

SOI: 1.1/TAS

DOI: 10.15863/TAS

Scopus ASJC: 1000

ISSN 2308-4944 (print)

ISSN 2409-0085 (online)

№ 03 (83) 2020

Teoretičeskaâ i prikladnaâ nauka

Theoretical & Applied Science



Philadelphia, USA

**Teoretičkaâ i prikladnaâ
nauka**

**Theoretical & Applied
Science**

03 (83)

2020

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 = 10 (33)
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 = 7 (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)
22	Prof.	Shoumarov G'ayrat Bahramovich	Uzbekistan	-
23	Associate Prof.	Saidvali Yusupov	Uzbekistan	-

International Scientific Journal
Theoretical & Applied Science



ISJ Theoretical & Applied Science, 03 (83), 500.
Philadelphia, USA



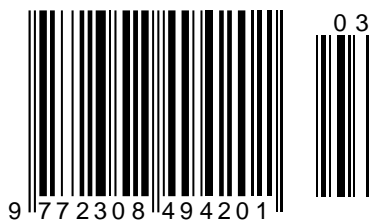
Impact Factor ICV = 6.630

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

The percentage of rejected articles:



ISSN 2308-4944



Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 01.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Konstantin Ivanovich Kurpayanidi

Fergana polytechnic institute

Ph D in economics,

Professor of the Russian academy of natural sciences,

Fergana, Uzbekistan

Corresponding member of the International Academy of

Theoretical & Applied Sciences

<https://orcid.org/0000-0001-8354-1512>

w7777@mail.ru

ON THE PROBLEM OF MACROECONOMIC ANALYSIS AND FORECASTING OF THE ECONOMY

Abstract: A new stage of reforms has begun in the Republic of Uzbekistan, characterized by deep and large-scale transformations in all spheres of life and activity of the state. The action Strategy for five priority areas of the country's development in 2017-2021 was approved. Special attention is paid to issues of social and economic development, creating an open economy, healthy competition, reducing the state presence in the economy, achieving high rates of economic growth by diversifying the economy and increasing labor productivity, and implementing a stable monetary policy. A balanced macroeconomic policy is being implemented, which is aimed at maintaining a balance between social support for the population and stimulating the growth of economic sectors. The paper provides a deep system analysis of the dynamics of changes in some macroeconomic indicators in recent years. The issues of development of the main trade partners of Uzbekistan are considered. As a result of the study, the author identified the vectors of strategic directions for the national economy of Uzbekistan, and also proposed solutions to typical problems associated with projected economic growth.

Key words: macroeconomic analysis, macroeconomic indicators, consumer price index, inflation, forecast, economy of Uzbekistan, economic growth.

Language: English

Citation: Kurpayanidi, K. I. (2020). On the problem of macroeconomic analysis and forecasting of the economy. *ISJ Theoretical & Applied Science*, 03 (83), 1-6.

Soi: <http://s-o-i.org/1.1/TAS-03-83-1> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.1>

Scopus ASCC: 2000.

Introduction

In recent years, the economy of Uzbekistan has implemented fundamental measures for economic reform aimed at improving the efficiency of market mechanisms and strengthening private property.

Given the significantly increased number of working-age populations, the country's top priority is to create new jobs and improve working conditions. Uzbekistan has already implemented the first wave of important economic reforms, including liberalization of the currency market, tax reform and serious improvement of statistics. Faced with the need for large-scale structural reforms, the official bodies want to carry out reforms aimed at eliminating the

distortions that cause the greatest damage to the economy of the country. The main challenge in the area of short-term macroeconomic stability is to prevent a credit boom that could cause excessive external deficits and increase inflationary pressures.

Degree of study of a problem. The study of the issue of forecasting development of the economy and economic growth, directions of development is typical for economists of various schools and individual researchers. The relationship between economic dynamics and growth rates was investigated by Joseph Alois Schumpeter [1], and the problem of public policy to stimulate national development was considered by Friedrich List [2]. Economists of the

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

institutional direction, developing the approach of J. A. Schumpeter, noted the important role of the technological factor in economic growth, described the relationship between basic technologies and the nature of economic development of society. The study of the techno-economic aspects of economic development is devoted to the work of Thorstein Bunde Veblen [3], John Kenneth Galbraith [4], G.Dosi [5], John Bates Clark [6] and others within the "main current." Theoretical and practical aspects of economic growth were investigated by John Maynard Keynes [7], Evsey Domar [8], Roy Forbes Harrod [9], Robert Merton Colow [10], James Tobin [11], Edmund S. Phelps [12]. For the conditions of the transition economy, the works of L.I. Abalkin [13], V.V. Bokov [14], S.U. Glazyev [15], T. Koichuev [16], A. K. Koshanov [17], V.I. Kusslin [18], K. I. Mikulsky [19], A.M. Rakhimov [20], A. I.Tatarin [21] and others made a significant contribution to the study of the problem.

In Uzbekistan, various aspects of economic growth are reflected in the scientific works of I.I. Iskandarov, A.M. Kadyrov [22], A.F. Rasulev [23], G.K. Saidova [24], S.V. Chapel [25], D.V. Trostyansky [26], etc. The problems of achieving the economic development of independent States in the context of the transition period in domestic and foreign literature received wide coverage. However, these attempts, because of the complexity of the problems being solved, do not yet contain clear solutions to the practice of managing in the new conditions. A number of questions remain in the position of measures reflecting only certain stages in the cyclical development of the advanced States, but they did not concern the transitional economies, while others are based on the national and social characteristics of individual CIS countries and do not answer the most important problems of the quality of economic growth of transformation systems. Important aspects of this problem and, in particular, the content of the quality of economic growth, the ratio of the quality of growth to economic development, the definition of priorities of public policy regarding the problem of optimal growth, etc., remain insufficiently studied.

II. Research methods.

The study used statistical methods, empirical, systems and situational analysis.

III. Materials and Methods

For example, according to preliminary estimates, the State Committee on Statistics, the GDP of the Republic of Uzbekistan in January-December 2019 in current prices amounted to 58.3 billion dollars and, compared to January-December 2018, grew by 5.6 % in real terms. The GDP deflator index against January-December 2018 prices amounted to 119.2%. GDP per capita was 1724 dollars and, compared to the corresponding period last year, increased by 3.6 %. Compared to the corresponding period last year, in the

sectoral structure of GDP (VPS) the share of agriculture, forestry and fisheries decreased from 31.5 % to 28.1 %, services - from 35.9 % to 35.5 %, while the share of industry increased from 26.5 % to 30.0 % and construction - from 6.1 % to 6.4 % [27].

The rate of economic growth for January-December 2019 is due to positive dynamics in the main sectors of the economy. Gross value added created by all sectors of the economy amounted to 90.9 % of total GDP and increased by 5.6 % (contribution to GDP growth - 5.0 percentage points). Net taxes on products in the GDP structure amounted to 9.1 % and showed growth at the level of 5.6 % (contribution to GDP growth - 0.6 p.p.).

According to the results of January-December 2019, agriculture, forestry and fisheries showed a positive growth rate of 2.5 %. The contribution of this industry to GDP growth amounted to 0.7 p.p. The positive dynamics in agriculture, forestry and fisheries is related to the growth of crop production by 3.7% and livestock production by 1.7 %. There is a 6.6 % increase in value added in the industry. At the same time, the positive contribution to GDP growth from industrial production amounted to 1.6 p.p. Positive dynamics in this industry is ensured due to growth of added value of mining industry and development of quarries by 1.9 %, manufacturing industry - by 8.9 % and other industries - by 1.6 %.

One of the most important indicators of the System of National Accounts, which describes the final result of the productive activities of the resident economic units, which is measured by the value of goods and services produced by these units for final use, is GDP. His analysis is of particular interest in macroeconomics.

Macroeconomic analysis is the final stage of any statistical study. The analysis of economic development is usually carried out in order to identify the main relationships and proportions of social production; The extent to which individual factors influence economic performance; receiving theoretical conclusions; The feasibility and further improvement of the statistical methodology used; Formulation of practical conclusions on the main trends in socio-economic processes and their effectiveness.

Based on the peculiarities of the Republic and world experience, institutional reform of the country's economy has focused on advanced highly efficient enterprises. The aim of drawing up an adequate socio-economic reality for the short-term development of the country is divided into a number of separate tasks involving difficulties of different types. The difficulties of macroeconomic forecasting are related not only to the fact that the global financial system is in a situation of post-crisis transformation, but also to the difficulty of finding analytical tools that could be used in the current situation.

Impact Factor:

ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PHHI (Russia) = 0.126	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

▪ *There are several methods of forecasting: first, the method of extrapolating earlier trends at the moment can have only limited application precisely because recent trends were in one way or another related to pre-crisis characteristics of economic dynamics.*

▪ *Second, the studies of economic cycle researchers cannot form the basis for short-term conclusions because of their fundamental orientation towards the synthesis of long-term data based on the analysis of the relevant time series.*

▪ *Third, the construction of mathematical models does not meet the task of forming a holistic understanding that is taking place: this method requires ignoring specific figures and events in the name of achieving the desired level of formalization of calculations and drawing conclusions.*

A compromise seems to be found if the causal method of event series analysis and statistics is used

for prediction purposes. At the same time, reliability of any conclusion is achieved at the same time due to its double check - statistical and actual.

The rapid restoration of entrepreneurial confidence in the availability of growth prospects is an obvious argument in favor of the thesis that microeconomic prerequisites (at the level of improving the motivation of entrepreneurs and increasing the financial stability of enterprises) for the modernization of the economy exist.

In the commodity structure of Uzbekistan's exports over the last 10 years (2008-2018) there have been changes towards a decrease in the share of cotton-fiber and an increase in the shares of food, energy and services. However, according to the analysis of the technicality of Uzbekistan's export structure, a significant share (about 60%) of it continues to be occupied by raw materials and resource-intensive goods.

Table 1. Analysis of the main macroeconomic indicators (forecast) of the development of the Republic of Uzbekistan for 2019 and targets for 2020-2021.

№	Indicators	2019	Target reference points on:	
			2020	2021
1	Gross domestic product, billion sum	511 838	524 105	637 970
2	Gross domestic product growth rate,%	105,6	106,0	107,0
3	Consumer price index by December last year,%	15,2	12,6	9,9
4	Industrial product growth rate,%	106,6	106,2	107,2
5	Growth rate of agricultural, forestry and fisheries production farms, in %	102,5	103,4	103,4
6	Capital investment growth rate,%	117,0	110,1	110,9
7	Retail trade turnover growth rate,%	104,8	105,5	106,5
8	Consolidated budget deficit (in % of gross domestic product and excluding the Fund for Reconstruction and Development of the Republic of Uzbekistan)	-1,8	-0,8	0,0

According to preliminary estimates, the forecast of GDP of the Republic of Uzbekistan for 2020 will amount to 524,105 billion sum, and in 2021 - 637,970 billion sum respectively. GDP growth rate in 2020 will be 106.0 %, and in 2020 - 106.0% and in 2021 - 107.0% .

