P. (1959). *Materialy Khorezmskoy ekspeditsii. T. 1 (Polevye issledovaniya Khorezmskoy ekspeditsii v 1954-1956 gg)*. Moscow.
32. Tolstov, C. P. (1960). *Materialy Khorezmskoy ekspeditsii. T. 4 (Polevye issledovaniya Khorezmskoy ekspeditsii v 1957 godu)*. Moscow.
33. Tolstov, C. P. (1963). *Materialy Khorezmskoy ekspeditsii. T. 6 (Polevye issledovaniya Khorezmskoy ekspeditsii v 1958-1961 gg)*. Moscow.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 21.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Rustam Daniyrovich Yuldashev
Independent applicant,
Samarkand state University
rustam.yuldashev78@mail.ru

THE ROLE AND SIGNIFICANCE OF INNOVATIVE EDUCATION IN THE DEVELOPMENT OF HIGHER EDUCATION

Abstract: In this scientific article reviewed role of system high education in social progress and the meaning “innovational education” in developing high education, foundations of innovative politic state in process of modernization high education.

Also, in this article included philosophical definitions of ideas such as «innovation», “system of uninterrupted education “and mentioned phase of origin process of innovative education, peculiarity quality; tools and methods their realization.

Key words: education, system of uninterrupted education, high education, innovation, Innovational education, politic.

Language: Russian

Citation: Yuldashev, R. D. (2019). The role and significance of innovative education in the development of higher education. *ISJ Theoretical & Applied Science*, 05 (73), 118-122.

Soi: <http://s-o-i.org/1.1/TAS-05-73-19> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.19>

РОЛЬ И ЗНАЧЕНИЕ ИННОВАЦИОННОГО ОБРАЗОВАНИЯ В РАЗВИТИИ ВЫСШЕГО ОБРАЗОВАНИЯ

Аннотация: В данной научной статье всесторонне освещены место системы высшего образования в социальном развитии общества, роль и значение инновационного образования в развитии высшего образования, принципы инновационной политики государства в этой сфере. Вместе с тем даны философские определения таких понятий, как «инновация», «система образования», «инновационное образование», показаны этапы протекания процесса инновационного образования, его специфические особенности, средства и методы.

Ключевые слова: образование, система образования, высшее образование, инновация, инновационное образование, инновационная политика, онтология, гносеология, аксиология.

Introduction

Система высшего образования во всем мире веками наряду с подготовкой специалистов, обеспечивающих социальное развитие общества, также постоянно постоянно занимается открытиями, изобретениями, усовершенствованием уже существующих предметов. В настоящее время особое значение приобретает вопрос создания нового поколения техники и технологий, применяемых в сферах материального и духовного производства, отвечающих за создание различных благ, удовлетворяющих потребности и интересывозрастающего из года в год населения земного шара. Это означает существование необходимости повышения непрерывной

модернизации всех сфер жизни, организации инновационного подхода к ней.

Materials and Methods

Что же такое инновация? Этому темину в “Толковом словаре узбекского языка” дано следующее определение: «Инновация [с англ. Innovation– нововведение, открытие] – это средства, расходуемые в экономике в целях внедрения новых видов (поколения) техники и технологии; новшества в передовой технике и технологии, управлении и других сферах и их применение в различных отраслях; появившиеся в самое последнее время новые явления (единицы языка) в определенном языке, в основном в его

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

морфологии»¹ [1]; в «Философии: энциклопедическом словаре» его определение следующее: «Иновация (с англ. innnovationas — внедренное новшество, открытие) — создание не существовавших ранее предметов, структур, ценностей и методов деятельности (технологий), выражение возникших новшеств в знаках, образах и символах, процесс внедрения во всех сферах жизни человека и общества²[2], в «Большой экономической энциклопедии»: «Деятельность, связанная с внедрением новшеств в проектно, технологическом, материальном, организационном аспектах производства»³[3], И.Т.Балабанов дает следующее определение: «Иновация – это материализованный результат, достигнутый посредством вложения средств в новые формы организации техники и технологии, труда, производства, обслуживания и управления, а также методов контроля, расчета, планирования, анализа и др.»⁴[4], С.Е.Крючкова считает, что: «Иновация – это парадигмальная деятельность, направленная на обновление существующих форм и методов научно-исследовательской деятельности, создание новых и целей и средств для ее осуществления»⁵[5], по мнению Н.А.Шермухамедовой: «Иновация означает эффективное использование научно-технических достижений»⁶[6].

Обобщив все вышеприведенных определения и рекомендации, мы видим, что, *во-первых*, иновация – состоит не из любой идеи, а только самых передовых идей; *во-вторых*, эта самая передовая идея воплощена в достижениях науки и техники; *в-третьих*, достижения проявляются в качестве передовой техники и технологии; *в-четвертых*, которые применяются в различных сферах социальной жизни общества, *в-пятых*, являются средством, вызывающим новые качественные изменения там, где они применяются.

В процессе освещения данных вопросов, естественно, возникает вопрос о том, какие виды иноваций существуют. М.К.Пардаев, Т.Х.Мамасоатов, О.М. Пардаев классифицируют

иновацию, то есть делят ее на различные виды по следующим признакам или точкам зрения: «создатели; факторы конкурентоспособности; выражение интересов; внедрение на практике; экономическое содержание; отрасли; время действия»⁷[7]. Принимая эту классификацию в качестве новшества и, принимая во внимание поставленную перед нами цель – высказать мнение о применении иновации в отраслях системы образования социальной жизни, в частности, в высшем образовании, на наш взгляд, нам следует начать с ответа на вопрос о том, что такое система образования.

В статье 9 Закона Республики Узбекистан “Об образовании” определено: «Система образования Республики Узбекистан состоит из:

- государственных и негосударственных образовательных учреждений, реализующих образовательные программы в соответствии с государственными образовательными стандартами;
- научно-педагогических учреждений, выполняющих исследовательские работы, необходимые для обеспечения функционирования и развития системы образования;
- органов государственного управления в области образования, а также подведомственных им предприятий, учреждений и организаций.

Система образования Республики Узбекистан является единой и непрерывной», указано, что она реализуется в следующих видах образования: “дошкольное образование; общее среднее образование; среднее специальное, профессиональное образование; высшее образование; послевузовское образование; повышение квалификации и переподготовка кадров; внешкольное образование”⁸[8] (статья 10). Исходя из сущности и содержания требований, указанных в законе, можно дать следующее определение понятию система образования. **Система образования** – это расположение в пространстве и во времени осуществляющих свою непрерывную деятельность, основанную на диалектическом

¹См.: Ўзбек тилининг изоҳли луғати. Ж.П. – Т.: «Ўзбекистон миллий энциклопедияси» Давлат илмий нашриёти, 2006. – Б.212-бет.

²См.: Фалсафа: энциклопедик луғат. – Т.: «Ўзбекистон миллий энциклопедияси» Давлат илмий нашриёти, 2006. – Б.138 (344-бет)

³См.: Большая экономическая энциклопедия. – М.: Эксмо, 2007. – С.257.

⁴См.: Балабанов И.Т. Иновационный менеджмент. – СПб.: «Питер», 2000. – С.11.

⁵См.: Крючкова С.Е. Иновация и их роль в современном мире // Синергетика – нелинейность – глобализм. Гл. в кол. монография. – М.: Изд-во МГТУ «Станкин», – С.57.

⁶См.: Шермухамедова Н.Илмий тадқиқот методологияси. Дарслик. – Т.: «Fanvatechnologiya», 2014. – Б.174.

⁷См.: Пардаев М.К., Мамасоатов Т.Х., Пардаев О.М. Модернизация, диверсификация ва иновация – иктисодий ўсишнинг муҳим омиллари. Монография. – Т.: «Наврўз», 2014. – Б.43.(104 б.)

⁸Ўзбекистон Республикасининг Қонуни. Таълим тўғрисида // Таълим фаолиятини тартибга солувчи норматив-ҳуқуқий ҳужжатлар тўплами. – Т.: «Адолат», 2008. – Б.37-38.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

единстве объектов, состоящих из учреждений, организаций и предприятий, занимающихся такими видами деятельности, как образование и воспитание, осуществление научных изысканий, управление на основе утвержденных и признанных государством и научным сообществом, и субъектов, занимающихся преподаванием и воспитанием и получающих образование и воспитание, осуществляющих научные исследования, управление и оказание услуг. Система образования обладает свойством изменчивости. Она изменяется в зависимости от сущности создаваемых, то есть возникших и возникающих на исторической сцене государств. В государстве, основанном на тоталитарном управлении, система образования опирается на командно-административную систему, а в государстве, основанном на демократическом управлении, устанавливается народная, гуманистическая система образования. Вместе с тем в системе образования в зависимости от соотношения в ней светских и религиозных учений могут существовать светского содержания система образования и система образования религиозного направления. Система образования в нашей стране носит народный, гуманистический, светский характер. Развитие системы образования осуществляется в зависимости от сущности и содержания государственной структуры. С этой точки зрения на развитие системы образования в нашей стране выделяется 34,6% средств государственного бюджета (10860,5 млрд. сумов) в год⁹[9]. Между тем этот показатель в развитых странах мира не превышает 10-15%. Это означает, что целью развития системы образования в стране является обеспечение благополучной жизни народа, соответствующей его кипучей деятельности, труда, основанного на квалифицированных знаниях. Поэтому в стране реализуется инновационная политика по видам образования, указанным в законах, принятых в целях совершенствования и дальнейшего развития системы образования.

Важное значение имеет внедрение инновации, являющейся одним из важных звеньем государственной инновационной политики, проводимой в целях обеспечения непрерывности социального развития общества, в систему высшего образования в качестве одного из видов образования (инновационного образования). Поскольку высшее образование обеспечивает

подготовку специалистов для всех сфер социальной жизни общества и их отраслей.

Инновационное образование – это целостная система, состоящая из протекающих непрерывно процессов, обеспечивающих достижение определенных результатов посредством использования средств, которые являются воплощением самых новых идей в достижениях науки и техники, проявляющихся в качестве передовой техники и технологии, вызывающих новые качественные изменения в преподавании и обучении в процессе усвоения субъектами преподавания и получения образования и воспитания систематизированных знаний, умений и навыков. Формирование и протекание инновационных образовательных процессов в системе высшего образования можно разделить на следующие этапы:

первый – это возникновение новой, самой передовой идеи, и возникновение концепции создания новшеств на этой основе;

второй – совершение открытий, создание нового на основе концепции создания новшеств;

третий – умение применить на практике созданные новшества (инновации)

четвертый – широкое внедрение новшества;

пятый – господство, преобладание нового;

шестой – появление очередной альтернативы данному новшеству;

седьмой – превращение в конечном итоге новшества в старое, обеспечение альтернативным новшеством перехода инновационного объекта с одного качественного уровня на более высокий качественный уровень¹⁰[10].

Conclusion

В системе высшего образования существуют специфические особенности внедрения инновационного образования. К ним относятся:

а) более высокий уровень грамотности контингента высшего образования по сравнению с другими, то есть основная их часть состоит из профессоров и преподавателей, прочно усвоивших светские знания и обладающие определенными научно-философским мировоззрением студентов;

б) органическое соответствие на диалектической основе образования-воспитания, научного творчества и научных исследований в системе высшего образования;

⁹См.: Ўзбекистон рақамларда 2015 йил. – Т.: Ўзбекистон Республикаси Давлат Статистика Қўмитаси Тезкор матбаа ва техник хизмат кўрсатиш бўлими, 2015. – Б.27,31.

¹⁰См.: Азизходжаева Н.Н. Педагогик технологиялар ва педагогик маҳорат. – Т.: Молия, 2006. – Б.19.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

в) мощь и широкомасштабность материально-технической базы и научного потенциала;

г) осуществление деятельности сформированных ведущими учеными научных школ на основе преемственности;

д) осуществление деятельности научных экспертов, определяющих место и продолжительность существования в обществе каждой новой идеи, научного открытия, изобретения, практической разработки и прочего;

г) налаженность научного сотрудничества между высшими образовательными учреждениями;

е) организованность обмена опытом по организации учебной и научно-исследовательской деятельности с высшими образовательными учреждениями зарубежных стран;

ё) существование уровня профессионально-инновационной компетентности профессорско-преподавательского состава в превращении в действительность возможностей использования современных педагогических и информационных технологий.

Составными частями инновационного образования являются средства и методы, применяемы в процессе внедрения совершенно нового типа техники и технологий, возникших из материализации самых передовых идей, способных качественно изменить или кардинально совершенствовать традиционную систему образования. К применяемым при этом инновационным *средствам* относятся: учебники, учебные пособия, информационные и технические установки, наглядные пособия, радио, телевидение, компьютеры, видеопроекторы, лабораторное оборудование, символические

знаки, изобразительные наглядные материалы; к инновационным *методам* относятся – «Мозговой штурм», «Дебаты», «Работа в группах», «Модифицированное обучение», «Импровизация», «Мультимедиа», «Технология бумеранг», «Технология веера», «Проблемная ситуация», «Критическое мышление» и прочее.

Объект инновационного образования в *онтологическом* аспекте составляют совершенно новые предметы, изобретения, открытия, возникшие в результате материализации самых передовых идей; их *гносеологическую* основу составляют субъекты их открывшие, широко их внедряющие или стремящиеся их освоить, а также накопленные ими знания. Между объектом и субъектом инновационного образования не существует четкой границы. В *аксиологическом* аспекте они для большинства людей относятся к разряду феноменов, имеющих статус материальных и духовных ценностей. Поскольку, если инновационный характер, то есть способность каждого новшества, внесенного в материальную и духовную жизнь общества, переведения из одного качественного состояния в новое или кардинально совершенствовать соответствует национальным и общечеловеческим интересам, то оно является феноменом обязательно имеющим статус ценности. Ценности же всегда служат социальному развитию общества. В связи с этим инновационное образование является самым оптимальным средством, обеспечивающим не только непрерывное развитие высшего образования, но и социально-экономического, политико-правового, духовно-культурного развития всего общества.

References:

1. (2006). *Uzbek tilining izoxli lugati. Zh.II.* (p.212). Tashkent: «Uzbekiston milliy entsiklopediyasi» Davlat ilmiy nashrieti.
2. (2006). *Falsafa: entsiklopedik lugat.* (p.138). Tashkent: «Ўzbekiston milliy entsiklopediyasi» Davlat ilmiy nashrieti.
3. (2007). *Bol'shaya ekonomicheskaya entsiklopediya.* (p.257). Moscow: Eksmo.
4. Balabanov, I. T. (2000). *Innovatsionnyu menedzhment.* (p.11). SPb.: «Piter».
5. Kryuchkova, S. E. (2007). *Innovatsiya i ikh rol' v sovremennom mire// Sinergetika–nelineynost' – globalizm.* Gl. v kol.monografiya. (p.57). Moscow: Izd-vo MGTU «Stankin».
6. Shermuxamedova, N. A. (2014). *Ilmiy tadqiqot metodologiyasi. Darslik.* (p.174). Tashkent: «Fan vatexnologiya».
7. Pardaev, M. K., Mamasoatov, T. K., & Pardaev, O. M. (2014). *Modernizatsiya, dversifikatsiya va innovatsiya – iqtisodiy yisishning muxim omillari.* Monografiya. (p.43). Tashkent: «Navr'z».
8. (2008). *Uzbekiston Respublikasining Qonuni. Ta"lim t'yarisida. Ta"lim faoliyatini tartibga*

Impact Factor:	ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHII (Russia) = 0.156	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

soluvchi normativ-huqukiy xuzhzhatlar t'plami. (p.39). Tashkent: «Adolat».

9. (2015). *Uzbekiston raqamlarda 2015 yil.* (p.27, 31). Tashkent: Uzbekiston Respublikasi Davlat

Statistika K'ymitasi Tezkor matbaa va texnik khizmat k'rsatish b'limi.

10. Azizkhodzhaeva, N. N. (2006). *Pedagogik texnologiyalar va pedagogik maxorat.* (p.19). Tashkent: Moliya.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 21.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Mexriniso Azamatovna Yarmatova
Senior lecturer, Russian language teacher;
Mexriniso_Y@mail.ru

Shoxida Egamberdievna Turaeva
Senior lecturer, Russian language teacher;
Department of Uzbek and Russian languages
Karshi Engineering-Economic institute

TEXT ANALYSIS IN GEODESY AND MAPPING ENGINEERING CONTEXTS

Abstract: *In teaching Russian language, corpus-linguistics plays crucial role in text analysis; collocations, concordances, types and tokens, frequency-words occurring in target language. Even single word gives a written context changes or other meaning. In this study, we conducted a research on the issues of constructing words such as; single words, collocations, and frequency-words occur in Russian language context. In the classes of Russian language for specific purposes, we focused on technical context of the geodesy and mapping field to analyze because there are some tokens and types which students of engineering need to acquire in order to use them in spoken context. However, we may see strong tokenization in the context of geodesy and mapping engineering. This paper highlights discussions of scholars on the issues of corpus linguistics, especially, analysis of collocations, tokens and types occurring in written context.*

Key words: *collocations, frequency words, written context.*

Language: English

Citation: Yarmatova, M. A., & Turaeva, S. E. (2019). Text Analysis in Geodesy and Mapping Engineering Contexts. *ISJ Theoretical & Applied Science*, 05 (73), 123-125.

Soi: <http://s-o-i.org/1.1/TAS-05-73-20> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.20>

Introduction

The growth of corpus linguistics (5) has convinced linguists that vocabulary is much more than the 'unordered list of all lexical formatives' which Chomsky (2:84) referred to it. Corpora reveal that much of our lexical output consists of multi-word units; language occurs in ready-made chunks to a far greater extent than could ever be accommodated by a theory of language insistent upon the primacy of syntax. Recent developments in the study of lexis have generated new applications within lexicography and language teaching, offering the possibility of a better understanding of the nature of the lexicon, especially multi-word phenomena. Besides, the notion of collocation shifts the emphasis from the single word to pairs of words as integrated chunks of meaning in the contexts, and collocation has become an uncontroversial element in a good deal of language description and pedagogy. Firth famously proposed that the meaning of a word was as much a matter of how the word combined in context with other words (i.e., its collocations) as any inherent properties of

meaning it possessed of itself: *dark* is part of the meaning of *night*, and vice-versa, through their high probability of co-occurrence in texts (6). Collocation studies show, most importantly, that a good deal of semantically transparent vocabulary is to a greater or lesser degree fossilized into restricted patterns (1). Moreover, there are some tokens and types, frequent words occurring in the context of specialty, which is more needed to acquire and use in target environment. Present study shows text analysis, indicating of discussion; collocations, corpora, and tokens and types occurring geodesy and mapping engineering in Russian language.

1. Single Word

In the study of the lexicon, the single word has remained, until recently, relatively unchallenged as the basic unit of meaning and as the focus in the study of lexical acquisition in second and foreign languages. This is not without good reason: single words form a substantial part of the lexicon of Russian language and are perceived in pedagogy as the central units to be

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
ПИИЦ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

acquired. Other units consisting of more than one word, such as phrasal verbs, compounds and idioms are often thought of as items belonging to higher levels of achievement. There are, of course, exceptions to this: greetings and other phatic expressions (e.g., Как твои дела? До скорой встречи, большое спасибо), specialized functional phrases (e.g., С днем рождения, удачи), basic prepositional phrases (e.g., утром, дома), and common compounds (e.g., автостоянка, регистрация) are often taught and/or acquired even at elementary level.

2. Collocation in Russian language context

Recent developments in the study of lexis have generated new applications within lexicography and language teaching, offering the possibility of a better understanding of the nature of the lexicon, especially multi-word phenomena. The collocational dimension of the mental lexicon has been increasingly seen as playing a vital role in respect of both L1 acquisition and L2 acquisition (3). Proponents of formula-based approaches to language learning maintain that the learning of fixed formulas is an essential aspect of the language learning process, and that it leads to the development of creative aspects of language (10: 305-307; 7: 114-116). According to this account, sequence learning lies at the very heart of language learning in that it involves “learning sequences of words (frequent collocations, phrases, and idioms)” and sequences within words (4: 45-46). Learning vocabulary involves sequencing at the level of syllable structures, while learning discourse involves sequencing of words, collocations and longer phrases within the frequency-based approach collocations are generally regarded as units made up of words that co-occur within a certain distance from one another with higher frequency than would be expected on the basis of coincidence or linguistic rules (3: 11). L1 users have normally accumulated a huge number of collocations and longer lexical chunks by the time L1 is a fully developed system. In the case of adult L2 learners, however, collocational knowledge tends to lag behind (9:1-24). While there is some evidence to suggest that adult language learners are relatively successful at producing simple conversational formulas at initial stages of L2 learning (8), at higher levels of L2 proficiency producing natural-sounding L2 output that abounds in native-like collocations appears to pose a somewhat larger challenge for L2 learners. We found that some frequency occurring words may exist in every Russian language context of geodesy and mapping because each context connects with each other by meaning.

3. Frequency occurring words in Russian language context

A word (or word-form) may be quite frequent, but majority, or even all, of its occurrences might be

in just one or two texts, in which case, although its frequency might look significant, its range might be quite small. The useful words for the learner are those words which are frequent and have a fairly wide range that is those which occur across a wide variety of texts. Information about range can be presented in the form of statistical comparison between the occurrence of a word in one part of a corpus (e.g. just the scientific texts in the corpus) and its occurrence in the corpus as a whole. Any word that gets a differential of around 16 occurs with more or less the same frequency in the scientific texts as in the whole corpus. Any word with a lower differential is not very characteristic of scientific and learned English. Words with high differentials are characteristic of scientific and learned language (5: 40). We may see frequent occurring words in the contexts of one specialty; geodesy and mapping engineering; **Штатив геодезиста, фотоштативов, неподвижно зафиксировать, трепер, прибор-тахеометр, нивелир, вешка, лазерная рулетка, геодезических бригад, рулетка, трубо-кабелеискатель.** These technical words often occur in the context of geodesy and mapping engineering as well as mining engineering in Russian language context, and they are considered as tokens and types.

4. Tokens and types

Lexical variation takes as its starting point the distinction between token and type. If a text is 50 words long, it is said to contain 50 tokens, but many of these tokens may be repeated within the text and this may give us a considerable lower total of types; she promised him she would write to him and write to him she did ‘there are 14 tokens but some are repeated; there are only 8 types, (she’, promised, him, would, write, to, and, did.)’. The ratio between tokens and types for this sentence is 14:8; the difference between the two numbers is great, indicating a fairly low load of differing items. In the sentence ‘as the trees grow gold and brown, then autumn has come to replace summer’, we have 14 tokens and 14 types, so the vocabulary load is quite high, with no repetition. Lexical variation counts do give us a rough measure of how many new items are introduced into a text as it unfolds; this may not be the same as new words for a language learner, but it can be a useful measure in predicting the likely degree of difficulty a text might present (5.42). In the context of geodesy and mapping engineering, tokens may occur more than types;

1). **Штатив**; очень простой инструмент **геодезиста**. Многие сталкивались с ним при съемках **фотографий** или **фильмов** в хорошем качестве. От **фотоштативов** геодезические отличаются в основном простотой **конструкции** и **неприхотливостью** в использовании.

2). Основная задача геодезического штатива- **неподвижно зафиксировать** прибор, который на него ставится над определенной точкой/пунктом на земле. На штатив сначала ставится **трепер-**

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	ПИИЦ (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

специальное устройство для **центрирования** над точкой и **горизонтирования прибора**. Потом уже ставится **прибор-тахсметр, нивелир** и т.д. Различают деревянные, металлические и штативы из композитных материалов.

According to the 1st context, there are 30 tokens and 30 types in the corpus of the geodesy and mapping engineering, and we found frequency occurred words within corpus of the geodesy and mapping engineering, they are; **Штатив** this main instrument occurs also in other written contexts of this field.

According to the 2nd context, there are 45 tokens and 40 types in the context of geodesy and mapping engineering, and we found that instrument “**трегер**” frequent word also occurred in other texts of this field of.

Conclusion

In the classes of Russian language for specific purposes, we focus on professionally-oriented context

to teach and design the class, coloring it because there are some tokens and types which frequently occurs not only in one text but also does in other written contexts which tell us about the subject matter and those learners need to know. We study collocations which modify the words related to, and vocabulary words which are tokens and types. We analyzed technical text to find out whether how many times one word occur in other sentences within specialty, and how many tokens and types does it consist of. We addressed to the discussions of scholars on the issues of collocations, tokens and types, corpora. As a result, findings were shown in the above-mentioned text examples.

References:

1. Aisenstadt, E. (1981). Restricted collocations in English Lexicology and lexicography. *ITL Review of Applied Linguistics* 53: 53-61.
2. Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge Mass: MIT Press
3. Durrant, P., & Schmitt, N. (2009). “To what extent do native and non-native writers make use of collocations?” *International Review of Applied Linguistics*.
4. Ellis, N. (1996). “Sequencing in SLA: Phonological memory, chunking, and points of order”. *Studies in Second Language Acquisition* 18: 91-126.
5. McCarthy, M. (1998). *Spoken Language and Applied Linguistics*. Cambridge: Cambridge University Press.
6. McCarthy, M. (2006). *Explorations in Corpus Linguistics*. Cambridge University Press. London.
7. Nattinger, J. R., & DeCarrico, J. S. (1992). *Lexical Phrases and Language Teaching*. Oxford: Oxford University Press.
8. Pawley, A., & Syder, F. H. (1983). “Two Puzzles for Linguistic Theory: Nativelike Selection and Nativelike Fluency.” In J. C. Richards and R. W. Schmidt (Eds.). *Language and Communication*. London: Longman.
9. Shokouhi, H. (2010). “Collocational Knowledge Versus General Linguistic Knowledge among Iranian Efl Learners”. *The Electronic Journal for English as a Second Language* 13 (4): 1-24.
10. Tomasello, M. (2003). *Constructing a Language: A Usage-Based Theory of Language Acquisition*. London: Harvard University Press.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 21.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Mavjuda Ergashevna Suyarova
Senior lecturer, English language teacher

Zukhra Allaberdieвна Zulfiqorova
English language teacher;
Department of Foreign languages
Karshi Engineering-Economic institute

TEXT ANALYSIS IN TECHNICAL ENGLISH

Abstract: *In teaching ESP courses, words play crucial role in text analysis; collocations, concordances, types and tokens, frequency-words occurring in technical language. Even single word gives a written context broad meaning. In this study, we conducted a research on the issues of constructing words such as; single words, collocations, and frequency-words occur in petroleum engineering context. In the classes of English for specific purposes, we mostly focused on technical words related to the field of petroleum engineering because there are some tokens and types which students of engineering need to acquire in order to use them in target environment both in written and oral forms. This paper highlights discussions of scholars on the issues of corpus linguistics, especially, analysis of collocations, tokens and types occurring in written context.*

Key words: *collocations, frequency words, written context.*

Language: *English*

Citation: *Suyarova, M. E., & Zulfiqorova, Z. A. (2019). Text Analysis in Technical English. ISJ Theoretical & Applied Science, 05 (73), 126-128.*

Soi: <http://s-o-i.org/1.1/TAS-05-73-21> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.21>

Introduction

Recent developments in the study of lexis have generated new applications within lexicography and language teaching, offering the possibility of a better understanding of the nature of the lexicon, especially multi-word phenomena. Besides, the notion of collocation shifts the emphasis from the single word to pairs of words as integrated chunks of meaning in the contexts, and collocation has become an uncontroversial element in a good deal of language description and pedagogy. Languages are full of strong collocational pairs and, therefore, collocation deserves to be a central aspect of vocabulary study. Knowledge of collocational appropriacy is part of the native speaker's competence, and can be problematic for learners in cases where collocability is language – specific and does not seem solely determined by universal semantic constraints. Even very advanced learners often make inappropriate or unacceptable collocations. Even advanced learners often make inappropriate or unacceptable collocations, and knowledge of collocation is knowledge of what words are most likely to occur together (6:12-14)

Moreover, there are some tokens and types, frequent words occurring in the context of specialty,

those are more needful to acquire and use in target environment. Present study shows text analysis, indicating of discussion; collocations, corpora, and tokens and types occurring in the contexts of petroleum engineering in Russian language.

1. Collocation in English language context

The collocational dimension of the mental lexicon has been increasingly seen as playing a vital role in respect of both L1 acquisition and FL acquisition (2). Collocations (e.g., make a mistake; tell the truth; take a photo; running water; narrow escape; sore throat; wide awake; deeply religious; at school; on purpose), along with other kinds of multiword expressions sometimes subsumed under the umbrella term formulaic language (11), have been attracting an increasing amount of attention in SLA circles in recent years. Many authors working in the domain of TESOL, in particular, have emphasized the need to regard collocation learning as an essential part of second language education (3; 7; 10).

In fact, most multiword expressions, including collocations, are to some extent non-compositional (8). For example, run in running water does not denote the kind of rapid bipedal, self-propelled motion that

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

most people would think of when presented with the word run in isolation. The same applies to the use of this verb in run a business, run the risk, and run a bath. In order to see the non-compositional nature of an expression, it may be necessary to adopt the perspective of a language learner. Thus, a native speaker of English may regard catch a cold as totally compositional and so perfectly transparent, but not a learner of English who tries to make sense of the expression through reading catch as an intentional act (as in hunting, for example). So, when we say that we confine our discussion to the scenario in which learners interpret an encountered collocation as being transparent, we do not mean that their interpretation is necessarily accurate since, as just indicated, the collocation may be deceptively transparent. However, when a learner takes a collocation encountered in a text to be semantically transparent, one might be hopeful that the attention which learner would otherwise allocate to working out the meaning of the phrase can be allocated instead to the precise wording of the phrase (1).

2. Frequency occurring words in authentic contexts

A word (or word-form) may be quite frequent, but majority, or even all, of its occurrences might be in just one or two texts, in which case, although its frequency might look significant, its range might be quite small. The useful words for the learner are those words which are frequent and have a fairly wide range that is those which occur across a wide variety of texts. Information about range can be presented in the form of statistical comparison between the occurrence of a word in one part of a corpus (e.g. just the scientific texts in the corpus) and its occurrence in the corpus as a whole. Any word that gets a differential of around 16 occurs with more or less the same frequency in the scientific texts as in the whole corpus. Any word with a lower differential is not very characteristic of scientific and learned English. Words with high differentials are characteristic of scientific and learned language (5). We may see frequent occurring words in the contexts of one specialty; petroleum engineering; **sedimentary rocks, fossil fuels, petroleum, diesel, oil fields, kerosene, propane, carbohydrate, methane, hydrocarbon, liquid fuel, gaseous fuel, oxygen, overburden and etc.** These technical words often occur in the context of petroleum engineering as well as mining engineering in technical English and they are considered as technical vocabulary words to acquire.

3. Tokens and types

Lexical variation takes as its starting point the distinction between token and type. If a text is 50 words long, it is said to contain 50 tokens, but many of these tokens may be repeated within the text and this may give us a considerable lower total of types;

she promised him she would write to him and write to him she did 'there are 14 tokens but some are repeated; there are only 8 types, (she', promised, him, would, write, to, and, did,). The ratio between tokens and types for this sentence is 14:8; the difference between the two numbers is great, indicating a fairly low load of differing items. In the sentence 'as the trees grow gold and brown, then autumn has come to replace summer', we have 14 tokens and 14 types, so the vocabulary load is quite high, with no repetition. Lexical variation counts do give us a rough measure of how many new items are introduced into a text as it unfolds; this may not be the same as new words for a language learner, but it can be a useful measure in predicting the likely degree of difficulty a text might present (6.42). In the context of petroleum engineering, tokens may occur more than types;

1). **Fossil Fuels** hold energy stored in plant **tissues** by **photosynthesis** millions of years ago. When these ancient plants and the animals that fed on them died, they were buried in **sediments**, where Earth's heat and compression from the weight of overlying rock eventually turned the deposits into **coal, oil, and natural gas.**

2). The most common **aero-geophysical maps** are **magnetometer** maps which record the variations in the earth's magnetic field with high degree of accuracy. The optimal selection of altitude and spacing as well as choice of instrumentation is important.

According to the 1st context, there are 52 tokens and 51 types in the corpus of the petroleum engineering, and we found frequency occurred words within corpus of the petroleum engineering, they are; **fossil fuel, sediments**, those frequency words occur also in other written contexts of this field.

According to the 2nd context, there are 37 tokens and 35 types in the context petroleum engineering and we found that "**magnetometer**" frequent word also occurred in other texts of this field of.

Conclusion

In the classes of English for specific purposes, we focus on professionally-oriented context to teach and design the class, coloring it because there are some tokens and types which frequently occur not only in one text but also do in other written contexts which tell us about the subject matter and those learners need to acquire. We study collocations which modify the words related to, and vocabulary words which are tokens and types. We analyzed technical text to find out whether how many times one word occur in other sentences within specialty, and how many tokens and types does it consist of. We addressed to the discussions of scholars on the issues of collocations, tokens and types. As a result, findings were shown in the above-mentioned text examples.

Impact Factor:	ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

References:

1. Barcroft, J. (2002). "Semantic and structural elaboration in L2 lexical acquisition". *Language Learning* 52: 323-363
2. Durrant, P., & Schmitt, N. (2009). "To what extent do native and non-native writers make use of collocations?" *International Review of Applied Linguistics*.
3. Lewis, M. (1993). *The Lexical Approach*. Hove: LTP / Boston: Thomson Heinle.
4. McCarthy, M. (1998). *Spoken Language and Applied Linguistics*. Cambridge: Cambridge University Press.
5. McCarthy, M. (2006). *Explorations in Corpus Linguistics*. Cambridge University Press. London.
6. McCarthy, M. (1990). *Vocabulary*. Cambridge University Press.
7. Nattinger, J. R., & DeCarrico, J. S. (1992). *Lexical Phrases and Language Teaching*. Oxford: Oxford University Press.
8. Taylor, J. (2006). "Polysemy and the lexicon". In G. Kristiansen, M. Achard, R. Dirven and J. Ruiz de Mendoza Ibanez (Eds.), *Cognitive Linguistics: Current applications and future perspectives*. (pp.51-80). Berlin.
9. Tomasello, M. (2003). *Constructing a Language: A Usage-Based Theory of Language Acquisition*. London: Harvard University Press.
10. Willis, D. (1990). *The Lexical Syllabus*. London: Harper Collins.
11. Wray, A. (2002). *Formulaic language and the lexicon*. Cambridge, UK: Cambridge University Press.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: 1.1/TAS DOI: [10.15863/TAS](https://doi.org/10.15863/TAS)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 21.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Nigora Irgashevna Shadmanova
Senior Lecturer, Russian language teacher,

Dilrabo Pulatovna Raximova
Russian language teacher,
Department of Uzbek and Russian languages
Karshi Engineering-Economic Institute

UTILIZATION OF DICTIONARY

Abstract: Today, languages are the main mean to communicate and socialize with people in companies, organizations, and firms, even universities. In teaching languages, especially, Russian language is being required for learners/specialists at target place of work.