While maintaining the dynamics of dependence, the consumer price index of the Republic of Uzbekistan and, excluding the impact of changes in certain factors, the projected consumer price index for 2020 will be 12.6%, and in 2021 the CPI - 9.9%.

In recent years, the development of the national economy has taken place in the context of adaptation to the consequences of the global economic crisis, the slowdown in the growth of the world economy as a whole and the main trading partners of the country.

According to the latest data of the International Monetary Fund (IMF), in 2019-2023 the world economy will grow at a moderate rate of 3.8% per year on average. In 2019 in the main trading partners of Uzbekistan GDP growth will be: in Russia - 1.5%, Kazakhstan - 2.8%, China - 6.4%, the European Union - 2%.

Impact Factor:

ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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

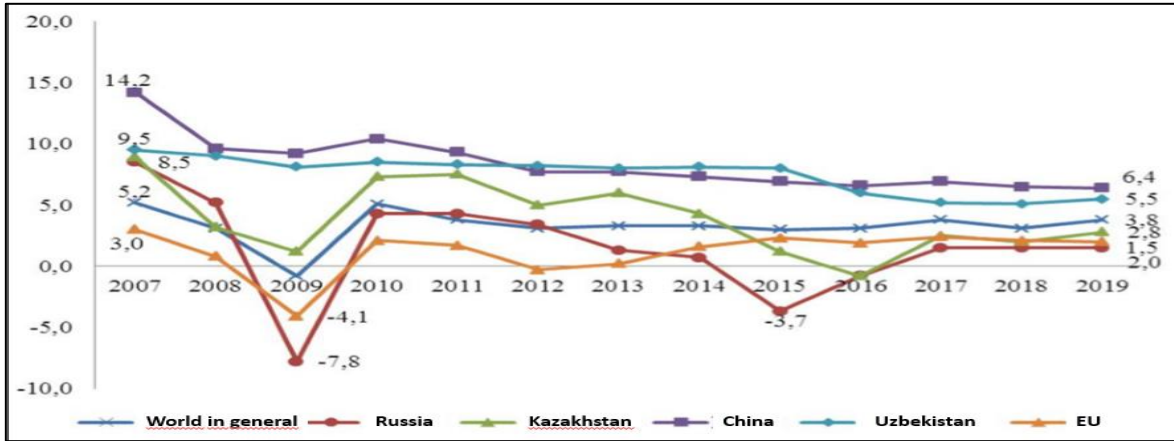


Figure 1 - Growth of the world economy and the main trading partners of Uzbekistan (in %).

Energy prices have tended to rise over the past three years, according to the IMF. By the end of 2019, the average price of gold is expected to be \$1,496.9 per ounce or, with 2.4% growth, the price of crude oil will be \$70.3 per barrel and natural gas will be \$106.5

per thousand. cube. In 2020, the rising trend in world commodity prices, which are the main items of domestic exports (gold, natural gas, cotton), will cease and prices will stabilize in the following years.

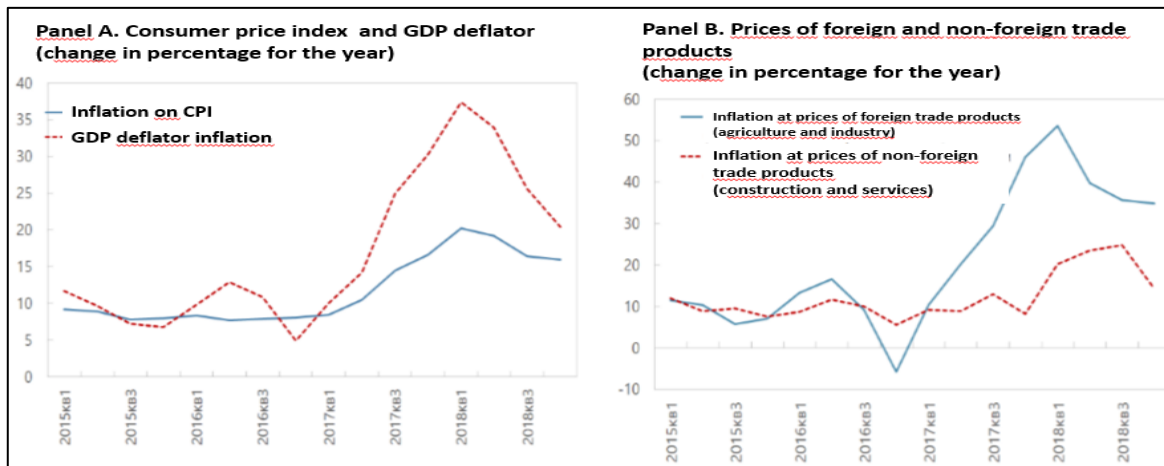


Figure 2 - Inflation of the Republic of Uzbekistan 2015-2019.

The liberalization of the currency market, the first steps towards price liberalization, the adjustment of the relative wages of public servants and the rapid growth of credit and domestic demand have had a strong, divergent effect on inflation since the reforms were initiated in 2018.

Reflecting the preponderance of the exchange rate depreciation effect, consumer price index (CPI) inflation reached a peak of 20 per cent in early 2019, but retreated to 14 per cent by the end of the year. Expectations of high inflation remain steady, and alternative inflation indicators, especially GDP deflator, indicate high pressure from benchmark prices, with prices for foreign trade goods still rising to levels well above the CPI.

Potential risks and threats affecting sustainable economic development:

First, the development of the world economy will be accompanied by increased competition in global markets, which impose strict requirements for improving the efficiency of factors of production, including the accumulation and development of human capital [28, 29].

Secondly, the problem of employment, in the context of the rapidly growing labour force in Uzbekistan, requires the creation of favorable conditions for the organization of new productive capacities [30]. At the same time, the existing structural deformation of the country's economy, characterized by the underdevelopment of the technological base of the main industries, the commodity direction of exports and the high share of agriculture in gross value added, the high size of the shadow economy, low productivity, high energy and

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

resource intensity, determines the long-term nature of the solution to the existing problems.

Thirdly, the accelerated introduction of effective instruments to ensure the functioning of the market economy is carried out, including the introduction of effective mechanisms for the protection of private property and the regulation of land relations, the improvement of the efficiency of State bodies, the eradication of corruption and the development of the financial market.

Fourthly, the country's economy is characterized by low levels of inclusiveness, accompanied by poor human capital quality, inequality in income distribution, weak social protection and scientific and technological potential, unsustainable use and depletion of natural resources.

Fifthly, the problems, as well as the shortcomings in ensuring an adequate material and technical base of the education system, are reflected in the low level of training and the territorial imbalance of demand in the personnel of various profiles. The weak relationship between scientific institutions and the real sector of the economy hinders the possibility of introducing innovation and adapting new technologies into production.

Sixth, the global environmental challenge and adverse long-term climate change resulting from the growth of industrialization, increased emissions, development of new natural resource deposits, as well as the depletion of the natural environment and water resources (including the reduction of sown areas and the decline in land fertility) are reflected in the adverse trend of climate change, which negatively affects the growth of disease levels, water supply and the

development of the economy of Uzbekistan as a whole.

I. Conclusion

In addition, the legal framework and mechanisms for the implementation of laws and other legal acts remain inadequate in the sphere of economic relations regulation, and the system of public administration is dominated by direct instruments of regulation without an appropriate mechanism of responsibility and control over their application.

In 2020-2021, the economy will adapt to new conditions and market mechanisms through the implementation of adopted documents, which will affect the following tasks:

- ensuring macroeconomic stabilization;
- reforming of a system of preparation, retraining and increase in shots of shots for civil service;
- further development of institutional base of the market relations;
- development of education, sciences, health care, the ICT advancing investments into the human capital;
- restriction of corruption and decrease in level of shadow economy.

In conclusion, let us say that the forecast of GDP change indicators of the Republic of Uzbekistan for 2020-2021, that it is possible to maintain the ratio of gross savings to expenditures on final consumption of gross domestic product. The majority of the GDP of the Republic of Uzbekistan will be spent on final consumption in comparison with the gross accumulation of GDP of the Republic of Uzbekistan.

References:

1. Schumpeter, J. A. (1947). Theoretical problems of economic growth. *The Journal of Economic History*, 7(S1), 1-9.
2. Senghaas, D. (1991). Friedrich List and the basic problems of modern development. *Review (Fernand Braudel Center)*, 451-467.
3. Clark, C. M. (1998). Thorstein Bunde Veblen: the quintessential dissenter. *Economics and its Discontents, Twentieth Century Dissenting Economists*. Cheltenham, UK: Edward Elgar, 267-282.
4. Galbraith, J. K., & Kum, H. (2003). Inequality and economic growth: A global view based on measures of pay. *CESifo Economic Studies*, 49(4), 527-556.
5. Dosi, G., Cimoli, M., & Stiglitz, J. E. (2009). The political economy of capabilities accumulation: The past and future of policies for industrial development. *Mario Cimoli, Giovanni Dosi and Joseph E. Stiglitz*.
6. Henry, J. F. (2016). *John Bates Clark: the making of a neoclassical economist*. Springer.
7. Keynes, J. M., & Szmrecsanyi, T. (1978). *John maynard keynes economia*. Ática.
8. Domar, E. D. (1952). Economic growth: an econometric approach. *The American Economic Review*, 42(2), 479-495.
9. Harrod, R. F. (1958). Policy against inflation. – Macmillan.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

10. Merton, R. Colow. (1975). An asymptotic theory of growth under uncertainty. *The Review of Economic Studies*, 42(3), 375-393.
11. Nordhaus, W. D., & Tobin, J. (1972). *Economic growth* (Vol. 5). National Bureau of Economic Res.
12. Nelson, R. R., & Phelps, E. S. (1966). Investment in humans, technological diffusion, and economic growth. *The American economic review*, 56(1/2), 69-75.
13. Abalkin, L. (2001). *Dinamika i protivorechiya ekonomicheskogo rosta*. *Ekonomist*, (12), 3-10.
14. Bokov, V. V. (2015). Nauchno-metodologicheskie i institutsionalnye aspekty obespecheniya ustoychivogo razvitiya otraslevyih kompleksov. *Problemy ekonomiki i yuridicheskoy praktiki*, (6).
15. Glazev, S. YU. (2012). Sovremennaya teoriya dlinnyih voln v razvitiy ekonomiki. *Ekonomicheskaya nauka sovremennoy Rossii*, (2 (57)).
16. Koychuev T. K. (2011) *Ekonomika Kyrgyzistana za 20 let suverenosti*. *Reforma*. (50). 6-13.
17. Koshanov A.K., et al. (2007) Konkurentosposobnost natsionalnoy ekonomiki: kriterii otsenki i puti povyisheniya. *Almatyi: Ekonomika*.
18. Kushlin, V. I. (2004). Traektorii ekonomicheskikh transformatsiy. *Ekonomika*.
19. Mikulskiy, K. I. (Ed.). (2002). Innovatsii i ekonomicheskii rost. *Nauka*.
20. Rahimov A. M. (2019) Nekotorye voprosy effektivnosti struktury ekonomiki Respubliki Tadjikistan. *Fundamentalnye i prikladnye nauchnye issledovaniya: aktualnye voprosy, dostizheniya i innovatsii*. 73-75.
21. Tatarkin, A. I., & Kotlyarova, S. N. (2013). Regionalnye instituty razvitiya kak faktory ekonomicheskogo rosta. *Ekonomika regiona*, (3 (35)).
22. Kadyirov, A. M., Sevliyants, S. G., Otto, O. E., & Ahmediyeva, A. T. (2011). Informatsionno-innovatsionnoe razvitie ekonomiki Uzbekistana. Monografiya. *Iktisodiyot*.
23. Rasulev, A. F., Pavlov, K. V., & Baymuradov, SH. M. (2016). YAdro regionalnoy ekonomicheskoy sistemy. *Ekonomika i finansi (Uzbekistan)*, (9).
24. Saidova, G. K. (2014). Uzbekistan vkhodit v TOP-5 stran mira, demonstriruyuschih vyisokie tempyi ekonomicheskogo rosta. Internet-jurnal. URL: http://economics.uzreport.uz/news_r_104348.html
25. CHepel, S. V., & Bondarenko, K. A. (2015). YAvlyaetsya li vneshnyaya trudovaya migratsiya faktorom ekonomicheskogo rosta. *Ekonomicheskii analiz i vyivody dlya stran SNG. OF THE NEW ECONOMIC ASSOCIATION*, 142.
26. Rasulev, A. F., & Trostyanskiy, D. V. (2016). Uzbekistan: priorityi innovatsionnogo obespecheniya i tehničeskogo obnovleniya promyshlennosti. *CHAsopis ekonomichnih reform*, (2), 114.
27. (2020). Socio-economic situation of the Republic of Uzbekistan for january-december 2019. Goskomstat.
28. Kurpayanidi, K. I. (2018). The typology of factors of increasing the innovative activity of enterprise entrepreneurs in the industry. *ISJ Theoretical & Applied Science* (10): 66.
29. Urmonov A. A. (2016). Modern trends in the further development of the Shanghai Cooperation Organization (SCO) in the context of globalization. *Young Scientist*. (17): 4.
30. Kurpayanidi, K. I. (2019). Actual issues of activation of foreign economic activity in the economy of Uzbekistan. *ISJ Theoretical & Applied Science*, 04 (72), 60-65

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 05.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Oleg Naumenko
NUST MISIS
PhD in Philosophy
Moscow, Russian Federation
naumenko06@mail.ru

COGNITIVE ASPECTS OF ECOLOGICAL CONSCIOUSNESS

Abstract: In given article some cognitive aspects of ecological consciousness are considered. Some retrospective analysis of these aspects is shown that any ecological constructs had many alternative psychological theories which, of course, unique, individual and had possibility to appear in interrelationship between external world and human.

Key words: cognitive science, psychology, environmental studies, ecological consciousness, ecological and psychological constructs.

Language: English

Citation: Naumenko, O. (2020). Cognitive aspects of ecological consciousness. *ISJ Theoretical & Applied Science*, 03 (83), 7-10.

Soi: <http://s-o-i.org/1.1/TAS-03-83-2> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.2>

Scopus ASCC: 1211.

Introduction

Thinking role in formation of ecological consciousness in the process of its functioning, i.e. corrective amendments which are brought by knowledge process in perception, influence and understanding of the nature is extraordinarily high.

The importance of thinking for ecological consciousness follows from definition according to which the ecological consciousness is our representation about world around and the relation to it.

There is no necessity to prove, that the knowledge is an obligatory element of image construction, model of the world which includes also behavior of the person in the real objective world. Certainly, cognitive processes along with knowledge of the world and the laws existing in the world, define also a place of the person in this structure, together with in the possible virtual parallel structures created by imagination of the person. The last is very important as allows the person to carry out that distinguishes the Homo Sapiens from all other biological world, - to plan the activity, "playing" possible variants and realising what has for whatever reasons seemed to the optimum.

The consciousness of the modern person necessarily includes three basic logic sections: logic of knowledge, logic of essence and logic of being.

Learnt always objectively, it does not depend on opinions, approaches and is equally used in the process of thinking by all carriers of consciousness, distinctions can be only in the relation to this learnt, in the place of learnt in the K.Lewin's psychological field [1].

Cognitive psychology was based on a number of representations of J.Piaget [2] and the theory personal конструкта, G.Kelly [3] developed in works.

The personal construct theory assumes, that the person, receiving data on an external world and from an external world, the assumption of essence of the received data, its communications with other phenomena and objects of an external world forms in consciousness. Such guesses also are constructs, i.e. base elements on which basis the general design of the world is under construction. Concept "External" in the G.Kelly [3] theory means external in relation to consciousness.

The concept of construct is close to concept of "knowledge unit" used in pedagogics, i.e. any data in aggregate with all characteristic communications for it and uses areas. Distinctions between them not terminological, but intrinsic – the construct theory tries to find the mechanism and laws of formation of these constructive guesses.

Constructs can be two kinds: rigid and flexible, or closed and opened.

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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 rigid, closed construct as though is accepted as a truth in last instance, not subject to doubt. The part of such constructs consists of the common truths checked up by personal experience or received in the training process, but a part of rigid constructs are positions which are base for the further constructions, further guesses. Very often we meet with conditionally rigid construct which existence is limited by narrow spatial and time frameworks, i.e. constructs for example «we will admit that...». But the basic part closed, rigid constructs are those of which firmness the person is firmly convinced. Very powerful stream contradicting information to construct is necessary to loosen for the at least, if not to deny it. Construct closeness degree is influenced by many factors.

Opened, flexible constructs can be easily transformed on the basis of again received information. On openness-closeness construct degree very big influence is rendered by the subjective importance of the received information on which basis construct is under construction or the importance generated in construct consciousness.

Position about constructs, generated by G.Kelly [3] and then developed in works of other scientists, close adjoins, in our opinion, with K.Lewin's substantive provision about a psychological field as the phenomenological world defined by presence of intense systems [1].

Construct occurrence, formation of its characteristics and that is very important, construct position in consciousness structure are in many respects defined by presence in consciousness already generated constructs. These constructs create favorable circumstances for new constructions, they form an expectation condition.

Expectation, apparently, is one more construct line, especially characteristic for opened, flexible constructs. Its sense consists that formed in the process of thinking construct as knowledge unit, co-operating with others constructs has an opportunity establishment of new communications and having received the additional information, aspires to enter as a component in new construct. It defines boundless possibilities of consciousness.

In sphere of knowledge irrespective of object (whether the knowledge external in relation to consciousness of the phenomenon, process, object or knowledge by consciousness itself) an expectation role is played by the theory, i.e. the opened law assuming obligatory presence of any else unknown processes or the phenomena.

The contribution to cognitive processes knowledge brought J.Piaget, consists that being based on ability of consciousness to change a touch input according to any scheme which is already available in consciousness, the last can itself by rules and the laws provided by this scheme, to change not only features of an input, but also an initial set corrected the

functioning and behavior [2].

Initial “adjustment” of system is connected with the available concept “Me” which interprets the information caused by a touch input.

Image of an external world which according to the stated concept initially cannot precisely reflect an objective reality, receive constant correction, on the one hand, as a result of sensual experience and, on the other hand, from representations of higher order formed in consciousness, and, first of all from the “Me” image.

“Me” image create and defines an object of an environment estimation on a number of parameters, for example utility, danger, a gratefulness, hyperbolized one and minimizing others. Important that it is not distortion of an image but the original adaptation of an image or representation to features of the person consciousness.

The great value for ecological consciousness has search selective attention at which there is a comparison of the image generated in operative memory, the standard, and a pattern to objects of an external world, the information about which arrives from a touch input. Usually such search attention does not operate with the full feature set, identifying object, but leans on any one or two characteristics maximum. If there is a coincidence under these characteristics, other signs become more active in consciousness. For example, the person collecting mushrooms or berries, well knows, that search is conducted on the basis of a mushroom or a berry in general (on the basis of a hat or rotundity), and, only having found out this sign, the mushroom picker starts it to identify to other signs defining whether white it's mushroom or toadstool. Thus, it is possible to accept position that the attention opens consciousness for the information arriving from a touch input and, in turn, changes its characteristics providing an input in consciousness of this or that an environment image.

All features of memory which are characteristic for consciousness in general keep value for ecological consciousness. Perhaps, some difference is a little raised value of figurative memory for formation of mutual relations with concrete objects of biosphere, though for the theory (according to G.Kelly [3]) the same interaction of evident-shaped and abstract-logic, associative memory, as well as for other displays of consciousness is characteristic. So, the concept “elephant” is always shown in the is evident-shaped form, as well as at more abstract concept “trunkings”, but in construct “elephant” the concept of a carving on an ivory appears already in the abstract-logic form is more often. Besides, feature of memory in ecological consciousness is that in it much brighter and for longer period the events having character of accident in the personal or global plan are embodied.

It is possible to specify in one feature of memory in ecological consciousness: embodied and reproduced images of the nature always have certain

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

emotional coloring, as a rule, such that was generated during the first contact of the person to this object. It is interesting, that dexterous fortunetellers and interpreters of dreams use this property of memory in ecological consciousness, involving widespread stamps of associative memory.

For consciousness cognitive processes including ecological, control presence over actions and their results is characteristic, and also correction of the further steps and change of an initial estimation of a situation according to this control, i.e. the mechanism described by P.K.Anokhin [4] as an acceptor of action.

The control can be constants, but in ecological consciousness there is a control on the set deviation is more often, i.e. it joins when deviations from the made decision reach any usually intuitively defined size.

Decision strategy is realized in the program (scheme) defining an order of expansion of processes and actions, promoting achievement of the required purpose. The ecological consciousness transforms the purpose of maintenance of a constancy of the internal environment to the purpose consisting in search or designing of such environment in which it's possible to support necessary level of physiological constants and their parity without pressure that in ordinary understanding turns to a problem of maintenance of good state of health.