However, to learn second language is not easy, it requires a lot of hard work, particularly, on the issues with translation of authentic context by dictionaries; electronic, paper-based, internet access. Furthermore, some adult learners prefer using online dictionaries and Google translator significantly more than print dictionaries in translating a written context. Moreover, students may enrich their knowledge of vocabulary by using more dictionaries in translating technical texts related to speciality.

This paper highlights some ideas of scholars on the issues of effective use of dictionary and which dictionary is the best to reflect the target needs of learners, and experiment carried out on using choice of dictionaries among the students with technical profiles.

Key words: paper-based dictionary, electronic dictionary, teaching Second language, using dictionary in Russian language classes.

Language: English

Citation: Shadmanova, N. I., & Raximova, D. P. (2019). Utilization of Dictionary. *ISJ Theoretical & Applied Science*, 05 (73), 129-131.

Soi: <http://s-o-i.org/1.1/TAS-05-73-22> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.22>

Introduction

Vocabulary is considered to be the most important source of language proficiency (Carter & McCarthy, 1988). Dictionaries are one of the most common lexical resources available in the form of books or in electronic versions. Learners feel more confident in the ability to use a dictionary (Gonzalez, 1999). According to Tseng (2009), dictionaries are trustworthy companions to second and foreign language learners because it guides them to uncover the meanings of unknown words. Nesi and Meara (1994) asked subjects to use dictionaries as an aid in writing sentences containing unfamiliar words. They found that many adult language learners systematically misinterpret dictionary entries. Grabe and Stoller found that using a bilingual dictionary in a consistent and appropriate manner was indeed beneficial for vocabulary learning and reading development (James Coady, 1993:286). Contextual acquisition research does demonstrate that most vocabulary knowledge comes from meaningful

language encounters. If the language is authentic, rich in content, enjoyable, and above all, comprehensible, then learning is more successful. In acquisition of Russian language, and translating from L2 into L1 language, learners should have dictionary if they do not have enough vocabulary knowledge according to written context they are studying. Besides, at present, there are varieties of dictionaries to use in class or out of class. The main issue is how effective to use them for learning purposes. Present study investigates scholars' perceptions according to the use of dictionary in class, and experiment carried out with learners, their beliefs, attitudes to the using choice of dictionaries during the SL classes.

1. Literature Review

Dictionary is considered as an effective and reliable source for learning vocabulary in a second or a foreign language (Ali, 2012). Moreover, dictionaries are a vital pedagogical tool that exerts much influence in language learning. Scholfield (1982) states that

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	ПИИЦ (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

learners use bilingual dictionaries because they can easily find the meanings or translations of unknown L2 words in their L1 as well. According to Stein (1989), the use of a bilingual dictionary for comprehension is effective because it provides a general understanding of certain kinds of words, such as the entries related to science, cultural institutions as well as scientific and cultural terms. She points out that the use of bilingual dictionaries is effective because they provide ready translation equivalents for common words and exact translation equivalents for institutional technical and scientific terms. However, Thompson (1987:286) supported the development of “a new generation of learners’ bilingual dictionaries” and argued against monolingual dictionaries. He opines that monolingual dictionaries tend to be orbicular in defining the entries, e.g., an entry laugh, has synonyms amuse, amusement, humor. One can also observe that these entries are routinely used as synonyms for each other's definitions. Besides, in the past, researchers argued that bilingual dictionaries narrow down the thinking process of L2 learners in the target language and L2 learners may cultivate the tendency to understand L2 words by way of translating them to L1 (Scholfield 1995). Also, bilingual dictionaries have more than one L1 or L2 equivalents for a given L2 or L1 entry which might pose a problem for the dictionary users. Tomaszczyk (1979) conducted the first survey of the dictionary requirements of learners. The findings of Tomaszczyk’s study suggests that despite their perception that bilingual dictionaries were inferior in terms of content and reliability, the subjects reported more use of bilingual dictionaries when compared to monolingual dictionaries.

2. Text-Translation

Scholfield (1982, 1999) states that we are mistaken if we think that learners can open the dictionary and be provided with words to fit with the context. However, according to the scholdfields’ ideas, learners cannot translate the subject-oriented context if they do not have post-experience or view in L1 on subject matter and even if they have a dictionary. Besides, learners must know and follow linguistic rules within the context because they should know the word occurring in the text whether it is noun or verb or adjective, they have different meaning in contexts. For example; **Тахеометр**; понятное дело, измерять углы, длины и высоты разными приборами — не слишком удобно и довольно

долго к тому же. Поэтому для тех случаев, когда нужно проводить несколько типов измерений, существуют приборы комбинированные, такие как тахеометр. Это наиболее современный электронно-оптический прибор, который позволяет измерять любые длины, разницы высот и горизонтальные углы.

Some studies recently starting investigating and comparing conventional dictionaries versus electronic dictionaries. When students need to look up information about words or lexical phrases, they have several dictionary resources from which to choose, including paper-based, online resources, and handheld electronic devices. Traditionally, paper dictionaries have been a common choice for the SL students. Picture dictionaries give essential vocabulary in word form along with illustrations instead of definitions and it is very helpful for low proficient learners.

3. Using Electronic dictionary or paper-based

With the rise in technological development, the use of conventional book dictionaries has decreased because of advancements in computer-mediated tools. Studies conducted in the last 20 years found that language learners in classrooms had embraced using electronic dictionaries over paper-based dictionaries .However, few studies have researched electronic dictionary use, the two kinds of computer-mediated look-up aids identified are the online type-in dictionary and the pop-up dictionary. They recognized that a desired word or phrase could be searched using the online type-in dictionary and a pop-up dictionary. Moreover, they are also useful because the words in a text can be selected or clicked to make the dictionary entries appear alongside the text on the screen. Bower and McMillan (2006) found that 96% of the students owned electronic dictionaries, and 90% of them were very active electronic users on reading and writing task (writing 53% and 37%).

4. Experiment

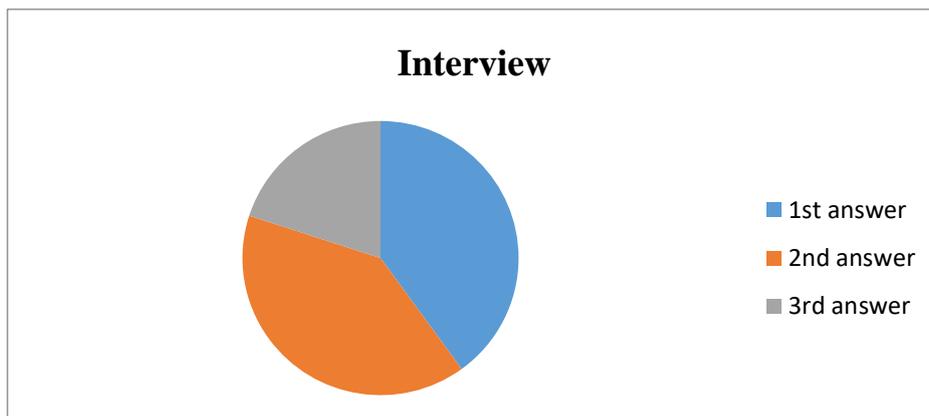
While teaching Russian language, we carried out survey with students from the faculty of Oil and Gas, Karshi Engineering-Economic institute, Karshi, Uzbekistan.

The survey consisted of following questions in general;

What kind of dictionary would you like to use in the classes of Russian language?

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350



Respondents' answer based on following;

1. I would like using a paper-based dictionary (90%)
2. I would like using an electronic dictionary (90%)
3. I would like using an internet-based (Google-translator) dictionary (45%)

As we may see the collected data from the interview with the students that most of them preferred electronic dictionary uploaded in smart-phones, and paper-based dictionary for correct translation of authentic context, on the contrary, some of them were willing to use internet based dictionary (Google-translator). However, they stated that they should not always rely on the translation variants of Google-translator because sometimes there may be some mistakes if the text is very technical. Instead, they prefer to use post-experience or rely on the background knowledge of subject matter in L1 and translate with paper-based dictionary.

Conclusion

The purpose of this study was to explore engineering students' perception of dictionary use as well as teachers' opinion about dictionary use. The

results revealed that students reported using electronic and paper-based dictionary more than other type of dictionaries. Furthermore, the findings showed that most of the students check their dictionaries for word meaning and spelling and they pay little attention to other information such as pronunciation, illustrated examples, and collocations. It is certainly a pity that despite the time and efforts spent by lexicographers on supplying different information besides word definitions, they are not fully utilized by the users. Information about pronunciation and part of speech in an entry can be beneficial for students to improve their writing and speaking abilities with words. The ability to use words in a clear, comprehensible and grammatically correct way also becomes increasingly important as students advance in their language proficiency.

References:

1. Ali, H. (2012). Monolingual dictionary use in an EFL context. *English Language Teaching*, 7, 16-24.
2. Bower, J., & MacMillan, B. (2007). Learner use and views of portable electronic dictionaries. In K. Cote Gonzalez, M & Martinez, T. (Eds.). *The effect of dictionary training in the teaching of English as foreign language. Revista Alicantina de Estudios Ingleses*, 24, 31-52.
3. Carter, R., & McCarthy, M. (1998). *Vocabulary and language teaching*. London. Longman.
4. Coady, J. (1993). *Research on ESL /EFL vocabulary acquisition*: Norwood, NJ: Ablex.
5. Nesi, H. (1994). The effect of language background and culture on productive dictionary use. In W. e. a. Martin (Eds.). *EURALEX'94* (pp. 577-585). Amsterdam: New University.
6. Scholfield, P. J. (1982a). The role of bilingual dictionaries in ESL/EFL: a positive view. *RELC Guidelines*, 4(1), 84-98.
7. Stein, M. J. (1989). The healthy inadequacy of contextual definition. In T. Huckin, M.
8. Tomaszczyk, J. (1979). Dictionaries: users and uses. *Glottodidactica*, 12, 103-119.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](https://doi.org/10.1177/1077049619863245) DOI: [10.15863/TAS](https://doi.org/10.15863/TAS)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 21.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Jakhongir Tokhirov

Researcher of
the International Islamic Academy of Uzbekistan

ISLAMIC SCIENTIFIC WORKS OF ALI QUSHCHI

Abstract: The article tells about the life and work of Ali Qushchi (Kushchi, Kushji), who was one of the most famous and distinguished medieval scholars in Central Asia, and his contribution to science. The article also analyzes the work of Ali Qushchi in the field of Islamic sciences, in particular, the work on "kalam" (Islamic theology). The article gives a general idea that Ali Qushchi is not only an outstanding scholar in the field of secular science, but also possessed sufficient knowledge of Islamic sciences.

Key words: Islamic theology, kalam, Nasir al-din al-Tūsī, Ali Qushchi, Tajrīd al-akaid.

Language: English

Citation: Tokhirov, J. (2019). Islamic scientific works of Ali Qushchi. *ISJ Theoretical & Applied Science*, 05 (73), 132-134.

Soi: <http://s-o-i.org/1.1/TAS-05-73-23> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.23>

Introduction

Ali Qushchi's (1403-1474) full name is Alouddin Ali ibn Muhammad Qushchi Samarkandi Hanafi Ash'ari-Maturidi. His science of field are astronomy, mathematics, kalam (Islamic theology), fiqh (Islamic law), Quran Interpretation (Tafseer) [1: 227].

He was not only a well-known mathematician and astronomer in the East and West, but was an encyclopedic scientist, who theoretically and practically effectively worked in the field of research and education. He not only perfectly mastered Arabic and Persian, but also practiced them in all scientific fields of his time.

He buried in the famous cemetery Abu Ayyub Ansari at Istanbul. The marble stone in entrance engraved with the words "Ali Qushchi is a man of knowledge".

Materials and Methods

Ali Qushchi wrote works on the exact, natural and humanity sciences, as well as on such Islamic sciences as tafseer, fiqh and aqida (kalam).

His nearly 30 works can be classified into three groups: exact sciences; logic and linguistics; following works of Islamic sciences:

1. Ali Qushchi's margins on Taftazoni's (1322-1392) commentary of Mahmud Zamakhshari's (1075-1144) "Tafseer al-Kashshof".

2. Ali Qushchi's margins on the "Sharh al-Matole'" of Qutbuddin Tahtoni (d.1365).

3. Ali Qushchi's commentary on "Mukhtasar al-Wiqaya" of Ubaydullah ibn Mas'ud (d.1238) [2:99]

4. Ali Qushchi's margins on "Mukhtasar al-muntaha fi usul al-fiqh" of Ibn al-Khojib. [3:1]

5. "Ar-Risala al-Muta'alliqa bi-kalima at-tawheed". His manuscripts are kept in libraries of Berlin and Rome.

6. Ali Qushchi's commentary on "al-Fiqh al-Akbar" of Imam A'zam Abu Khanifah. Only one copy of the manuscript is stored in the Kazan University Library [4:1]

7. "Tafseer az-Zakhravayn" is a interpretation of Suras al-Baqara and Ali-Imran [5: 448].

8. "Khoshiya alat-Talvih" - Ali Qushchi's margins of Taftazani's commentary "Talvih" on Ubaydullah ibn Mas'ud's "Tavzih sharh li-Tanqih" about Usul Al-Fiqh [6: 194]. The copy is stored in the Library of Sulemaniya. Jarulloh Afandi № 1438/2.

9. Ali Qushchi's commentary on Nasiruddin Tusi's (1201-1274) "Tajreed al-Aqoid".

Usually, when studying the scientific heritage of a scientist, it is observed that he has worked a particular direction of maz'hab or science. The unique of Ali Qushchi is that he wrote commentaries and refutations on the works of the great scholars of the various maz'hab as Hanafi jurisprudence, Ash'ari-Moturidi, Mu'tazila and Shia aqeedah. The fact that fundamental scientifically-practical research on

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

Islamic sciences such as aqida, tafseer and fiqh, as well as logic, exact and natural sciences, is a sign of how comprehensible he was.

Some sources provide information that the above-mentioned works were written by Ali Qushchi. However, many copies still have not been found. It is known that the two books at the end of this list were partly studied abroad (Turkey, Egypt and Iran).

The most famous of them is "**Sharh Tajreed al-Aqaid**", it's the Ali Qushchi's commentary on Nasiruddin Tusi's *Tajreed al-Aqaid*. Tusi is from Maveraunnakhr, a native of Marv. He wrote in his introduction: "*The people asked me to sort out the Issues of Kalam, I replied, and called it Tajreed al-Aqaid.*" [7: 3957]

In the sources it's named in different, such as *At-Tajreed*, *Tajreed al-Aqaid*, *Tajreed al-E'tiqad*, *Tajreed al-Kalam*. Ali Qushchi's commentary also named in different, such as *at-Tajreed*, *at-Tajreed al-Jadid*, *ash-Sharh al-Jadid lit-Tajreed* [8:1].

Although in different names, the essence is the same meaning, the issues of belief in Islamic teachings. This branch of Islamic sciences, which was originally known as "**Fiqh al-akbar**," later used in the Muslim East such as "**Kalam**", "**Usuli Din**", "**Tawheed**", "**Aqaid**". In Western Orientalism, "**Islamic Philosophy**" and "**Islamic Theology**" names are mentioned.

Nasiruddin Tusi's *Tajreed al-Aqaid* was published in Egypt in 1996, which informed that Ali Qushchi and Shamsuddin Muhammad Isfakhani (1275-1348) commented on it [9:194].

Many commentaries and margins have also been written on it. Ali Qushchi highly appreciated in his introduction that Shamsuddin Muhammad Isfakhani and Sayyid Sharif Jurjani (1340-1413) wrote well commentaries on this work. Ali Qushchi's commentary was the most famous of them, and in the later periods, more than 20 margins on it was written.

The name of Isfakhani's commentary is "*Tashyeed al-qawaid fi sharhi Tajreed al-Aqaid*", which is briefly called "*at-Tajreed al-qadim*" (ancient interpretation), and Ali Qushi's commentary is called "*At-Tajreed al-jadid*" (new interpretation) [10: 249].

The work is presented in many sources and in the "*Mu'jam al-Matbuat*" (11: 170), which contains short information about the names of the books published in the east and western countries by the end of 1919, and the names of their translations.

Including, "Ali Qushchi is one of the Ahli Sunna's Ash'ari imam, has book named "Sharhi-Tajreed" [12: 1];

"Sharh At-Tajreed belongs to mavla Ali Qushchi" [13: 1];

"Sharh Tajreed al-kalam" There is a lithoprint (stone print) for 1884, with a total of 429 pages [14: 1].

In the lithoprint copy of 1858 the work's full name is called "*Sharh Tajreed al-kalam fi tahrir al-aqaid al-Islam*" [15: 1].

Orientalist Ashraf Akhmedov says that, "Ali Qushchi wrote it in 1417 in the city of Cermon in Iran and was the first work. His manuscripts are kept in the British Museum, the Imam Reza Library in Mashhad, the Ayo Sufian Library in Istanbul, the Tehran University Library, the Abu Raykhon Beruni Institute of Oriental Studies at the Academy of Sciences of the Republic of Uzbekistan (14 copies) and in the public library in Saint Petersburg." [4: 1]

Ali Qushchi later presented this work to Abu Said Khan [16: 1].

There are also several manuscripts in the Turkish libraries of Suleymaniye, Nuriusmania, Kayseri Rashid Efendi and Istanbul [17: 410].

Many margins was written on Ali Qushchi's commentary. In particular, Ahmad Ardabili's "*Al-Khashiya ala Ilahiyat al-Sharh al-Jadeed lit-Tajreed*". Ahmad A'bidiy has studied its part of theology.

Another research, "*Min Al-Turath al-Islamiy / Sharh Ali Qushchi ala Tajreed al-Aqaid lit-Tusi / Mabhas al-ilahiyat*" was made by Sabir Abduh Abu Zayd the doctor of the University of Janub al-Vadi in Alexandria, Egypt [18: 90].

The unknown author copy of the book, "*Mabakhis al-Javahir val-a'raz min kitab sharh at-Tajreed*", dated 1654, which is stored in the Library of Congress Library Mansuriy, shows that some parts of the work have been published in a separate book [19: 398].

Also, the first part of Ali Qushchi's commentary - "The First Purpose is General Affairs" was published in 2014 by Zariy Ridai in the Iranian city of Kum.

Jalaliddin Davvani (1427-1502) wrote persian "*Khashiyati Sharhi Qushchi*". With name "*Sharhi Qushchi*", he classified in the three books: "The essence of the commentary is Tajreed Qushchi", "The essence of the jadid bar commentary Tajreed Qushchi", "The essence of the ancient bar comment Tajreed Qushchi". This third paragraph is a commentary on the commentary of "Tajreed" in the book "Ajaddu seasons". It is written in Mu'jam al-Bughdon, "*The margins on the Qushchi's commentary*" published in Istanbul. However, it is not clear which published one of the three above mentioned is the margin [20: 1].

In the manuscript margin of Jalal al-Din al-Davvaniy on Ali Qushchi's commentary which 1335th hijri edition, the theological issues was described on six targets. [21: 228]

Ali Qushchi (1401-1474) lived 200 years later then Nasiruddin Tusi (1201-1274). His reference to his work is not accidental. Both Tusi and Ali Qushchi have written astronomical works along with Kalam and philosophy. Thus, there is a common in these two scholarly views.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

It is a philosophical and metaphysical approach, which is slightly different from classical interpretations of theological issues. In the commentary of the work, it is possible to reconcile such expressions as "this is a Shia's view, and that is Ahl al-Sunna's, or the Ash'ari's view", and some statements of the Zoroasterizm. It is difficult to feel the effects of the periodic environment in writing the review. Because, in the content of the work, it is difficult to find such information that point to this.

Conclusion

Summing up, many commentaries and margins have been written on Ali Qushchi's this work in various periods of times, and have been copied at different times, this shows that, always appealed to it and how important it is to have. Several scientists of his time wrote a commentaries on this work, it shows that, how much they appreciate this work. This work is still being taught as a textbook in Iranian madrasas.

References:

- (n.d.). Retrieved 2019, from <http://almerja.com/reading.php?idm=15250>
: ریحانة الأدب ؛ 227/7 : معجم المؤلفين ؛ 9/5 : الأعلام 495/4.
- Taşköprüzoda, M. (1561). *Shaqoiq Un-Nu'moniya / Dor al-kitab al-Arabi / Beirut /1975*. See also: Abdulhay Laknavi (1847-1886) / *Umdat ur-rioya (The margins of al-Wiqaya's commentary)*. Hamidullah Beruniy <https://ahlisunna.uz/moturidiylar-haqida-bashorat/>
- Riza, U. (1993). *"Mu'jam al-muallifeen"*. Muassasa ar-Risala.
- Ahmedov, A. (n.d.). Retrieved 2019, from <http://www.e-tarix.uz/shaxslar/506-cola.html>
- Khaji, K. (1941). *Kashf az-zunun, Beirut, Volume 1, 14*: 264. See also: Ilay Next / Journal of the Center for Ottoman Studies, Ankara University (OTAM), vol. 20/2006, p.183; Cengiz Aydin / TDV Islamic Encyclopedia, 1989, Volume 2, Volume 410.
- Özer, H., & Ali Kuşçu ve (2009). "Haşiye 'ale'telviḥ" adli eseri / *İslam hukuku araştırmaları dergisi*, Sayı:13 | Nisan 2009, p.361.
- (n.d.). "Dar al-Kutub al-Misriya". 1311 h.y. Published in India in Stonehenge № 3957. King Saud University.
- (1993). "Mir'at al-Kutub", Mirzo Ali Hoiriy Muhammad Ali, *Maktabat Ayatullah al-Mar'ashi al-'amma, Vol. 1*.
- (1996). *Dar al-ma'rifat al-jomiya*, Egypt (Cairo, Alexandria). p. 194.
- (1900). *Al-fawâid al-bahiya fi tarâjim al-Hanafiya, Muhammad Abdulhay*, Dar Al-Ma'rifa, p.249.
- (1928). *"Mujam al-Matbuat al-Arabiya val-mu'raba"*, Yusuf Ilyan, matbaa Sarkis, 1928. Volume 2, p.170.
- (2006). "Mavsu'a al-imam as-Sayyid Abdulhusayn Sharafuddin", *Dar al-Muarrixeen al-Arabi, Volume 1*.
- (1981) "Riyâd al'ulamâ wa-ḥiyâdat al-fuḍalâ", Volume 1, Abd Allâh ibn 'Âsâ Afandî, Aḥmad Hûsînî, Maktabat Âyat Allaah al-Mar'âshî al-'amma.
- (n.d.). Princeton University Arabic collection: Phase II.
- (n.d.). Early Arabic Printed Books from the British Library.
- (n.d.). Retrieved 2019, from <http://www.biografya.com/biyografi/3678>
- (n.d.). Sulaymoniya: No. I, 821, 822; II, 151. Nuriusmonia: № 2104/2. Kayseri Rashid Efendi, No.484). Also published in Tabriz (h. 1301 / m.1880). (Istanbul: No. 74152, 82016). Cengiz (1989). Aydin / *TDV Islamic Encyclopedia, Volume 2, Volume 410*.
- (2002). *Dar al-vafa li dunya al-Tabâa wa'l-nashr*. p.90.
- (1654). *Commentary on the section on substance and accident*. p.398.
- Nurmuḥamedov, D. (2014). Retrieved 2019, from <http://davron28.fikr.uz/> 21.06.2014
http://fikr.uz/blog/toshkent_islom_universiteti/20848.html
- (1966). *Harvard University Library / OL 22800.10.5F*.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 21.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Boburmirzo Botirov
Master's student
Foreign Islamic academy

THE ROLE OF UZBEKISTAN IN THE ACTIVITY OF ISLAMIC COOPERATION ORGANIZATION ON PATIENCE AND SUSTAINABLE DEVELOPMENT DURING THE GLOBALIZATION AGE

Abstract: The article focuses on the current activities of the Organization of Islamic Cooperation. Also analyzed contribution of the Republic of Uzbekistan to the policy of Islamic cooperation in the economic, political, social and cultural spheres of the organization. As well as a number of measures taken by Uzbekistan in cooperation with the Organization of Islamic Cooperation as an international actor.

Key words: Organization of Islamic Cooperation, globalization, Central Asia, session, member of international organization, group 6 + 2, trade and economic cooperation.

Language: English

Citation: Botirov, B. (2019). The role of Uzbekistan in the activity of Islamic cooperation organization on patience and sustainable development during the globalization age. *ISJ Theoretical & Applied Science*, 05 (73), 135-138.

Soi: <http://s-o-i.org/1.1/TAS-05-73-24> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.24>

Introduction

"The need for further expansion of the scope of the Organization of Islamic Cooperation is growing. In this context, it is crucial for the countries and peoples to engage in dialogue at different levels, and to establish systematic links between governments, parliaments, representatives of science, culture, and the public. It is these purposes that can bolster multilateral cooperation within the framework of the Organization of Islamic Cooperation".

**President of the Republic of Uzbekistan
Mirziyoev Shavkat Miromonovich.**

It is no secret that today the role of international organizations, foreign relations unmatched in Uzbekistan. During the current globalization process, the activities of the authoritative Islamic Cooperation Organization and cooperation with member states are worthy of note.

Materials and Methods

As the First President of the Republic of Uzbekistan Islam Karimov emphasized, "Uzbekistan and other Central Asian states are an integral part of the complex Islamic world[1].

"Therefore, in foreign policy, the first President of the Republic of Uzbekistan Islam Karimov said: "Uzbekistan strives to deepen its relations with Muslim countries on a multilateral basis. There are certain shifts on this road"[2].

In particular, the benefits and prospects of cooperation between Uzbekistan and the Organization of Islamic Cooperation can be explained by the following analytical evidence.

In January 1995, Uzbekistan sent a letter to the General Secretariat of the Organization of the Islamic Conference on the status of the organization. On October 2, 2013, the Foreign Ministers of the Organization of Islamic Cooperation (OIC) in New York (USA) were given an observer status in Uzbekistan at the extraordinary session. Under the Letter of the President of the Republic of Uzbekistan, on October 2, 1996 at the Coordination Session of the Foreign Ministers of the Organization of Islamic Cooperation member-states, the Republic of Uzbekistan became an equal member of the Organization.

After joining the Organization of Islamic Cooperation, Uzbekistan has been cooperating with the organization in many areas, including political, cultural and educational. The Organization of Islamic Cooperation (OIC) is also participating in the annual

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

sessions of the Heads of State, Foreign Ministers and the General Secretariat. At the same time, Uzbekistan welcomes the decisions and proposals of the Organization of Islamic Cooperation in addressing the Middle East problem.

The activities of our country within the framework of the Organization of Islamic Cooperation will promote the initiatives of the Republic of Uzbekistan on regional security and stability on the international arena, using its facilities and conferences. In particular, the national interests of Uzbekistan require a fuller consideration of the Islamic factor in international relations[3].

One of the main goals of Uzbekistan's accession to the Organization of Islamic Cooperation is to ensure the protection of the national interests of the Republic in the Islamic world, using the potential of this organization. Uzbekistan recognizes the Organization of Islamic Cooperation as a high-status organization in the Islamic world on a number of topical, regional and global issues, and emphasizes the importance of bilateral co-operation with multilateral cooperation. Therefore, the organization is attracting its potential and capabilities to address the challenges of modern times such as combating international terrorism, trafficking, and the production and distribution of drugs.

At the time, the Organization of Islamic Cooperation actively supported the Republic of Uzbekistan's peaceful settlement of the conflict in Afghanistan and its support for the 6 + 2 group meeting in Tashkent in July 1999 and the declaration of Central Asia's nuclear-weapon free zone. Today, Uzbekistan is effectively using the platform of the Organization of the Islamic Cooperation on Afghanistan's reconstruction and strengthening regional stability.

Recently, representatives of the Organization of Islamic Cooperation and some countries have been striving to take an active part in the work of various organization and specialized institutions of Uzbekistan.

Uzbekistan and Uzbekistan have been establishing multilateral cooperation within the framework of the Organization of Islamic Cooperation on socio-economic researches and the Center for training of specialists for Islamic countries, the Islamic Educational, Scientific and Cultural Organization, Islamic University of Technology and Trade and Economic Cooperation.

The Islamic Development Bank (IDB) is implementing regional economic cooperation programs as it has its own potential and is an important financial center in the Islamic world. Among such programs are the development of transport communications in the region.

Uzbekistan also has the opportunity to effectively use the Organization of Islamic Cooperation in protecting its interests in

transboundary waters and in environmental issues in the Central Asian region. In particular, the Islamic Cooperation Organization has been focusing on the problem in recent years, as international water scarcity and environmental risks are becoming a major problem.

In particular, within the framework of the V World Water Forum in Istanbul in 2009, most of the member states of the Organization of Islamic Cooperation agreed to a general approach to the organization's water problem. In the same year, the General Secretariat began a study paper titled "OIC water vision", the "Water Partnership of the Organization of Islamic Cooperation." To this end, a group of 15 experts from different regions of the Organization of the Islamic Cooperation member countries, water technicians and specialists have been established.

From the Central Asian republics, this group includes First Deputy Minister of Melioration and Water Resources of Tajikistan S.Rahimov. The expert group held two meetings in Dubai in May 2010 and in Astana in June 2011. At the session of the foreign ministers of the Organization of Islamic Cooperation (OIC) held in Astana in January 2012 to hold an expert meeting and to coordinate the project of the document "OIC water vision: working together for a water security future", and in the next stage - the ministers agreed to accept the document at a meeting of the ministers.

The meeting was held in Istanbul on 5-6 March, with representatives from 34 countries. The Uzbek Ambassador Extraordinary and Plenipotentiary to Turkey attended the meeting[4].

The document, "OIC water vision: working together for a water secure future," is designed to identify and address common water-related problems and shortcomings in Muslim countries in Muslim countries.

The document has a more characteristic character, with the appearance and size of the problem of water scarcity in specific regions, and in particular, members of the Organization of Islamic Cooperation[4].

The document entitled "Water Partnership for the Future of the Organization of Islamic Cooperation: Building a Successful Future for the Future" aims at promoting the use of water resources among member states of the Organization of Islamic Cooperation, institutional and scientific capacity building, exchange of experience, development and implementation of specific projects which means.

The document includes ideas for donor funding and assistance to countries experiencing water scarcity.

It is of paramount importance for Uzbekistan to establish a strong partnership with the Organization of Islamic Cooperation. The organization serves as a platform for Uzbekistan to protect its interests. While

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

the problem of transboundary water use is becoming more and more urgent in the Central Asian republics, it is also a good solution to this problem through international organizations.

At the same time, along with the exchange of experience, there are good opportunities for Uzbek specialists, who have extensive experience in irrigation, to work in the international arena. He also has been a member of the Muslim-Intergovernmental Network for Water Resources Management and Development in the structure of the Organization of Islamic Cooperation of Uzbekistan since 2010. Within the framework of this institution, water management programs will be adopted in the member states of the Organization of Islamic Cooperation.

In addition, a number of official visits, conferences and conferences are being held between Uzbekistan and the Organization of Islamic Cooperation. In particular, on June 8, 2015, Secretary-General of the Organization of Islamic Cooperation Iyad Amin Madani visited Hazrati Imam complex. Visited the "Usman Koran", which is being kept at the Moy Muborak madrassah museum. Also, they have been acquainted with translations of the Qur'an in different languages[5].

A delegation led by Minister of Foreign Affairs of the Republic of Uzbekistan Abdulaziz Kamilov met in Al-Kuwait on May 27, 2015 with Secretary-General of the Organization of Islamic Cooperation Iyad Amin Madani[6].

The meeting was held within the framework of the regular session of the heads of foreign ministries of the member states of the Organization of Islamic Cooperation (OIC). During the meeting the sides discussed the current state and prospects of cooperation between Uzbekistan and the Organization of Islamic Cooperation.

It is known that the Organization of Islamic Cooperation since 2006 implements election observation in member states. Over the past period, the mission has monitored elections in Azerbaijan, Algeria, Guinea, Kyrgyzstan, Mauritania, Mozambique, Nigeria, Sudan and Tunisia, including the 2009 elections in Uzbekistan. The observers mission of the Organization of Islamic Cooperation (OIC) for the 2015 presidential elections in Uzbekistan and 2016 held a press conference[7].

According to Ali Abulhassani, director of the political office of the Organization of Islamic Cooperation, observer mission, and other observers, the election in Uzbekistan is democratic, fair and fully meets all the requirements of national legislation and international standards. They are particularly impressed by the active participation of citizens in this important political process.

On June 8, 2015, President of the Republic of Uzbekistan Islam Karimov received Secretary General of the Organization of Islamic Cooperation Iyad Amin Madani. As it was noted at the meeting,

Uzbekistan, which was a member of the Organization of Islamic Cooperation in 1996, actively participates in its various activities and events.

At a recent meeting of the Council of Foreign Ministers of the Organization of Islamic Cooperation (OIC), a decision was made to hold the next meeting of foreign policy chiefs in Uzbekistan and to chair the organization's major institute in 2016[8].

An international conference titled "Education and Education - Path to Peace and Creativity" was held in Tashkent on October 18-19 this year, at the 43rd session of the Council of Foreign Ministers of the Organization of Islamic Cooperation. The President of the Republic of Uzbekistan Shavkat Mirziyoev sincerely, congratulated all the participants of the conference and emphasized the role of the organization, its activities and the role and place of the organization in today's globalization processes.