The second constant purpose is realization of metabolic processes thanks to which two primary goals of maintenance of a life dare: accumulation and clearing of the energy necessary for realization of processes of ability to live, and maintenance of course of plastic processes.

Both the first and the second purpose co-operate with each other and in this interaction define requirements of an organism, and proceeding from them requirements to environment as to satisfaction of these requirements source. Thus, in the activity providing achievement of these two purposes, the person acts as the consumer.

The following constant purpose consists in kind protection. Here it is possible to allocate three mainstreams of the activity providing achievement of the purpose: Geno fund preservation, reproduction and protection of own life.

The genetic constancy of an organism is one of the constants most protected by an organism, there are the special systems providing a genetic constancy. Centuries-old practice has revealed a number of the restrictions which have become by moral restrictions, the interdiction protecting genetic safety.

The self-preservation purpose sometimes is

allocated in the form of the especial purpose which have been not connected with protection of a kind, and formed as protection of an organism against harmful, pathogenic factors. Here it is possible to allocate two physiological systems of protection: system of a pain and system of immune protection.

Considering cognitive aspects of ecological consciousness, it is necessary to stop on such important concept as "subject value" in that its understanding which has been given by V.Zinchenko and B.Velichkovski [5] and is used by them for decoding of some problems of memory. Certainly, this term reflects anthropocentrism of consciousness, perception by it of world around and characterises object in its relation to the person considering experience of previous relations.

Still K.Lewin, summing up the military experience (he was the officer, the participant of the First World War), has shown, how the military landscape depending on circumstances varies. He has established that the perception of environment and the relation to it varies with change of situation sense. So, the hill at defense is perceived as protection, shelter, but the same hill at approach turns to an annoying hindrance. Differently, we as though attribute to the nature ourselves, and to ourselves the nature and the importance of a situation is defined by features of these mutual relations [1].

Comprehension of relations with an external world is usually adhered to spatial and time coordinates though it concerns only the subject world. American psychologist E.Tolmen [6] has come out with the assumption that spatial co-ordinates are reflected in consciousness in the form of certain "cognitive cards" which topography includes, on the one hand, experience of the person, experience of his visual and locko-motoric perceptions, and, on the other hand, provides a cognizance and object storing. Thus, the cognitive space card acquires in the beginning objects and their mutual position on which then the space metrics is imposed. It is probable, that there is same a cognitive time scale.

Extremely interesting definition of perception of environment taking into account a position of the person was given by known psychologist J.Gibson on which opinion "to perceive some subject is means to perceive, how to come nearer to it and what is possible to make with it" [7].

Certainly, it is difficult to ordinary, everyday ecological consciousness to accept and comprehend even simple philosophical concepts, therefore special value gets ecological education.

Impact Factor:	ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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:

- Lewin, K. (1952). *Field theory in social science*. Leningrad.
- Piaget, J. (1969). *The selected psychological works: Intelligence Psychology*. Moscow: Education.
- Kelly, G. (1991). *The psychology of personal constructs*, V. 1, № 2.
- Anokhin, U.K. (1975). *Sketches on physiology of functional systems*. Moscow: Medicine.
- Zinchenko, V.P. (1995). *Affect and intelligence in education*. Moscow: Triwola.
- Velichkovski, B.M. (1982). *Modern collective psychology*. Moscow: MSU.
- Medvedev, V.I., & Aldasheva, A.A. (2001). *Ecological consciousness*. Moscow: "Logos".
- Gibson, Y. Y. (1979). *An ecological approach to visual perception*. Boston.
- (1968). *Group dynamics: research and theory*. In Cartwright L., Zander A. (Ed.) N.Y.: Harper and Row.
- Naumenko, O.A. (2010). Zennostnye orientacii invaironmentalisma. *Teoreticheskiy jurnal «CREDO new»*, №1 (61), Saint-Petersburg, Russia, pp. 141-149.
- Naumenko, O.A., Li, E.V., Tulenova, G.J., Izzetova, E.M., & Mahkamov, U.A. (2017). To the question of philosophical analysis on categories of "creativity" and "innovation". *«Theoretical and applied science» Journal. Philadelphia, USA*, №10 (54), pp. 206-209.
- Naumenko, O.A. (2014). Some aspects of environmental movement in development of the civil society. *Black Sea Scientific Journal of Academic Research*, T. 11, № 4, p.14.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 09.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Mamura Bakhtiyarovna Yuldasheva
Tashkent railway engineering institute
Lecturer, Tashkent, Uzbekistan

HISTORY OF THE ENGLISH UZBEK TRANSLATION

Abstract: This research paper describes specifics of the translation of English into Uzbek is revealed in terms of the maximum possible preservation of them, first of all, semantic, and then lexical, and linguistic content. The possibilities of an adequate transfer of meanings and images, the mechanisms and principles of literary translation, as well as the use of a comparative method to achieve the objectives are considered.

Key words: History, history of English translation, history of Uzbek translation, methodology, period, literature.

Language: English

Citation: Yuldasheva, M. B. (2020). History of the English Uzbek translation. *ISJ Theoretical & Applied Science*, 03 (83), 11-14.

Soi: <http://s-o-i.org/1.1/TAS-03-83-3> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.3>

Scopus ASCC: 1203.

Introduction

From history, we know translation plays a large role in shaping the development of interethnic cultural relations. Genres in the literature are enriched through translations. Thanks to the translation, we get acquainted with the lifestyle, culture, customs, tradition, history, literature, as well as the science of the peoples of other countries or continents. Similarly, the peoples of the world, also through translation literature, receive information about the spiritual life of the East. The basis of literary relations between states is also translation.

The history of the development of the Uzbek school of translation has its own specifics and originality. This peculiarity is characterized by the wide development already in the Middle Ages of translations from Eastern languages, mainly from Arabic, the presence of bilingual dictionaries; beginning in the second half of XIX translations directly from Western languages, and finally, a rather widespread development of translations of fiction and scientific literature from the English language, including translations from other languages of world literature. The role of these translations of English literature (1;2;5;), or through world literature, was very influential on the development of Uzbek culture as a whole. In this cultural and literary interchange and interpenetration, the English language played the role of a bridge connecting the Uzbek reader with world culture and literature.

Methodology

The Uzbek translation school of the last century, in fact, in its main composition and practice was based on translations from Russian. Consequently, English-language literature was also born through the Russian language. There was practically no translation school directly from English. The above specifics of the Uzbek translation school are based on the following factors: Firstly, the Uzbek translation school was formed in the Middle Ages and was one of the opportunities for the wide development of Islamic religion and culture. Subsequently, many representatives of the Serenasiyan school of science and literature made a huge contribution to the formation and development of Islamic civilization in many sciences. The work of the great encyclopedists of that time is a vivid evidence of this. One of the characteristics of that time was the presence of translators and bilingual, as well as explanatory dictionaries. Secondly, the development process of the Uzbek translation school has always been associated with the growth of national identity and the manifestation of the ideas of the revival of national greatness, with the growth of the educational movement (2;4;7;). The Uzbek enlightenment sought to acquaint the reader with the greatest and immortal works included in the golden fund of world literature. Therefore, it was during the period of enlightenment that the first attempts to translate from Russian and other languages, including from the English language,

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

appeared. Thirdly, the most developed period of the Uzbek school of translations falls on the second half of the last century. It was during this period that the main principles, methodology, and main directions of the Uzbek translation school and Uzbek translology formed as a scientific discipline. A number of translologists and translators entered the literary scene. Also, many poets and writers engaged in translation activities. During this period, research works were carried out on the features of literary translation by such translologists as G. Salamov, S. Mamadzhonov, G. Khojaev, N. Vladimir, K. Dzhuraev, N. Kamilov, S. Meliev, S. Azimov, Sh. Atabaev, S. Achilov, B. Ermatov, H. Ismailov, M. Bakaev, N. Atadzhonov, K. Musaev. It was during this period that hundreds of translations of works of world literature were published, made by dozens of translators, writers and poets like Usman Nasyr, Sanjar Syddyk, Dzhumaniyaz Sharipov, Ninel Vladimirova, Mirzakalon Ismaili (more than 200 works of classics of Russian and Western literature), Gulnara Gafurova, Askad Mukhtar, Gafur Gulyam (Shakespeare, Othello), M. Sheikhzade (Shakespeare, Hamlet, Romeo and Juliet, King Lear), Uygun (Shakespeare, Julius Caesar), Camille Yashen (Shakespeare, “Anthony and Cleopatra”), Jamal Kamal (Shakespeare, “Richard III”), Fly Mmad Ali (Ramayana), Kadyr Mirmuhamedov (J. Bocaccio, “The Decameron”), Erkin Vahidov (Goethe, “Faust”), Abdulla Aripov (Dante, “The Divine Comedy”), Sh. Shamuhamedov (Firdousi, “Shahnameh” and classics Persian literature) (1; 5; 7; 8;). In the same period, the works of English poets Robert Burns and Byron, the Shakespeare sonnets, the works of Charles Dickens, Jonathan Swift, Theodore Dreiser, John Steinbeck, Ernest Hemingway and other authors were translated into Uzbek. In 1980-1990, the tragedy of Christopher Marlo “Sahibkiran Timur” was translated into Uzbek. In the same period, the works of more than thirty representatives of English and American literature, writers and poets were translated into Uzbek. However, the main feature of these translations was that they were not direct translations from English, but were indirect translations through Russian. During the years of independence (after 1991), the Uzbek school of translations underwent significant transformations. The practice of direct translations of world literature has intensified. The Russian language began to lose its role as an intermediary language. Fourthly, the peculiarity of the Uzbek school of translations today is the tradition of direct translations into the Uzbek language from all world languages, including English. Moreover, translations go mainly in one direction - they are translated into Uzbek. But there is no active movement from Uzbek into English yet.

Another feature of today's practice is the development, along with fiction, of translations significant on a global scale and recognized by readers in the world of literature on socio-political, historical,

philosophical, scientific, technical and natural disciplines, including direct translation film materials. Today, there are all opportunities for the broad development of the school of translation into the Uzbek language and from the Uzbek language, and most importantly, the acquisition of original works of art is not difficult (1; 2; 3; 9;10;). At the same time, activities in publishing language dictionaries are developing rapidly in Uzbekistan, which is a convenient opportunity for translology. The tradition of direct translations from English into Uzbek begins in the 30s of the last century. Then, in the 80s of the last century, the tradition of direct translations into Uzbek from English was resumed. Thus, the history of the translation from English into the Uzbek language has revealed the peculiar aspects of the Uzbek national tradition of language translations. Today in Uzbek translology a new, promising, full of opportunities period has begun. The main features of this period are determined by such factors as the expansion of literary, cultural, scientific communication with foreign countries, wide opportunities for learning foreign languages, the ability for many people to travel to foreign countries to improve their language skills, especially English, the abundance of necessary educational supplies and dictionaries, the possibility of using the Internet and telecommunications, the organization in many universities of live communication with native speakers and many and others. However, these opportunities are not enough. Until the work on the preparation of specialists aimed at literary and scientific translation is effectively carried out in the system of higher education, the flaws in translations from Uzbek into English and from English into Uzbek will continue to be felt (3; 7;). Therefore, in a number of urgent tasks of the current period related to the field of translology, we can point out problems such as the targeted education of highly qualified personnel, providing them with translation activities, attracting modern poets and writers to translation activities, organizing special courses in translation skills, material support for creative business trips of young specialists to foreign countries within the framework of their specialization, continuous improvement of their qualifications, provision of legal guarantees Labor Tille translators and material support at the appropriate level of their intellectual and creative activity. The history of the development of direct translations from English into Uzbek can be divided into the following stages:

1. The stage of the first transfers during the period of national enlightenment (end of the 19th century and the beginning of the 20th century). Translations from English during this period are based on the desire to introduce progressive and educational ideas, the desire to promote the most famous works of world literature.

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

2. Indirect and direct translations from English, carried out in the former Soviet period. (1924-1991 years). During this period, the most famous works of English literature were translated. Behind this activity lies the desire, first of all, to acquaint the reader with progressive literature. She was supported and encouraged financially. But this movement did not develop naturally, but was carried out on the basis of certain intentions of the national policy of the Soviet period of the country's development. This was a difficult period in the development of a translation school. Along with a wide scale of translations, it also included repressions against translators, a lack of freedom for translators to choose literature for translation, and translations of works approved "from above", that is, by party bodies. Along with this, properties were inherent in this period, such as censoring the original work, making the necessary changes to it, in some cases, distorting the original (6; 8; 10;). In most cases, a Russian-language version was prepared first, after which it was translated into Uzbek. As a result, the number of direct translations from English is a minority, and in the end, a school of translators capable of direct translations is not created.

3. Translation of works of English-language literature during the years of independence (1991-2011). A feature of this period is the increased social need for direct translations of works from English. But in these translations, changes were made in matters of the objective preservation of the essence of the original work. At the same time, the issue is the revision of translations saturated with the ideology of the totalitarian system, that is, they need to be freed from amendments to censorship and gross interferences in the text. Step by step, the national translation school is starting to recover. However, translology does not directly begin to manifest itself through the translation of literary works, but through the dubbing of films. Another feature of this period is that in the first years of independence, after the economic and political crisis, translology as an independent direction of the cultural life of society stops in its development, but then gradually begins to recover. Above, we purposefully used a term such as

English literature. Because English-language literature covers literary works of the countries of England, the USA, Australia and other countries, including India. Thus, based on a scientific study of the main features of works translated from English into Uzbek, we can come to the following conclusions: First, the creation of an Uzbek school of national translation became possible only during the period of independence. Therefore, in this period, instead of indirect translations through the Russian language, it was difficult, but nevertheless, the tradition of direct translations from foreign languages was established. Secondly, during the period of independence through the activities of the national school of translations, an opportunity was created to free translations from ideological requirements and censorship. Thirdly, it was precisely during these years that a creative environment and opportunities were created for restructuring the Uzbek translology on a national basis and forming the criteria for translology based on modern requirements.

Results

After independence, there is every opportunity for the broad development of the school of translation into the Uzbek language and from the Uzbek language, and most importantly, it is not difficult to acquire the originals of fiction. In Uzbek translology, a new, promising, full of opportunities period has begun.

Conclusion

Consequently, the main features of this period are determined by such factors as the expansion of literary, cultural, scientific communication with foreign countries, wide opportunities for learning foreign languages, the ability for many people to travel to foreign countries to improve their language skills, especially English, the abundance of necessary educational supplies and dictionaries, the possibility of using the Internet and telecommunications, the organization in many universities of live communication with native speakers and many and others.

References:

1. Teshabaeva, D.M. (2018). Translation of fiction taking into account the normative aspect of speech culture. *Bulletin of Moscow State Linguistic University*. Humanitarian sciences, No. 12 (805).
2. Dosbaeva, N. T. (2010). Recreating the artistic style with direct translation. *Bulletin of ChelSU*, No. 21.
3. Vasilevich, A. P., & Popova, L. K. (2018). On the question of the methodology of teaching phraseological units of the English language. *Vestnik MGOU*, Series: Pedagogy, No3.

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PPIHII (Russia)	= 0.126	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. Kardumyan, M. S., & Pavlenko, V. G. (2018). Translation of phraseological units as an integral part of learning English. *Concept*, No9.
5. Pushkina, K. V., & Nikolaeva, N. V. (2017). Comparative analysis of phraseological units with a somatic component in English, Russian and Chuvash languages. *Bulletin of ChSU*, No2.
6. Arsentyeva, E. F., & Guryanov, I. O. (2014). Methods of translating phraseological units of the book style of Russian, English and German languages. *Vestnik TGGPU*, No1 (35).
7. Shimko, E. A. (2012). On the problems of translating phraseological units. *Bulletin of KSPU im. V.P. Astafieva*, No4.
8. Hafizova, A. A. (2010). Phraseological units and their translation (Russian English French parallels). *Vestnik TGGPU*, No.20.
9. Shepeleva, E. V. (2009). Features of the translation of phraseological units. *Proceedings of PSU. V.G. Belinsky*, No.15.
10. Malykhina, S. N. (2005). Using data from contrastive phraseology in translation (based on a comparison of English and Russian phraseological units verbalizing concepts expressing the intellectual and emotional activity of a person). *Bulletin of Voronezh State University. Series: Linguistics and Intercultural Communication*, No1.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 09.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Nadira Makhkamovna Mamatkulova

Tashkent institute of architecture and civil engineering
Senior lecturer, Tashkent, Uzbekistan

STRATEGICS FOR IMPROVING THE COMPETITIVENESS OF INNOVATIVE MARKETING IN INDUSTRY ENTERPRISES

Abstract: In this article, you will see the relevance of developing industrial marketing enterprises based on innovative marketing strategies and classify innovative marketing strategies aimed at managing industrial activities, accelerating production processes and enhancing the competitiveness of industrial enterprises.

Key words: Industry, marketing, innovation marketing, economics, competition, innovation, product innovation, technological innovation, gaming marketing, marketing evangelism, storytelling, market mapping, fraud.

Language: English

Citation: Mamatkulova, N. M. (2020). Strategics for improving the competitiveness of innovative marketing in industry enterprises. *ISJ Theoretical & Applied Science*, 03 (83), 15-17.

Soi: <http://s-o-i.org/1.1/TAS-03-83-4> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.4>

Scopus ASCC: 1405.

Introduction

Gaining a high market share is a key factor for innovative development in countries around the world. Innovative developments in the world have increased by 7.8% over the past five years, and innovation costs account for 2.1% of global GDP [1].

Strategy of actions for development of the Republic of Uzbekistan for 2017-2021 "further modernization and diversification of industry by transferring high-tech processing networks, first and foremost, to high-quality finished goods production based on deep processing of local raw materials." [2] has been identified as one of the key areas. Effective use of innovative marketing strategies in industrial enterprises plays an important role in the effective implementation of these tasks. The first research on marketing innovations was undertaken in 1960 by Theodore Levitt, showing its impact on the effectiveness of the enterprise. Regardless of marketing innovation, many businesses now focus on product and process innovation. In his research, T. Levitt "seeks to create and maintain the effectiveness of enterprise management by introducing innovations into the production process, as well as by introducing new marketing systems, even though they are aware of new products" [3], argues that. In his view, marketing innovation is seen as a process that is

ignored by businesses and occurs spontaneously or by accident.

It is now widely recognized that full economic efficiency alone cannot be achieved by focusing on product innovation [4].

In general, marketing innovation is one of the key issues in developing a multi-system approach that should be widely studied. It can be seen that these conceptual approaches determine the relevance of a comprehensive analysis of innovative marketing and its study as a separate area of marketing.

Uzbekistan's oil and gas, chemical, automotive, construction materials and pharmaceuticals, light and food industries are developing dynamically. The share of industry in the GDP has increased by more than 8.5% in 2005-2018, with more than 25.0% in total investment in fixed assets and about 38% in the total number of employed in the economy. However, the impact of global competition on global markets dictates that all countries must effectively use innovation in the development of industrial markets. Therefore, effective introduction of marketing innovations in the development of industrial enterprises based on the national economy characteristics, assessment of its formation and development, comprehensive study of theoretical and methodological issues, development of innovative marketing activities in industrial enterprises,

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

identification of specifics, innovative marketing activities of industrial enterprises in the country. the development of mechanisms to improve the organizational and legal framework are available.

The diversity of consumer needs and new forms of competition that create and execute their own market strategies based on the principles of innovative marketing strategies for industrial enterprises will help the company grow unprecedented growth opportunities.

Methods of research

The introduction of marketing innovations in conjunction with product innovation is a key issue. Old methods are not effective enough to enter the market with new products. The use of old marketing techniques to enter the market with a new product does not provide sufficient volume of sales for the new product [5].

The development of an innovative marketing strategy may differ to different markets, for example:

➤ The individual emotions of a particular consumer play a key role in making B2C (business-to-customers - business for the consumer) market;

➤ In the B2B (business-to-business) market, the buyer's choice is based on rational thinking. The following key features of marketing in the B2B market.

➤ Influence of rational factors on consumer motivation the focus of attention;

➤ Impact on individual motivation of employees (salary increase, promotion, positive evaluation by the management, achievement of certain employment achievements);

➤ Step-by-step and multi-level procurement decisions acceptance after processes;

➤ Extension of procurement processes for a certain period;

A number of targeted strategies for innovative development of industrial enterprises abroad have been implemented.

In recent years, marketing innovation has been a major factor in enhancing the competitiveness of industrial enterprises in countries around the world. The countries are investing heavily in the development of science and research to ensure long-term industry development. It can be seen that the national innovation system created in developed countries promotes high economic growth.

Innovative development of the industry means the intellectual potential of industrial enterprises, the creative potential of workers and employees, knowledge, all stages from product creation to consumer. Innovation in these areas is a key resource for the strategic development of an industrial enterprise. In today's conditions, the economy is competitive with an innovative, intellectually-based, skilled workforce, and a high-tech industry.

Various organizational and economic principles that promote innovative marketing strategies have been developed and implemented in foreign companies.

Large corporations and companies have extensive experience in the use and application of innovative marketing technologies in various fields.