In particular, "We are living in the historic stage of human development today, in the event of a sharp turnaround. In recent years, there has been a dramatic geopolitical change in the world, and the system of international security and stability is failing. The increasingly globalization of the globalization process not only expands the human capacities, but also the aggravation of the controversy, which leads to an increase in the disparities between developed and developed countries".

"As a result, various actions are being undertaken that are transnational in nature and in scope, which are encouraging peace and stability. People who have been homeless and wandering abroad are experiencing severe hardships, and children and elderly men and women are killed by armed conflicts and terrorism. Many countries are becoming destructive due to invisible wars. "

In such circumstances, the role and responsibility of the Organization of Islamic Cooperation is enhanced by the Organization of the Islamic Cooperation member-states for consolidation of peace and security in the Muslim world and for the sake of sustainable development, creating reliable mechanisms for cooperation and creating a platform for dialogue among member states on pressing issues.

We appreciate the fact that the organization operates with understanding that sustainable stability and security can not be solved without economic progress, social issues. There is a need for further expansion of the scope of the Organization of Islamic Cooperation. In this context, it is crucial for the countries and peoples to engage in dialogue at different levels, and to establish systematic links between governments, parliaments, representatives of science, culture, and the public. It is these purposes that can bolster multilateral cooperation within the Organization of Islamic Cooperation, "Sh. Mirziyoyev said.

President of Uzbekistan Shavkat Miromonovich has also made some state initiatives in the context of

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

one of the priorities proposed for the country's presidency in the Organization of Islamic Cooperation.

The essence of the first initiative is to create "Samarkand Imam Bukhari Center for International Studies" specializing in the study of the multifarious religious and spiritual heritage of our great ancestors, who contributed not only to Islamic culture, but also to universal civilization.

Another initiative of Uzbekistan is related to the establishment of a special department of the Islamic Educational, Scientific and Cultural Organization under the auspices of the Tashkent Islamic University (now Uzbekistan International Islamic Academy). The main direction of the new department is the study of the history of education, science and culture in the Muslim world, and the study of their current state and the intensification of special courses for students.

The 43rd Session of the Council of Foreign Ministers of the Organization of Islamic Cooperation will undoubtedly contribute to further strengthening and enhancing the authority of the organization on the international arena and effective solution of the challenges ahead.

Conclusion

Today, the perspectives of cooperation between the Organization of Islamic Cooperation and Uzbekistan can be seen in addressing a number of

global and regional problems. In particular, the initiative of President Islam Karimov to establish a nuclear-weapon-free zone in Central Asia in 1993 was widely supported by prominent international organizations such as the United Nations, the United Nations, the OSCE, the International Atomic Energy Agency, the Organization of Islamic Cooperation, and promoting global security a great contribution. Moreover, cooperation between Central Asian countries, including Uzbekistan and the Organization of Islamic Cooperation, is ongoing in the fight against terrorism and extremism, the problem of refugees, and peace in Afghanistan.

The overwhelming majority of the Muslim population of more than 50 Muslim countries, as well as organizations dedicated to ensuring Muslim integration, act as subjects of international law, defining not only local or regional, but also global geopolitical significance of Islam[9].

In general, it is important to avoid the horrendous geoconfessional behavior of the geostrategic relationships with the religious factor controlled by the Organization of Islamic Cooperation, and the confrontation between confessions. The global religious space should serve not only political "games" but also the rational satisfaction of the people's spiritual needs and interests.

References:

1. Karimov, I. A. (1997). *Uzbekistan at the turn of the XXI century: threats to security, stability and guarantees of progress*. (p.447). Tashkent: Uzbekistan.
2. Karimov, I. A. (1996). *Uzbekistan: National independence, economy, politics, ideology*. (p.48). Tashkent: Uzbekistan.
3. (2010). The Islamic factor in US foreign policy in the context of the formation of a new world order: Author's abstract. dis. ... Cand. watered sciences. (p.21). Tashkent: UWED.
4. (n.d.). The document "OIC water vision: working together for a water secure future", prepared by the General Secretariat of the OIC, sent to the Ministries of Foreign Affairs of all the OIC member states.
5. (n.d.). Retrieved 2019, from <http://www.kun.uz>
6. (n.d.). Retrieved 2019, from <http://www.daryo.uz>
7. (n.d.). Retrieved 2019, from <http://www.UzReport.uz>
8. (n.d.). Retrieved 2019, from <http://www.daryo.uz>
9. Komilov, K. (2014). *Globalization and Religious Processes*. (p.85). Tashkent: Movarounnahr.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](http://s-o-i.org/1.1/TAS) DOI: [10.15863/TAS](https://doi.org/10.15863/TAS)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 21.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Ilhomjon Alimov

Department of Banking
Tashkent State University of Economics

PROSPECTIVE BANKING REFORMS ARE THE SOLUTION FOR THE ECONOMIC GROWTH IN EMERGING ECONOMIES LIKE UZBEKISTAN

Abstract: Today the banking system is one of the fastest growing segments of the world economy. World financial markets which responsible for the total amount of the bank facilities are also developed under international banking reforms. International capital movement in types of money, security, cash, technology even by the help of the banking sector. For the fulfillment of the sustainable economic growth each country are mainly settlement cooperation with World Bank, IMF, EBRD, ABRD and etc. based on total banking reforms. In our country this reforms and prospective changes evidenced by the growth rates of key performance indicators such as assets, capital, credit investments and volumes of investment operations. When main macroeconomic indicators are stable FDI increase due to investment climate or attractiveness for the foreign investors of Uzbekistan.

Key words: Bank, reforms, integration, investment climate, macroeconomic stability, cooperation.

Language: English

Citation: Alimov, I. (2019). Prospective banking reforms are the solution for the economic growth in emerging economies like Uzbekistan. *ISJ Theoretical & Applied Science*, 05 (73), 139-144.

Soi: <http://s-o-i.org/1.1/TAS-05-73-25> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.25>

INTRODUCTION

Particular attention is paid to the strengthening and qualitative improvement of the banking and financial system, as well as the representation of commercial banks as a driving force of the economy and their turning into large investment institutions. The financial and economic stability of the country depends largely on the effective functioning of the banking and financial system. On behalf of the Bank Association and the banking community, let me sincerely congratulate you on the beginning of the conference on the issues of sustainable development of the banking and financial sector and the further deepening of the ongoing reforms in that country.

Consistent and targeted reforms in the banking system of Uzbekistan not only provide reliable protection from negative impacts and consequences of the global financial crisis, but also achieve significant and qualitative changes in the activities of banks, expand the volume of lending to the real sector of the economy, and facilitate banking and financial services. The stable and reliable functioning of the banking system of the country, its growing influence on the global financial market, as well as our bold steps towards modernization of the country are

recognized by the world community as well as a number of authoritative international financial institutions.

METHODS

In this research paper work it is used qualitative described method with secondary date from various sources like, central bank, banking association, Uzbekistan information agency, and ministry of foreign affairs.

URGENCY

Relevance of the current research paper work is identifying banking reforms in Uzbekistan. Discuss obtain data with the prospective partnership and cooperation with world class institutions. The next idea of the paper is find out innovation ways of development and provide transparency economic policy for investors and attract foreign direct investors into the country.

RESULTS

It should be noted that the increase of the capitalization level of large banks in the Republic of Uzbekistan is largely due to the practice of many foreign countries, not primarily to the maintenance of

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

liquidity of banks, but also to reinvestment and expansion of investment activity of banks, the priority directions of structural transformations in the

economy, increasing the volume of crediting, modernization, technical and technological renewal.

Table 1. Uzbekistan macroeconomic indicators in views of World Rankings

Markets	Last	Reference	Previous	Range	Frequency	
Currency	8453	May/19	8453	1455 : 8453	Daily	
Overview	Last	Reference	Previous	Range	Frequency	
GDP Annual Growth Rate (%)	5.3	Mar/19	5.1	3.6 : 9.8	Quarterly	
Unemployment Rate (%)	6.9	Dec/18	7.2	6.3 : 8.3	Yearly	
Inflation Rate (%)	14.3	Dec/18	14.4	2.4 : 14.4	Yearly	
Interest Rate (%)	16	Apr/19	16	9 : 300	Daily	
Balance of Trade (USD Million)	-3200	Dec/18	-2102	-3200 : 2016	Quarterly	
Current Account (USD Million)	-3231	Dec/18	1429	-3231 : 2621	Yearly	
Current Account to GDP (%)	-7	Dec/18	2.8	-7.98 : 9.18	Yearly	
Government Debt to GDP (%)	23.6	Dec/18	24.1	9.21 : 59.38	Yearly	
Government Budget (% of GDP)	0.5	Dec/18	0.7	-2.9 : 2	Yearly	
Corporate Tax Rate (%)	7.5	Dec/18	7.5	7.5 : 20	Yearly	
Personal Income Tax Rate (%)	23	Dec/18	23	22 : 29	Yearly	

Source: trading economics official data

Economic Indicators for Uzbekistan including actual values, historical data charts, an economic calendar, time-series statistics, business news, long term forecasts and short-term predictions for Uzbekistan economy which indicated in table 1 [1].

The trend towards a decline in lending to the real sector in many developed and emerging economies is increasing year by year, and the volume of loans issued by commercial banks to the real sector of the economy grows year to year.

DISCUSSION

1.1. In views of Global Risk Assessment Companies

It is noteworthy that over the years, the international rating agency Moody's has been awarded

the "Stable" rating only among the CIS countries by the banking system of Uzbekistan. This, in turn, is closely linked to the assessment of our entire economy. The positive rating given by international rating agencies such as Moody's, Fitch Ratings, and Standard & Poor's, as of the end of 2011, was 13 of Uzbekistan's commercial banks, all commercially active banks have a positive rating.

Table 2. Global Ranking Companies about Uzbekistan

Agency	Rating	Outlook	Date
Moody's	B1	stable	Feb 13 2019
S&P	BB-	stable	Dec 21 2018
Fitch	BB-	stable	Dec 21 2018

Source: trading economics official data

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

Standard & Poor's credit rating for Uzbekistan stands at BB- with stable outlook. Moody's credit rating for Uzbekistan was last set at B1 with stable outlook. Fitch's credit rating for Uzbekistan was last reported at BB- with stable outlook. In general, a credit rating is used by sovereign wealth funds, pension funds and other investors to gauge the credit worthiness of Uzbekistan thus having a big impact on the country's borrowing costs. This page includes the government debt credit rating for Uzbekistan as reported by major credit rating agencies [2].

1.2. World class cooperation

It should be noted that, according to the financial stability and the national banking system development indicators developed on the basis of international requirements, the value of the banking system's performance and development is "high". At the same time, according to recent research by the International Monetary Fund, Uzbekistan is the leader among CIS countries in the number of commercial banks, which corresponds to 100 thousand adults. In 2013, the network of branches of commercial banks expanded further, and as of January 1, 2014 their number

reached 837. One more example of success achieved in reforming and liberalizing the banking system was the World Bank's and International Finance Corporation's (IFC) Annual Performance Report 2014. The relay has risen to 24 positions.

1.3. Projects

In particular, over the past five years, more than 900 new housing units have been built in 159 rural districts of the country on standard designs, and more than 33,500 individual homes with a total area of 4 million 500 thousand square meters have been commissioned.

1.4. Current Reforms

Modern banking system development and the reforms being implemented in this direction. In 2014, the main focus of the reform of the banking system and further improvement of sustainability was the adoption of the Resolution of the President of the Republic of Uzbekistan dated November 26, 2010 № PP-1438, "Reforming and increasing the stability of the financial and banking system of the republic in 2011-2015.



Figure 1. Benchmark interest rate in Uzbekistan (2010-2018) [3]

The benchmark interest rate in Uzbekistan was last recorded at 16 percent. Interest Rate in Uzbekistan averaged 32.15 percent from 1994 until 2019, reaching an all-time high of 300 percent in March of 1995 and a record low of 9 percent in January of 2015 as fig 1.

Implementation of the measures outlined in the "Comprehensive measures on priority directions of achieving international rating indicators". It is specifically:

1. Further improvement of the system of regulation and supervision of commercial banks activity based on new recommendations of the Basel Committee on Banking Supervision, introduction of norms, criteria and standards used in international practice in the assessment of banks activity;

2. Further increase of level of capitalization of commercial banks, strengthening and diversification of the resource base, further intensification of

attraction of free money resources of population and business entities to long-term deposits;

3. Increasing the investment activity of commercial banks, increasing the volumes of crediting of projects for modernization and technical and technological re-equipment of production;

4. Expansion and improvement of the quality of services rendered by banks, increasing the number of online service providers online;

5. Improvement of the quality of assets and credit investments of banks, further development of the Bank's risk assessment system;

6. Further improvement of the convenience and efficiency of the use of plastic cards, issued by commercial banks, in particular, the further development of the payment system through the Internet;

7. Carrying out appropriate work on training and retraining of personnel with modern knowledge and skills in the field of banking management;

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

8. Implementation of measures aimed at further improving the business environment in the banking and finance sphere;

9. Further improvement of the regulatory framework of the Bank and ensuring its compliance with international requirements and principles;

10. The financial and banking system of the Republic will be aimed at continuation of the ongoing measures to perfect the accounting and financial reporting system in accordance with the International Financial Reporting Standards (IFRS).



Figure 2. Spot exchange rate of Uzbekistan

The USD UZS spot exchange rate specifies how much one currency, the USD, is currently worth in terms of the other, the UZS. While the USD UZS spot exchange rate is quoted and exchanged in the same day, the USD UZS forward rate is quoted today but for delivery and payment on a specific future date. This page provides - Uzbekistani Soum - actual values, historical data, forecast, chart, statistics, economic calendar and news. Uzbekistani Soum - actual data, historical chart and calendar of releases - was last updated on May of 2019 [4].

As for the potential of the securities market in our country in order to further expand investment activities of commercial banks, modernize production, as well as attract domestic and foreign investments into the country's economy:

- To take appropriate measures to further increase the volume of the total capital of commercial banks and fulfill the set parameters;

- Introduction of clear mechanisms of deep analysis of the bank risk assessment and management in order to ensure the growth of commercial banks' assets, including the further growth and quality of credit portfolios;

- Implementation of effective measures to improve the quality of investment projects' expertise in banks, including the transparency of the expertise process, and to take into account all the potential factors and risks.

- Further introduction of new types of bank deposits, deposit certificates and corporate bonds to increase the long-term bank's resources, and further

improving the existing types of loans on terms, amounts, types of currency and payment;

- Improving the legal framework regulating asset securitization, enhancing prudential supervision over this activity in order to prevent the emergence of "financial bubbles", increasing the transparency of securitized assets and paying attention to their level of security;

- Complex implementation of international standards in the practice of commercial banks and other issuers of emerging stock markets with a view to increasing the level of information transparency for potential investors;

- Activation of secondary market of commercial banks' securities, expansion of subordinated debt volumes;

- Further intensification of participation of banks in establishment of emission and underwriting syndicates, rating and collective agencies, joint investment institutions with the purpose of development of investment and financial infrastructure of emerging securities markets;

- Expanding the list of securities, the subject of mortgage, and regular announcement of the list;

- Organization of the procedure of non-withdrawn certificate of deposit certificates, strengthening of its legal bases; [5]

1.5. Application of the new standards

In accordance with the changes, which include information on innovative approaches to banking activities, development of retail business and implementation of corporate governance in banks,

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

development of electronic commerce in banking services? The publication also includes introduction of Basel III standards in the banking system. Reforms reflect new and ample information reflecting the evolutionary stages of evolving the banking and financial system during the course of the developments in Uzbekistan and the global economy from 1991 to 2016.

At the same time, reforms in the banking system, the banking system's functions and the principles of its formation are considered on the example of the Central Bank of the Republic of Uzbekistan as one of the most important institutions involved in the management of the bank. The successful implementation of the Anti-crisis program, initiated by the First President of the Republic of Uzbekistan Islam Karimov, serves as an important factor in the socio-economic development of the country.

1.6. Modern Banking in higher education system

Modern day's wide range of professional banking finance education systems has been implemented in Uzbekistan. The main focus of this issue is focused on the evolution of banking, finance and credit relations, interaction between commercial banks and subjects of small business and private entrepreneurship, modern methods and means of bank service. Major approaches also addresses the issues of forming and improving the legislative framework regulating the activities of banks. [6]

1.7. Banking and Finance Academy of Uzbekistan as a locomotive

At the Banking and Finance Academy of Uzbekistan a scientific-practical seminar with the participation of representatives of the Ministry of Finance, the State Tax Committee, the Central Bank, the Tashkent State Economic University, the Institute of Finance, the Tax Academy, professors and lecturers, researchers and listeners held. It was attended by President of the Republic of Uzbekistan Shavkat Mirziyoyev at the enlarged session of the Cabinet of Ministers dedicated to the main results of socioeconomic development of the country in 2016 and the most important priorities of the economic program for 2017.

The Strategy of Action on five priority directions of development of the Republic of Uzbekistan for 2017-2021, proposed by the head of our state Shavkat Mirziyoev, is to further improve the effectiveness of the ongoing reforms in the country, to bring the state and society to a new level, in order to liberalize their spheres. Presentations on further improvement of monetary policy, reduction of tax burden and simplification of taxation system, introduction of new types of insurance services, attraction of foreign investments and loans and their efficient use were held [7].

1.8. Economic stability during Global financial crisis

One of the negative impacts of the global financial and economic crisis has been demonstrated by the decline in the solvency of banks and financial institutions. - In the world's leading stock markets, large indices of companies and market value of shares have fallen dramatically, resulting in unemployment and social uncertainty associated with sharp decline in production and economic growth in many countries due to these factors.

In this complex situation, additional funds were channeled to the capital of the country's major commercial banks, based on the anti-crisis program developed by the President and requirements of the Decrees and resolutions adopted in the country. It is noteworthy that in the USA, Europe and CIS countries, the capital of commercial banks is directed to liquidity and purchase of problematic bank assets.

This mechanism, which has no analogues in the world practice, provides additional investments by banks for restoration of bankrupt enterprises, modernization, technical and technological renewal of production, financial rehabilitation of enterprises, and establishment of new types of products and implementing modern methods of management, restoring jobs and creating new ones.

Presidential Decree "On Measures to Increase the Financial Stability of Enterprises of the Real Sector of the Economy" of November 18, 2008 serves as a guideline in this regard. In particular, according to this document, 173 inefficient enterprises have been transferred to the balance of commercial banks since 2009. Thanks to the bank-directed investments, 120 of them were fully recovered and sold to new owners. In sphere loans for financial support of the real sector of the economy have increased 44 times over the past 13 years, and as of July 1, 2014.

4.9. The benefits for the society

Today, 26 commercial banks in Uzbekistan, 843 branches in Uzbekistan, more than 4,200 mini-banks and specialized cash desks provide high-quality banking services to individuals and legal entities. Banks' service indicators show that the banking services utilization rate is 49.7 per 100,000 (adult) population, with a "high level" and Individuals - Accounts Indicators for 1,000 adults comprise 1028 units and have a "high" (more than 1000) ratings. According to the results of research by the International Monetary Fund, Uzbekistan is the leader among the CIS countries in the number of commercial banks with a population of 100,000. Funding of social issues such as social sector development, job creation and employment, housing construction and improvement of settlements, education and upbringing and healthcare system, highlighted the attention of banks operating in our country in the center. [8]

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

4.10 Central bank reforms

By the decree signed by the President of the Republic of Uzbekistan Shavkat Mirziyoev, measures have been taken to radically improve the activities of the Central Bank. As part of the ongoing reforms, the priorities of the activity of the Central Bank were:

Firstly, it is planned to radically improve the monetary policy and its instruments by means of step-by-step implementation of the principles and mechanisms of inflation targeting in order to prevent unreasonable inflationary expectations.

Secondly, it is expected that monetary policy will be shaped on the basis of deep study of inflation factors and full formation of the balance of payments accounting and analysis system.

Thirdly, it is planned to improve the system of risk management and evaluation of commercial banks, which will identify the mechanisms of regulation and control of the banking system.

Fourthly, it is said that the development of the banking system, as well as commercial banks and business entities, will form mutually beneficial partnerships as an important component of sustainable economic growth in the long term.

Fifthly, there is a system of efficient information exchange of commercial banks with further development of the payment system, including remote banking services, which allow fast account management and banking operations in real-time mode.

Sixth, it is planned to implement a set of measures to strengthen the financial stability of non-banking credit organizations, as well as to strengthen control over their activities.

Seventh, the protection of the rights and legitimate interests of consumers of banking services, increasing the level of financial literacy and disclosure

of the population and entrepreneurship is a priority. [9]

According to the data, the internal conditions and effectiveness of the monetary policy in 2019-2021 will largely depend on the fiscal policy. In the future, the main directions of comprehensive reform in tax and budget spheres will cover:

- Improvement of the budget system;
- Indexing of wages and equivalent payments based on inflation level;
- improvement of tax administration;
- reducing the difference in tax burden on small and large enterprises;
- wider use of value added tax, tax cuts;
- Optimization of tax burden in the economy through consolidation of compulsory payments and abolishment of some.

CONCLUSION

Taking into account it should be noted that, by the intention of the Uzbek President to the development of the banking system and the creation of favorable macroeconomic conditions in the country, positive results have been achieved in the development and reform of the banking system. Society, investors and government are come into one platform to make business more visible and wide partnership among sectors. Banking reforms which support all changes in macroeconomic scale like money transfers, payments into account, state expenditures and procurements, foreign trade, bank reserves, stable security markets, integration with commercial banks in sectors of agriculture, manufacturing, tourism, education, retail, transportation, infrastructure, medicine and social sphere are directly targeted for the prospective life development of the Uzbek nation.

References:

1. (n.d.). Retrieved 2019, from <https://tradingeconomics.com/uzbekistan/global-rating>
2. (n.d.). Retrieved 2019, from <https://tradingeconomics.com/uzbekistan/rating>
3. (n.d.). Retrieved 2019, from <https://tradingeconomics.com/uzbekistan/interest-rate>
4. (n.d.). Retrieved 2019, from <https://tradingeconomics.com/uzbekistan/currency>
5. (2018). "Sustainable development of banking and finance as an important priority of economic policy of Uzbekistan 2018". report at the republican scientific-practical conference. https://www.uba.uz/uz/press_center/publications/3052/38251/
6. (n.d.). Retrieved 2019, from www.cbu.uz
7. (2017). Uzbekistan Information Agency source, <http://uza.uz/uz/business/bank-moliyatizimi-takomillashadi--25-01-2017>
8. (n.d.). Retrieved 2019, from <https://mfa.uz/uz/press/news/2014/08/2131/>
9. (n.d.). Retrieved 2019, from <https://kun.uz/uz/news/2018/01/09/markaziy-bank-faoliyatining-ustuvor-7ta-junalisi-belgilandi>

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 21.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Burobiya Rajabova

Dr. Senior scientific researcher of the Institute of Uzbek language, literature and folklore of the Uzbekistan Academy of Sciences, Uzbekistan.

dokma@bk.ru

THE WILL LITERARY GENRE IN “KUTADGU BILIG”

Abstract: In the case of the testimony of the petition submitted by Judge Oytoldi to King Kuntughd in the article, Yusuf Hos Hojiib's "Qutadgu bilig", the bequest shows that the will of the poet have been formed as X-XI centuries in the literary genre.

Key words: willedness, Navoi, minister, literary genre, law.

Language: English

Citation: Rajabova, B. (2019). The will literary genre in “Kutadgu bilig”. *ISJ Theoretical & Applied Science*, 05 (73), 145-150.

Soi: <http://s-o-i.org/1.1/TAS-05-73-26> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.26>

Introduction

The testament, the will is almost never studied in the Uzbek literature as the literary genre, only is given short definition in the book “Literary forms and genres as follows, “The will(say is written before the death) is a lyric genre, reflecting long-term conclusions belonging to life and future important tasks of generations in literary literature” [2. 165-168]. If we give attention to the definition, the definition is not perfect, it does not fully cover the features of the will genre, it has been defined considering some features of wills created in the modern lyricism. Navai-studying scholars have studied the famous will which written to the mother of Iskandar, the queen Bonu before the death of the king Iskandar, in the researches about the epic poem “Saddi Iskandari” of Alisher Navai in some ways, but they did not define his famous will as an independent literary genre. The hero of Uzbekistan, S.Ganieva gave approximate opinion that this will belongs to Alisher Navai.

Materials and Methods

While we have being studied the historical and legal terms used in the creation of Alisher Navai, we have focused on the term “will”, which is a concept of Islamic and modern law. In the result, we are witness to that the great poet not only used the will as the meaning of one of the term of Islamic law, but also gavemore than thirty testaments and wills which have the systematically of the events, educational, religious, and mystical nature connected with lifestyle and creation process in his lyric and epic works. In our

research “Boqiy vasiyatnomalar” (“Eternal wills”) [9], we researched and analyzed the historical will of poet Mevlana Kobuli to Alisher Navai given in “Majolis un-nafois” of Alisher Navai, the historical will of malik ul-kalam Lutfi to Abdurakhman Jami, the historical will of poet Mir Shahi to the poet Khoja Avhad in connection with life difficulties, creation process, literary effect, teacher-apprentice relationships, and the will in the religious-mystery meaning, consisted of eleven sayings which Jaloliddin Rumi said to his friends and companions in “Nasoyim-ul-muhabbat”, the will which Farhod said to the mountain in “Farhod and Shirin” (in imaginary character – B.R.), eternal wills of Nushiravoni Odil which have immortality in “Tarixi muluki Ajam”.

The conclusion is that Alisher Navai made creation perceptibly in the sphere of the will genre, and firstly, his wills have a special importance in development of this genre, and secondly, the wills which the great poet wrote, have enriched with the best traditions of Arabic, Persian and Turkish literature till his period, and thirdly, the wills of Nushiravoni Odil which interpreted artistically in the work of Alisher Navai, can base that this genre is the oldest genre, and the fourthly, we can be aware of some of the salient and interesting stories of the dreams and lives and activities of statesman and religious specialists, prominent artists, sheikhs, and historical people by the testaments and wills which have universal importance and he wrote. Hence, we can add the will genre to the oldest genres type on the basis of the famous will of prophet Mohammad (peace

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

will be upon him) which consists of 164 testaments said to Hazret Ali and in the next place after the will of Nushiravoni Odil in terms of its antiquity.

We addressed to the both ancient wills for the proof of our opinion. The great Alisher Navai wrote in his book about the will of Nushiravoni Odil as follows: “Va aning soyir salotin uchun vasiyatnomasi borkim, ne dastur bila saltanat qilganlarkim bu muxtasarda ul gunjoyish yo’qtirkim, barchasin bitilgay, iki-uch kalima bila ixtisor qilildi. Va ul buladurkim, adl bir qo’rg’ondurkim, suv solib yiqilmas va o’t bila kuymas, manjaniq bila buzilmas. Va adl ganjdurkim, ko’prak olg’on sayin, ko’prak bo’lur va ozroq harj qilsang, ozroq bo’lur. Va xirandmand uldurkim, maxfiy andoq so’z demag’aykim, yuzig’a dey olmag’ay. Urushda dushman oz deb g’ofil bo’lmamoq kerakkim, ko’p o’tunni oz o’t kuydurur” (The honesty is imitated the strong fortress. It cannot be destroyed with water, the fire, and the tools of war. Also, do not think the number of enemy is less, because many woods are fired with less fire) [3. 244]. Or we observe the revered will of prophet Mohammad (peace will be upon him). For instance: “Hazrati Ali karamallohu vajhadan rivoyat qilibdurki, aytdilarki: “Bir kun sarvari olam – Muhammad Mustafo sallallohu alayhi vasallam meni huzuriga talab qildilar. Vaqtiki, xizmatlariga bordim, menga mehribonliklar qilib aytdilar: “Yo Ali, sen menga Muso alayhissalomning Horun degan ukase kabi yaqinsan. Lekin Horun kabi payg’ambar emassan. Chunki mendan keyin payg’ambar chiqmas. “Yo Ali, bu kun senga bir vasiyat qilurmanki, uni asrasang, dunyoda yaxshi holda bo’lg’aysan, agar o’lsang shahid bo’lg’aysan”. Avvalg’iva oxirgi ilmlar ushbu vasiyatnomada aytilgandir, ey musulmonlar, har kuni bu “Vasiyatnoma”ni o’qinglar va unga amal qilinglar va bu vasiyatlarni bajo keltiringlar. Dunyo va oxiratda balolardan xalos va emin bo’lursizlar, oqil va dono bo’lg’aysizlar”. (In this sentences are given the will of the prophet Mohammad (peace will be upon him) to the Hazreti Ali. According to this will, if each person conforms it, he or she will live in relaxation.) [7. 5]

Foreign scholars have studied the will which were created in the Oriental literature as a special genre. It is expedient to remember the researches of the well-known Turkish scholar Guzal Abdurakhman in this case, she gave enough information about twenty-six letters in the religious-conservative spirit, including the will which created in poetry and prose, in her book titled “The Religious and Sufi Mystery Turkish Literature-the book of the people”. The scientist well illustrated the lexical and inflammatory meanings of the word will, the legal foundations of the term, and how does it write in poetry and prose as the genre, and gave definition about it as follows in his research: “The lexical meaning of the will word is a written expression form of things that are intended to be made after the death of a person as the legal term

with attention. It has a particular importance to fulfill the wishes expressed in this will. The inflammatory meaning of the will is ordered desires and wishes to the future generations after the deaths of religious leaders and statesmen by religious-mystery aspect. Wish, desires are works written as poem or prose” [1. 531-534]. The professor gave the famous wills of Lukman Karim to his son, the will Imami A’zam Abu Khanifa to his student Yusuf binni Khalid Samtia and the will of Hoji Bektoshi Vali to Sari Ismail from the history of religious-sufi, mystery Turkish literature written in prose in order to prove the definition given to the will, his own theoretical arguments. We considered in this our research that the description to the will given by the teacher Guzal Abdurakhman is a perfect description, and in turn, we were interested in how to call the will in Turkic language and also we addressed to the valuable book of Makhmud Kashgari titled “Devonu lugotit turk” which created in 1076, consists of 7500 words. We read the following unique information about this in the section titled “The words in the form faolon, fanlon”: “*Tutsug*’-vasiyat (the will); *men anar tutsug’ tutuzdim* – *men unga vasiyat qildim* (I bequeath to him)” [6. 429]. Interestingly, we know that Makhmud Kashgari used *tutsug*’ term in the context of given proverb as the form *tutrug’i* in the explanation written to the word *a:z* which means good fortune, the result is a good word, a good intention in the dictionary, and consider to give the opinions of hard-working scientist, S. Mutallibov who prepared to publish the book for the first time in Uzbek language: “Iglig *tutrug’i* a: z bo’lur – willing of patient will bring good thing for him. This proverb is pointed to the will of the patient, and are said in front of the patient” [6. 108]. Thus, the will is expressed with Turkic words such as *tutsug’*, *tutrug’i*, until the term will comes from the Arabic language into the language of Turkic peoples, and that it expressed how to do the things which said and must be done things and wishes before the death.

As a logical continuation of our research connected with the wills of Alisher Navai, we continue to examine the genesis and history of this literary genre in the Uzbek literature, we appeal to the will written by the minister Oytuldi for the king Kuntugdi, given in the great work “Kutadgu Bilig” written in Turkish language by Yusuf Xos Hojib who the great poet of XI century, the wise and statesman (was created in 1069-1070 years, namely, in the period which the reign of the Karakhanids raised the top in the XI century, and it was presented to the ruler of the East, Tavgachkhan. The book is valuable with the images such as Kuntugdi-justice, Oytuldi-state, Ogdulmish-mind, Ozgurmish-contentment. The work is called “Odobul mulk” by Chinese, “Oynul mamlakat” by Mongols, “Ziynatul umaro” by eastern peoples, “Shohnomai turkiy” by Persians, “Pandnomai muluk” by some peoples, “Kutadgu

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

bilik” by Turan peoples. The Caiaphas, Vienna, Namangan copies of this book are well-known and famous in Turkology science.) This will is the form of the will which is spread more less, namely, is written for the ruler. Yusuf Hos Hojib could prove that he is a talented artist with the will “In the language of Bugrokhan”, his this will is a classic example of will.

It is well known that significant scientific research works were carried out on “Kutadgu bilig” of Yusuf Hos Hojib by foreign scientists H. Purgstall, J. Amedi, G. Vamberi, R. R. Arat, V. V. Radlov, S. E. Malov, O. Valitova, Uzbek scientists Fitrat, K. Karimov, S. Mutalibov, N. Mallaev, G. Abdurakhmonov and B. Tohliov [12. 5-47; 10. 108]. They praised the book and regarded it as the first example of literary literature that were reached to us, as well as a textbook of intellect and wisdom. In particular, Solih Mutalibov wrote in his headline to the book “Devonu lugotit turk” of Makhmud Koshgari about this valuable book and its literary influence on the word art: “...Kutadgu bilig” is a very important document as a great artistic work of its time. Because it influenced to the writers in recent stages as the sample of the oldest literary work, and the writers by recent stages used it. That is why, this work is a very important work that helps us to discover the essence of many issues, such as literary formulations, poetic images, symbolic gestures, the style and expressions specific to the poetry, and even some names which have shown in the works of writers of the last period” [6. 15]. Thus, “Kutadgu bilig” is the first important theoretical, literary source that helps us to study the genesis and history of the will genre. When we examined the works of our teachers such as K. Karimov and N. Malalayev who are the hard-working researchers of this valuable work, by this issue, we were convinced that they did not mention this will in their researches. This case appears in the followings: Firstly, it is not mentioned in the image of the work connected with remembering the will. Secondly, when they analyzed the image minister Oytuldi in their research in detail, they did not speak about the will of the minister for the governor [4. 47-70; 5. 122]. For example, that piece was left in the image of event which was necessary to mention the will, in the reference “The following event is narrated in the epic poem” of the research of well-known scientist, N. Mallaev titled “Yusuf Hos Hojib”. We corrected the event of the will which was left in the story of the scholar, in the following, namely: “...gave him the will which his father wrote to the governor”. Here: “... He served a long time at the palace, and Kuntugdi was enjoyed with his mind and intelligence and entrepreneurship. But Oytuldi missed his country and his family, gave permission and returned to his homeland, and eventually died there. There was a son of Oytuldi, Ogdulmish. He obeyed his father's word and went to the mansion of Kuntugdi and gave him his father's will which his father wrote to the governor,

and entered to work serving at the palace. Ogdulmish followed the works of his father; he gladdened Kuntugdi with his activity and wisdom in public affairs” [5. 116]. However, we can see that the teacher K. Karimov corrected this mistake in one of his subsequent studies, and commented the image about his will in one phrase “...Oytuldi suffered serious illness and got sick. He gave advice to the governor and his young son, Ogdulmish, and died with the will” [10. 106-131], in the analyses about the minister Oytuldi and the scholar was interested in the will of the minister.