Sub Way, a fast-food retailer in India, launched its DART strategy in selling sandwiches in 1956. The main approach of the DART strategy is that the consumer creates the product for himself, that is, the buyer is directly involved in the creation of the product.

DART operates on a system of communication, access, risk assessment and information transparency (communication, access, risk assessment, transparency). Prahalad and Ramaswamy [6] describe the DART strategy as a key way to create value for innovative marketing, using a customer-centered, open-to-consumer, customer-centric approach.

Gamification is an innovative marketing strategy as a gaming approach to consumer engagement, a technology that is effectively used by US businesses. Its main principle is to promote new products in the market effectively through different mobile games.

Marketing evangelism is independent of providing technical information, developing diverse teams and consumers by relying on competent experts and creating a feedback channel is an innovative marketing strategy used to increase the level of loyalty and utilization of company products. Marketing evangelism represents the process of building up a new market and increasing market opportunities by introducing a new consumer image to the minds of consumers. Storytelling is an innovative marketing technology that is actively used in developing brands, especially new ones. This technology is based on a holistic brand history. Its main purpose is marketing strategy to attract consumers through praise slogans that affect them. Leading companies provide the consumer with a variety of tools and distribute videos that tell them about their achievements.

The market map is a map for users and reflects the movements of groups, distributors, information channels, potential company products, and market participants.

Crowdsourcing is an innovative marketing strategy aimed at reducing the commercial risk of innovative products by engaging consumers in news creation and testing. Crowdsourcing (crowdsourcing, crowd - "public" and sourcing - "resource use") - solving problems and creating new brands based on the creativity, experience and knowledge of ordinary people.

Conclusion

Consequently, it is possible for industrial enterprises to use, among other things, strategies such as past marketing, guerilla marketing,

Impact Factor:	ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PИHИЦ (Russia) = 0.126	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

micromarketing, mega marketing, green marketing, internal marketing, which are now the dominant types of marketing as a result of their entry into the market.

It should be seen not only as a priority in global competition, but also as an important area of development for countries.

References:

- (2017). The Global Innovation Index 2017. Innovation Feeding the World. Retrieved from <https://www.globalinnovationindex.org/gii-2017-report>
- (2017). Decree of the President of the Republic of Uzbekistan Shavkat Mirziyoev "On the strategy of further development of the Republic of Uzbekistan" February 7, 2017 - Collection of legislation of the Republic of Uzbekistan. 2017, Issue 6, Article 70.
- Levitt, T. (1960). 'Growth and profits through planned marketing innovation', *Journal of Marketing*, Vol. April, pp. 1-8.
- Lin, C. Y.-Y., & Chen, M. Y.-C. (2007). 'Does innovation lead to performance? An empirical study of SMEs in Taiwan', *Management Research News*, Vol.30, No. 2, pp. 115-132.
- Usmanova, D. (2018). Methodological aspects of formation of marketing innovations. "Business Expert". No.10 (130) 2018. [http://www.biznes-daily.uz/ru/birjaexpert/61591--Methodological aspects of developing marketing innovation](http://www.biznes-daily.uz/ru/birjaexpert/61591--Methodological%20aspects%20of%20developing%20marketing%20innovation)
- Prahalad, C., & Ramaswamy, V. (2006). *The future of competition. Creating unique value with the consumer*. Moscow: Olympus Business.
- (n.d.). Retrieved from www.Taqi.uz
- (n.d.). Retrieved from www.strategy.uz
- (n.d.). Retrieved from www.President.uz
- (n.d.). Retrieved from www.mininnovation.uz

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 09.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Nargiza Yusupdjanova

Tashkent Institute of Architecture and Civil Engineering
Senior lecturer of the department " Economics and real estate management"
Tashkent, Uzbekistan

Inomjon Karimov

Tashkent Institute of Architecture and Civil Engineering
Senior lecturer of the department " Economics and real estate management"
Tashkent, Uzbekistan

INVESTMENT PROJECTS IN THE FIELD OF CONSTRUCTION MATERIALS PRODUCTION

Abstract: The article presents the state of investment projects and key elements of investment management in the manufacturing industry of building materials.

Key words: investment supply, modern methods, construction materials, investment attraction, equipment and machinery, labor resources, export.

Language: English

Citation: Yusupdjanova, N., & Karimov, I. (2020). Investment projects in the field of construction materials production. *ISJ Theoretical & Applied Science*, 03 (83), 18-21.

Soi: <http://s-o-i.org/1.1/TAS-03-83-5> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.5>

Scopus ASCC: 2213.

Introduction

Since the beginning of the period of independent development in the country, the head of state and the government of the Republic of Uzbekistan have been carrying out comprehensive and deeply thought-out structural reforms step by step in the implementation of socio-economic policy. The Strategy of Action on further development of the Republic of Uzbekistan, approved by the decree of the president of the Republic of Uzbekistan on February 7, 2017, sets out the fundamental goals that would be implemented in 2017-2021, as well as the means and ways to achieve these goals. Among them, as an important branch of the economy, a wide range of measures are being taken to develop the construction materials industry in terms of quality. In particular, the production of high-quality, import-substituting export-oriented and competitive construction materials is being established at the manufacturers of building materials, equipped with modern techniques and technologies with the participation of foreign capital. However, the attraction of investments and the amount of investment in the sector do not fully meet the current

requirements. Therefore, foreign investment in the building materials industry is one of the priorities. The strategy of action on five priority areas of development of the Republic of Uzbekistan defines important tasks on "active involvement of investments, in particular foreign investments in the sectors and regions of the economy of the country by improving the investment climate"[1].

Ensuring the effective implementation of these tasks requires the development of proposals and recommendations for increasing the effectiveness of management of attracting investments in the construction materials industry.

This dissertation research serves to a certain extent in the implementation of the tasks set out in the normative documents including, Resolution of the President of the Republic of Uzbekistan dated February 7, 2017 N UP-4947 "On the action strategy for further development of the Republic of Uzbekistan," Resolution of the President of the Republic of Uzbekistan "On Establishment of the State Committee on Investments of the Republic of Uzbekistan" dated March 31, 2017, No-4996, August

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

1, 2018 No. UP-5495 "On measures to radically improve the investment climate in the Republic of Uzbekistan", Resolution of the Cabinet of Ministers of the Republic of Uzbekistan from September 25, 1998 of No. 410 "On measures for organization of activity of investment funds".

Materials And Methods

With the adoption of the decree of the president of the Republic of Uzbekistan № PQ-4335 of May 23, 2019 "on additional measures for the rapid development of the building materials industry", more favorable conditions have been created for local and foreign investors to implement promising projects in the direction of production of imported substitute and export-oriented building materials in the Republic.

In particular, since July 1, 2019 in the implementation of projects, the following benefits were granted:

- The costs of certification of exported products of producers of local building materials shall be paid by the Export Development Agency of the Ministry of investments and foreign trade of the Republic of Uzbekistan in accordance with the calculations based on the agency "Uzstandard";

- The taxation base of business entities shall be reduced for five years to the amount of costs for the construction of Engineering, Communication and transport infrastructure necessary for the development of deposits of non-mineral resources in equal shares, but not more than the amount calculated in accordance with the norms established by the Ministry of energy and transport of the Republic;

- Construction materials that have passed the relevant tests and have been certified in accordance with the established procedure can be used in construction works;

- Information about the type or appearance of man-caused mineral formations, their quantitative and qualitative characteristics, and the technical conditions of their storage shall be provided free of charge to business entities upon their request;

At the expense of the State Fund for Support of Entrepreneurship Development under the Cabinet of Ministers of the Republic of Uzbekistan, the initiator of the project will be repaid a portion of the loan or guarantee for the loan up to 8 billion soms. firstly, to the availability of investment capacity. It consists of natural, labor reserves, as well as production, consumption, financial, innovation, institutional and infrastructural capacities;

secondly, the existing investment conditions in the country are important. These include: general economic, Market, normative-legal, Information and communication, environmental, social, cultural conditions;

thirdly, Investment Risk Factors. They include: political, legal, economic, social, financial, Foreign Economic, criminal and etc. They are opposed to the tasks of using the investment capacity of foreign investors and the favorable advantages of investment conditions.

Currently, with the emergence of new types of construction materials in the global market, much of the domestic market's demand for modern building materials is met through the production of new types of building materials using local raw materials and compounds.

Results

One of the key factors in achieving these results is the investment in the national economy and the construction materials industry (Table 1).

Table 1. Dynamics of Attracting Domestic and Foreign Investments in the Economy of Uzbekistan for 2012-2018 (billion/uzs.)

Name of the indicators	Years							2018 as compared to 2017,%
	2012	2013	2014	2015	2016	2017	2018	
1 Investment in fixed assets	17953	22797	28694	35233	41670	48083	68423	142,4 %
2 Foreign investments and loans in fixed assets	3853	4653	5532	6980	8309	10611	17146	161,5 %
3 including: direct and other investments	3215	3668	4315	5489	6133	7353	12768	173,6 %

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PИHИЦ (Russia)	= 0.126	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	government-guaranteed investments	638	984	1217	1490	2176	3257	4378	134,4 %
5	Investments in fixed assets in the building materials industry	317	277	420	808	1057	932	967	103,7 %

According to the table, in 2018 for the development of the economy of the Republic of Uzbekistan at the expense of all sources of financing were 68,423 billion. or 142.4% of capital investments in 2017. In this case, the share of foreign investment in 2018 is 17146 billion dollars. or 161.5% increase compared to 2017, of which Foreign direct investment is \$ 12768 billion in 2018. or 173.6% to 2017.

Successful investment in the construction materials industry depends on a large extent on the following factors. Consequently, the structure of the building materials industry should be accompanied by changes in the structure, development and liquidation of unprofitable enterprises, and changes in the specialization of manufacturing companies that are not competitive. This aspect is more important than building new businesses.

Thus, in order to increase the efficiency of investment attraction in the building materials industry, the following tasks should be developed and implemented in the development of programs and measures for structural transformations in the industry:

- increasing the volume and effectiveness of investment projects aimed at the development of network infrastructure;
- achieving economic independence in the construction industry of the Republic through the establishment and development of enterprises producing substitute products by reducing the import

of the most important types of building materials and supplies;

- Efficient use of the rich mineral resources available in the country through localization of production, increasing the level and competitiveness of the products;

- expansion of export potential of the republic, achievement of positive balance of payments in foreign economic relations;

- Efficient use of resources (natural, material, financial, etc.) in the building materials industry. These include the rational employment of labor resources, the introduction of new labor management technologies, and the increasing use of modern management and marketing techniques in management.