Indeed, when Yusuf Xos Hojib, created master fully the beautiful sample of the will genre in Turkic language in “Kutadgu bilig”, we have the right to accept this creative process as not only a sample, but also theoretical information about the literary genre of will. According to our observations, this will which he wrote, indicates the fact that the will genre became in the initial form in one hand, on the other hand, this genre appeared and formed at that period in Turkish literature. It is noteworthy that a perfect will was written by ideological-artistic aspects and in high volume by the author in the work according to the composition. In this respect, the value of the work is also great for literary criticism.

The chapter titled “Oytuldi said to write the will to the governor” [12. 249-269] is written wholly in the will genre. He emphasized to his son “it is a will” in the final part of the will. We have seen that the term of *vasiyatnoma* (will) is given in both places with the term *meros* (legacy) in the manuscript, quoted in the edition of “Kutadgu bilig” which was published in 1984 year in Urumchi city in China. For example:

Dedi: tut bu xatni, yo'qotma o'g'ul,
Eligga eturgin merosimdur ul

(Take this letter and give it to the governor. It is my will) [11. 343].

However, we observed that the scholar K. Karimov interpreted this literary genre as the manuscript *meros* (legacy) in one case, in the other case he interpreted as the manuscript *vasiyatnoma* (will) in the edition of 1971 year, and according to our opinion both terms are properly interpreted.

The form of the will:

Aytdi: O'g'lim, bu nomani saqla, yo'qotma,
Uni eligga yetkaz, bu vasiyatnomadir

(Son, take this letter give it to the governor) (269).

The form of the legacy:

Kishi o'lsa, undan esdalik meros qoladi,
Mening senga esdaligim mana shudir, ey dono.

Men uchun sen sevikli kishi eding, ey elig,
Foydali esdalik senga qoldirdim.

Mana, men chin so'zlarni yozib qoldirdim,
Bu so'zlarni va meni unutma

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

(This will is my memory for you, do not forget the words written in it (266–267).

Generally, this will consists of 152 bytes, the main images of the work such as Kuntugdi, Oytuldi, Ogdulmish participate in the will, and the will can be evaluated as an independent epic poem which has its entirety by this aspect, is written in the teachings spirit and given fully in the work. According to the plot of the work and poetic image, the melody of teachings to the governors in the will is leading because of the author of the will is the statesman, the particular teachings, symbols and phrases which ordinary people are lead to the goodness, are shown in the will, especially, the teachings about the training of young girls and boys are a vivid proof of it. The chapter 14 of this will is the introduction of it, the introduction consists of basmala, excepts the traditional vojib ul-tasnif (the method of classification of the book) parts devoted to the God, prophet, fourth khaleefahs, the parts devoted to the praise of governor, the issues of cause of writing the will and conclusion:

1. Basmala consists of 2 bytes. Yusuf Hos Hojib actually started the book with the basmala according to vojib ul-tasnif (the method of classification of the book) [8. 51-57] and wrote letters of praise. However, the example and the argument for the independent basmala written in the book are found in this will, so the has been begun with a separate basmala:

Siyohdon bilan yozuv qog'ozi oldi,

Xudo nomi bilan (ya'ni bismillo deb) xat yozishga kirishdi.

So'zini xudo nomi bilan (ya'ni bismilloni yozish bilan) boshladi.

Yaratgan, parvarishlagan, afv etgan ega(m)dir (249).

(He began writing letters in the name of God (bismillah))

2. Hamd consists of 4 bytes. The praise to the God which is the kindness of the merciful, the closest to the mystery and dear to the soul, is told in this part with saying the language of Yusuf Hos Hojib;

3. Na't consists of 1 byte, it is said salavat too the prophet Mohammad (peace will be upon him) who was chosen the messenger, the head of the people, and the eyes of all people:

Sevimli payg'ambarga mendan ming-ming salomlar

Yetkazsin Xudoyim payvasta va kamu ko'stsiz

(The God delivers my greetings to the prophet) (251).

4. The greetings part to the sahabas (companions of the Messenger) of the will consists of 1 byte, the companions of the Messenger, valuable sahabas (companions of the Messenger) are remembered in this byte:

Barcha sahobalariga yana boshqa (takror)

Salomlarimni yetkazsin Xudoyim kamaytmasdan

(Also, the God delivers my greetings to the sahabas (companions of the Messenger) (251).

5. The praise of governor part (the highest rank ruler of the Kingdom of Karahanids period) - consists of 1 byte, a ruler who has inherited the will, his great name is not directly expressed in the will, and the minister said the ideas, opinions, plans, desires and wishes and sorrowing about the training of his son Ogdulmish which saved in his soul for a long time, and he wished the age of Noah to the governor:

Uzun va uzoq yashagin, ey baxtiyor elig,

Ko'p ellarga muyassar va beglik otiga payvasta bo'l

(Live for long time, and be suitable for the name of the governor) (251).

6. The reason of being written of the will. This section consists of 4 bytes, according to the statement, the governor appreciated the keen-wittedness of the minister, the activity of the minister on the basis of honesty, truthfulness, rewarded him with many donations. When the minister, who was lying in bed of death, presented himself as a person who had fully good character, his name was Oytuldi, he said the reason for writing this will as follows:

O'lim jarchisi keldi, qattiq tutdi,

Qutular joyim yo'q, halovatimni oldi.

Meni juda yaxshi tutding, ko'p inoyatlar ko'rsatding,

Men esa senga sazovor bo'larli xizmat qila olmadim, mana endi o'layotiman.

O'sha inoyatlaringga javoban ushbu pandnomani

Endi sen uchun yozib qoldirdim, ey tetik

(Now I am dying and write for you these teachings) (251).

He gladly said that he worked with honesty as the ministry only for the consent of Allah and goodness for the great governor and the great nation and:

Bu dunyoning ishlariga do'st edim bilgin,

Barcha ishlarini to'g'rilik bilan bajardim

(I am a friend of this world and I have done all your work correctly (251)–

He reminded that the pride of the cordon minister with his work was also shown in the method faxriya. He sincerely recited and reminded to the governor that uses the truth, because, the base of truth is justice, it leads to the honesty, relaxation and the truthfulness, and it leads to the goodness.

Yusuf Hos Hojib did not use the name Kuntugdi of the governor directed to the justice in the will, but he used more than twenty extended appeals and appealed to the governor with O, governor, O healthy, O courageous, O happy governor, O king, O wise leading the people, O skillful, O wise, O ruler, O handsome under the name of the governor.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

This will written by Yusuf Hos Hojib is in didactic character according to the nature of the work, and, in this case, we can see that the author explained it as the teachings in the headline of the chapter, and he expressed his purpose to write this will as follows:

Mana, endi o'ta mehribonlik bilan

Pand-nasihati yozib qoldirdim, o'zing uchun o'qigin.

Mehribon kishi nima deydi, eshit,

Mehribonlik – bu insonlikning bosh (belgisi)dir:

Mehribon kishining so'zini va naqlarini tutgin,

Bu pand nasihat (so'z) lar senga davlat ovi bo'ladi.

Kishilarning eng chini mehribon kishidir,

Mehribon (kishi) so'ziga amal qil, (u) seni buyuklikka eltadi.

(The best person in the world is kind person, he or she helps to you to achieve the greatest) (251).

7. The main representation part of the will. It can be studied dividing into two parts depending on the content of wishes Oytuldi directed to the teachings. Namely, in the first part, the minister's testament is expressed in connection with the personality of the governor, the activity of the state, in the second part (Chapter 14) is about the future fate, education and training of his son Ogdulmish, who is orphan without mother and father (according to the plot of the work his mother died in his childhood). The wise minister began the will devoted to his governor with the following byte full of love and kind:

Ey elig, mana, men ham senga mehribonman,

So'zlarimga amal qil, ey mardona bahodir

(I am also kind person for you, and you should do my sayings) (253).

Hence, as the wisdom of "Kutadgu bilig" was seen in the interpretation of justice, state, mind, contentment, the wisdom of the will of the minister is revealed in these four things on the inner background. He recites his teachings to the governor in written will by him, not only used own speech with skillful in order to give them with gentleness and affection, explain them to his mind and avoid the repetition, but also used the Turkic method that what does the kind, trustful person say, what does vigilant person say, what does strong person say, what does the poet say, what does the person say who understands the confusion of the world, what does prudent person say, what does the wise and famous person say, what does the old person say, what does the knowledgeable person say, what does the person say who thinks before saying, what does the person say who knows own death, we prefer to evaluate this will as the teachings for the governors.

While he was continuing to write the will, he gave conceptions and conclusions to the governor in the means of some existed traditional images,

symbols, assimilations about the world that the world is rabat (caravansaray), the world is field, the world is your shadow, admonished to the governor, explained to the governor the waysto achieve the honor and respect, forgiveness and health, sacred relaxation in the Hereafter one by one, reminded to the governor about the death.

Yusuf Hos Hojib masterfully describes the death tragedies as the will genre is the preceding words before death, the vital conclusions, the desires and wishes which must be done, and, in turn, the minister writes about his regret, dissatisfaction connecting with the death to the governor in the will in 12 bytes.

O'kinch bilan o'lmoqdaman, o'kinchning foydasi yo'q,

O'zimdan (jonimdan) umidimni uzdim, ishonchimni yo'qotdim

(I am dying with regret, but it is unuseful) (253).

Or:

Hanuz o'lim yopishgan ekan, xushyor bo'l, ey elig,

Tadbirlaringni ko'r va muhayyo qil

(Be careful from the death and do good works) (253).

Balo, zo'rlik o'rniga sen yaxshilik qil,

Qo'l va tilingda xalqni sevtingin

(Do always good works and the people are satisfied from you) (253).

And also when he explains as "O governor, be careful after me", he will focus his attention on the honesty, justice characteres, and remind us the phrase "The honesty–is salvation and joy":

Dunyo davlat bilan seni avramasin,

Hamma ishlarda ham rostlik ista

(Do not be deceived the wealth and do all works with honesty) (253).

In the will, the minister puts to the governor the greater issue of justice and the right policy in the state administration than the period of his ministry:

Xalqqa to'g'ri va adolatli siyosat yuritgin,

O'zingning hayot kunlaring ham ezgu bo'ladi

(Be honesty and justice for ruling the state) (255).

Oytuldi tried to explain to the governor that the governor should not oppress to his heart, to the soul, to the throne and to the state and to the people, because of the greater envy to the wealth:

Mol-dunyo uchun o'zingni o'tga –cho'qqa urmagin,

Tanu jonga qasdma-qasd havas bo'ynini yanch

(Do not desire for the wealth in this world) (255).

8. The conclusion part of the will. He writes the conclusion as follows what the old person says:

O'g'il-qiz kichikligida nimani o'rgansa,

To qarib o'lmaguncha uni unutmaydi.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIIHQ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

Ulg'aygan qari (kishi) nima deydi, eshitgin,
Sinagan, uqqan hamda bilib so'zlagan kishi:

Kichik ekan o'g'il bilim o'rgat,
Kichiklikda bilim o'rgansa, qo'li baland bo'ladi.

Ayama, o'g'il-qizga kaltak yedirib tur,
Kaltak o'g'il-qizga bilim (adab) o'rgatadi
(Teach the knowledge and courteousness to his
son-daughter in their childhood, it is useful for them)
(259).

Yusuf Hos Hojib bequeaths to the governor to
take care of the education of his son Ogdulmish in
the conclusion of the will from the speech of the
minister, in turn, he reminds separately that the
issue of education of the younger generation is a
serious matter and one of the most important
tasks of the state.

According to the progresses of the story, the second
will of the minister exists in the book, this will is
said to the son Ogdulmish and his relatives in
verbal form by the minister, Oytuldi, he bequeaths
that all wealth which he gathered during his whole
life, is divided to the people and died.

Conclusion

In conclusion, we have seen that the will and
testament written in "Kutadgu bilig" of Yusuf Hos
Hojib have been shaped as literary genres along
with various literary genres in the X-XI centuries.
In separate chapters of the work, he also makes a
debate about issues raised in the will. Yusuf Hos
Hojib created the will with skillful, how he
expressed his skill in the qasida genre in his
qasida "Bahor" ("Spring"), thus, he created the
classic example of the will literary genre.

References:

1. Abdurrahman, G. (2014). *Dini-tasavvufi turk edebiyati el kitabi*. Ankara.
2. (1992). *Adabiy turlar va janrlar*. Uch jildlik. 2-jild. Lirik. Toshkent: Fan.
3. Navoiy, A. (2000). *Tarixi muluki Ajam. Mukammal asarlar to'plami. Yigirma jildlik*. 16-jild. Toshkent: Fan.
4. Karimov, Q. (1976). *Ilk badiiy doston*. Toshkent: Fan.
5. Mallayev, N. (1976). *O'zbek adabiyoti tarixi. 3-nashr*. Toshkent: O'qituvchi.
6. Koshg'ariy, M. (1960). *Devonu lug'otit turk*. Uch tomlik. 1-tom. Tarjimon va nashrga tayyorlovchi S. M Mutallibov. Toshkent: Fan.
7. (1992). *Muhammad alayhissalomning vasiyatlari*. Nashrga tayyorlovchi, so'zboshi va izoh mualliflari S.Rafiddinov, Rustam Safo. Toshkent: O'zbekiston.
8. Rajabova, B. (2018). *Yassaviy va Navoiy ijodida basmala*. O'zbek tili va adabiyoti, 3-son. pp. 51-57.
9. Rajabova, B. (2015). *Boqiy vasiyatnomalar*. O'zbekiston adabiyoti va san'ati, 2015-yil 27-may.
10. (1977). *O'zbek adabiyoti tarixi*. Besh jildlik. 1-jild. Toshkent: Fan.
11. Yusuf, Xos Hojib. (1984). *Qutadg'u bilig*. Urumchi: Millatlar nashriyoti.
12. Yusuf, Xos Hojib. (1971). *Qutadg'u bilig*. Nashrga tayyorlovchi Q.Karimov. Toshkent: Fan.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 21.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Gulnoz Ernazarova

The candidate of philological sciences
The Karshi State University, Uzbekistan.
dokma@bk.ru

THE DEVELOPMENT OF “MEDITATE LYRICS” IN THE UZBEK CLASSICAL POETRY

Abstract: This article analyzes the meditate lyrics in Uzbek classic poetry in the examples by Alisher Navoi, Mashrab, Ogahiy, Furkat.

Key words: Uzbek lyrics, Mashrab, Bobur, Ogahiy, Furkat.

Language: English

Citation: Ernazarova, G. (2019). The development of “Meditate lyrics” in the Uzbek classical poetry. *ISJ Theoretical & Applied Science*, 05 (73), 151-155.

Soi: <http://s-o-i.org/1.1/TAS-05-73-27> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.27>

Introduction

When the development of “meditate lyrics” in Uzbek classical poetry is explained we understand the new stage developed through the use of philosophical symbols, rich in poetic dyes, which has enriched the traditions of Uzbek folklore and ancient writing poetry. In this article we try to describe a “Meditate lyrics” problem as an example of the greatest poets creating in this period.

The poetry of Alisher Navoi is full of poems, which are characterized by completed philosophy of Sufism, sophisticated social and human problems. Clearly, it also calls for learning of Alisher Navoi poetry with other classic poets together as a medieval lyric problem. Here are some examples of some meditate aspects in the poet’s work.

An addition story for “Avalgi maqolat” in the poem “Hayratul –abror” is about human and society, human life as well as its meaning. Unlike his ancestors like Yusuf Xos Hojib and Yassaviy who illustrated humanistic, social problems in the form of monolog, Alisher Navoi represented the sentences of the characters in a lively and dialogic way.

Materials and Methods

In the narrative his student asked him to express the reason of his trouble noticing well-known sheikh Boyazid Bastomiy sit in distress. The sheikh explains the cause of his sorrow to his student so:

*Kim bu jahon ichraki eldur g'ulu,
El to'la, ammo kishidindur hulu.. [1. 108].*

So, I have not found a real human among people living in the world with bustle. In another way, the world is full of people but I have not seen one whom can be considered as a human.

Surprised at this answer, the student also asked a question: Who are you living among them, if you have an idea that there is not a man in the world? Do not you belong to this society? The reply of the sheikh is so intelligent that the student could not understand it and had to ask another one. In that case the sheikh explained clearly so what he meant when he told about a human:

Шайх деди: “Эй иши гумроҳлик,

Topmag'on ish sirridin ogohliq.
Men dog'i yuz ming meni sargashtadek,
Ashki bog'ir qonig'a og'ushtadek,
Bo'lmasa imon bila ketmak ishi
Anglaki oni desa bo'lmas kishi...
Kim chu vido' aylagusi jon anga,
Hamroh o'lur yo'qsa imon anga...” [1. 109]

It was revealed in his answer that Boyazid Bastomiy was in distress because he thought about a general question whether the human’s life would pass with faith or not. The cause of sorrow that is general and leads one in a deep thought can be not realized by a human being concerned with living things. A person who lives with thinking about the next world (in Islam), like saying in Nakshband propaganda: “One must think about only Allah even though they are doing something” can comprehend it. Another side of this concept is that the people can have no idea

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

whether they pass away with faith or not until they die. We think it is the essence of his dignity, tragedy, unbalance and sadness. Moreover, remembrance of the past, looking at their lives from the point of view and a panic at the same time are clearly described in the story. The character in the story not only remembered his ancestors but also had a feeling of sorrow about their death. Besides this, he expressed his distress for obligation of existence in the period that is unsuitable for his feelings.

Although the term “Meditate lyrics” appeared in Europe and its original examples have been described in the English sentimentalism poetry, their roots are connected with the East. Courage and friendship ethics in the North literature during the Islam period and their existence in the poetry of religious belief influenced deeply on Salb movements as long as the poetry of knights having visited the North. There are special notes in the works of scientists like N. Komilov, F. Sulaymanov who have seriously studied comparative literary criticism. As a result, the features of meditate lyrics such as considering death as the standpoint of immortality, considering death as a transition of the eternal life, contradicting the independence on society and the exotic nature each other, thinking about childhood, chaos, having freedom of feelings based on the memory of travel, the motive of understanding the philosophy of life on the journey, having a fear of industry and the aspiration of nature, keeping death in memory, a great deal of devotions to ideal ancestors in the past, siblings and temporary love, in addition to socialization of the poet’s personality gradually developed in the Western poetry. Therefore, we do not meet by chance a lot of poetic elements of meditate lyricism in the archaic and the classical period of the Uzbek poetry.

At the time, a number of features in Uzbek poetry like meditate lyrics are connected with Islam dogmas passing from centuries to centuries as a tradition and to understand the reality of the world on the basis of Islamic beliefs and the principles of artistic expression.

The reconfigure and updates of the traditions written in Oriental poetry can be meet in the work of Mashrab. This not only appears in poetic form, but also in content, internal structure, image, rhythmic acceleration and pessimism. Life of the human, the world lifestyle and its value, and the attitude of the man to the place where he lives as well as the period are essentially new in the style of Mashrab.

Dunya sarig'a bir kelibon g'amzada kettim,
Bir lahza dam olmay dam olmay, turibon lahzada kettim.

Bir mushfiqi hamroz jahon ichra topolmay,
Hasrat o'tidin kuydimu motamzoda kettim.

Surtmay bu qaro yuzni oshal ravzada bir yo'l,
Yuz hasratu motam bila mehnatzada kettim.

Har jon keliru ketgusiur bilsam oni ham,
Yuz g'amzada bo'ldum, yana motamzoda kettim.

Har ne bo'libon dunyoda yurdi necha gumroh,
Uryon kelibon munda yana arbada kettim.

G'ofil kishilar kechayu-kunduz tilagay mol,
Dunyo dedimu oxiratimni sota kettim.

Yorni xayol ayladi, Mashrab, ko'zin ochdi,
Yuz dardu alam birlaki mehnatzada kettim. [5. 73.]

Although a lyric character speaking, thinking, interacting, evaluating and coming to the conclusion in this ghazal seems to have a common characteristic like the poet, he expressed the general picture of a glorious person’s image who is in respect essence. The time and reality told by the lyric character do not fit in the biography of a single person. It is not impossible to determine the beginning and end of the space in the poetry. First of all, the radif of the ghazal must be explained. The term “radif” used as “a key word” in the majority of the works in ghazal genre has the same function as one in the ghazal of Mashrab.

In the Uzbek language the word “ketdim” is an example of the verb which expresses poetic varieties in speech. It can convey the meaning and the end of the activity without grammatically connecting with other words and word expressions. In first case, this word means to say good-bye in the Present simple having the same function. If the question like “Weren’t you in school at 9 00 in the morning?” is answered like “Ketdim”, it means as “I had gone at this time”. In this sentence it expresses an activity which is completed and happened only in the Past tense. When the question like “Have not you gone yet?” is replied like this, the expression like “I am going now” is realized. Because there is a speaker’s intention we must understand it in the future meaning.

Apparently, “a key word” was correctly picked for this ghazal of Mashrab. The varieties of the meaning were used perfectly in the poetic construction of Mashrab’s ghazal, leading to intensification of meditate spirit at the same time. As there were the varieties of the meaning in this key word meditate lyric criteria like “travel and travel experiences”, “stranger’s position and keep away from it”, “chaos”, “death and realizing it as edifying source” and “socialization of lyric personality” were completely expressed in the ghazal. We can clearly feel in from the beginning till the end of the ghazal.

Dunyo sarig'a bir kelibon g'amzada kettim,
Lahza dam olmay, turibon lahzada kettim.

In this couplet the lyric character emphasized that life would end in an instant and was in sorrow

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

about it. Though the one is completely short consisting of two lines of poetry, it expresses a great history of the human being from his birth till death. The time when a person leaves is really a moment for the one coming from the eternal world. Because after leaving the world, the human goes to the place where he came from. The lyric hero's happiness for leaving caused for grief, merry-making with dance in this ghazal. Because he was happy about leaving the world where was full of trouble, falsehood and evil deed and coming back his own homeland. Likewise, a version of Mashrab's "Masnaviy" is described with a help of the image of a leaf dying up and leaving on the ground. However, the expression like "I have gone" is realized accurately, it is clearly explained that this biographic history belongs to not only Mashrab, the author of the ghazal but also all the humanity. Because no one can know when and in which situation they came and which mood he will leave in. In addition, the person has no chance to speak, communicate, explain his/her opinion to others. The dead human cannot say "I have died". In the ghazal, there is a meaning which means to die, to leave the world under the radif like "I left" and it expresses all the humanity, the human history in an example of a person. The following lines of poetry are directed to the image of the world life in this lyric expressed. In the second line the poet emphasized that he could find a friend having ideas as he had and living in grief, when he complaint about his behavior in the third line that he confessed not having knelled on the prophet's feet. The poet said that this kind of life was not only for him, but also others. Of course, it is definite that every living thing will leave the world. So human beings must be properly aware of the birth and the dying to be true that birth is the main page of death in the book of life. The only thing to do is to live in a world of goodness and righteousness in order to go out with joy, as Mashrab went. Therefore, the fifth line shows the position of a stray who did not comprehend that there was not eternal life. In the sixth line this idea is further developed and the poet pointed out that the status of the people who want only to have wealth and do not think about their end of life is definitely in bad situation:

G'ofil kishilar kechayu kunduz tilagay mol,
Dunyo dedimu oxiratimni sota kettim.

He said that social and ethical problems may lead to deteriorate of the society as well as the world. So there is an interesting question. How must the human live in order to leave the world with happiness? He / she must live only thinking about the God and act as God orders to achieve something. The poet put forward to his general conclusion in his line like "Yorni xayol ayladi, Mashrab, ko'zin ochdi". In this way, the reader should comprehend that the poet's trouble and happiness are the same as all the human being's. Such a thoughtful conclusion develops

meditation in the version of the poet leading to the high point and causes to appearance of the feeling of meditation in the heart of the reader.

In general, we can frequently see characteristics which are specific to meditate lyrics in the work of the poets who lived till the century of XX. As it is clearly explained in our observation, the lyric interpretation of the world on the basis of Islam etiquette causes the poet's meditative thought, comprehension regardless of wanting or not. We see that meditative lyrics was highly reflected in the following Ogahiy's poetry who continued writing traditions of Atoy, Sakkokiy, Lutfiy, especially, Navoi:

Bo'ldi chun umrung kunining vaqti tush,
Nafsi sarkash otini ko'p chopma, tush,
Xobgoh etgil anoat manzilin,
Yo'qsa hargiz ko'magungdur rost tush [6. 563.].

This poem was written in the style of Tajnis and according to early Turkic classic style of Tuyuk. However, when the contents of the essence is looked through with attention it is clear that it was written in a philosophical style of the quatrain genre. Because in the Islam education living in meaningless life and passing time with contentment, evil, quarrel is wasting one's life away. We have long been witnesses of the fact that our classic poets identified it with sleep and dream. Ogahiy addressed to people who spent their life in vain and wasted their time: "You are trying fast to have everything like possessions but you live in wasted life. Life goes as fast as a dream. Do not keep this way of living. Learn how to live with patience. In the way you can get rid of greediness and you will have real life." Tuyuk including history, enlightenment, spiritual advancement and psychological state of a person reflects the philosophy of life, the meditate lyrical content of the Oriental life.

An important aspect of meditate lyrics is the fact that experiences of travel were described in a poetic expression. Similarly, literary works are found in the works of all poets who were ancestors and descendants of Navoi. Especially, this theme was the leading one in the creativities of our poets like Zaridin Muhammad Bobur, Furqat who lost their homeland and lived in homesickness. "Baburnama", in its nature, compiled the poems of Babur as part of the story including the events of his journey, and also consisted of the lyric writing about his such memories. In lyrical genre samples of "Baburnama", memories of travel are different from ordinary travel stories with their philosophical, religious, tragic nature. Therefore, it is possible to call them lyrical interpretation of philosophical, psychological, tragic experiences existed in Babur's magnificent journeys. The poet and the great king Babur reflected on the essence of his military journey describing the events of 1526-27s. He was reflected as an experienced person in the quatrain,

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHII (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

written in the result of Bobur's observation during the travel.

Islom uchun ovorai yozi bo'ldum,
Kufforu hunud harbsozi bo'ldum,
Jazm aylab erdim o'zni shahd o'moqqa,
Al-minnatu lillohki, g'ozi bo'ldum [4. 229].

The person who is in the journey has different mind than other people. He observed himself in two situations. When he saw his own image in a foreign country in the first one, a stranger who was being watched by inhabitants in this country in the latter one. Dual observation makes a person who is in a foreign country think carefully about the meaning and outcome of his trip and find the answer of questions like "Why did I come here?" What did I achieve? Those questions always made the great and well known poet be in trouble. After gaining victory over Raana Sanga non-Muslims in India he got this exaggerated quatrain written. The purpose of his campaign was to spread Islam, to march to disbelievers in it and Babur expressed widely the conclusion of his life, his activities as a king as well as philosophy of his life in the quatrain where the God gave him to have chance of being Muslim. Also, Islam dogmas which in everything with human beings would happen according to their fate was the main essence of the quatrain.

Memories about his travel, experiences and the description of events happened during the journey were clearly described in the creative work of Furqat, another poet having no chance to live in his own homeland. The work "A legend in Greece" was in the writing style of description of events so it was written in Masnaviy. The work included in two parts. In the former the poet wrote about himself in the center of the place and period where there was the description of a journey. However, in the latter one of the work the place and period changed and a real event like a legend occupied in the middle.

Eshitkil, sarguzashtkim safarda,
Ko'rub xavfu xatarlar bahru barda.
Ko'ribon beaded shahar diyoru,
Guzorim tushdi Yunon mulki sori... [7. 49.]

In the first part we can realize that the event happened during the journey and the main character was the poet himself. He described how he had reached in Greece and sailed through the seas and rivers having terrible dangers and a long way journey. He told with a great surprise about spacious streets, marble-built buildings, shops, the Lungi is made of silk and baths with basins made of glass in the country with beautiful trees and he accidentally met a church

during his journey. He described in the second part that a woman whom he met in the church had told a narrative and that one was expressed by that woman, in a direct speech. That one telling a narrative played a great role and placed in the center of the second part. The period in the narrative was connected with the biography and the experiences of that woman. The narrative of hers included in a four-part composition. In the first part is about the childhood and adolescence periods of that Italian woman: She was a daughter of a rich merchant who liked her very much, brought up with care. She grew up and was so beautiful that everybody was surprised at her beauty. She suffered in tuberculosis but doctors could not treat her though they had done all their best. In the second part she told that a doctor recommended her to live by the sea and her father got a place for her relaxing built, having treated for the disease she recovered completely but she fell down in the sea while she was fishing. In the third part a fisherman rescued her with a fish net and brought her to her father in a good position. In the fourth one her place and period connected with those of Furqat. The woman telling her narratives to the poet explained why she was there and had told him everything belonging to her:

Iqobat aylabon har yerda tanho
Boray har erdakim bo'lsa kaliso.
O'zim birla olib ko'p siymu zarni
Sayohat ayladim bahr ila barni... []¹

She also stated that she was visiting sacred places because of her gratitude for having getting over the disease and rescuing from sinking in the sea.

Conclusion

In our opinion, the reason why Furkat described about the beautiful woman's legend though he had his interesting journey experiences, he also presented with his new and independent narratives about his journeys like that woman. The experiences in other countries, observation of other's fate and immediate conclusion provide meditate character of the work "A legend in Greece".

In general, the meditate nature of contemporary Uzbek poetry is not the result of coincidence or external influence, but rather its historical foundations, deep genetic roots. Consequently, the following conclusion can be drawn to the fact that the stages of formation of modern Uzbek meditative poetry are independent art phenomena:

1. By means of Mashrab and Babur's creativity it is felt that meditative lyrical poetry is consistent with human psychology. It is now commonplace in private to show that the general public's personality is

¹Кўрсатилган китоб. – Б. 55.

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

the main feature of individual meditative interpretation.

2. The poetry of Babur and Furkat has been reflected in the memories of meditative lyrical poetry,

the philosophical –psychological interpretation of the new social reality. Poetic and meditative updates like chaos, thoughts about death, are noticed in the poetries of Mashrab and Ogahiy.

References:

1. Navoiy, A. (1991). *Mukammal asarlar typlami. Khamisa. Xayrat ul abror*. Toshkent: Fan.
2. Navoiy, A. (1966). *Asarlar*. 15 jildlik. 13-jild. Toshkent: Fan.
3. Bertel's, E. E. (1965). *Sufizm i sufiyskaya literatura*. Moskva: Nauka.
4. Bobur (2002). *Boburnoma*. Toshkent: Shark.
5. Mashrab (1963). *Tanlangan asarlar*. Toshkent: Badiiy adabiet nashrieti,
6. Ogaxiy, M. R. (1960). *Ta"vizul oshiqin*. Toshkent: Fanlar akademiyasi nashrieti.
7. Furkat (1959). *Tanlangan asarlar. Iki tomlik. Ikkinchi tom*. Toshkent: Badiiy adabiet nashrieti.
8. Haqullof, I. (2019). *Mushohada yog'dusi. II*. Toshkent: Tafakkur.
9. Haqqulov, I. (2011). *Navoiyga qaytish-2*. Toshkent: Fan.
10. Haqqulov, I. (2018). *Talant - jasorat javhari*. Toshkent: Muharrir.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)
International Scientific Journal
Theoretical & Applied Science
p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)
Year: 2019 Issue: 05 Volume: 73
Published: 22.05.2019 <http://T-Science.org>

QR – Issue

QR – Article



Sherali Abduvalievich Dusmanov
Samarkand state university

THEORETICAL AND PRACTICAL ISSUES OF FORMATION AND DEVELOPMENT OF ENTREPRENEURIAL PHILOSOPHY IN UZBEKISTAN

Abstract: This scientific article provides an overview of entrepreneurship as a socio-economic phenomenon and provides a set of social, economic, political, legal, ethical and moral factors affecting the formation and development of entrepreneurial philosophy, as well as a number of recommendations aimed at developing youth entrepreneurial thinking.

Key words: business, innovation, business philosophy, business culture, private entrepreneurship, clandestine business.

Language: English

Citation: Dusmanov, S. A. (2019). Theoretical and practical issues of formation and development of entrepreneurial philosophy in Uzbekistan. *ISJ Theoretical & Applied Science*, 05 (73), 156-158.

Soi: <http://s-o-i.org/1.1/TAS-05-73-28> **Doi:** <https://dx.doi.org/10.15863/TAS.2019.05.73.28>

Introduction

In the 21st century, labour able people from 40% to 55% of the economically developed countries of the world are working in the private sector of various small enterprises, firms and businesses, with a minimum of 20 personnel. The share of the total gross domestic product is 62% in France, 60% in Italy, 55% in Japan, 54% in Germany, 53% in the UK, 52% in the United States, and 56% in general [1]. That is why small businesses and private entrepreneurship are becoming a major economic, political, and spiritual power worldwide.

Consequently, entrepreneurship exists as a social entity and its philosophical study of its formation and development laws is essential as an urgent problem.

The problem of positively solving a number of problems such as the prolongation of the global economic crisis, aggravation of competition, increasing unemployment, deteriorating environmental degradation, increasing population migration, the overthrow of material resources, and the rise of hunger and poverty, which is largely dependent on the laws, methods and means of small business and private entrepreneurship.

The share of employment in the economy is 78.0 in Japan, 71.0 in Italy, 69.5 in Germany, 56.0 in the United Kingdom, and 54 in the United States [2] due

to the wide and broader access to small businesses and private entrepreneurship in developed countries, can be seen as positively solved by the above mentioned problems.