Conclusion

In order to ensure the competitiveness of the products in the construction materials industry, deepening the processes of restructuring, modernization and diversification should become an important priority. Investments are needed to solve these problems.

In general, an important issue related to attracting investments is not to prioritize the distribution of investment, whether domestic or foreign, but for the allocation and placement of the needs of our economy and their efficiency.

References:

- (2018). Decree of the President of the Republic of Uzbekistan dated January 22, 2018 NF-5308 "On the State Program on Implementation of the Strategy of Action on the five priority directions of development of the Republic of Uzbekistan in the" Year of active entrepreneurship, support of innovative ideas and technologies ".
- (2017). Decree of the President of the Republic of Uzbekistan dated February 7, 2017 "On the strategy of further development of the Republic of Uzbekistan".
- (2018). Address of the President of the Republic of Uzbekistan to the Oliy Majlis December 28, 2018 //xs.uz/uzkr/post/ozbekiston-respublikasi-prezidenti-shavkat-mirziyoevning-olij-mazhlisga-murozhaatnomasi.
- Nurimbetov, R.I., & Matyawakubov, A.D. (2017). Trends in the Construction Materials

Impact Factor:	ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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

Industry in Uzbekistan. *Construction and Architecture of Uzbekistan*, Issue 1-2, pp. 37-42.

5. Teshabaev, A. (2006). *Modern enterprise management*. (p.300). Tashkent: Science.
6. Topychkanov, D.E. (2004). Features of corporate property management in foreign

countries of the post-industrial type. *Property and market*, No. 3, p.9.

7. (n.d.). Retrieved from www.Mininnovation.uz
8. (n.d.). Retrieved from www.uza.uz
9. (n.d.). Retrieved from www.strategy.uz
10. (n.d.). Retrieved from www.economy.uz

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 09.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Makhbubakhon Rakhimovna Tojiboeva
Kokand State Pedagogical Institute
PhD, Associated Professor
Kokand, Uzbekistan.

ARABISM IN HAMZA'S ENLIGHTENMENT WORKS

Abstract: The article presents use of Arabic words in such a manner was acceptable to people of the time. The effects of books that have been read for centuries are also felt here. For this reason, most of the works created during this period are dominated by the Arabic words. For this reason, there is a great deal of disagreement in the educational works of Hamza.

Key words: Arabism, denotative and taciturn meanings, enlightenment, Hamza's Works, national poems, national songs, traditional and changing gallery.

Language: English

Citation: Tojiboeva, M. R. (2020). Arabism in Hamza's Enlightenment Works. *ISJ Theoretical & Applied Science*, 03 (83), 22-24.

Soi: <http://s-o-i.org/1.1/TAS-03-83-6> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.6>
Scopus ASCC: 1201.

Introduction

It is known that in the period of Hamza Hakimzoda the Arabic words were much higher in the Uzbek written literary language. There are some reasons. Jadids believed that the most effective way to awaken a nation was through the dissemination of knowledge, enlightenment, and the freedom of their lives. That is why they have used literature as the main instrument: they have invented new genres, they have written a variety of manuals, and poems calling for the revival of the nation. Of course, many of these poems have been judged by Islamic judgments, quoted from the Koran and hadiths, or used their interpretations. As a result, the weight of the Arabs in the lexicon of these works increased and increased. In addition, in the monologic and dialogical systems (poetry, prose and drama), in the discourse of the authors and heroes, the Arabic words, the traditional and changing gallery of words changing from Arabic to Uzbek were formed. In addition, whether the leading heroes of Hamza Hakimzade's educational works are those of Islamic faith, madrassahs (at least who attended a religious elementary school), they have many examples of Arabic lexicon.

Hamza has a set of national poems for national songs. His seven poems included in the collection of "Gul", other poems and publicist articles published in the press, his dramas, textbooks, and "national

rhymes" show that he has become one of the great figures of the Jadid movement, while his national literary language, his Turkish. To appreciate the skill of a skilled artist who combines elements of Persian and Arabic, especially those who have a broader use of Arabic words in denotative and taciturn meanings, and who have created various interpretations and interpretations with them. Allowing In his collection, the national spirit strives to present the words of the nation's aspirations for independence in the shell of the Arabic-Islamic word, which provided a powerful impression on the spirit and spirituality of the people of that time and environment. The folk song, which is based on deeper meaning and more meaningful words, replaces the melodious and melancholy melody of the song "Lom Mum Mamajanan" with more and more Arabic words and calls the nation to education. People in Turkestan are crying because they are in the grip of ignorance:

Methodology

Hamza has a set of national poems for national songs. His seven poems included in the collection of "Gul", other poems and publicist articles published in the press, his dramas, textbooks, and "national rhymes" show that he has become one of the great figures of the Jadid movement, while his national literary language, his Turkish. To appreciate the skill

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

of a skilled artist who combines elements of Persian and Arabic, especially those who have a broader use of Arabic words in denotative and taciturn meanings, and who have created various interpretations and interpretations with them. Allowing In his collection, the national spirit strives to present the words of the nation's aspirations for independence in the shell of the Arabic-Islamic word, which provided a powerful impression on the spirit and spirituality of the people of that time and environment. The folk song, which is based on deeper meaning and more meaningful words, replaces the melodious and melancholy melody of the song "Lom Mum Mamajanan" with more and more Arabic words and calls the nation to education. People in Turkestan are crying because they are in the grip of ignorance:

Do not worry if it goes to knowledge,
The obligation to read a thousand ways in the Qur'an
Decree,
Faith without command, without faith,
A perfect Muslim without knowledge.
Cry, cry, Turkistan, cry, Turkistan,
Let the spirits shake, cry, Turkestan.

With regard to the text, except for the repetition of four out of the thirty-one words used, it is easy to see that ten words are Arabic, which are firmly embedded in our language and are easily understood. Words like "science", "Quran", "decree", "enlightenment", "rules", "faith", "perfect", "Muslim" are interconnected art. In another poem in the collection, one can see that the Arabic words evoked purposeful harmony as in the same passage:

This Nihon is a worthy breakfast for the nation that is
crying blood,
The summer has come and winter has come, but
spring has not come,
Sarsari's body wants to be ignorant,
Let's open a school, maybe a greenhouse.
O Muslims, When Do You Want a Drug?
Do you want the nation to have a vibrant, prosperous
and honorable era?

Hamza published a relatively new genre for Uzbek literature - a new prose, called the "National Hero" by the publisher of the Madora Library in 1915. This byte in the novel is epigraphic and also uses Arabic words:

Read the science, get the education juice,
Get rid of your anger and cross over with the people.

The young scientist, Abdulkahhar, is blissfully unaware of the ignorance and ignorance in the New Happiness.

If you look at the text of the novel, you will find many Arabic words in the language of the author and

heroes, balanced within the antithesis of knowledge and ignorance. Not only that, Arabic words are crucial in the drama "Poisonous Life or Victims of Love," which was published in the year of the writer's novel. The drama tells of ignorance, backwardness, fanaticism, the devastation of the lives of Mahmud Khan and Maryam Khan. The author does not justify the genre of the work as a tragedy of the bride and groom from the Turkestan house. The main characters of the work are Maryamkhan and Mahmudkhan - the most advanced intellectuals of the time. They live with great dreams, romantic dreams, and their love is pure and sincere. The playwright emphasizes the image of Mary in the work, and the author's educational views are more fully reflected in the image of Mary than the image of Mahmud. It is true that Mahmud Khan has played a great role in helping Maryamhan reach this level.

It is Mahmudhan who took him to the Enlightenment. Here is Maryamkhan's purpose in life, the key to her life: "... Sir, hasten my judgment; Let us write to the newspapers and warn each other about the husbands of our husbands and the families of our oppressed families. Let's open a real-purpose girls' school, be it morally-minded, you have financial service, and raise money for our dying nurses with knowledge. Let's live the next generation, our husbands, you and your daughters, in white, red flowers in our graves, reading the Qur'an and giving our spirits a service ... No, until the Day of Judgment, your grave is well known by the nation and the next generation. Let me remember the shameful and dying death of our noble and noble Lord! So, if the dream dies, let the nation and humanity not die! " Italics is full of words, or the base part is Arabic. Clearly, Maryam expresses her hope that the Shari'a will revolt against the fanatics who violate Islam, expose their misdeeds, and look to the future with the help of Arabic words. It is true that at the time the drama was written and printed on stone, the Arabic words were not quite clear to most people. This may be an example for intellectuals of the time, or perhaps the reason for the individualization of the language of two educated representatives of the time. In any case, the writer was able to put Arabic words in the speech of the heroes more than expected.

It is noteworthy that Hamza (as well as other thinkers) is sometimes regarded as an atheist because of his exposing some of the dishonest behavior of the Shari'a leaders. In fact, he exposes fanatics and fanatics, not religion. This is evidenced by his drama The Poisoning Life. Take a look at the discourse on Sharia and Islam in it: "The Shari'ah is not a tyrant or a traitor. The Sharia makes everyone happy. There is freedom in Sharia, there is competition, there is justice. In Shari'a, it is haram. Marriage is lawful with the acceptance of the party. If I do not accept it, marriage is a fad, marriage is haram. Oh Shariah!

Impact Factor:

ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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

Islam without understanding! Is Shariah over? O Lord!

Results

To sum up, we want to emphasize that Jadid writers intend to address their actions directly with Islam. Naturally, in this process the Arabic-Islamic words occupy a special place in their writings and serve as an expression of their way of life, their interactions, and their outlook. In addition, the use of Arabic words in such a manner was acceptable to people of the time.

Conclusion

The effects of books that have been read for centuries are also felt here. For this reason, most of the works created during this period are dominated by the Arabic words. For this reason, there is a great deal of disagreement in the educational works of Hamza.