In Uzbekistan it is formed as 78.2% of those employed in the small business and private entrepreneurship, 61.9% in individual entrepreneurship and 16.3% in small businesses and microfirms make up 56.9% of the total.

The small business entities operating in Uzbekistan are 218,170, including 61220 in trade, 42,862 in industry, 21,796 in construction, 1,851 in agriculture, forestry and fishery. Overall, more than 10 million people in the country are engaged in small businesses and private entrepreneurship [3].

However, this is not enough. Unfounded investigations, corruption cases, low legal literacy, inadequate entrepreneurial skills and culture, and the incompleteness of bureaucratic barriers prevent to its development.

The head of state Sh.M.Mirziyoev said: "The World Bank ranked 134th our country's construction industry rating. This indicates that there are many problems in this area"[4], therefore, " ...preventing entrepreneurship is assessed as a barrier to state policy and the policy of the President "[5]. Thus, the creation of a new philosophy of entrepreneurship in the minds

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

of young people by studying the historical roots, business ethics, and secular principles of entrepreneurship is one of the most urgent tasks of present time.

When we get into account that 64% of the population of the country is young, the majority of young people (the average age of population in Uzbekistan is 26.9) years are engaged in the sphere of small business and private entrepreneurship. The objective of it is to create entrepreneurial skills of young entrepreneurs who have just started their business and become one of the priority directions of the youth policy currently underway in our country.

Main part

Entrepreneurship is a business that is earnings and making profits by producing and servicing goods based on the use of their property or others' property. Businesspersons are called entrepreneurs. Today, entrepreneurs are formed by workers, peasants, workers, and serve to the emergence and development of the middle class ownership. Among these, the number of young people is growing.

Young entrepreneurial skills are individual mental and physical attributes that reflect subjective circumstances of earning and making a profit by producing and servicing goods based on the use of their property or others' property. They can be sorted into skillful or incompetent in entrepreneurship.

We attach such qualities as wish, interest, talent, skill and power to the psychological and physical features inherent to the talented entrepreneur.

Accordingly, we consider as young entrepreneur who talented, skillful, constantly thinking and capable person who is interested in doing business. When we say that a incompetent young entrepreneur, we understand a person who is just interested in entrepreneurship, who is unlucky, untalented, indifferent, unable to do anything.

Nowadays, the problem of innovative development and development of youth entrepreneurship is of great importance.

"Active entrepreneurial business is an innovation that is based on modern approaches, advanced technology and management methods" [6].

The goal of innovative development of youth entrepreneurship is to create entrepreneurial philosophy that serves as a methodological basis for reflecting the laws and categories of their further development and determining the strategic directions for further development.

The ontological foundations of formation and development of entrepreneurial philosophy in Uzbekistan are all the material and spiritual wealth of the entrepreneurs, and the subjects gnoseological bases are engaged in entrepreneurial activity.

The first (empiric) bases for the formation and development of business philosophy are: 1) to educate a child from the beginning of the child's element of

entrepreneurship, i.e. teaching children to do something by their own hands;

2) providing a wide range of opportunities for children to attend children at different clubs, especially in scientific and practical circles; 3) to teach the secrets of craftsmanship inherited from their ancestors in the mahallas and to train them to innovate modernization 4) to familiarize the mass media with news, especially in the magazines and scientifically-practical magazines, in practice organizing vision; 5) Continuously maintains the traditions of the "teacher and pupil" and etc.

Socio-economic factors affecting the formation and development of entrepreneurial philosophy in Uzbekistan include:

- own property;
- Availability of a private enterprise;
- Availability of funds in the bank;
- Availability of service charge;
- Availability of access to the consumer market;
- Competitiveness of the product;
- Availability of raw material resources and others.

A young businessman who wants to engage in entrepreneurial activity can achieve great success only when he or she adheres to these standards. However, if it does not take into account these factors, it will be economically degraded.

Political and legal factors influencing the formation and development of business philosophy are as follows:

- Presence of required normative and legal documents on entrepreneurship;
- level of legal literacy of the population;
- concluded contracts and their execution;
- legally distributed benefits;
- Relations with foreign entrepreneurs;
- Attitude towards various political institutions that are not legally valid;
- The ability of young people to adhere to the principles of political literacy and democratic thinking;
- the attitude to smuggled earnings.

Ethical and moral factors influencing the formation and development of business philosophy include:

- the rise of the national idea to the level of belief;
- harmony of national and universal values;
- Familiarity with advanced social and philosophical ideas about entrepreneurship;
- degree of compliance with universal ethical standards;
- Superiority of conscience;
- Rising bread to the level of ethical law;
- The extent to which ethical media can be addressed.

The ultimate goal of the formation and development of entrepreneurial philosophy in

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

Uzbekistan is to develop entrepreneurial thinking, based on a healthy outlook of people.

Entrepreneurial mindset is a theoretical basis for making profit and earning from their own property or other property, based on risk and entrepreneurship in accordance with socio-economic, political, legal, ethical and social norms of citizens and a system of ideas and ideas aimed at implementing practical actions. From this perspective, it is desirable to carry out the following activities for the formation and development of youth entrepreneurial thinking.

Conclusion

1. It is desirable for all educational establishments to organize their debates on the topic "Formation and development of entrepreneurial

thinking in Uzbekistan: theory and practice" and based on new aspects of entrepreneurship, to formulate their entrepreneurial thinking skills.

2. Development of a project "Code of Ethics of Spiritual Culture of Young Entrepreneurs of Uzbekistan" under the auspices of officials and their submission to the public discussion and subsequent acceptance.

3. Publish a collection of words about entrepreneurship by world intellectuals and publish a collection titled "World Intellectual Property Entrepreneurship".

4. Development of the conceptual model of creating a "Young Uzbek entrepreneur's philosophical image".

References:

1. (n.d.). Development of small business and private entrepreneurship in the Republic of Uzbekistan. Retrieved 2019, from <https://uz/uz/statinfo/kichik-biznes-va-tadbirkorlik/tahliylar-kichik-biznes/432-analiticheskie-materialy-uz/2031-o>
2. (n.d.). development of private entrepreneurship. Retrieved 2019, from <https://stat.uz/eng/statinfo/kichik-biznes-va-tadbirkorlik/tahliylar-kichik-biznes/432-analiticheskie-materialy-uz/2031-o-zbekiston-kichik-biznes-va->
3. Mirziyoev, S. M. (2019). *Decree of the President of the Republic of Uzbekistan Shavkat Mirziyoev to Oliy Majlis*. December 28, 2018. (p.19). Tashkent: "Uzbekistan", NMIU.
4. Mirziyoev, S. M. (2017). *We build a free and prosperous democratic society together. // we continue our national development path with determination and bring it to a new level*. (pp.147-148). Tashkent: "Uzbekistan" NMIU.
5. Mirziyoev, S. M. (2018). *Reference to the President of the Republic of Uzbekistan Shavkat Mirziyoev to the Oliy Majlis*. December 22, 2017. (p.19). Tashkent: Uzbekistan, NMIU.
6. Karimov, I. A. (1997). *Uzbekistan at the turn of the twenty-first century: security threats, stability and guarantees of development*. (p.325). Tashkent: Uzbekistan.
7. (2015). *To get new achievements and bring our reforms to a new level - our most urgent task today*. Rule 23. (p.404). Tashkent: Uzbekistan.
8. Ganiev, B. (2013). *The philosophy of economics*. The program of XXIII World Congress of Philosophy, Greece, Athens, 04-10 August 2013. p.180
9. Temur, A. (2016). *Tuzuklar*. (p.544). Tashkent: Extremum press.
10. Forobiy, Abu Nasr (2016). *City of Wise people*. (p.186). Tashkent: Folk Heritage of A.Kadyri.
11. Locks, D. (2014). *Two tractates about ruling*. (p.484). Series: Biblioteka GVL - Chelyabinsk. Sotsium.
12. Laine, L. J. (2018). *"Process philosophy of entrepreneurship and spiritual innovation"*. Aalto University School of Business, Helsinki.
13. (2018). *Improvement of legal regulation of business activity in free economic zones in Uzbekistan*. Doctor of Philosophical Sciences (PhD) abstract of diss. (p.51). Tashkent.
14. Semenov, V. P. (2003). *Upgrading innovation-investment process and entrepreneurship: theory and methodology*. (p.184). SPb.: SPBGIEU.
15. Shcherbatikh, Y. V. (2009). *Psychology of entrepreneurship and business*. (p.97). SP: Peter.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)
International Scientific Journal
Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 22.05.2019 <http://T-Science.org>

QR – Issue

QR – Article



M. V. Datuashvili
Ph.D., Associate Professor of
the Department "Design and Technology",
Akaki Tsereteli State University,
Georgia, Kutaisi

THE STUDY OF SECURING SECTIONS OF FABRIC PARTS OF HIGH MODULUS FIBERS

Abstract: The article is devoted to the issues of improving the quality indicators of sewing items. One of the determining factors of the operational properties of sewing items is shear processes between threads. A visual observation of worn sewing items has shown that the mixing of threads most often appear in the region of the edges of the parts. The purpose of this work is to study the mixing of threads in the area of fixed edges of parts made of fabrics.

According to the results of the study, it was established that various methods of fastening the edges of parts are used depending on the physical and mechanical properties of textile materials.

Key words: the cloth, textile thread, destruction.

Language: Russian

Citation: Datuashvili, M. V. (2019). The study of securing sections of fabric parts of high modulus fibers. *ISJ Theoretical & Applied Science*, 05 (73), 159-162.

Soi: <http://s-o-i.org/1.1/TAS-05-73-29> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.29>

ИССЛЕДОВАНИЕ ЗАКРЕПЛЕНИЯ СРЕЗОВ ДЕТАЛЕЙ ТКАНИ ИЗ ВЫСОКОМОДУЛЬНЫХ ВОЛОКОН

Аннотация: Статья посвящена вопросам повышения качественных показателей швейных изделий. Одним из определяющих факторов эксплуатационных свойств как бытовых, так и технических швейных изделий, являются сдвиговые процессы между нитями. Визуальное наблюдение за изношенными швейными изделиями показало, что сдвиговые процессы чаще всего появляются в области срезов деталей в виде осыпания нитей. Целью настоящей работы является исследование осыпаемости нитей по обработанным разными методами срезам деталей.

По результатам исследования установлена целесообразность использования разных методов закрепления срезов деталей в зависимости от физико-механических свойств текстильных материалов.

Ключевые слова: ткань, текстильная нить, осыпаемость.

Introduction

Качественные показатели швейных изделий во многом определяются физико-механическими свойствами текстильных материалов. Они играют важную роль на всех этапах как производства, так и эксплуатации изделий. Согласование требований к качеству сырья, материалов, комплектующих изделий, технических средств производства, а также процессов конструктивного проектирования комплектующих деталей являются предпосылками успешного решения задачи повышения качества продукции.

Materials and Methods

Одним из факторов, который влияет на эксплуатационные свойства швейных изделий, является осыпание нитей по срезам деталей. Осыпание нитей наблюдается как при раскрое материалов, так и в процессе изготовления самого изделия [1, с. 211].

Осыпаемость ткани вызывает излишний расход ткани, снижает прочность соединительных швов, загрязняет изделие и, в ряде случаев, играет важную роль в процессе изготовления изделия. Степень осыпаемости тканей зависит от природы волокна, вида переплетения и ряда других

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

факторов. При изготовлении изделий из тканей с большой осыпаемостью предусматривается увеличение технологических припусков [2, с. 220]. Однако, увеличение этих припусков не гарантирует надежного сохранения его прочности, так как в процессе эксплуатации происходит осыпание сначала крайних нитей, а затем и нитей, расположенных на более далеком расстоянии от края. Для предотвращения краев деталей от осыпания, в настоящее время, применяют обметывание срезов или зубчатую обрезку краев. Надо отметить, что в большинстве случаев, и особенно в изделиях из тканей с высокой осыпаемостью, обметывание и, тем более, зубчатая обрезка срезов не дает достаточно прочного закрепления краев деталей. Эффективное и надежное закрепление срезов деталей швейных изделий из тканей с высокой осыпаемостью, в настоящее время, остается актуальной проблемой [9, с. 15].

Исследования крепления деталей в швейной промышленности указывают на возможность разработки эффективных способов закрепления срезов деталей с помощью клеевых материалов [9, с. 15; 10, с. 20].

Целью настоящей работы является оптимизация процессов проектирования армирующего каркаса или наполнителя стеклопластикового изделия из многослойной тканевой оболочки (рис. 1, б). С этой целью были проведены исследования осыпаемости нитей по обработанным срезам деталей наполнителя.

Армирующий каркас представляет собой многослойную оболочку куполообразной формы из нескольких слоев стеклоткани Т/С8/3 КТО ГОСТ 6-11-216-76 (рис. 1, б). Формообразование армирующего каркаса осуществляется последовательной выкладкой слоев с дальнейшим формованием и закреплением полученной формы путем прошивания стеклотканью (рис. 1, а).

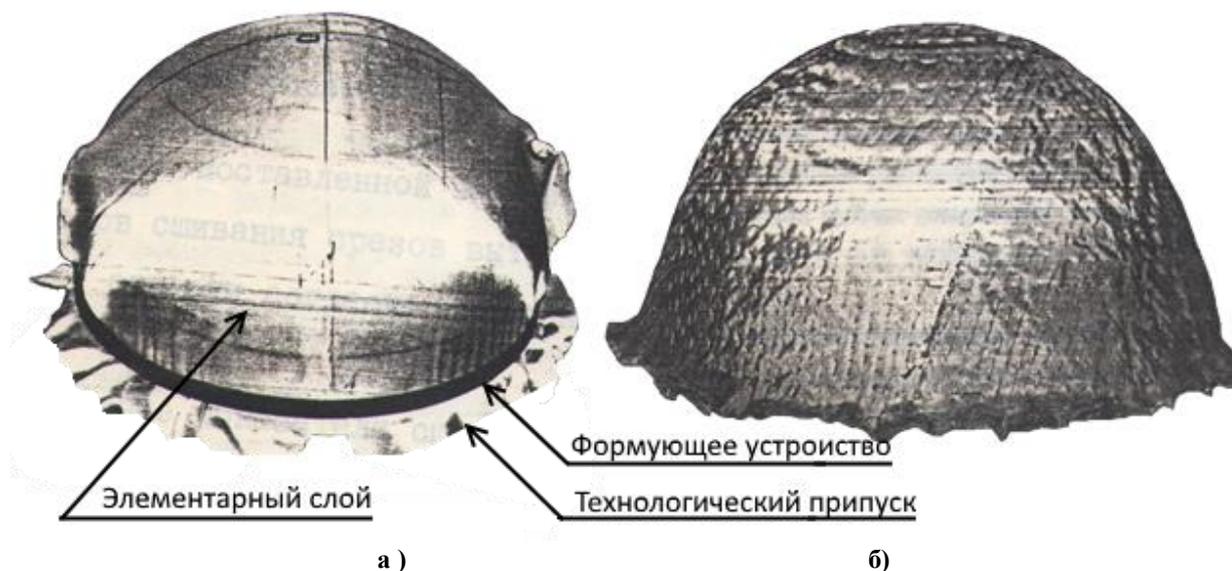


Рис.1. Процесс формования деталей: а - армирующий каркас из стеклоткани; б- армирующий каркас.

Первой стадией в последовательности технологического изготовления наполнителя является раскрой элементарных слоев наполнителя из стеклоткани по разработанным контурам лекал. Конструкции элементарных слоев наполнителя были разработаны с учетом формовочных свойств материалов. Размеры каждого слоя являются постоянными и зависят от геометрических размеров оправки, которые тоже меняются в зависимости от количества наложенных деталей.

Величина закладываемых припусков, в этом случае, можно определить в зависимости от технологического процесса с помощью формулы:

$$П = П_{ог} + П_{форм} + П_{осип.},$$

где: $П_{ог}$ – припуск на огибание через формующее устройство (кольцо), см;

$П_{форм}$ – припуск для захвата при формовании через формующее устройство (кольцо), см;

$П_{осип.}$ – припуск на осыпание материала, см.

Результаты и их обсуждение

Ввиду небольшого сопротивления сдвигу между нитями основы и утка [10, с. 20; 11, с. 525-528] для исследования были взяты ткани, имеющие значительную осыпаемость: хлопчатобумажная; подкладочная и стеклоткань Т/С 8/3 КТО ГОСТ 6-11-216-76. Учитывая специфику формования слоев армирующего каркаса, клеевые материалы, предназначенные для закрепления срезов деталей, должны быть устойчивы к механическим воздействиям [6, с. 10; 7, с. 21; 8, с. 85]. Для предварительных опытов были взяты этилцеллюлоза, поливинилацетат,

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

полиамидная смола П 54 и эпоксидная смола ЭДП-10.

Для обработки срезов были приготовлены клеящие растворы: этилцеллюлозы в ацетоне 20% концентрации; поливинилацетата в этиловом спирте 75% концентрации с добавкой 2,5 % дибутилфталата; полиамидных и эпоксидных смол в этиловом спирте 15% концентрации.

Исследование образцов ткани проводилось после обработки указанными растворами и

высушивания. Исследование на осыпаемость осуществлялась по методике, основанной на действии ударной нагрузки [3, с.98; 4;5].

Для определения прочности закрепления линии срезов вышеуказанными клеевыми растворами были изготовлены партии образцов, которые после соответствующих воздействий были испытаны на сопротивление сдвигу крайних нитей ткани. Результаты исследований приведены в табл.1.

Таблица 1.
Сопротивление сдвигу крайних нитей ткани на срезах обработанных образцов

№	Испытываемые образцы	Показания в кг при испытании обработанных образцов					
		без обработки	обметыванием	клеем ПА-54	смолой ЭДП-10	этилцеллюлозой	поливинилацетатом
1	Х/б ткань	2,24	3,85	5,75	5,73	5,20	5,30
2	Подкладочная ткань	0,85	1,45	4,95	4,85	3,85	3,35
3	Стеклоткань	0,75	1,20	4,85	4,80	3,50	3,30

Результаты исследований показывают, что клей на основе полиамидных и эпоксидных смол может быть использован для закрепления срезов осыпающихся тканей. Прочность закрепления срезов этим клеем настолько высока, что не уступает прочности текстильной кромки, образующейся при изготовлении тканей.

С учетом проведенных исследований были установлены необходимо минимальные значения технологических припусков: припуск на огибание через формующее устройство $P_{ог}$ – равняется 0,7 см; припуск для захвата при формовании через формующее устройство $P_{форм}$ – равняется 3÷3,5 см; что касается припуска на осыпание материала с использованием полиамидных и эпоксидных клеевых растворов, она колеблется в пределах

0,8÷1см (без обработки краев припуски на осыпание материалов равнялись 4÷5 см). Установленные значения технологических припусков полностью соответствуют всем требованиям технологических процессов изготовления армирующего каркаса и обеспечивают надежность конечной продукции.

Выводы

Проведенные исследования показали, что клеевое закрепление срезов деталей швейных изделий является эффективным; практическое применение установленных параметров технологических припусков является весьма актуальным и дает ощутимые результаты.

References:

1. Buzov, B. A. (2008). *Materialovedenie v proizvodstve izdeliy legkoy promyshlennosti (shveynoe proizvodstvo)* / B.A. Buzov, N.D. Alymenkova; Pod red. B.A. Buzova (Eds.). – 2-e izd., ster. Moscow: Izdatel'skiy tsentr «Akademiya».
2. Zhikharev, A. P. (2004). *Materialovedenie v proizvodstve izdeliy legkoy promyshlennosti* / A.P. Zhikharev, D.G. Petropavlovskiy, S.K. Kuzin, V.Yu. Mishakov; Pod red A.P. Zhikhareva (Eds.). Moscow: Izdatel'skiy tsentr «Akademiya».
3. (1966). *Nauchno-issledovatel'skie trudy*. pod red. P.A. Kolesnikova (Eds.). (p.133). Moscow: Legkaya industriya.
4. (n.d.). OST 17-739—78, izmenenie № 2.
5. (n.d.). GOST 4.6-85, Tkani shelkovye i polushelkovye bytovogo naznacheniya.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIIHQ (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

6. Denisenko, I. A., & Belyaeva, S. A. (1987). Metod opredeleniya razdvigaemosti nitey v shve. *Shveytnaya promyshlennost', №4*.
7. Datuashvili, M. (2016). *Issledovanie napryazhenno -deformirovannogo sostoyaniya mnogosloynnoy tkanevoy obolochki s razlichnoy orientatsiey armiruyushchikh elementov*. Sbornik nauchnykh trudov «Tekhnika i tekhnologiya – nauka vchera, segodnya, zavtra». (pp.21-26). Varshava.
8. Datuashvili, M., Dolidze, N., & Charkviani, I. (2016). *Influence of the reinforcement structure on the operational properties of multilayer tissue membranes*. Bulletin of the National Polytechnic University of Armenia. Yerevan.
9. Datuashvili, M., & Dolidze, N. (2011). O metode kleevogo zakrepleniya srezov detaley odezhdy. *Georgian Scietifik Nevs, №1(9)*.
10. Datuashvili, M. (2016). *Issledovanie osypaemosti tkani iz vysokomodul'nykh volokon*. Sbornik nauchnykh trudov mezhdunarodnoy nauchnoy konferentsii Sovremennye tekhnologiy i prikladnoy dizayn. Kutaisi.
11. Datuashvili, M. (2019). The study of camouflage fabriks on shear threads. *International scientific jurnal ISJ "Theoretical&Applied Science"*. Philadelphia, USA, 03(71).

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](https://doi.org/10.15863/TAS) DOI: [10.15863/TAS](https://doi.org/10.15863/TAS)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 23.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



Iroda Rayshanbekovna Bazarova

Teacher of the chair of “Theory of the civil society”
of Andizhan State University, Republic of Uzbekistan

SECTION 13. Geography. History. Oceanology.
Meteorology.

FROM THE HISTORY OF MODERNIZATION SYSTEM OF PRIMARY EDUCATION IN FERGHANA VALLEY (AS AN EXAMPLE OF INDEPENDENT PERIOD)

Abstract: In this article has been illuminated the modernization history of the primary education system in Ferghana valley by the historical literatures and statistic materials as well.

Key words: Ferghana valley, education system, primary education, schools, pupils, young generation, modernization.

Language: English

Citation: Bazarova, I. R. (2019). From the history of modernization system of primary education in Ferghana valley (as an example of independent period). *ISJ Theoretical & Applied Science*, 05 (73), 163-165.

Soi: <http://s-o-i.org/1.1/TAS-05-73-30> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.30>

Introduction

In Uzbekistan, during the years of independence, special attention was paid to the modernization and development of the education system. The reform of the education system and the implementation of reforms have led to a state policy. Looking at the progress that has been going on for over a decade in the country, it is clear that under the guidance of the head of our state, the immense efforts are being made to strengthen and improve the national education system and to create the conditions for the young generation to grow up as a mature, healthy and harmoniously developed generation. The Decree of the President of the Republic of Uzbekistan "On the Strategy for the Further Development of the Republic of Uzbekistan" dated 7 February 2017 [1, p.32] called the "Social Sector Development" of the State Program on the implementation of the Strategy of Action in the Year of the Communication and Human Interest in the fourth direction - to ensure the convenience of preschool educational institutions, to improve the quality of general secondary, secondary and higher education, and to develop them.

Materials and Methods

The protection of the rights and legitimate interests of citizens in the Fergana Valley, particularly the rights of child rights as an integral part of human rights, has been identified as one of the priorities of

the state policy at the level of public policy. In the short history of our country, great achievements in the upbringing of harmoniously developed generation are being achieved, and this is well appreciated by the international community. Without a radical reform of the old system of education, today's successes in the education system could not be achieved by raising the work to the highest level.

The state educational standard of the Republic of Uzbekistan of the second generation, realizing new requirements for the level of preparation of younger schoolchildren and determining ways to improve the mathematical training of primary school students, focuses on the need to form such a key factor in their skills as the ability and desire to learn. Raising interest in mathematics among younger students, the development of their mathematical abilities to a greater extent depends on the implementation in the educational process of various types of tasks that require students to know different sections of the initial course of mathematics, the ability to build reasoning, draw conclusions, justifying their judgments and, ultimately as a result, independently acquiring knowledge and solving problems that occur, teaches children to critical understanding of the results obtained.

Supporting and caring for young people in fulfilling these goals is key to achieving certain goals. In order to achieve this noble goal, all organizational

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

and legal measures have been implemented in our country to ensure the future of our youth, important laws have been adopted, state programs have been implemented. Article 41 of the Constitution of the Republic of Uzbekistan, which forms the legal basis for the rights and interests of citizens, stipulates that everyone has the right to education [2, p.9], state guarantees of free general education and school supervision are under state control.

Particular attention was paid to reforming education system in Uzbekistan, particularly in Fergana valley, and primary education. "The National Program of Personnel Training" and "On Education" adopted on August 29, 1997 on the consistent reforming of the education system and strengthening the state policy in this area became a historic step. Article 3 of this law sets out the main principles of the state policy in the field of education, in particular, the continuity and consistency of education, as well as the obligation of general secondary and vocational, professional education. In line with the National Program of Personnel Training, a continuous education system has been created that provides a highly qualified staff of the country's socio-economic infrastructure, including the 9-year general secondary school stages and 3-year secondary special, vocational education stages. It should be noted that, along with the reform of the education system, the material and technical basis of educational institutions is also strengthened. Due to the wide-ranging measures, 1549 modern educational institutions, including 1406 professional colleges and 143 academic lyceums were built in the republic. At present, academic lyceums pay close attention to the cardinal improvement of the quality of education and its modernization.

As a result of the set goals and the creation of a continuing education system and a radical improvement in the quality of education, adolescents have increased their interest in learning and vocational learning, which, in turn, has led to a sharp reduction in crime among minors. In particular, in comparison with 2000, the crime rate among juveniles decreased by 30.5% in 2012 [6]. In addition, the attendance of schoolchildren to educational institutions and their participation in the training sessions, ie the issue of attendance, is an important and topical task of the administration of the educational institution, on the one hand, and on the other.

Also, Article 47 of the Code of Administrative Liability of the Republic of Uzbekistan sets out the administrative responsibility for non-performance of obligations by parents or their substitutes for the upbringing and education of their children. The Law of the Republic of Uzbekistan of 7 October 2012 "On amendments and additions to some legislative acts of the Republic of Uzbekistan", as well as the Decree of the President of the Republic of Uzbekistan "On recognition of some legislative acts as null and void" Now fill in the second part of Article 47 of the Code

of removal of children of compulsory secondary education, secondary, and vocational education can be parents or persons substituting them by five to ten times the minimum wage in order to prevent the imposition of a fine to be determined. Such changes and additions to our legislation are, of course, a requirement of the day, when the quality of education is elevated to a new level, and that our citizens get acquainted with newly adopted laws, as well as bureaucratic organizations and law enforcement agencies, wide dissemination, especially in the use of mass media. Therefore, all state bodies and public organizations are responsible for every healthy minded citizen, who is not indifferent to the future of the country, in order to grow up a younger generation physically healthy, intellectually mature and spiritually mature generation.

Particular attention was paid to the reform of the mandatory one-year education system in the Fergana valley. In particular, the pilot project on introducing mandatory one-year primary education of children started in Fergana, Kuvasay and Furkat [3]. The ability to independently create an algorithm is especially important, since in solving logical problems the main goal is to develop a plan or method of activity. This is especially important since, by solving logical problems, elements of the information culture are formed on the initial course. They include various ways of processing information, visual forms of its presentation - tables, charts, graphs, and many others, and this is important for the inclusion of information in the course of mathematics in elementary school.

Along with the training and educational functions, the leading functions of logical tasks are the developmental function aimed at developing students' logical thinking, mastering effective mental activity by them, the ability to analyze, synthesize, compare, classify, perform tasks by analogy, generalize.

At the present time, the Republic has taken a serious and special attention to the further improvement of the system of preschool education, modernization, creating a healthy environment, the formation of an active, competent, socially adapted child person, as well as the conditions for future successful learning activities and quality education of children in elementary education [4].

It is important to note that the system of mandatory one-year training of children of school age has been reformed. In particular, the Decree of the Cabinet of Ministers of the Republic of Uzbekistan "On gradual transition to compulsory education for children of primary education" of December 8, 2018 provides concrete measures to be taken in this regard. In particular, a pilot project for compulsory free education of children for primary education was launched in three districts of Ferghana region. A total of 2,454 children aged 5-6 years old were not included in the nursery as a result of compulsory one-year free-

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

of-charge enrollment in Ferghana, Kuvasay and Furkat districts. At the same time, 99 groups were organized in 77 pre-school educational institutions and 4 general secondary schools in the area to prepare children for school not covered by the kindergarten [7, p.78]. 84 people were employed in these groups. Newly hired pedagogues have been trained on the development of primary and pre-school age children and the content of the "First Step" state curriculum [8]. Conceptions and counseling on program-based training and regulatory documentation were provided [9].

Of all the variety of logical problems, depending on their content, form, level of complexity, and the possibility for pupils of primary classes to find an acceptable solution, we consider it expedient to include the following types of logical problems in the initial course of mathematics, the solution of which comes down to the use of certain techniques.

Lacking mathematical generality, tasks of this type are designed to facilitate students' search for rules, patterns, ways of writing, building specified or created constructions, sequences of numbers, etc., i.e. they are designed to develop students' observation,

intuition, ingenuity, the need to see the whole meaning of the exercises, to see patterns; these tasks are not immediately given to students and not to everyone with the same success.

At the same time, separate study rooms have been set up in order to create the basics of national education standards and best international experience, mainly for the comprehensive development of preschool children. Teaching and learning process was provided with methodological and didactic manuals for effective teaching and learning. This, in turn, is an expression of the Government's commitment to this area.

Conclusion

In conclusion, if the education system in the Ferghana valley remains, there has been a special focus on modernizing primary education. Elementary schoolchildren were provided with modern teaching materials, various books and classrooms with all conveniences. These processes are progressing from year to year because the young generation is the future of tomorrow, and the development of the future society is associated with them.

References:

1. (2017). *The Decree of the President of the Republic of Uzbekistan on February 7, 2017 numbered PF-4947 named "The Actions Strategy for further development of the Republic of Uzbekistan"*.
2. (2018). *Constitution of the Republic of Uzbekistan*. Tashkent.
3. (2019). Retrieved 2019, from <http://uza.uz/oz/society/boshlan-ich-talimda-yangi-loyi-a-04-02-2019>
4. Ochilova, B. M. (2005). *The enthusiasm towards the heritage of ancestors and spiritual-moral maturity of a person*. The dissertation written for gaining the scientific degree of PhD abstract. (p.45). Tashkent.
5. Kurbonov, M. (2018). *If you want your child to be happy... Student manual*. (p.320). Tashkent, Ma'naviyat.
6. Khasanboeva, O., et al. (2018). *The pedagogue of family*. (p.383). Tashkent, Aloqachi.
7. Kurbonov, M. (2018). *Student Manual*. Tashkent.
8. Islomov, R. (2018). *Pedagogics*. Tashkent.
9. Nuriddinov, S. (2018). *Lecture of life*. Tashkent.
10. (2018). *Khalq suzi*.

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2019 Issue: 05 Volume: 73

Published: 22.05.2019 <http://T-Science.org>

QR – Issue



QR – Article



SECTION 33. Advertising technologies. Creative. Innovations.

Arthur Alexandrovich Blagorodov
Institute of Entrepreneurship and
Service sector (branch) DSTU, g. Shakhty

Dmitry Olegovich Bordukh
Institute of Entrepreneurship and
Service sector (branch) DSTU, g. Shakhty

Angelina Vladimirovna Kopylova
Institute of Entrepreneurship and
Service sector (branch) DSTU, g. Shakhty

Vladimir Timofeevich Prokhorov
Institute of Entrepreneurship and
Service sector (branch) DSTU, g. Shakhty

Peter Nikolaevich Kozachenko
Institute of Entrepreneurship and
Service sector (branch) DSTU, g. Shakhty

Igor Mikhailovich Maltsev
Institute of Entrepreneurship and
Service sector (branch) DSTU, g. Shakhty

ON THE FEASIBILITY OF THE FORMATION OF CULTURE COLLECTIVES OF ENTERPRISES FOR EFFECTIVE RESULTS MAKING DIGITAL PRODUCTION OF IMPORT-SUBSTITUTING PRODUCTS FOR CONSUMERS IN THE REGIONS OF SFD AND NCFD (message 1)

Abstract: Production management, including standardization, should be carefully prepared with maximum reliance on the reserves of professional culture of specialists, but the dynamics of running production management is desirable to entrust the technical programs and tools. So everything will be more reliable. But technical management has its weaknesses. Among them: a high level of energy dependence, computer security is not absolute, the requirements for personal abilities of specialists in terms of personal and team responsibility increased, sometimes up to exclusive. Problems in production, as a rule, create people, but it is in the absence of qualified specialists there are the most serious problems. Technical standardized management is not a panacea. The authors formulated the rules of standardization. Basic, in their opinion, their two. First, standardization should be carried out in three directions, linking them into a complex - to determine the standard of the product within its functional purpose, taking into account a broad understanding of the safety of use; to regulate the production process and to form a consumer attitude to the product. standardization. Without proper consumer interest in the product, the product will not be in demand on the scale necessary for its sustainable production. Second, standardization of production is carried out on the basis of conceptual understanding of its position in the system of specific historical conditions, as it is due to the quality of the stage of economic development. No matter how it is perceived by the consciousness, it is necessary to put up with it. Third, the product must be in demand not exclusively, but on a mass scale, otherwise the production will cease to be mass, will waste its quality. The authors considered that the range of products of mass demand in the USSR was not great, but the quality of consumer goods satisfied and allowed the

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

manufacturer to solve its problems. Departure from the standards of production developed in the USSR allowed to expand significantly the range of goods, at the cost of quality loss. Increasingly, in stores and advertising there are Soviet brands that were not in the USSR them, as ordinary products. Apart from the fact that digital production is built on the basis of physical impact on the object and requires a standardized re-quality. History known as the history of quality management, essentially there is a history of standardization of production, concretization of quality into sample production.

Key words: production management, technical management, standardization, digital production, identified and production management, consumer, commodity, assortment, quality, economic development.

Language: English

Citation: Blagorodov, A. A., Bordukh, D. O., Kopylova, A. V., Prokhorov, V. T., Kozachenko, P. N., & Maltsev, I. M. (2019). On the feasibility of the formation of culture collectives of enterprises for effective results making digital production of import-substituting products for consumers in the regions of SFD and NCFD (message 1). *ISJ Theoretical & Applied Science*, 05 (73), 166-191.

Soi: <http://s-o-i.org/1.1/TAS-05-73-31> **Doi:**  <https://dx.doi.org/10.15863/TAS.2019.05.73.31>

Introduction

The need to tighten responsibility for the quality of imported products is confirmed by the results of the inspection of this very quality by specialists of Roskoshestvo. In their opinion, the quality of products does not depend on their price, it is necessary only in their production to strictly comply with the requirements of state Standards and technical regulations, increasing the level of responsibility of heads of enterprises for the results of their work and the level of individual responsibility of performers employed in the workplace in the digital production of

The most effective is the use of statistical methods of quality control using the Pareto diagram at the enterprises of the regions of the southern Federal district and the southern Federal district are presented below in the form of research results

Main part.

The history of the market was formed as a relationship between the two movements. One of them caused the spread of the market, the other - its development. Both acted in the General direction – gave stability to the market, providing through stability of the market progress of production. The growth of the market was a consequence of the division of labor and increase in its productivity, which led to a decrease in cost, prices and opened up the availability of goods to consumers. Development of the market went at the expense of quality of goods and eventually found the continuation in policy of management of quality of production through improvement of the organization and standardization[1]

After saving capitalism, economic science abandoned its political function, reduced the methodological and ontological base, trying to get out by activating the mathematical apparatus, the fundamental concepts supporting scientific knowledge, were in the economic archive.

The modern history of economic science began in the minds of well-known philosophers. Classical political economy was developed not so much by economists as by philosophers: Sismondi, Smith,

Ricardo, Hume, Marx, mill. They adhered to different philosophical concepts, but were United in the understanding that the birth of science, the quality of scientific knowledge is primarily due to the methodology – General scientific and specific to each science because of its ontological originality.

The rejection of the political component in economic theory is explained by the need to achieve true freedom in knowledge, the independence of scientific thinking. The truth is that through political analysis, and only in this way, it is possible to give a system-historical character to economic analysis. History shows that social progress was carried out on an economic basis, due to the natural change of production methods.

When it came to the bourgeois way to replace the feudal, constantly the current market to change seasonal fairs, making them their private form, freedom fighters together began to praise democracy, to prove the historical legitimacy of the arrival of a new economic, social and political order. Now about natural process of change of economic orders amicably became silent. On the contrary, attempts are made to turn the historicism of development back into the past, presenting the recognition of its truth as limited in time, valid only until the period of formation of capitalism. The reserves of capitalism are sufficient to overcome the time limits.

In order to perpetuate capitalism, it was divided on a private basis – the industrial form of production. History under capitalism is part of the post-industrial formation, which will remain forever, and all other manipulations with its definitions will not go beyond the post-industrial stage of history, as you should not call it - Technotronic society, information, welfare, digital.

We specifically focused on the analysis of bourgeois philosophical thought, designed to identify the history of the future with the history of bourgeois society, to reveal the nature of the substitution of the methodology of economic analysis by statistical probability calculations, economic science by financial analysis, and to show what this substitution leads to. Private scientific methodology is the most

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

important component of scientific knowledge and creativity, but its importance is revealed in the more General context developed by epistemology. Scientific and technical creativity is subordinated to the system of philosophical knowledge and design. It is the concretization of the ascent of knowledge from the abstract to the concrete, the process of filling the movement of thought with content that reflects the subject feature of scientific and engineering thinking. Such thinking is connected with the concept of quality.[1]

Development of production, improvement of the market, organization of distribution and disposal – all this is subject to the solution of the quality problem. Entering the world market in 1970-80 years and trying to win back a worthy place for the next ascent, Japanese scientists and engineers relied on the total – system – value of quality. They considered quality as a system of the most essential properties of production, requiring the mobilization of the national potential of spirituality: education, education, citizenship, concentration of scientific and engineering thought. Quality has become a symbol of Japan's return to the community of world powers. The Japanese did not look for symbols among historical figures, monuments, nature, achievements of creativity, they were not tormented by the search for a national idea. They closed the future on quality and won, within one - one and a half decades having wrung out at Americans the most technologically difficult sectors of the market, - automobile, electronic and, partly, textile. Japanese managers understood quality in two aspects: first, as the quality of production of goods, and secondly, as the qualitative organization of their implementation, including functional support of durable goods. In Japan, in pursuit of competitors, the end of the two thousand years was associated with the national movement for the quality of everything created in the country.

Having correctly understood that quality is the last technical problem, so we should start with the philosophy of quality, moving progressively to the scientific development of the concept of quality, then to its technical expression and, further, to the quality of consumption and utilization of quality goods, Japanese experts won the competition from the world's giants. Standardization and technical regulation in Japan was defined not instead and not next to quality, but after quality as products of the development of the doctrine of the quality of production and the importance of a quality economy for improving the structure of national consumption and achieving the authority of Japanese producers in the world.

"Quality", as well as "quantity", "measure", are universal philosophical categories for the characteristic of the subject world, its knowledge by science and transformation in practice of industrial, scientific – technical and social creativity. All other

concepts used are derived from the understanding of the above categories, which is developed in philosophy. It is not correct to identify them with the original concepts or to present them as equivalent. They are the product of their specification, so all derived concepts must meet some requirements. The main two: to be developed in the context of philosophical doctrine and to be particular-subject-specific – in relation to the basic concepts. Derived from the philosophical categories of special concepts such as "standard", "regulations", "technical measure", "terms of reference", etc., it is appropriate as a necessary simplification of universal concepts, "binding" to the practical specifics. Their crucial importance for the organization of production policy should not be questioned. In terms of solving problems directly in the workplace, they are the most effective tools. This, in particular, is taught by domestic experience – successful and not very – import substitution. However, one should always keep in mind the requirement of a systematic approach: particular problems are successfully solved in the light of the General context. It is not necessary to hope for the General as for God, it is impossible and to substitute the General private experience. Biblical texts look significant. They are written mainly not as an edification and indication of the only solution, but as information for reflection in a certain direction. The standard should be the quality standard.[2]

In the East there is a popular saying: "how Many do not hide donkey ears, they still get out.» Her excellent sense characterizes the economic science. All efforts to separate economic theory from politics and to replace political economy with "pure" economic theory are aimed at the simple-minded man in the street, satisfied with his achievements and confident in his future. Scientists economists, acting on conviction or according to political trends, are concerned about one thing – happy with their recommendations over time become less and more critical attitude is growing. In economic theory, there is nothing non-political, there is only something indirectly related to politics and openly serving politics. Even the course of economic thought is built in the political trend.

Take, for example, such an urgent and seemingly completely neutral problem as quality management. Everyone is interested in its optimal solution, with one invariant amendment – everyone pulls the "blanket over", hoping to get the maximum. Therefore, in the foreseeable future, the problem will remain, and its relevance will only increase with the availability of quality products. As a product, all the real forces involved in production are concentrated, it was and will be a "bone of contention", as well as that new, promised by economists, "civilization of quality". The most impressive thing is that it is unfair to accuse political regulators of the current situation, unless, of course, they act with an obvious steady shift in

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

someone's direction, that is, unprofessional. The purpose of production – a product that makes a profit. Without profit, scientists and politicians teach, production cannot be sustainable, developing reproduction. And it really is. Only those who teach and rule, with varying degrees of skill mask the quantitative certainty of quality. As a rule, qualitative certainty is obtained in the values of a given range of quantities. And here the measure is already beginning to work. Knowledge of measure, a sense of measure – the most important condition for effective management. Within the measure there is also a certain freedom of variation, that is, the possibility of a certain expenditure of interests depending on the financial contribution.

Technical regulation, Cooling, GOST, ISO and all born of the desire to take control of the quality of goods other systems, already its diversity raise questions. The effect is designed for the action of the name, it is intended to cause respect, especially when the name has the authority of the industry, the state, international organizations of specialists concerned about the interests of consumers. The history of improvement of methods of production quality control is analyzed and advertised.

Unfortunately, behind the well-designed facade of the quality control policy hides some excellent content, due to the priority of political interests. When, during the frequent crises of different etiologies and stagnations that accompany the exit from crises, the rich invariably become richer, and the poor – poorer, the middle class, which is a social support, is reduced, involuntarily born doubts about the sincerity of economic promises and distrust of plans aimed at changing the situation in the economy for the better.

It is not modern to speak of the class nature of economic policy in a bad tone. The modern history is the era of social partnership, globalization, which requires mutual understanding. The world is tired of wars, revolutions, violence. Humanity is worthy of a way of life that corresponds to its reasonable status and the social orientation that have been formed historically. We should not underestimate the psychological need for a better life and the hope of being a part of it not once, but in the real future. Psychological mood is able to reduce the criticality of the mental reaction, block the analytical approach. How much objective information in advertising products? The question is clearly rhetorical. The business will be successful if the interests of the success of the business will be under the fifth margin. So it was at the dawn of capitalism and so it will be until the position of business in society and its reflection in the public consciousness will not change.

Marx put forward and justified the idea of the basic status of the economy in social progress. Then everything was as always: Marx left not his brains, but only an idea, a thought in a more or less systematic presentation. He would have had time to add to the

four volumes of "Capital" as much, still nothing has changed in essence. Each person has his own thinking head. The recognition of the right of Karl Marx in the analysis of capitalism and the understanding of capitalism, as it was the Marx – two very different things.

The most serious mistake that his ideological and closest friend F. Engels noted to whom the world is obliged to decipher drafts and texts of "Capital", their preparation for the edition, consists in so-called "economic materialism". This looks simplified in the absolutization of the importance of the economic factor in social development. Society does not build its structure freely, guided by the needs and in accordance with the abstract meaning. Real social creativity is conditioned by economic opportunities, which means that the reality of social reforms is of a concrete historical character.

You can dream about anything and how you want, but only those plans have a chance to come true, which are able to withstand the economic base. However, we are not talking about a rigid and single-version program of social transformations. There is a historical backlash in development and the possibility of one of the social dominants - the social orientation of sustainable development (1) and the rate of economic development, coupled with a focus on maximizing profits, ostensibly necessary to reserve the acceleration in subsequent social progress. Marx wrote about the economic basis, not the economic Foundation. The economic basis, unlike the economic Foundation, is mobile and its mobility can be used. Question: in whose interests?

99.9 percent of the time of its existence, mankind did not think about any socially significant systems of quality control of goods. There were no goods themselves, production and consumption were connected within the boundaries of a common subject. Ate, dressed, shod what he did. Quality control had an ideal form, focused on the producer who had a maximum scale of a family. During this time, there were decisive events in the fate of man: the ascent to the top of homo sapiens; proof of viability in the process of natural selection; the creation of a cultural environment and cultural self-development; sustainable social progress.

Human history can be compared to weaving. It the same two combined form the warp and weft. Basis - designing, ducks – resistance movement forward. Only knowing the history of mankind as a complex and contradictory process, a single person can become an optimist. Our trouble, like donkey ears, got out in the 1990s and, partly, in the following decades. The essence of it is that we snatch from the history of individual periods and take them to judge everything. To judge history is not given to anyone, it is reasonable to draw historical lessons from history in the form of "information for reflection".

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

Progress in agricultural production was due to the knowledge and improvement of technical means. The success of the use of technology in the processing of agricultural products, increasing the need for construction, transport, arrangement of culture of life stimulated artisan activity. Someone could work perfectly on their own, as H. Huygens, designed the pendulum clock, due to the fact that he was both a great mechanic and an outstanding mathematician. In the Renaissance, there were many single masters and they moved the technical side of production progress, based on scientific knowledge. However, they could not move production, they needed those who with intelligence and production wit turned unique things into a series.

The objective regularity of the development of production split the Creator and the master, raising the question of quality assurance of reproduction of products. There is a version of the conversation between Huygens and the king of France, to whom he gave the constructed watch. The king asked the learned mechanic, "how Long will he enjoy the gift and how accurate will the clock be?". Huygens replied: "This watch will serve Your successors." What kind of public quality control could be judged if there was a professional reputation at stake. The mark of the wizard meant at the level to be master or not to be. The quality was identical to the case, and wizards have invested in this product all the best that I could.

The problem of product quality and the need for consumers to control the quality of products began to appear at the end of the late middle ages, closer to the XII-XIII centuries. The number of masters has grown, and with the increase in the mass of commodity products actualized and the difference between the masters. A person is unique in everything – in feelings, skills, needs, interests, attitude to mentality. Human differences are reflected in activities and products. In addition, the increase in production, due to the formation of a sustainable market with transnational, transregional elements, assumed the importance of comparing products. The development of common mandatory requirements for manufacturers was required. In turn, manufacturers have realized the benefits of combined actions.

In the most economically developed countries of Western Europe – Italy, France, England, Germany in the XII century there were associations of artisans by profession – shops. The shops operated mainly where there was demand for their products - in cities, some of which had state status. Everyone was comfortable. Some had the opportunity to learn from experience, to bring their work to perfection, others received control over the activities of organizations producing goods, others - certain guarantees that they will acquire a quality product. Shops quickly bred and strengthened the position, both in the market, and in society.

In most European cities there were shops of blacksmiths, armourers, weavers, cloth makers,

bakers, carpenters. Later they were joined by shop organizations of brewers, winemakers, manufacturers of leather goods. Each shop must have been a Charter, consistent with the authorities of the city logo, seal, office. In the statutes to prescribe the conditions of service of masters, journeymen, quality requirements of raw materials, production technology, conditions of procurement of raw materials, marketing of products, and even the conditions of discipleship. In fact, it is from the organization of shops that the time of public control over the quality of production of public consumption goods can be counted.

The transformation of seasonal fairs into sustainable markets has led to increased demand, demand has led to the rise and diversification of supply. The increase in the number of manufacturers required more control over the quality of goods. Local authorities have taken control of a number of key parameters of the shop activity, following the local authorities included the state. Until GOST History is not ripe, and the Skeleton history, we can say, began with the statutes of the shops. Technical regulation started with the organization of shop production, and at that time it was really effective, as it coincided with the main interests of all market participants, including self-government. Shop order was the best guarantee of quality, so self-control then could count. Employees watched each other and each of them began with himself, realizing the high price of violation of the rules of work defined by the Charter.

Of course the knowledge of the Late middle Ages, Renaissance and Modern times, which replaced the Revival is difficult to compare with the achievements of XX and XXI centuries. In those times, the birth of modern scientific knowledge began, scientific knowledge was intertwined with religious dogmas, myths, ordinary knowledge of "common sense". In the statutory canons of the shops reflected the originality of the time, the dominant worldview, they were, as we believe now, imperfect. At the same time, they were not pressed by the specifics of capitalism of the developed period, sharpened by margin at any cost. They were attended by the sincere desire of the manufacturer, the regulator to ensure the legitimate rights of the consumer to a quality product at its real price. The consumer was protected from the arbitrariness of the manufacturer to the extent possible - cognitive, technological, hygienic, aesthetic. And in this regard, the market relations were dominated by objectivity. Apparently even then there were some attempts to cheat, but they only confirmed the assessment of the ability to control quality by determining the technical and technological regulations.

The history of standardization was a continuation of the policy of regulation of shop activities. The initial technical regulation was quite consistent with the level of development of economic institutions. The workshops were organized in

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

associations, not in order to standardize the production and produce the same item. Standardization of goods was carried out with an eye to the quality of the product. The basis of production was still "secrets of the company", "know-how", developed in the depths of family stories, carefully protected technological recipes.

In Western Europe, the Guild organization of production activity has long sunk into oblivion, and popular products of mass demand, in particular, beer, wine, tobacco, certain types of shoes, clothes, some fruits, vegetables retain the seal of those Guild times. Consumers prefer them, despite the market expanse of offers.

Market masquerade could surprise us, the Russians, at the end of the XX century, when the country flooded consumer goods from the West and the East, carried everything that was not in demand on the ground. Who then remembered the quality and tools of quality control, and if he thought, he would have knocked out the memory along with the brains of frisky reformers. During the period of "shock therapy" it is proportionate to think not about the quality - about how to survive with the hope that then will live better. Indigenous Europeans react poorly to the diversity of goods, most of them conservatives brought up by traditional family preferences. Conservatism has a healthy beginning, conservatives do not put themselves at risk of temptations by innovations. They believe in experience and experience justifies their choice due to the time-tested quality of the goods. Naturally, being a conservative is not cheap, but European conservatives are also not from the poor part of society.

We are no longer interested in the moral side of the matter, but in the organizational side, in particular, the question of the possibilities and limits of standards in the regulation of production. Thinking and aware of the measure of their own responsibility for the invented experts understand that standardization, no matter how perfect it is, will remain conditional, expressing the objective and subjective circumstances of the action – specifically -historical reality. Standardization – a systemic phenomenon itself and at the same time it is an integral part of the overall political and economic system. It necessarily has a systemic conditionality, both internal and external. It is naive to believe that standardization is developed for the benefit of all equally. First, all those who have sufficient financial resources for freedom of choice do not need standardization for most of the necessary goods. They are in direct contact with trusted manufacturers. Secondly, standards have long been determined not by producers, which does not mean objectivity, as we want to convince.

The most democratic government and the most impartial organizations authorized to draft standards are not as objective as they may seem. The policy will lose its effectiveness if it refuses to participate in such

a case without its own interest. Politics is driven by the economy and serves the economy.

In the systems of standards, the objectivity of the calculation bases is determined by the minimum values. Otherwise, production will SAG and there will be a crisis, or prices in the market will exceed so real purchasing opportunities, due to the increase in costs from producers that the market will freeze.

In the domestic luxury shopping fabulous wealth of variety not because of the whims of a gourmand. The reason here is the opposite – the low level of effective demand of the mass buyer. By and large with their purse to choose from nothing. Set mass range while the buyer does not require. At the time, refer to the standard sets of goods produced by the minimum standards to be cheaper. Sanpins are a wonderful thing, but they are due not only to the danger of excess health. They contain the time of action, socio-cultural, economic and political factors. Let the one who does not believe it, promonitorit sanpiny, compare and see the results.

The high values of subjectivity in the definition of standards can be judged by the standardization of time. "Standard time" is the official local time for a country or region. A region can be part of a country and, conversely, a number of countries can form a common region. There is one invariant feature in the standard time definition: it must be the same for all points on the same Meridian. Local mean solar time depends upon longitude; it grows on the East degrees each for 4 minutes. The earth is conventionally divided into 24 standard time zones, each of which is equal to $\approx 15^\circ$ longitude. It is here that the administrative initiative of the local authorities is manifested. The boundaries of the zones are determined by them and in many cases significantly deviates from the normative 15° , which should not be qualified as arbitrariness. These costs are associated with administrative division, production activities. Time in different (adjacent) zones differ by 1 hour, minutes and seconds do not change.

Standardization is associated with limitations, so personal and public perception of standards are superimposed on the ideological background, which is very important for the functioning of standards. Worldview, dominant in historical time is different. It can be "black soil", fertile soil – stick a branch and do not doubt - will take root, but the worldview can slow down when, rolled out under the absolutization of freedoms by liberals, forms a militant attitude to any kind of restrictions.

The easiest way to implement the standards in practice was in the Middle ages. Mythology and religion are reflected in various taboos. To restrictions medieval consciousness was calm, with an understanding of the need. In the Statutory standards of craft shops restrictions were introduced not so much to simplify the technology, to make production more technological, but in order to preserve the

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

developed concept of production, preserve it and facilitate continuity in the development of production.

The shop was primarily interested in the quality of its goods. The regulator tried to manufacture was not brought innovations capable of under different pretext to worsen the result. This became particularly relevant with the growth of production and division of labor. Increased productivity often threatened the quality of the goods. The negative scenario in the development of production restrained the tradition of shop activities. The history of the shop emphasized its social and economic situation. Zech – "Association, company". At the beginning of the shop was represented by class associations, emphasizing the special position in society of persons belonging to the shop. The development of the middle Ages was expressed in the change of the social status of the shop. The shop was historically concretized and appeared already by the Union of handicraftsmen of the General specialty.

We have a common simplified view of the shops. In fact, due to their social origin, shop masters were, as a rule, culturally formed individuals who possess related knowledge and skills. The conditions of the shop organization required a high level of creativity. It was not easy to become a member of the shop Association. For example, the painters were included in the shop of doctors and pharmacists as Junior members, because they used paints, which were prepared as medicines in pharmacies. Sculptors worked in the General shop with masons, masons with carpenters. Under the terms of the Charter, which standardized relations, the master could be a member of only one shop, but most of the masters sought to master different crafts. The owner of a large workshop Florentine L. Ghiberti, who carried out orders for bronze, hammered and jewelry works, was a sculptor, jeweler, caster, draughtsman and painter. In his Bottega (workshop) trained outstanding representatives of the Italian Renaissance: Donatello, Michelozzo, Uccello, filarete, Finiguerra. To obtain the title of master, apprentices had at the end of training to perform their own work on the approved model. The fact that the title of the work for the title of master was a "masterpiece" can be judged on the qualification of the performer.

To standardize shop production, on the one hand, was not easy, as it was a question of high performing skills and traditions, established on the basis of respect for the cause, which you serve. On the other hand, - it is easy, because the standards produced shop workers, random people in the shop could not be - did not allow the organization.

In the depths of standardization of shop production, two trends have developed: the first - deepening, tightening the requirements for the organization of production and quality of goods; the second - expanding the requirements, which eventually led to a change in the shop organization of

production to large-scale production of commodity products. In place of the shops came factory. The main reasons for the decline of the Guild organization of production and the change of shops in the manufactory should be sought in politics and Economics. In the XVI and XVII centuries in Europe intensified centripetal processes, formed in the modern form of the main state, concentrated wealth. Together with the growing capital needs of those in power.

Huge revenues were given to the colonies, from them came unique materials for construction and decoration. Luxury has become a symbol of power. Workshops guaranteed the highest quality and in turn did not require much effort and money to control the quality of work. However, in the new scale of the quantity of goods, the desire to have everything as quickly as possible, the shops clearly lost. In the organization of economic activity it is time to modernize.

The manufactory, from the technical and technological points of view, did not differ significantly from the shops, but the quantity is associated with a change in quality – this is the law of development. Quantity in itself, of course, does not pass into quality, it creates by increasing or decreasing the conditions in which the existing quality loses its qualitative status. To maintain the quality characteristics of the goods need additional measures.

The size of the shops, despite the diversity of the work performed were limited. And only at those scales that they satisfy the demand. However, such a clear increase in demand, as it happened at the beginning of the New time, the shops could not provide. At the same time, at the end of XVI – beginning of XVII centuries the technical prerequisites of the Industrial revolution have not yet developed. The most painful question remained about the energy source of production work. The sun's energy to use, basically, could not, the force of the wind and water did not differ in reliability. It was impossible to order wind, water, especially in Central and Northern Europe, froze. The interest of science and technology in the energy of steam, emerging long before the New time, has not yet promised the required results.:[3-4]

The manufacture was required to provide the required range of products as quickly as possible without technical and technological re-equipment. It is not surprising that the formation of manufactories not only took place on the basis of shop production, but also with the preservation of mainly the previous working conditions. Perhaps someone understood the auxiliary role of the manufactory, its historical futility, only such an understanding of the real history did not help much. When society does not have a fundamental recipe for solving the problem, it is always looking for reserves in what is already there, trying to stay in motion until the time in which the desired solution will be found.

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

Manufactories appeared as the new scale of the old shops. The shop ceased to be quantitatively – on performers, technical and technological equipment, quantity of the made production – the necessary manufacturing institutions, the internal mechanisms of the organization of qualitative activity inherent in it lost the force. Shops have exhausted their quality reserves, focused on limited demand for goods. Manufactories, of course, maintained the quality due to the achievements of the shop practice, but the increase in the production of goods inevitably reduced the quality of the product.

The solution to the problem came: to divide the quality into ranks. It was a kind of knight's move. Privileged customers could count on high quality, the rest got quality products worse. And here the need for intervention in the Affairs of the manufactories of the external regulator was actualized. It is time to standardize the new order. The standardization function has evolved.

Public standardization duplicated the main internal, inscribed in the shop statutes. The manufacturing form of production has outgrown the potential of self-regulation and caused the need for intervention in quality control from outside the production is not formal, but in fact. Workshops regulated production cycles, established rules of production, work schedule, distributed orders, controlling the quality of products. Manufactories, in terms of production, could not rely on the internal system of the organization.

Large manufactories originated in the South of Europe, first in Italy, then in France. They arose on the initiative of the Ducal courts, located in the same places in the neighborhood. Basically, the manufactory produced expensive products: tapestries, furniture, utensils, jewelry. The products of the manufactories were mostly akin to works of art. An illustration of this can be the first European furniture manufacturer at Vaux-Le Vicomte (1658g.) and in Paris (1662r.), serving the needs of the Bourbons. At the junction of XVII-XVIII centuries they were added trellis, bronze, phasis manufactories. In 1710. In Meissen built a manufactory that produced the famous Meissen porcelain. The absence of machines and conveyors at the manufactories made the quantity and quality of products dependent on the quality and quantity of manual labor.

As for quality, to bring together in one place a shop of skilled craftsmen the big work does not make. It was harder with the quantity. Such masters are not enough, and orders had to perform. The order of shop preparation of masters was broken. As a result, it was necessary to increase the control function on the part of public institutions, taking into account the highest state status of customers. The quality had to match their position.

The shops and factories had a common essence, and distinguished their scale of its expression in the

phenomenon. In workshops and manufactories were created by the masters; the work was mostly manual, mechanisms provided manual labor; the perpetrator knew the fate of his product, and it is hardly frustrated. Production of shops and manufactories decorated the best buildings and their interiors, causing constant public delight. The time of the manifestation of alienation in the work of the individual artist has not yet arrived, although the process of alienation with the growth of production was. To make the essence of alienation obvious, it was necessary to realize the division of labor within production at the microeconomic level. Manual labor was becoming obsolete under the technical onslaught. Along with this, the attitude of the master to work changed.

"Mastery", like any concept, evolves. In the workshop, the master created a masterpiece, a unique work and understood that he objectifies his feelings, thoughts and skills in it. In the factory the relation of master and products were varied. They kept the creativity, but it is with the expansion of manufactories, appeared to be depending on the number of products. The number of pressed quality, reduced interest in the work. Creativity turned out to be subordinate to the plans of production. The responsibility of the artist, the Creator retreated from the previous dominant positions.

The initial idea of standardization was formed at the time of the latent form of manifestation of the phenomenon of alienation in the work of creative abilities of the performer of works. The art of the master still remained, on feelings, free, and continuity of creative work removed contradictions of production. The master alienated the product, but among the feelings accompanying the alienation there was no sense of social injustice. The product was created for consumption by others, for which the master received a reward, part of which was the opportunity to continue to reveal their creative potential, working in the shop or at the manufactory.

The standards were designed not to unify the product, its parts, production conditions, technological structure. Their goal was to preserve the achieved creative results. In the standards of the period of shop and manufacture organization of production coincided interests of producers, consumers and regulators, resulting in the effectiveness of their actions and minor maintenance costs.

Authoritative reference books omit the presented part of the history of standardization, apparently believing that it is not related to standardization. Such an interpretation can be accepted only on condition of a return to the Aristotelian approach to concepts. After Hegel justified the historicism of concepts, such a retreat seems to be a very unfortunate step in the past. In art theory, the "standard" is identified with the "stereotype" - a form that is repeated without changes, independent of conditions (eng. standard –

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

"accepted", "approved"). "Stereotype," writes V. Vlasov, - an artificial entity, so it is different from both of the archetype, and creative thinking.[IX; C 246]. Limiting creative participation in production, the Statutes of shops and factories did not encroach on creativity as a creative force. The regulation was protecting the quality of the products, which conform to the model. The problem samples the standards were decided organically. In those areas where the required improvement has been recognized as high-quality products, allowed the development of new standards.

The organizers were forced to spin in the truest sense of the word in search of a rational solution to the contradiction between conservatism in production and the need to move on. The brewers conservatism was more, the masters, manufactures shoes, harness, saddle - less. As not slowly had life in the middle Ages, the movement was, and with him was changing. There are new materials that have varied tastes. All significant changes in public moods and views had to be monitored and reflected in the products of production.

The fact that, until the eighteenth century, the content of the concepts of "standard", "standardization", put a slightly different idea is not sufficient reason to make an audit aimed at denying the relevant policy. Standardization has its roots in the Medieval period, by the time the history of mobile artels of masters ended. The farm has acquired a fixed look, was enlarged and transformed in the end into the shops. The workshops strengthened the position of the creative component of the production of products on the commodity market and thus necessitated the control of creativity, so that the desire for a new one does not harm the traditions of quality production. [12]

Genius and control are not compatible, but the shops, as well as the manufacture were forms of relatively mass production, for which the stability of the range and quality of goods are particularly important. Workshops and factories were part of public life and in this status demanded control over their activities. Control, taking into account the specifics of the shop and manufactory production. The craftsmanship of care is not particularly needed. Folk wisdom says: "to teach the master, only to harm the cause," but in the production of approved samples requires a strict order, which was subordinated to the standard approach. The received certificate, whether it is good to act in accordance with the regulations. Standardization was more like regulation, but it was not something that did not fit into the understanding of the essence of standardization.

We have a classical demonstration, on the one hand, of the connection of the essence with the phenomenon, on the other - a misunderstanding of the historicity of the phenomena of social development. "... Nowhere: neither in heaven, nor on earth, nor in the spiritual world, nor in the world of nature, there is

that abstract 'or ' or' which is affirmed by reason, Hegel explained. All anywhere existing is some specific and therefore in itself a kind of different and opposite. The finiteness of things is that their immediate existence does not correspond to what they are in themselves[3].

Thinking homo sapiens has two types – rational and reasonable. The division was introduced by Hegel in his characteristic linguistic manner. F. Engels translated Hegel's thoughts and expressed them in a language understandable to non-philosophists who prefer to choose and use thinking simpler and more practical, referring to "common sense", which serves as a Navigator in knowledge. "Common human reason," wrote Engels, a very respectable companion within the four walls of his household, experiences the most amazing adventures, as soon as he dares to go out into the wide expanse of research. Metaphysical – common sense – way of understanding, although it is legitimate and even necessary in certain areas, more or less extensive, depending on the nature of the subject, sooner or later reaches every time the limit beyond which it becomes unilateral, limited, abstract and wrapped in insoluble contradictions, because for individual things he does not see their mutual connection, for their existence – their origin and disappearance..."[4].

To make our reflection clear, let's refer to another authoritative source – encyclopedia "Britannica": "Standardization, in industry, development and application of standards that make it possible to produce a large number of interchangeable parts. Standardization may focus on design standards, such as a property of the materials, their conformity and tolerances requirements of drawings or product standards that detail to paint properties of the produced items and are embodied in the formulas, descriptions, images or patterns..."[Britannica. Table illustrated encyclopedia. Per. with English. in 2 volumes, TII M.: "Astrel publishing House",2008.-2325s; c1816]. We turned to Britannice, because its materials are actively used by other information publications.

The author of the article in Britannice summarizes the understanding of standardization in our time. Britannica with the reissue of modernizarea. Without much mental effort, we can isolate the main considerations: the essence and purpose of standardization. We have already written about the essence of standardization, that is, its social significance. Standards and control over their observance are the most important conditions for the socialization of production. Production exists as a way to meet social needs. The function of the state, no matter how liberal economists clamored for the absolute freedom of producers from political control, has always been to stimulate production, to act not only in their own interests.

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

The class character of power does not mean that it openly and directly protects the interests of the ruling class in the economy. Democracy is a historically polished mechanism of political activity of the state, creating the impression of its neutrality. Politics is the art of lobbying certain economic interests. Standardization is one of the technologies of such policy. The British are the founders of modern European democracy. They have long mastered the technology of political participation in public life. Introducing standardization with pure production side, the British experts obviously disingenuous. All that can be learned by reading an article from Britannici, however, there is no guile. It is behind text, it is simply not included, or considered unnecessary, or inappropriate.

"Standard" - the basic concept of standardization, the concept is not so much technical and technological order as political economy. Abandoning political economy, replacing the political economy of macro and microeconomics, rolled down to economic, you should try as little as possible to remember the history of economic theory, its philosophical roots. A. Smith, D. Hume, J. - Sh. Sismondi, K. Marx, K-A. Saint-Simon, G. Spencer, J. St. Mill, economic theory has been developed in a broad socio-political and historical context. Before becoming a technical and technological concept, the concept of "standard" was designed to regulate a certain level of quality of the goods. And then it was present technical characteristics, but they had an auxiliary value. Without historical analysis, it is hopeless to understand the essence of the basic categories.

Tools for managing economic phenomena, depending on their scale and subject certainty, may be within the limits of economic and production competence, or have a socio - economic scale of action. The second option requires analyzing them within the boundaries of social development, as a factor of social progress.

Standardization belongs from the beginning to the second type of management.

Moreover, it was in the original time of its social purpose was especially

it was noticeable and manifested both casually and universally. Beer brewing standards,

production of wines, household items, clothes, shoes were designed for public consumption, were a kind of protection of the interests of the General population. Furniture production, jewelry, was mainly addressed to the upper class. In both cases, we see the participation of the state and municipal authorities in protecting the interests of consumers by forcing producers to perform work qualitatively. The standard was taken as a criterion of quality. At the same time, in the initial standardization it is easy to distinguish the absence of petty care of producers, which is explained not by the sentimental approach of the

regulator, but by the quality of skill and professional responsibility of producers. Recall that even in the factories production has not yet reached the level of mass action.

The essence of standardization was determined from the very beginning of its history - to develop a mechanism to neutralize the opposition of the interests of the manufacturer and the consumer. Spontaneously there was a search of tools of repayment of the increasing process of alienation of the person in work. Hegel is right in asserting that essence is abstract and manifests itself in experience not by itself, but through phenomena conditioned by a concrete historical environment. In the period of origin standardization directly focused on the qualitative certainty of the result of labor - products. In the absence of intra-production division of labor, the greatest efficiency was achieved in the final expression of the process. Standardization partly regulated the production process itself, but the centripetal forces were in preference - it was necessary to guarantee the quality of the result. The qualitative side in the measurement of production efficiency was relegated to the background, given to the producer himself. The inspector regulated the quality of the result through the quality of the products.

The interpretation of the production efficiency corresponded to the historical and economic situation. This concept was not yet, it only matured. Efficiency became relevant much later, when production reached the frontiers of mass production of goods. On the change of competition of the qualities of the products came in competition the cost of production of goods. Manufactories did not increase the number of production goods so much that production costs came to the fore. As for the technology competition, it was hardly significant. Differences in technology naturally took place, but within the boundaries of the General manual form of production, where the benefits could be obtained through better skills and better organization, time savings, perhaps somewhere through a successful logistics alignment.

Manufactories temporarily solved the problem of meeting the increased demand for products, but production has not yet grown to measure efficiency. The quality of the products was still relevant, the quality guaranteed a high reward. Since in most cases the goods were made to order, the competition had a hidden form.

The potential need for standardization inherent in the development of production was revealed gradually, in proportion to the state of production. Its abstract form was loaded with concrete content. The process of formation of standardization was similar to the work of the master tailor, who first took the measure in the absence of any real signs of the future product, made the first fitting of something not very clear to the customer, and only at the end showing the product, embodied the specificity of the image. So

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

was the process of climbing the initial appointment standardization to the specificity, which captures the modern scientific and news sources. The functions of standardization have changed, and its content has evolved as a tool for managing economic activity.

Standardization as one of the basic methods of economic policy drifted from the quality of the finished product to the production of goods that ensure its quality. The wind in the sails of standardization was blowing from another important concept of political economy - production efficiency. While efficiency is determined by satisfaction with the quality and price of the consumer, standardization driving is quality. The standardization was based on the regulation of the parameters of the technology of its production. The samples of goods agreed by associations of producers with regulators ruled the ball. The situation was quite balanced, but its stability was determined by the technological specifics of the manufacture.

Progress admits stagnation within certain limits. As in the mountains there are vast plateaus, and in the history of production - the field of active professional activity have a lull in the movement. They are natural, as they correspond to the social condition as a whole. The middle ages were not a sleepy Kingdom, as it is depicted in school textbooks, it simply reproduced itself equally accelerated, without jumps. At this time, humanity was gaining energy of action, creating approaches to obtaining critical values of the energy of impulse in various fields of activity. The specificity lies in the fact that in the public life of Europe and beyond, was dominated by religion and political - of the absolute monarchy, carefully keep the movement from making any alterations. The social consciousness was dominated by the calmness of the achieved, forced to tolerate the troublemakers within the confines of the vector of increment created by religion. No faith could become an impassable barrier to social progress. When this happened, the changes took place in the religion itself. Christianity was part of the middle Ages a single faith, and came out, turning around like a fan.

The peculiarity of the middle Ages affected the subsequent development of history. New time(XVII-XIX) could not come immediately after the Middle ages. It took a transitional historical stage – "Revival". It was necessary to clear the socio-cultural and political conditions for the free and independent movement of scientific knowledge, the methodology of scientific knowledge, education and technological progress.

In the XVII-XVIII centuries the development of scientific knowledge goes out of control of the Church. By this time include the completion of science as an independent field of culture. In Europe, there are associations of scientists, science management bodies. Scientific knowledge on a new scale is part of technical creativity. The engineer

becomes a "scientific Builder". Technological progress displaces manual labor. The manufactory is replaced by a factory-a new way of organizing production and labor. Production becomes mass, so more affordable.

Accessibility requires a different quality. Quality comes to the fore

the mass of the product. It should be and be inexpensive. Place name consumer replaces experimental, which could be anyone. The former quality control capabilities are crammed with new challenges.

In Russia there was a common saying: "Cheap and angry." Young people are unlikely to understand its essence, so let's explain: the product does not have to be expensive to be in demand, but not every product will be in demand, but only the one with the signs of a quality product. In recent times, the saying gave a modern form of expression: "Quality product - at a reasonable price."

The change in the nature of production forced to change the philosophy of standardization. Standardization of product quality as a result was replaced by standardization of production of high-quality products. "Synthetic idea" of control of a sample left, "analytical idea" came: all production and the product to decompose into components - knots, details, operations to the last screw, a seam, a nut, the compelled movement and to take all received under control. Bring differences to a minimum and versatility to make maximum. Similar for craftsmen workshops and manufactories could not dream about and in really the chilling dream.

Skill is closed to originality, it is unique. Even the master himself can not fully decompose the process of making his product. Creativity only begins with a common set of tools, actions, order, it is revealed in the fact that it is impossible to construct from a set of "designer". Reason acts according to logic, therefore there is a possibility and necessity of rationalization activity. The innovator does not invent, his thought is focused on bringing the invention to the perfection hidden in it. The mind and only the mind makes jumps from the known to the unknown. It focuses the creative power of man. Hence the name of the species - "sapiens".

Both manufactory and factory production combine creativity with rationality, but they do it in different ways. In the shops worked in the first place. The master was the Creator, the apprentice and the students provided the conditions for the inspiration of the master. At the factory, the master organizer of the production of the approved sample, in essence, the head of the Assembly operation of the product, or, if it is particularly complex, its individual parts. Creativity and production are bred to not have the temptation to deviate from planned and controlled manner. And in this order it is not necessary to look for unreasonableness, on the contrary, only by

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

following rationally divorced and fixed order it is possible to maintain the rate of production when it is mass. The power of mass-availability of goods to a wide range of consumers. And no state will deviate from the philosophy of satisfying the mass need. Quality here is a payment for mass character, which is forced to make all participants in the process.

The history of mass production shows how to find a solution to the problem of quantity quality. This story is not a series of events and actions, it is primarily inscribed in the historical process of the logic of conflict resolution, the history of economic policy, which should be perceived as a higher school of Economics. Having mentally passed the historical experience, it is possible to avoid both romanticism and liberal illusions in the management of economic activity.

The beginning of the study history has affirmed the natural character of the development of economic progress. The story began where production turned out to be more Mature, the importance of science and technical creativity more in demand, and the political situation more democratic - in England. In this connection, we once again call for the help of Britannicy: "Industrial revolution" (industrial Revolution), the process of transition from an agricultural economy to an industrial, based on machine production. It began in England in the 18th century. The technological changes included the use of iron and steel, new energy resources, the invention of new machines that increase production (including spinning machine "Jenny"), the development of the factory system, important inventions in the field of transport and communication (including steam engine and Telegraph)... the Industrial revolution took place mainly in England from 1760 to 1830, then spread to Belgium and France. Other countries lagged behind temporarily, but when Germany, the US and Japan built a strong industrial base, they surpassed England's initial successes. Eastern European countries lagged behind in development until the early 20C...

The characteristics of the industrial revolution, apparently, was prepared taking into account the mass consumer of information services, is perceived, from a professional point of view, critically. There is no essential assessment of economic development, a bit strange is the beginning - the transformation of England from an agricultural country into an industrial one. England has long relied on its own agricultural Foundation, in which the transition to the industrial foundations was not without complications, as well as in industrial production, it is enough to recall the famous protest movement "ludites". At the same time, the historical path of the industrial revolution in Europe and beyond is traced.

We are interested in just what the author has not said, relying on professional logic and ingenuity. The industrial revolution led to the massive scale of production and the need to divide labor into the depth

of technological progress. Skill was replaced by performing discipline, and the internal motivation of the master gave way to external motivation. The industrial revolution led to an economic revolution. The way of production has changed, starting with the source of strength and internal motivation in achieving the quality of the goods and ending with the priority in the new way of production

technical division of labor. The organization of production has steadily become a leader in economic theory and practice of economic activity management. The art of the master was replaced by the art of the dispatcher, increased the importance of technological discipline, the ability to count and calculate, to risk to be a winner.

The period of economic history that followed the Industrial revolution is divided into two stages. At first there was a mass production of the classic model. We call it classical to emphasize the originality of the stage of maturity. Maturity as a stage of development, regardless of what has reached it, is characterized by transparency of the essence. The essence comes out of the shadow of the phenomena that hide it, it is revealed almost as it really is. All the most perfect, the best is presented at the stage of maturity. At the same time, the disadvantages and costs of development look more contrast.

At the Zenith of the classics of mass production, his philosophy was formulated quite clearly and tempting for the consumer: the buyer should save time on making a purchase, the store is not the best

a place of life responsible person to was exactly need in one place to focus maximum range. Who was the philosopher who has helped economists to determine the nature of shopping, we don't know his anonymity carefully guarded, but the philosopher vxlicinst was not modern. The mission of trade was presented methodologically flawed, outside the system approach. The temptation turned out like a spinner.

Economic science can be separated from politics, but even the proponents of simplifying it to Economics, proceed from the fact that it is about economy, not waste. Implementation of the philosophy of availability of goods in one place, involves unreasonable or economically, or humanitarian, or environmentally huge costs. It was impossible to write them off and they laid all their weight on the cost of goods, significantly raising the price and undermining the possibility of mass access to the market.

The basis of the philosophy of mass production laid closer to the end of the XIX century, well-known experts in the field of management: F. Taylor, A. fayol, A. Sloan, Ford Jr. They also have the initial experience of developing the theory of production management, in particular, the idea of the system-forming value of quality management through the standardization process. In the XIX and the first half

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

of the XX century, the issues of humanization of the economy, the protection of the natural conditions of social progress were not included in the first line of relevance, therefore, as a rule, ignored when solving production problems.

The situation has changed dramatically towards the end of the second Millennium. Economic planning and design became dependent on higher-level relationships. To solve the question of how to live? Without answering the question: will there be life? Illogically. Management specialists thought about the historical logic of providing the consumer with the formula "here and now". B. S. Aleshin, L. N. Alexandrovskaya, V. I. Kruglov, A. M. Sholom and many others opposed to mass production the type of production called "lean production" - diligent, sparing production. Deciding that it will not be so massive, as the emphasis on market research will help to remove the undue burden on production, will make production targeted. It is not clear just why they came to the conclusion that if it ceases to be mass.

Mass character initially became not a brand, it merged with the essence of production. Other production will not be able in the foreseeable future. Naturally, in parallel with mass production artisanal and individual coexist side by side - heirs of shops and manufactories, however, unlike their ancestors, not limited in technology to hand tools, actively using scientific and technical products. "Sustainable production"- this is really a good trend for a more adekvatnoy form of continuation of mass production.

In its previous form, mass production looks like in the twenty-first century is clearly outdated. Among the global problems: "energy saving", "resource saving", "concern for the state of the natural environment", "world warming", "protection from the destruction of the ozone layer", economic philosophical strategy is developed in spite of. What kind of humanism is that? The very participation of science and philosophy in the development of mass production, which, as has been repeatedly noted, was essential for social progress - has created hundreds of millions of jobs, increased purchasing power, forced to learn, improve skills, enjoy civilizational achievements, gain freedom in the national and transnational space, etc., was undoubtedly a significant factor. But we should not forget that science and philosophy are initially perfect in comparison with the existing knowledge - mythological, ordinary. Their strength is not in what they have already done, but in what they can do if they are not disturbed. [5-6]

Even Pythagoras explained that he is not a sage and not omnipotent, his goal is to understand how wisdom works. At the origins of economic science were prominent representatives of philosophical thought, able to understand the essence of the matter and to predict the development within the historical specificity. They understood in detail the present,

determined the nature of the upcoming movement, developed a scientific methodology, philosophical foundations of scientific knowledge as a private search within the framework of the universal.

Science and philosophy are denied the ability to guess and seek truth in the Scriptures. Their destiny is to analyze what has grown. In the XIX and XX centuries grew much, but even more just beginning to grow. Here is these shoots and failed to adequately assess. The natural environment seemed an endless storehouse for thought. Dialectics could not be completed in time with a systematic approach.

"Zeal production" is not an alternative to mass production, but only its next stage of improvement. The essence in the case of a successful transition will remain the same, reduce costs related to unnecessary. Understanding the true nature of a "prudent, sparing" economy is important for the development of a valid economic policy.

The effectiveness of economic policy is primarily determined by how well the quality of existing production is assessed. It would seem, why actualize the obvious dependence, when everything should be clear to everyone without it. Let us explain: evidence is a dangerous state of consciousness. In it often the essence of what is happening is seen like a rod immersed in water. Even the mirror has its own character in the reflection, then what to do thinking in the reflection of the consciousness.

Physical reflection is devoid of intention, and reflection in consciousness is a way of understanding, therefore, along with the object of reflection, the state of consciousness - experience, interest-actively participates in reflection. An example is the categorical refusal of bourgeois economic thought in the XX century from the political essence and even from the bourgeois orientation. At the dawn of capitalism, the term "bourgeois" was honorary. It reflected the revolutionary restructuring of the economy, social relations, the transition to democratic freedoms. Everything was clear – the time of the feudal social order has developed its historical resource and is obliged, according to social progress, to give way to capitalism - a better social structure. The concept of "bourgeois" has historically been included in the definition of the most effective "great French bourgeois revolution". Then, why in the XXI century shyly hide domestic liberals the term "bourgeois" in relation to the definition of the state of the economy and its reflection in economic science? The reference to the objectivity of scientific knowledge is inappropriate, since it is not science that is defined, but its object. Scientific knowledge and scientific methodology in this context strictly retain their objectivity. Science is attached to a historically specific object and gives it a scientific understanding.

Nobody anywhere has not officially announced the completion of the bourgeois history. If such occurred, it was necessary to open a new Chapter

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

of social progress, and tried to do in 1917 an Attempt was defined as a historical arbitrariness, unlawful violence over the history of capitalism, demanded the totalitarian character of the social order, the violation of individual rights, freedom of expression, etc. in short, capitalism has survived and is still here. But try to find the term "bourgeois" in the democratic media, modern scientific journals in relation to the economy. What is it that prevents the phenomenon to be called adequately? - Historical logic.

History is a naturally developing process of changing phases (stages, formations, civilizations, eras, etc.). Capitalism replaced the feudal structure of society, the basis of which was the agricultural and artisan type of management, built on manual labor, non-stationary commodity market, shop and manufactory organization of production. Management went through standardization focused on the certification of the final product rather than the manufacturing process. Whatever capitalism was not perfect, his perfection has historically regulated. Sooner or later the contradictions will "eat" his perfection and he will give way.

What will follow? While this is a mystery for science, it is absolutely clear that the bourgeoisie and those it contains, it is vital to reclassify the historical status of capitalism from concrete historical to non-historical, that is, universal. To remove the problem of the future society, to transfer it to the technical level of regulation, including through standardization.

Rate for lean production – a knight's move. It is designed to show the humanitarian and environmental reserves of the bourgeois economy and to draw attention to the need for a new paradigm of development within the existing economic platform – the bourgeois mode of production. We cannot share the satisfaction with the transition to "prudent production" of a number of authors of the late XX – early XXI centuries, when research was carried out on various grants, including the Soros Foundation, and the products of science were presented in a technical spectrum free from ideological influence. There can be no freedom from politics in political economy. The relationship was in the period of socialist history, it continues after. Self-determination of the state of the domestic economy as a transition convenient course. From what we leave it became clear since 1991. Try to find out where we are headed, and we are going exactly there – in the bourgeois mode of production, as it does not commune technological industrialization, the digital economy. And we were there at the end we will, in this connection, it should be clearly understood that all technical decisions are political in nature, just some of it sticking out like a donkey's ears, and somewhere behind mediation efforts.

The bourgeois economy was born as an alternative to artisanal, manufactory production, not able to be mass, but technologically very high quality.

The quantitative leap was to affect the quality, which led to a policy in the management to ensure acceptable quality of the goods. The vector here is possible only – the creation of standard conditions for obtaining high-quality products in large quantities. The heterogeneity of mass demand resulted in a wide range of product quality, which was reflected even in the scale of national and transnational planning.

In Western European countries, goods are marked for consumers from the Eastern part of the continent and especially for Russia. Quality, and together with quality and standards to a large extent are due to the political map. Standardization as a technique is indeed necessary and reasonable as an instrument of economic policy, but only beyond systemic understanding. In systematic consideration, it has political ears, which, like donkeys, how many do not hide, will come out.

Let us return to the paradigm of "prudent production". At first glance at the RP, writes B. S. Aleshin with colleagues, it may seem that the whole thing is in the wide implementation of the so-called "just in time" system, in which products are produced only when they are needed for the next stage of the production process, and only in the required amount for this. However, a closer examination shows that the case is not limited to the organization of proceedings under this system. It is necessary to rethink the logic and technology of production, which inevitably leads to changes in mentality or, as is now often said, to a change in the culture of the organization.

In the first approximation, the impression of the inevitability of the metamorphosis of standardization in the development of sustainable production. As long as the RP exists only as a project, one can indulge in reflection, the subject of which should take the main thing in any business regardless of its scale and value – the quality of the process and the product[6]

If you think strictly logically, the concept of "quality" - a specific philosophical category. In philosophy, it is the second in order, following the concept of being, reveals the essence of being. All the philosophical arguments quality modifieres acquires concreteproduct, very often sense-specific certainty. Economic science and production practice are no exception. The difference can be felt by comparing the understanding of quality in philosophy and beyond, focusing on the human explanation of what is quality. Quality, according to the famous German philosopher, is "that, losing that, the subject ceases to be itself". The philosopher has the right to define quality in this way, because he takes an object in its abstract form. In the abstract, the subject exists conditionally, and therefore ceases to exist subject also conditionally, taken in the system of philosophical abstractions. The commodity ceases to be a commodity only for the philosophizing specialist when it is deprived of consumer value. But who is going to organize the production of what no

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

one needs. This can only be in a madhouse, and not in the actual production.

The definition of the quality of philosophical phenomena allows human formulation. The number one reason the quality of the investigation - more. Losing its quality, the consequence can become the cause of new changes. It does not disappear, but only transforms according to the natural order of motion. Chance, deprived of quality, turns into necessity; possibility into reality or impossibility. Product requires, as a necessity, the lack of it needs of the manufacturer, and is built to the placing on the market; and as an addition (if you are preparing it for sale) it should be something that someone really needs, it is for this came to the market. A product really ceases to be a product when it does not have what someone other than the manufacturer needs. Only such a "product" is not a standard of commodity production. In the production, designed for the market, the philosophical concept of quality is concretized in the context of the reality of the product and looks like a standard. This explains the fact that the whole history of quality management in the XX and XXI centuries, was developed in the form of standardization of mass production.

The modern history of production management is focused on the management of the quality of production of goods and is carried out through the improvement of standardization. This should be guided in the assessment of the economic efficiency of management. And it should begin in General with a clarification of the concept of economic efficiency. The reason is that there is a growing tendency to separate economic efficiency from the systemic functioning of the economic block of social life.

Scientists economists sequestered the methodology of knowledge and management to mathematical support, trying to implement the failed in the XIX century, the idea of O. Comte to make every science at the same time and philosophy. One of the attempts of this kind K. Marx called "poverty of philosophy", which is not destined to pay the bourgeoisie, and not those who serve it, to pay determined consumers. Therefore, the dynamics of the increment looks stable: the rich and the crisis become richer, the rest float on the real waves of economic movement. As those who are in a balloon in distress are trying to throw off the ballast to reach the right place, so the current theorists of the economic movement are trying to detach from the economy everything as they consider uneconomical, enrolling in the infrastructure activities aimed directly at the development of human capital, and at the same time declare that it is human capital that is the main source and reserve of the growth of the economy.

It is surprising, as professionals, lured by the term "humanization of the production," read the statistics. "Learning is becoming the norm, enthusiastically state the authors of the textbook

"Philosophical and social aspects of quality".[5] The Average spending of American companies on training is about 1, 4% of the payroll (!?)" When this one and a half percent was an indicator of special attention to anything. There is just a division of profits on the residual basis.

So, we highlight the essence of our thesis: standardization from the first steps of its history was aimed at determining and stabilizing the quality. At first, the product itself, since there was no special chance to affect the technology and organization of production, and with the transition to mass production, when the value of the organization of production increased significantly as a result of activities, the direction shifted to the manufacturing process. Standardization of production came to the fore. It was believed that if the organization of production meets the requirements of the developed standard, the result will be qualitative.

Turning the switch to standardization of production from the outside seems to be a justified action. In fact, where low-quality products when there are only high-quality actions. Naive people are convinced that it is enough to combine high-quality alcohol with high-quality water, and you get high-quality vodka. Chemists have a different opinion. They argue that to obtain a quality alcohol-containing drink, it is necessary to observe the order of combining water with alcohol to properly start the reaction.

Shop and partly of the manufacturing production was subject to the quality of the product. Manual labor was unproductive, but within qualifications highly mobile. Hence the absolute participation of creativity in the product. Quality of a product completely subordinated to itself technology and the organization of production. It is pointless to dream on: a Stradivarius or Amati would go for the change of the sample, if have experienced difficulty with the manufacturer? They would not step back from the idea of its material objectification, they would look for a solution in production and would find it. The mass production of any type is of a very different character – it is unattractive and prudent. If the product recommended for mass production can not be made without a serious restructuring of production, requires serious costs, it is easier to connect innovators to "improve" the product in the interests of production.

The Soviet experience can be cited as an illustration. Consumers knew that the premiere shipments would be perfect, but the further, the worse. German automakers are among the most qualified, however, and they went to the falsification of engine performance, admitted and were roughly fined. Similar cases have been repeatedly noted in the practice of Japanese manufacturers. Unfortunately, this is even worse in the Russian Federation. The main reason for the flourishing of corruption.

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

It is necessary to understand the dual function of standardization. She has rallied a technology to politic. Its importance for the improvement of production is objective - it is the only main way to move the economy forward, but at the same time - it is the main means of objectification of economic policy, so the objectivity of standardization was and will be oriented by political interests. Standardization can be managed (and should!), therefore, can be and manipulate.

When he came to power, us President D. trump took measures to withdraw the country from the Paris agreements on environmental policy, despite the complication of relations with European partners, particularly sensitive to the effects of environmental change – the mainland is small, crowded population and large production. Trump is a man of business and business policy for him is the essence of politics. Everything else should be in subordination. Trump took up the restructuring of the economic movement of his country and the standards he will build on the basis of purely American interests, without straining infrastructure processes, which trump refers to the state of the environment. Through the technical form of standardization, its political essence is manifested.

And the last argument in favor of the dialectical perception of standardization - the President of the Russian Federation announced the Central economic task of creating digital production. Figures since the time of the Pythagoreans have been a symbol of ultimate abstraction, behind the figure is lost objectivity, it replaces the number, but not chaotic, but quite definitely. A single figure is pointless. The other thing is a combination of numbers, it, using a specific code that recreates the subject in its most exact expression, which opens up almost unlimited possibilities to identify and control. The emotional - motivational component of the subject activity, the costs of professional readiness of a specialist are withdrawn from the management, thanks to the transfer of actions to the sphere independent of the subjective factor. As they say: nothing personal, only in the interests of the case. It is bad when the role of the individual is underestimated, even worse when the fate of the common cause turns out to be depending on the individual.

Production management, including standardization, should be carefully prepared with maximum reliance on the reserves of professional culture of specialists, but it is desirable to entrust the dynamics of management of the launched production to technical programs and tools. So everything will be more reliable. In June 2018, the icebreaker fleet of Russia was replenished with the most modern diesel vessel of the Arctic class for conducting caravans along the Northern sea route in the annual mode. Height - with a five-storey house, the main engine power of 45,000 HP. The ship is operated by 19 people, which can be more convincing in favor of the

advantages of technical production management. But technical management has its weaknesses. Among them: a high level of energy dependence, computer security is not absolute, the requirements for the personal abilities of specialists in terms of personal and team responsibility increased, sometimes up to exclusive. Problems at work, as a rule, are created by people, but it is in the absence of qualified specialists that the most serious problems arise. Technical standardized management is not a panacea.

Let's try to formulate the rules of standardization. In our opinion, there are two main ones. First, standardization should be carried out in three directions, linking them into a complex - to determine the standard of the product within its functional purpose, taking into account a broad understanding of the safety of use; to regulate the production process and to form a consumer attitude to the product. The consumer is a full participant of standardization. Without proper consumer interest in the product, the product will not be in demand on the scale necessary for its sustainable production.

Second: standardization of production is carried out on the basis of conceptual understanding of its position in the system of specific historical conditions, as it is due to the quality of the stage of economic development. No matter how it is perceived by the consciousness, it is necessary to put up with it. The goods should be in demand not exclusively, but on a mass scale, otherwise the production will cease to be mass, will waste its quality.

The range of products of mass demand in the USSR was not great, but the quality of the consumer's goods satisfied and allowed the manufacturer to solve its problems. The departure from the standards of production developed in the USSR allowed to significantly expand the range of goods at the cost of quality loss. Increasingly, in stores and advertising meet the Soviet brands that were not in the USSR they are, as the ordinary products.

Concepts are expressed only in words, they can not be translated into numbers, unlike products. Once again, we draw attention to the fact that the concepts of "quality" and "standard" are correlated as General and particular in the characteristic of the phenomenon. Really manage the quality you can only use words, and the word, by definition, generalizes the reflected phenomenon, and takes it off sensually and subject specific, making it difficult practical impact, reducing the efficiency. Determining the quality of an item, we merely restrict it and pinpoint control, setting the control vector and the goal. To control has acquired a practical form, it is necessary to have no longer the image of the object, and its objective expression. Here is required subject or relevant to it sensitive, digitized sample, which, after technical processing takes the form of a program action. Digital production is built on the basis of physical impact on the object and requires a standardized reality of quality. History

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

known as the history of quality management, essentially there is a history of standardization of production, concretization of quality into sample production.

The first experience of control intervention in the production process in order to give it stability and a certain increment can be found in the activities of shops, individual industries, schools of masters. Most of the famous Renaissance sculptors tried to work in teams of stonemasons, directly in the field of extraction of material. They were looking for in the quarries needed to create an image texture. That's when there was a joke: a masterpiece to make simple - it is necessary to remove all unnecessary, unnecessary, but first you need to find the basis. In shops for the sake of quality of the master carefully checked products, observed on a course of production at work of apprentices, actively attached to secrets of production of pupils, selecting from them the most capable. In spite of the fact that each product was individual, made by the master, it passed internal control behind which there was also external from the city shop organizations. In consequence, such work will be defined as the phase of rejection.

In content, it was much richer, synthetic, more like a "sample" than a "rejection". Creativity moved the masters, the masters studied no less than the students. They were looking for paint, soil, Foundation, perfect images and ... were wrong. Creativity does not spare anyone – neither great nor beginners. We had to work all, and especially the masters, the method of sticking. The concept of "marriage" is not as simple as it seems from the outside. Marriage is not always in sight, the masters got his hidden form, manifested over time. "Culling" was not an act as in mass production, but a technology. Today it is difficult for us to look beyond the achieved horizon in the development of mass production. What is clear is that a "diligent" form, while most the development direction than the phase. However, the logic of progress, built on continuity, does not exclude a return to some part characteristic of the shop organization. Mass character should not be a brake on creativity. It will eventually reveal the diversity under the General "roof" of the multiple result. Therefore, you should carefully examine the production process, improved in the shop form.

Modern rejection as an action aimed at standardization is counted from the last quarter of the XIX century. The experience of S. Colt plants is recognized as the beginning, it is believed that the idea of "standard quality" was born there. If we evaluate the system of our version of "quality – standard", it was a subconscious embodiment of Hegel's conclusion about the dialectics of the ascent of knowledge from the abstract concept of quality to the specific concept of "standard" of product quality.

Colt Assembly went without a preliminary adjustment of the parts. Specially trained inspectors

performed calibration in advance and rejected the noncondition, thereby accelerating the main – the Assembly part of the production. The experience of S. Colt at the beginning of the next century developed in the automotive production Of Ford and Leland ("Cadillac"). G. Ford, introducing the conveyor Assembly removed from the conveyor control components, logically believing that such work should be done before. As a result, the "input control" of compliance with the standard calibers was replaced by the "output control" in the adjacent production, which cleared the main production from defects, made it qualitatively cleaner.

Further, the standardization process has gone through improvement achieved, joined theorists F. Taylor, A. Fayolle., M. Weber. In Alliance with the managers, they identified the basic principles of the scientific approach to the organization of mass production: a systematic approach to management; personnel management; delegation of responsibility; scientific regulation of labor. The developed production management system went down in history as a Ford – Taylor production system. Having unquestionable advantages, the system of Ford, Taylor, and contained serious defects that a long time "asleep" in her potential. The development of production in the new socio-political conditions of activation of social-democratic interests inevitably pushed the Ford-Taylor system to a standstill. Technological progress, the process of turning scientific knowledge into a direct productive force, also contributed to this. The desire to implement the principle by all means not to allow defective products to reach the consumer could not but lead production into a technological structural crisis.

The lack of a clear understanding of quality and standard in the management theory led to the same. They were changed instead of being considered in development. The most noticeable and sensitive was the identification of quality and standard in the production of consumer goods, where the concept of product quality reflects the duality of the nature of the product. [7]

The product, intended to be subjective, or rather, the subjective use of the individual or social group should be of high quality is objectively, physically and subjectively, is to deliver satisfaction to its physical quality to the consumer. It is naive to believe that only advertising the physical perfection of the product, you can cause the location of the consumer. Such a consumer should be subjectively none. Interest in the physical quality of the product can be formed by demonstrating its capabilities, but in order to form an interest in the need to buy it is not enough. The product should capture the feelings of the buyer, and this process is irrational, deeply intimate in nature, expressing the individuality of the consumer. Especially if the consumer is attached to a significant range, picky and fastidious.

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

The quality of consumer goods is not reduced to a system of physical parameters, but it exists in their quality as a kind of core. And also, as the atom is not limited to the presence of the nucleus, and the quality of such goods is not limited to the system of physical characteristics. On the contrary, the standard is a purely physical phenomenon and requires a clear description in physical units. The concept of "quality of goods" should go through the market, and the "standard of goods" is defined in terms of scientific and technical creativity.[18]

Subconsciously, the differentiation of the concepts of "quality" and "standard" came to the end of the first quarter of the XX century, when they felt the insidiousness of the absolutization of control over the standard conformity of products. In high-tech, complex production, the share of supervisors exceeded one third of those employed at the enterprise, which significantly increased the load on the cost of goods. The price has increased and the quality has not improved according to the price increment. The buyer had to pay for the previous level of guarantees. Quality began to slow down production efficiency. In fact, there was a contradiction between standardization and efficiency. We had to think about how to improve the physical model of the standard - about new materials, original design and technological solutions. Standard -technical image of product quality. And just as the quality of the product described in words depends on the knowledge and ability to use them, the standard is determined by the possibilities of technical modeling of the concept of quality. The understanding of quality is evolving, and the technical model of the quality standard is also

changing. Thinking has its own language and its own language owns technical creativity, designed to serve as a translator from scientific language to technical, understandable production. At the same time, the translator should feel well the organizational and technological capabilities of production, so as not to absolutize the value of the idealized model. The image of the model is significant when it fits into the image of production, otherwise the above situation will arise. Good intentions will bring the organization of production to a hellish state. When the desire for the totality of the organization of quality control came into conflict with the total goal of improving the efficiency of production and it became clear that the former way the conflict is not resolved, V. Schuhert, who worked in the Department of technical control of the American company "Western electric", proposed to shift the focus of quality management on the organization of the dynamics of the production process. Innovation B. Schuhert saw production and the quality of production as a movement, and in this context understood the main thing as a movement: first, the achievement of stability, and second, the inevitability of a deviation from the direction of movement(Fig.1). Translated the features of the movement to the solution of the problem to obtain a qualitative result and received two conclusions: the desired quality can be obtained only in conditions of sustainable movement of production, therefore it is necessary to stabilize production in certain qualitative parameters (1), and quality is a generalizing characteristic of the process, which really represents a variation. Variations must be enclosed in a certain framework (2)

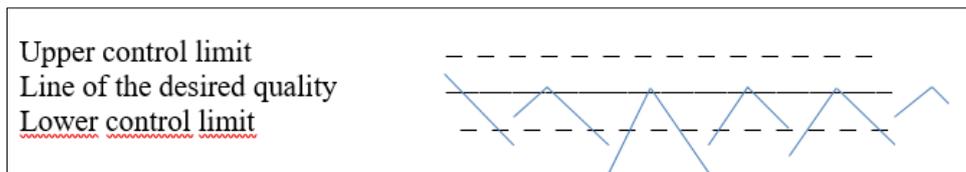


Figure. 1 quality Chart

The task of achieving the quality of production has acquired Shewhart technical form and meaning: to avoid variations in the parameters of the resulting quality of products is impossible, you need to strive to reduce variations. The criterion of quality is the stability of production in the static sense, that is, the convergence of variations with the center line. One of the most important factors in the solution of the problem V. Schuhart called the reconstruction of personal interaction - cooperation, team organization.

Shewhart was the first to approach the interpretation of the standard in terms of mass

production, presenting the quality of production and goods as a statistical form, assuming a certain fluctuation, which was called tolerance. Shewhart did not introduce the concept of a statistical model of the standard, but it was necessarily formed on the basis of his innovative ideas. B. S. Aleshin, et al. a comparison of quality management systems of Taylor and Shewhart brought to the table, visually persuasive as advanced management thought(Fig.2).

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

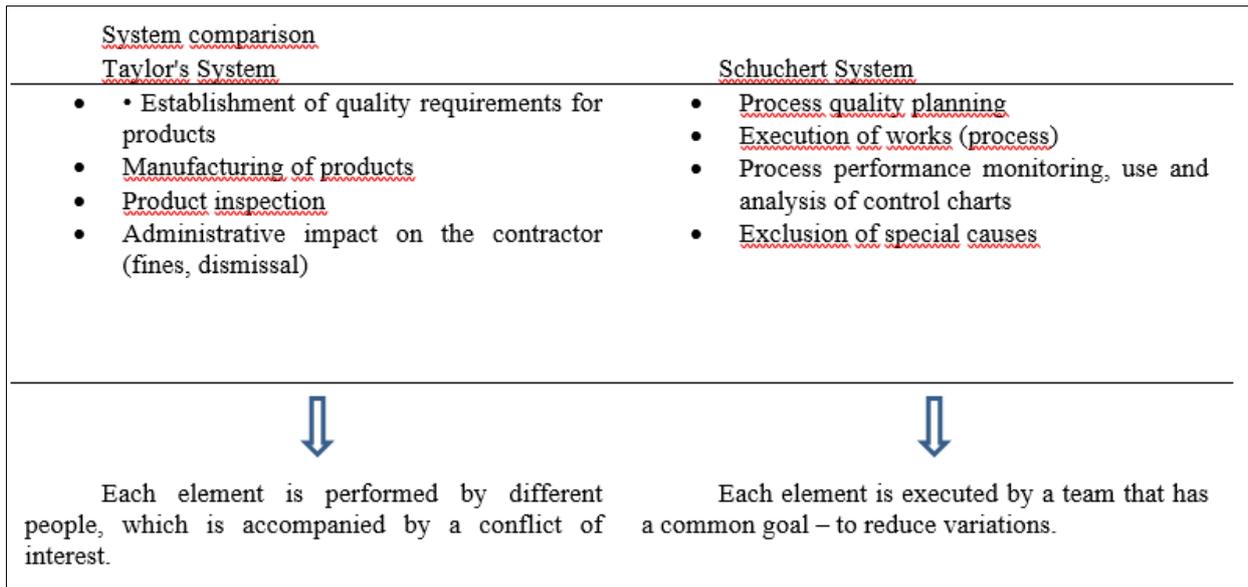


Figure. 2 The comparison of the systems of Taylor and Shewhart

V. Shuhart tried to give quality management a human face. He stressed the importance of internal, including personal, motivation. But he did not seek to radically change the position of the worker in production. The alienation of the individual remained essentially the same, so the motivation was supported mainly by financial evaluation of the activity. Researchers of Schuchert's experience clearly overestimated its content, introducing such a reaction of employees as "the joy of getting results"; "the pleasure of teamwork, recognition of the merits of colleagues and managers"; "feeling of importance", etc. Adequate to say that the method Suharto forced managers to learn what is referred to as humanitarian knowledge.

The restructuring of the quality management organization has become more significant. In place of the technical control Department came to audit service quality, focused on the verification of the validity of the quality management system through selective control of individual small samples from the total consignment of the goods.

The next step in improving the standardization of production was the concept of "quality management" E. Deming. It was formed and optimized for almost half a century, from 1950 to 1992. Based on the ideas of Schuchert, Deming formulated three basic "pragmatic axioms»:

- Any production activity is reduced to a standard type of technical process and contains reserves of improvement that need to be identified and loved;
- Production has two standard forms of existence: stable and unstable, so the solution of

specific (current) problems is ineffective, it is necessary to direct the vector of management activity to fundamental changes;

- The main responsibility for the failure in the development of production should be assumed by senior management.

The doctrine of E. Deming is well known, it has received wide practical application. We would like to draw attention not so much to the structural sections that make up the content of the concept, but rather to the question: to what does Deming owe its resounding success, which contributed to the effectiveness of the application of its provisions in the real economy?

The years of E. Deming's work fell on two turning points in the world economy events. First of all, it turned out to be a myth project designed for the omnipotence of technological progress. The history of science was repeated in the age of Enlightenment, when it seemed that humanity had found a full replacement of religion in the face of science. Science is universal knowledge, it will solve all problems. It is only necessary to expand the consciousness of the masses to face science, to make Education scientific and universal. Deming before others understood and warned: the opinion that mechanization, automation and computerization will make a breakthrough in the field of sustainability of production quality, belongs to the sphere of difficulties in solving the problem of quality management efficiency, as well as the mood of obtaining positive results in the shortest possible time. Deming proposed his philosophy as a "valuable reaction"(Fig.3).

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350



Figure.3 "Chain reaction" (by E. Deming)

Comparing the management philosophy of Schuchert and Deming, to see how much the economy and economic theory is dependent on the trends of social development. Shuhart, reflected in its concept of the socio-political and cultural attitude that emerged after the crisis caused by the First world war. Europe and the United States with Canada were difficult, because a war of extermination called into question the merits of democracy. At the same time, a certain part of thinking humanity tried to rethink the situation and save the image of democratic reforms, believing in the power of creativity homo sapiens.

Economists of the first half of the XX century felt a crucial role in the development of human factor production, questioned the rate of Taylor, Ford, Fayol on the technical factor. Before the concretization of the human factor in human capital was still half a century, but as in nature, in society, cataclysms are more harmful than beneficial. Revolutions really are locomotives in history, adjusted for the fact that it is not the time factor that forms the core of the revolution. Revolutions, whether in industry, technology, science, culture, social order - it is before just the process of changing the old quality to the new. Revolution is identical to the quality of transformation; it makes ideals the standards of practical life. The factor of time of revolutionary transformations is secondary and is caused by specificity of historical reality. But one thing is invariant in history – the decisive power of man as the primary historical factor. History is a process of human creativity, however, not always successful. All the same and then to correct, except the person, there is nobody.

Merit Suharto and Deming was that they stood on the platform, classical political economy did not succumb to the numerous "temptations" of technical, statistical and other things. Their logic was characterized by confidence in the historical power of human subjectivity as a person. Weighing on the "scales" of history the technique and creativity of the individual, they confirmed that the growth of capital is carried out by man. Equipment and existentially and functionally depends on the person.

And here time worked on the side of Deming. It's time for the rebirth of Japan.[9]

The war destroyed the country's economy, but did not undermine the samurai spirit. Japanese nature has taught to keep the blows of fate. The national will was ready to return the country to its former greatness in the Pacific region, the residents of the state of the "rising sun" well understood that the path of revival lies through the industrialization of the destroyed production capacity. They just didn't know how to do it. At the very end of the 1940s, leading Japanese experts United in the Japanese Union of scientists and engineers – JUSE. Within the Union there was a group aimed at studying the industrial experience of the United States. It has established the dependence of progress in quality management with increased productivity. Tried to understand the mechanism of the established communication.

The informal leader of this group was K. Ishikawa – the future initiator of the "Japanese miracle". In 1950, JUSE invited E. Deming to become better acquainted with the technology of American industrial development, but, unlike the Russian reformers of the 1990s-zero years, the Japanese themselves were well prepared. They did not expect a

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

miracle from the Americans, and "information for reflection."

Ishikawa concentrated his thoughts in three conclusions: [10]

- all experimental engineering work should be defined statistically. In order to improve the level of knowledge of statistical methods of analysis, on the initiative of JUSE at the industrial faculty of the University of Tokyo introduced a mandatory course "how to use experimental data»;

- dependence on imports of raw materials and food can be overcome only by increasing and expanding the range of exports, and there must be a clear focus of industry on the production of high-quality products, so as not to squander resources;

- it is necessary to reorient the consciousness of specialists and society as a whole to the management of high-quality high-tech products. Japan did not have an alternative this path, as the financial reserves do not allow you to plan for a total modernization of production.

E. Deming was invited to go to the goal not in American, but in Japanese, moving not from large finances, but from the national mentality, in which the culture of labor occupied an important place.

Domestic demreformers failed amicably because they knew what to get rid of, but did not know how to do it in a civilized way and most importantly - what to replace, based on the Russian specifics of reality. The Japanese have decided in advance what they will do. They needed only specifics - a "road map" of the movement, so they called E. Deming as a Navigator or pilot. I. Deming brilliantly coped. Deming was paid for his lectures by the Japanese, our "foremen" - sores. The Japanese were saving national prestige, our - cut national historical roots and stole wherever he could. It is not surprising that the Japanese after 30 years (the early 1980s) produced 40% of world production of color television sets, 75% of transistor receivers, and 95% of the VCRs. Russia thirty years later still can not restore the ruined potential.

The ideas of Deming, Ishikawa, Juran were realized, confirming the importance of the counter courses of the movement of national interests and innovative, creative, creative thinking of unbiased, honest specialists. "Japanese miracle" is a product of interaction of scientific thought, critical analysis of production experience of advanced economies and peculiarities of Japanese national consciousness. Ishikawa, Deming and Juran met happily in the same place and at the time when the situation matured and objectively - it was necessary to save and return the economic potential of the country and subjectively-the Japanese nation has a high and cohesive responsibility for its image. Only the Japanese team, losing in the last seconds of the match of the world Cup 2018. all cleaned in his locker room and left a note in Russian with a single word: "Thank you." Of course, this fact has no direct relation to the topic of our study, but it is

indicative as a characteristic touch to the national character.[11]

The "road map" of the revival of the Japanese economy in the status of one of the world leaders in the qualitative organization of production was restored by B. S. Aleshin and his colleagues [from 40-41]. We are more interested in the lessons of the movement of Japanese specialists to the goal. Them enough not to pass by, but such is the peculiarity of our fans to steer the economy on the American sailing directions followed by Gaidar and his disciples. They do not like when something does not want to move in the rut of liberal economic theory, excommunicating the state from production.

So what, then, teaches the Japanese experience (that teaches, that is, directs the thought, not prescribers):[7-8]

- quality is the time, years of consistent, hard work associated with the need to collect and analyze creative approaches;

- quality - the product of interaction with the consumer, built on a partnership of mutual respect. The consumer is understood very broadly, including all participants in production;

- total participation in achieving quality results;

- systematic audit control;

- a key role in ensuring the sustainability of the quality of work of masters and foremen, their continuous retraining in various forms, including special programs of national and regional television;

- special attention to the mobilization of the physical, moral and creative abilities of workers;

- promotion of quality and its key importance for the development of production;

- and finally, what is infuriating the liberals - managers - the need of coherent economic policies of the state, especially in the manufacture of export products; mandatory state certification of products to other countries. Attempts to sell non-certified goods outside the state are equated with smuggling. State support of exports, assistance in the promotion of goods on the world market.

The final touch in the Japanese quality management program is advisable to consider the idea of dividing the problems into sudden and chronic, proposed by Th. By Juran. It is not possible to foresee all possible problems in planning and therefore it is not necessary. It is enough to have mobilization reserves that ensure the stability of the movement. The goal should be chronic problems that have become part of the organization - in fact, disorganization-of production. Chronic problems are often latent in nature, they seem to be adapted by production. It is no secret that there is no waste-free technology, therefore tolerances are the natural state of quality management. Orders, resolutions, appeals, slogans are powerless

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

here. Since chronic problems have become part of the organization of production, it is necessary to overcome them within the framework of the established order.

The process of solving chronic problems Juran presented as a kind of "road map" movement with four nodal stations. Stations – stages of the decision, on

them certain actions in the sequence set by the organization of movement are made. The components of the problem at the stages Juran called "the main phases". The Scheme Th. Jurana is still relevant as "information for thought". We give it(Fig.Four)

<u>Problem solving phase</u>	Components of the problem (phases)
Development of the main provisions of the project	1. Making a list of problems and identifying priorities. 2. Definition of the composition, responsibility and powers of the working groups.
<u>Diagnostics</u>	3. Symptom analysis 4. Version formulation 5. Version verification
<u>Finding solution</u>	6. The identification of the causes 7. The search for optimal solutions 8. Development of necessary measures 9. Overcoming resistance 10. Implementation of solutions
Retention of the achieved results	11. Verification of the effectiveness of the implementation results. Regular comparison of the achieved results with the planned ones.

Figure. 4 Problem solving phases (th. Gurano)

In the 1970s, Japan's expansion in the world markets reached such a scale that the US "Japanese miracle" appeared "Japanese threat". The success of Japan in the production of high-quality and relatively (with Americans and Western Europeans) inexpensive products in the range of high technologies forced to re-engage in the theory of quality management. It's time for the author of the program "Zero defects" F. Crosby. Taking as a basis the experience of Deming, Crosby developed his "Fourteen points". The development of Crosby's ideas was the program of A. Feigenbaum. As a result, there was Total Quality Control (TQC), from which all subsequent quality standardization systems grew.

Did you finally manage to build a unified basic model of quality management based on the standardization of organizational and managerial actions? Yes, a comprehensive program has been developed and tested by international practice. As for its systematic assessment, we would refrain from a positive conclusion. There is still a lack of clarity in the interpretation of the concepts of "quality" and "standard".

Methodological reserve formed in the second half of XX century - the beginning of XXI approach to improving standardization, apparently exhausted. It is this factor that can explain the lack of breakthrough ideas after the works of A. Feigenbaum, which summarized the practical application of important findings of his predecessors – innovators. International standards ISO 9000-2000, domestic GOST 10 57189-2016/ISO/TS 9002-2016 are a linear

continuation, that is, in fact, the rationalization of what has been achieved. It is necessary in accordance with the new requirements, formed at the stage of post-non-classical development of science, to finalize the methodological foundations of the theory of quality and standardization. First of all, to separate the concepts of "quality" and "standard", to clarify the hierarchy of their relations, to combine in a new approach to solving the problem of quality management.

For clarity, we repeat: "quality" is a philosophical category, its use in a non-philosophical context – scientific, scientific, practical, practical – a phenomenon logically legitimate with the clarification that it will not bring direct pragmatic benefits. It is necessary to go down from the height of philosophical generalization to the level of practical action, to transform the concept of quality, filling it with specific content that reflects the specifics of the subject activity, in our case - the production of commodity products in mass production.

The philosophical concept is revealed in the verbal form of definition. The word has a special meaning here. Words should be a little and a lot, even so much that they convey the essence of quality. The essence of quality – not what is indicated in the guidelines, not a list of essential features, and their systematic coexistence. The quality of the goods reproduces – indirectly through the originality of the physical substrate – the essence of the market as a structural design of the two subjects – the manufacturer of the goods and the consumer of the

Impact Factor:

ISRA (India)	= 3.117	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.156	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.716	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

goods (sellers make up the infrastructure and do not count). The goods are only what someone needs, except the manufacturer, therefore, along with the physical component, as a product there is a consumer interest as a superstructure over the physical basis of the phenomenon.

It is impossible to manage a philosophical category, it is used to develop a route of practical action, as a Navigator of movement from the idea to the subject (organizational) result.

The quality of the goods, after a balanced determination, must be translated into the form that corresponds to the production process, expressed in symbols of technical production management - to turn into a standard. Then begins the history of standardization. The concept of "quality" is revealed in dialectics and is controlled by dialectics. The concept of "standard" implies management at the production level. It is described physically, chemically, biologically, ecologically, hygienically and, finally, mathematically. At the level of the standard, a model is formed - physical and mathematical, and a systematic approach prevails. The system approach is the future of standardization management.[9-10]

Let us illustrate this by the example of goods produced by light industry enterprises. The range of products is so diverse and significant that the possibility of skeptical perception of our example is close to zero and there is enough reason to neglect it.

Let's start with quality as the highest form of abstraction in the definition of goods. Quality is the absence of which makes an object unremarkable from the point of view of its existence. At the places of sale of light industry products, at the exhibition demonstrations, a feeling is formed that the vector of creativity is one - to create something different, different. The fan has limitations, and creativity has no limits. The feeling is false, the limit is hidden in diversity, as Thales said: "all in one". We must always remember this and keep the quality in the work in the form of collecting reference point. Shoes, socks, stockings, tights are not similar to each other

outwardly, but they are all of the same quality - serve as clothing for the legs and hands, that is, are clothes in the broad sense of their quality. Its clothes are at the head of separate parts of the head, face, torso. There are different levels of clothing - internal, external. Legprom protects a person and refines its appearance. It so happened that the evolution of man, depriving him of much of the natural remedies, forced to solve the problem artificially.

Manufacturers in search of a new must be guided by the requirements of the standard of product quality, due to the quality of the subject. Clothing should contribute to the preservation of natural forces (health), protect from the effects of harmful factors, to be, if possible, light, elastic, do not constrain movement in their natural expression, breathe with the skin, minimize the shortcomings of physical development and be massively accessible.

Next, the second level of the concept of quality of goods is formed, providing its consumer appearance. This "quality" has already a subjective basis, represents the spiritual development of the consumer, his personal status. The subjective side of the quality of the product complements the objective quality of the substrate, it tells him what the product would have lost its consumer value without. Combined in a General way, the objective and subjective aspects of the quality of the goods represent the objective specificity of the quality.

As such, the philosophical interpretation of quality is complemented with economic and technical representation. Quality, being loaded with commodity specifics, is transformed into the standard of production assuming technical and mathematical expression in the form of quality model. The circle of quality movement from the abstract to the concrete expression is passed exactly by half. The second part of the history of product quality begins - the comparison is achieved with the ideal, the improvement of the standard (model) in accordance with the requirements of the quality of the object (Fig.5).

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

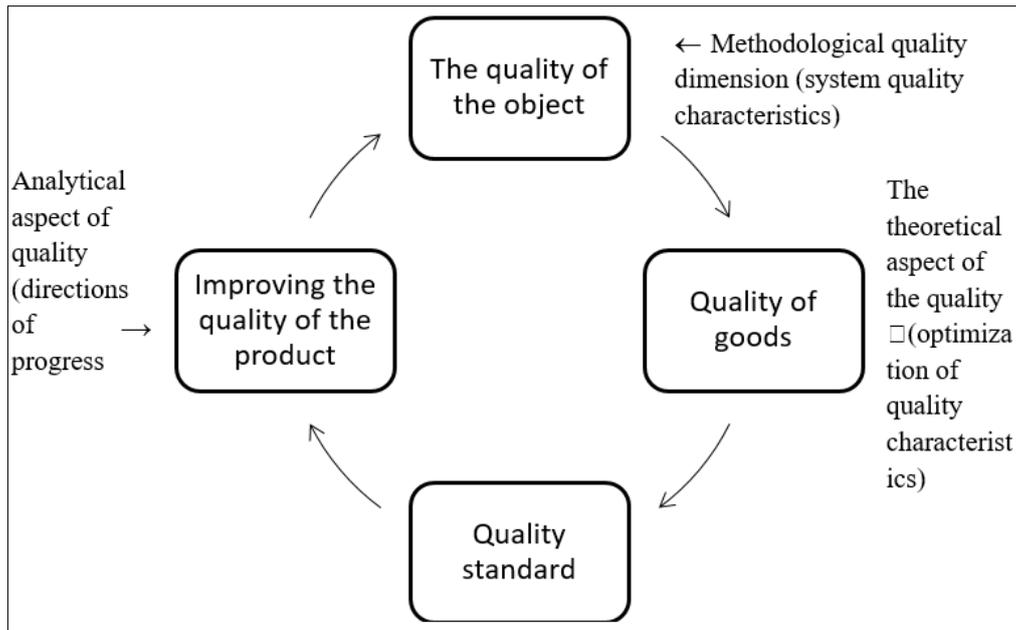


Figure. 5 The route of ascent of quality in the process of reproduction.

Conclusion.

Let's summarize the analysis of the current situation in the production and market with the standardization of marketable products.

First, and apparently most important, standardization is an unavoidable attribute of economic activity. History clearly shows that production management is possible only through standardization. Through standardization increases the importance of scientific and political components of the progressive movement of the economy.

With methodological currents of view, this dependence is explained simply: any theory is a system of concepts that reflect the subject definition. The concept is formed as a form of knowledge, the content of which are the common features of a number of homogeneous phenomena. The concept standardizes professional thinking and at the same time creates the preconditions for the management of such processes in production. Before becoming a problem of economic policy, standardization became the algorithm of our thinking.

Second, "standard" is a production concept from the basic concept of "quality". Quality is commonly interpreted as a system of signs that make up the totality of these phenomena, for example, ninety percent of the most important producing enterprises belonging to light industry, belongs to the same General concept – to be a garment for the body, therefore, the quality of all these products is their ability to enable the adaptation of man (and animals) to external conditions of life. All other important features such as comfort, ergonomics, hygiene,

aesthetics, etc. p., characterize the level of basic quality.

Naturally, producers in the conditions of the developed, steady to volatility, market aspire to reach the known level of quality, but on their way there are serious obstacles – temptation to make something striking with the singularity, or in a pursuit of cost reduction to use dangerous materials, technologies, elements of designs.

The quality of natural origin is protected naturally by an objective natural order. Nature is not able to fake, to deceive. Quality control is not needed in nature. The quality of what a person does inevitably includes the products of human participation. Since, unlike nature, a person may be inclined to be crafty in the "interests of the cause", or just to do something bad, the quality must be standardized.

Quality standard – this is the gap that allows the quality to its dynamic performance. Quality has levels, quality levels were fixed in due time in the form of varieties. Having lost control of the market, the government decided at the same time and "tie" with the production, limiting itself to one indicator of quality – MPC.[11-12]

Liberal Economics remained silent, although as a "defender of the interests of the people", its freedom, it would be necessary to give a balanced assessment of the violation of the rights of consumers to free access to objective information.

Third, "quality" is a category of economic science and economic policy. Quality will make all to be reckoned with. Japan has proved this in practice, having carried out a socio-economic breakthrough in

Impact Factor:

ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

the leaders of world development, trusting the vector in full attention to quality.

There is, however, also China, with a reputation for producing low-quality goods, but we should not forget that we are talking about the mass consumer market. The Chinese, practically assessing the scientific, technical and industrial potential, just as carefully linked the breakthrough with their respective capabilities, the market sector and its prospect.

The world is not getting richer with progress. The distribution is due to property, the calculation of the Chinese is determined by the prospect of the market. The market will continue to grow in the foreseeable future with the accelerated development of the part visited by billions of people with disabilities. To the foresight of the Chinese, we will add that where they need, they seek to build quality production.

In contrast to the "quality", "standard" - the concept of scientific and technical creativity and production activities. The interest of politicians in standardization is determined ideologically, because in a democratic state the priority should be not private, but national interests. Economic policy has socially significant interests and is designed to create conditions for the availability of mass consumption to a quality market range. It is this indicator that integrates the assessment of the quality of regulators' work. Failing national anything meaningful to oppose the old ideological paradigm, gamefactory 1990s, he took the unprecedented decision to crazy. Thus, they doomed domestic production to stagnation.

In order for production to develop dynamically, it is necessary to activate consumer demand to the utmost, and this can be done only through solvent mass demand. Economic statistics in the Soviet era served as an instrument of cunning, in times of democratic change, it has become generally fabulous when politicians need to report on their achievements. As a result, the President has a special folder, which is so afraid of high officials and top managers.

Policy, based on the ideologization, sequestered qualitative characteristics of the product, identifying the quality standard, and standard with indicators acceptable standards of risk. The criterion of quality of goods in the domestic economic policy is its safety. From ideology, the core of which was and remains a philosophy, you can refuse. only you need to understand that you refuse, gentlemen of politics, not ideology. You refuse from its concrete development and are obliged to oppose to what renounced, something, worthy.

Criticizing Proudhon's book "Philosophy of poverty", K. Marx called his work "Poverty of philosophy". It is very appropriate to use the hint of the great economist to determine the current period in the "ideology", its interpretation of the concepts of "quality", "standard". Or as a "poverty ideology" to describe this condition.

The fourth – a chain of concepts: "technical regulation", "terms of reference", "standard", "quality", we add to this list also "level of quality status" with "measure of quality", it is necessary to build as a logical ascent from practical opportunities (and responsibilities) to the scientific and philosophical system of verification of the quality management tool of production. In order for the theoretical justification to be truly effective, it is necessary to first understand the operational capabilities of the dialectical methodology, supplemented by integrated and systematic approaches. Those who, together with the former ideology localized within national boundaries, rejected the conquests of world philosophical thought, had to justify their professional competence with an alternative concept.

You can try to mislead people, the head of state, but it is useless to "fight" with three thousand years of human wisdom. Arbitrary treatment of basic concepts leads to a dead end and production.

References:

1. Prokhorov, V. T., et al. (2017). *The concept of import substitution of products of light industry: background, challenges, and innovations*: monograph / under the General editorship of Dr. sci. prof. V. T. Prokhorova (Eds.). Institute of service sector and entrepreneurship (branch) of don state technical University. (p.334). Mines: Isoip (branch) DSTU.
2. Surovtseva, O. A., et al. (2018). *Management of the real quality of products rather than advertising by motivating the behavior of the leader of the team of the enterprise of the industry*: monograph by O. A. Surovtseva [et al.]; prof. V. T. Prokhorova (Eds.). Institute of service sector and entrepreneurship (branch) of don state technical University. (p.384). Novochoerkassk: URGU (NPI).
3. (1975). *Hegel encyclopedia of philosophical Sciences*. Vol.1. Science of logic: translation with it. (p.452). Moscow, "Thought".

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

4. Engels, F. (1961). Anti-Dühring. For Marx and Friedrich E.:Sob. CIT.: publishing House. M.-state policy, T20. p.827.
5. Ileshin, L. N., Alexandrovskaya, V. I., & Kruglov, S. A. (2004). *Philosophical and social aspects of quality*. (p.438). Moscow: Logos.
6. Adler, Y. P., Aronov, I. Z., & Shper, V. L. (1999). What is the coming century preparing for us? (management of the XXI century-a brief overview of the main trends). *Reliability and quality control, № 1*.
7. Ford, G. (1989). *My life, my achievements*. TRANS. with English. Moscow: Finance and statistics, 1989 (reprint edition 1924).
8. Sitkowski, E. P. (n.d.). *encyclopedia of philosophy Hegel*. Preface to 1 T. Hegel. – Science of logic, pp.5-50.
9. Schonberger, R. (1988). *Japanese methods of production management*. Nine simple lessons: socr. Per. with English. (p.211). Moscow: Economy.
10. Ricardo, D. (1955). Ricardo's Preface to the first edition. From 30-31, CH. XXX " on the impact of supply and demand on prices." SOC. in 3 t, T II. (pp.314-317). Moscow: GOS. Izd-vo polit. lit-ry.
11. Deming, W. E. (1994). *out of the crisis: pens. with English*. (p.415). Tver: Alba.
12. (2000). *Anthology of Russian quality*. (p.378). Moscow: Standards and quality.

Impact Factor:	ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

Impact Factor:	ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHII (Russia) = 0.156	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

Contents

	p.
17. Kulmurotov, N. R., & Kaxarov, S. K. Dynamic stressed-deformable state of a piece-uniform cylindrical layer (shell) with liquid from a harmonic wave.	101-110
18. Hoshimov, H. New data on the absolute chronology of Kelteminar culture based on the materials from the site of Ajakagyta.	111-117
19. Yuldashev, R. D. The role and significance of innovative education in the development of higher education.	118-122
20. Yarmatova, M. A., & Turaeva, S. E. Text Analysis in Geodesy and Mapping Engineering Contexts.	123-125
21. Suyarova, M. E., & Zulfiqorova, Z. A. Text Analysis in Technical English.	126-128
22. Shadmanova, N. I., & Raximova, D. P. Utilization of Dictionary.	129-131
23. Tokhirov, J. Islamic scientific works of Ali Qushchi.	132-134
24. Botirov, B. The role of Uzbekistan in the activity of Islamic cooperation organization on patience and sustainable development during the globalization age.	135-138
25. Alimov, I. Prospective banking reforms are the solution for the economic growth in emerging economies like Uzbekistan.	139-144
26. Rajabova, B. The will literary genre in “Kutadgu bilig”.	145-150
27. Ernazarova, G. The development of “Meditate lyrics” in the Uzbek classical poetry.	151-155
28. Dusmanov, S. A. Theoretical and practical issues of formation and development of entrepreneurial philosophy in Uzbekistan.	156-158
29. Datuashvili, M. V. The study of securing sections of fabric parts of high modulus fibers.	159-162
30. Bazarova, I. R. From the history of modernization system of primary education in Ferghana valley (as an example of independent period).	163-165
31. Blagorodov, A. A., Bordukh, D. O., Kopylova, A. V., Prokhorov, V. T., Kozachenko, P. N., & Maltsev, I. M. On the feasibility of the formation of culture collectives of enterprises for effective results making digital production of import-substituting products for consumers in the regions of SFD and NCFD (message 1).	166-191

Impact Factor:	ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

Impact Factor:	ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	ПИИЦ (Russia) = 0.156	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350



Scientific publication

«ISJ Theoretical & Applied Science, USA» - Международный научный журнал зарегистрированный во Франции, и выходящий в электронном и печатном формате. **Препринт** журнала публикуется на сайте по мере поступления статей.

Все поданные авторами статьи в течении 1-го дня размещаются на сайте <http://T-Science.org>.

Печатный экземпляр рассылается авторам в течение 2-4 дней после 30 числа каждого месяца.

Импакт фактор журнала

Impact Factor	2013	2014	2015	2016	2017	2018	2019
Impact Factor JIF		1.500					
Impact Factor ISRA (India)		1.344				3.117	
Impact Factor ISI (Dubai, UAE) based on International Citation Report (ICR)	0.307	0.829					
Impact Factor GIF (Australia)	0.356	0.453	0.564				
Impact Factor SIS (USA)	0.438	0.912					
Impact Factor ПИИЦ (Russia)		0.179	0.224	0.207	0.156		
Impact Factor ESJI (KZ) based on Eurasian Citation Report (ECR)		1.042	1.950	3.860	4.102	6.015	8.716
Impact Factor SJIF (Morocco)		2.031				5.667	
Impact Factor ICV (Poland)		6.630					
Impact Factor PIF (India)		1.619	1.940				
Impact Factor IBI (India)			4.260				
Impact Factor OAJI (USA)						0.350	

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

INDEXING METADATA OF ARTICLES IN SCIENTOMETRIC BASES:



International Scientific Indexing ISI (Dubai, UAE)
<http://isindexing.com/isi/journaldetails.php?id=327>



Research Bible (Japan)
<http://journalseeker.researchbib.com/?action=viewJournalDetails&issn=23084944&uid=rd1775>



PIHII (Russia)
<http://elibrary.ru/contents.asp?issueid=1246197>



Türk Eğitim İndeksi (Turkey)
<http://www.turkegitimindeksi.com/Journals.aspx?ID=149>



DOI (USA)
<http://www.doi.org>



Open Academic Journals Index (Russia)
<http://oaji.net/journal-detail.html?number=679>



Japan Link Center (Japan) <https://japanlinkcenter.org>



Kudos Innovations, Ltd. (USA)
<https://www.growkudos.com>



Cl.An. // THOMSON REUTERS, EndNote (USA)
<https://www.myendnoteweb.com/EndNoteWeb.html>



Scientific Object Identifier (SOI)
<http://s-o-i.org/>



Google Scholar (USA)
http://scholar.google.ru/scholar?q=Theoretical+science.org&btnG=&hl=ru&as_sdt=0%2C5



Directory of abstract indexing for Journals
<http://www.daij.org/journal-detail.php?jid=94>



CrossRef (USA)
<http://doi.crossref.org>



Collective IP (USA)
<https://www.collectiveip.com/>



PFTS Europe/Rebus:list (United Kingdom)
<http://www.rebuslist.com>



Korean Federation of Science and Technology Societies (Korea)
<http://www.kofst.or.kr>

Impact Factor:	ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350



AcademicKeys (Connecticut, USA)
http://sciences.academickeys.com/jour_main.php



Cl.An. // THOMSON REUTERS, ResearcherID (USA)
<http://www.researcherid.com/rid/N-7988-2013>



RedLink (Canada)
<https://www.redlink.com/>



TDNet
 Library & Information Center Solutions (USA)
<http://www.tdnet.io/>



RefME (USA & UK)
<https://www.refme.com>



Sherpa Romeo (United Kingdom)
<http://www.sherpa.ac.uk/romeo/search.php?source=journal&sourceid=28772>



Cl.An. // THOMSON REUTERS, ORCID (USA)
<http://orcid.org/0000-0002-7689-4157>



Yewno (USA & UK)
<http://yewno.com/>



Stratified Medical Ltd. (London, United Kingdom)
<http://www.stratifiedmedical.com/>

THE SCIENTIFIC JOURNAL IS INDEXED IN SCIENTOMETRIC BASES:



Advanced Sciences Index (Germany)
<http://journal-index.org/>



Global Impact Factor (Australia)
<http://globalimpactfactor.com/?type=issn&s=2308-4944&submit=Submit>



SCIENTIFIC INDEXING SERVICE (USA)
<http://sindexs.org/JournalList.aspx?ID=202>



International Society for Research Activity (India)
<http://www.israjif.org/single.php?did=2308-4944>

Impact Factor:

ISRA (India) = 3.117
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 0.156
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350



CiteFactor (USA) Directory Indexing of
International Research Journals

<http://www.citefactor.org/journal/index/11362/theoretical-applied-science>



JIFACTOR

JIFACTOR

http://www.jifactor.org/journal_view.php?journal_id=2073



Eurasian Scientific Journal Index (Kazakhstan)

<http://esjindex.org/search.php?id=1>



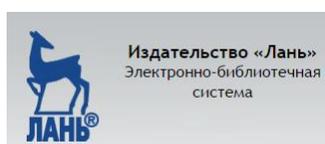
SJIF Impact Factor (Morocco)

<http://sjifactor.inno-space.net/passport.php?id=18062>



InfoBase Index (India)

<http://infobaseindex.com>



Электронно-библиотечная система
«Издательства «Лань» (Russia)

<http://e.lanbook.com/journal/>



International Institute of Organized Research
(India)

<http://www.i2or.com/indexed-journals.html>



Journal Index

<http://journalindex.net/?qi=Theoretical+%26+Applied+Science>



Open Access
JOURNALS

Open Access Journals

<http://www.oajournals.info/>



Indian Citation Index

Indian citation index (India)

<http://www.indiancitationindex.com/>



Index Copernicus International (Warsaw, Poland)

<http://journals.indexcopernicus.com/masterlist.php?q=2308-4944>

Impact Factor:	ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.156	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

Impact Factor:	ISRA (India) = 3.117	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHII (Russia) = 0.156	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.716	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

Signed in print: 30.05.2019. Size 60x84 $\frac{1}{8}$

«Theoretical & Applied Science» (USA, Sweden, KZ)

Scientific publication, p.sh. 42.0. Edition of 90 copies.

<http://T-Science.org> E-mail: T-Science@mail.ru

Printed «Theoretical & Applied Science»