References:

1. Karum, H. (1975). *Abd al-Nasir Bayna Haykal wa-Mustafa Amin*. Cairo: Dar Amun lil-Tibaa.
2. Mahfuz, N. (1996). *Hawla al-Taharrur wal-Taqaddum*. Cairo: al-Dar al-Misriyya alLubnaniyya.
3. Mansur, A. (1994). *Abd al-Nasir al-Muftara Alyhi wal-Muftari Alayna*. 4th ed. Cairo: al-Maktab al-Misri al-Hadith.
4. Mattar, F. (1975). *BiSaraha an Abd al-Nasir: Hiwar maa Muhammad Hasanayn Haykal*. Beirut: Matbaa al-Sharq al-Taawuniyya.
5. Ramadan, Abd al-Azim (2000). *Al-Haqiqa al-Tarikhyya Hawla Tamim Sharikat Qanat al-Suways*. Cairo: al-Haya al-Misriyya al-Amma lil-Kitab.
6. Riad, M. (1992). *Hiwar Shamil maa Jamal al-Atasi an al-Nasiriyya wal-Nasiriyyin*. Cairo: Markaz al-Khadara al-Arabiyya lil-Ilam wal-Nashr.
7. Rifat, K. (1976). *Nasiriyyun? Naam*. Cairo: Markaz al-Kahirah lil-Thaqafa al-Arabiyya.
8. Riyad, M. (1985). *Mudhakkirat Mahmud Riyad, 1948–1978*. 3 vols. Cairo: Dar alMustaqbal al-Arabi.
9. Al-Said, R. (2000). *Tammalat fi al-Nasiriyya*. 3d ed. Cairo: al-Mada.
10. Al-Saydawi, R. (1999). *Haykal: Aw al-Milaff al-Siri Lil-Zakirah al-Arabiyya*. Cairo: Maktabat Madbuli.
11. Shamir, S. (ed.) (1978). *The Decline of Nasserism, 1965–1970: The Waning of a Messianic Movement*. Tel Aviv: Mifalim Universitayim (Hebrew).
12. Al-Shelby, G. (1999). *Muhammad Hasanayn Haykal: Istimrariyya am Tahawwul*. Beirut: al-Muwasat al-Arabiyya lil-Dirasat wal-Nashir.
13. Shuqair, L. (ed.) (1965). *Hadith al-Batal al-Zaim Jamal Abd al-Nasir Ila al-Umma*. Cairo: Dar al-Tahrir.
14. Sivan, E. (1997). *Arab Political Myths*. 2d ed. Tel Aviv: Am Oved (Hebrew).
15. Umran, M. (1970). *Tajribaty fi al-Thawra*. Damascus.
16. Vered, Y. (1967). *Coup and War in Yemen*. Tel Aviv: Am Oved (Hebrew).
17. Yahya, J. (1967). *Misr al-Ifriqiyya*. Alexandria: Dar al-Maarif.
18. Zaki, S.A. (1985). *Qamus al-Nasiriyya*. Cairo: Dar al-Mustaqbal al-Arabi.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 22.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Mahrukh Taghiyeva
Baku Slavic University
Ph.D., Associate professor
Baku, Azerbaijan
tagiyevamahrukh@gmail.com

THE DEGREE OF KEEPING THE SPEECH STYLE IN THE TRANSLATION OF DOSTOYEVSKY'S "THE DEVILS" NOVEL

Abstract: Dostoevsky characterizes his heroes with the help of their vocabulary, as well as their speech style, which makes it possible to find out the hero's belonging to one or another class, his literacy level, his attachment to his homeland, etc. Comparing selected places from the original and the translated text, the article traces the adequacy of the speech style of Stepan Verkhovensky (specialties of his long monologue speech, the use of French expressions), Kirillov (short, unfinished sentences), Fedka (nationality, illiteracy).

Analyzing the translation of the speech style of the characters in the novel "Demons", we can conclude that M.K. Kodzhaev reacted to every word of this or that hero with great accuracy, took into account each element of their intonation and vocabulary. On the Azerbaijani version of the novel "Demons" all the heroes speak with their voice and language, their intonation and vocabulary.

Key words: language, style of Dostoyevsky, "Devils", translate, speech style, character.

Language: Russian

Citation: Taghiyeva, M. (2020). The degree of keeping the speech style in the translation of Dostoyevsky's "The Devils" novel. *ISJ Theoretical & Applied Science*, 03 (83), 25-29.

Soi: <http://s-o-i.org/1.1/TAS-03-83-7> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.7>

Scopus ASCC: 1208.

АДЕКВАТНОСТЬ СОХРАНЕНИЯ СТИЛЯ РЕЧИ РОМАНА ДОСТОЕВСКОГО «БЕСЫ» В ПЕРЕВОДЕ НА АЗЕРБАЙДЖАНСКИЙ ЯЗЫК

Аннотация: Достоевский характеризует своих героев с помощью их лексики, а также стиля речи, что дает возможность узнать принадлежность героя к тому или иному сословию, уровень его грамотности, его привязанность к родине и т.д. В статье сравнивая избранные места из оригинала и переведенного текста прослеживается адекватность передачи стиля речи Степана Верховенского (особенности его долгой монологической речи, употребление французских выражений), Кириллова (краткие, незаконченные предложения), Федьки (колорит народности, неграмотность).

Анализируя перевод стиля речи героев в романе «Бесы», можно сделать вывод о том, что М.К. Коджаев отнесся к каждому слову того или иного героя с большой точностью, учел каждый элемент их интонации и лексики. На азербайджанском варианте романа «Бесы» все герои говорят своим голосом и языком, своей интонацией и лексикой.

Ключевые слова: язык, стиль Достоевского, «Бесы», перевод, стиль речи, характер.

Введение

Уникальные герои Достоевского – люди, принадлежащие разным сословиям. У каждого персонажа есть свое слово, свой способ самовыражения и свой неповторимый стиль речи в зависимости от их мировоззрения, профессии,

положения в обществе. Качества, придающие разнообразность характерам, служат не только общей интонации и гармонии романа, но и помогают читателю понять идейное содержание произведения, оживит в воображении тот или иной образ.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

Изображению Достоевского больше всего подходит народность, свобода и образность, исходившая от диалогической речи. В художественных произведениях не все персонажи говорят на литературном языке. «Для естественности, убедительности их речи автор может внести ряд лексических, грамматических, стилистических элементов или изменений, противоречащие нормам лингвистики» [8, р. 44]. В большинстве случаев писатель, чтобы охарактеризовать характеров с нравственной стороны, или же отличить их из социального аспекта, наделяет персонажей неопытной, непоследовательной, грамматически неправильной речью. В это время в речи героя, в его предложениях опускается один из членов предложения и появляются весьма непонятные мысли, при переводе которых затрудняется переводчик. Таким образом, возникает необходимость в сглаживании речи героя, и тогда текст звучит ровным и созвучным. А в оригинальном тексте этой ровности нет. Сравнивая оригинал и переведенный текст по предложениям, мы иногда обнаруживаем, что перевод стилистически незаконченных мыслей главного героя соответствует нормам литературного языка, что следовательно приводит к искажению текста оригинала. Возникает вопрос: как быть, сохранить в тексте незаконченные мысли героя как они есть, или выровнять и отредактировать их в рамках художественного стиля? Хотя, очень нужно сохранить художественность произведения, но также важно учитывать идиостиль писателя и его непосредственное влияние на идею романа. Не следует забывать, что помимо действий героя, и его речь, стиль самовыражения должны соответствовать его характеру и социальному статусу.

Основная часть

Первый человек, с которым знакомимся в произведении «Бесы», - это Степан Трофимович Верховенский. Он ученый-исследователь, переводчик, писатель, учитель-педагог и воспитанник молодежи России XIX века. Из первых страниц романа ясно, что он еще не подтвердил себя ни в одной из перечисленных профессий. И потому его речь в большинстве случаев прерывистая и незаконченная. Например, "Нельзя ... честнее... долг... я умру, если не признаюсь ей во всем, во всем!" [1, р. 13]. Фраза остается такой же и в переводе: "Olmaz... daha səmimi... borc... əgər mən onun qarşısında hər şeyi, hər şeyi etiraf etməsəm, ölləm!" [6, р. 24]. Здесь Достоевский указывает, что мысли героя длинные и запутанные, непредсказуемые и неоформленные, что не было упущено переводчиком. Переводчик сблизил мысль "я

умру" к народному высказыванию ("мәп... öllәм").

Речь Степана Трофимовича также состоит из незаконченных сложных предложений. Он любит говорить долго и его речь напоминает нескончаемый монолог. Коджаев в своей статье "Eybəcərliyin iflasi" («Поражение уродства»), написанной в качестве предисловия к азербайджанскому варианту произведения, сделал следующие заметки: "в романе «Бесы» есть сцены, которые могут надоедать читателю своей длиной и монотонностью, например, монологи Степана Трофимовича. Однако эта делается самим Достоевским для определенных целей. Степан Трофимович не может говорить коротко, лаконично и осмысленно. И это вытекает из его характера, от беспочвенности этого характера» [7, р. 9].

В России XIX века склонность аристократов к французскому языку нашло свое яркое олицетворение в речи Степана Трофимовича, так как, в каждой своей реплике он использует французское слово и фразу: «Друг мой ... через две недели, под величайшим секретом, - друг мой, я открыл ужасную для меня... новость: je suis un простой приживальщик, et rien de plus! Mais r-rien de plus! » [1, р. 38]. Или: «Милая, vous comprendrez apres, а теперь это очень волнует меня... Vous comprendrez apres... Nous comprendrons ensemble» [1, 499]. Степан Верховенский был настолько увлечен французским, что, переводя на этот язык русские пословицы и поговорки, вводил их в свою речь. Например, Достоевский пишет: "Фраза "dans le pays de Makar et de ses veaux" означала: "куда Макара телят не гонял". Степан Трофимович нарочно глупейшим образом переводил иногда русские пословицы и коренные поговорки на французский язык, без сомнения умея и понять, и переводить лучше; но это он делывал из особого рода шик и находил его остроумным" [1, р. 25]. Этот отрывок в переводе звучит так: "Dans le pays de Makar et de ses veaux" cümləsi o deməkdir ki, lap uzağa, gedər gəlməzə. Stepan Trofimoviç bəzən rus atalar sözlərini bilərəkdən axmaq tərzdə fransız dilinə tərcümə edirdi, halbuki daha yaxşı anlaya və tərcümə edə bilərdi; amma o, bunu xüsusi dəbdəbə üçün edir və bunu ağıllı hərəkət sayırdı" [6, р. 38]. Читатель, ознакомившись с этим отрывком на переводимом языке, чувствует, что он сознательно и нарочно придавал своей речи необыкновенность и думал, что тем самым его истинная благообразность и ценность как человека будет еще больше очевидной.

Если исключить французские слова из речи Степана Верховенского, ничего не будет понятным. Речь Степана Верховенского: незаконченные мысли, сложные предложения и иностранные слова в тексте перевода абсолютно

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

сохранены. Но в азербайджанской версии романа все французские слова, фразы и предложения в речи героя выделены курсивом, в отличие от оригинала. Конечно, это технический аспект работы и один из вопросов, которого можно легко устронить в будущих изданиях.

В романе привлекает внимание диалог Степана Верховенского с летописцем, то есть с хроникером, а точнее здесь происходит не диалогическая, а монологическая речь. «Сцены Степана Трофимовича и летописца – это, по сути, театр одного актера и одного зрителя. Это, именно, театр, Степан Трофимович – актер, а хроникер – его зритель. Степан Трофимович, в прямом смысле этого слова, не живет, а играет роль. Он постоянно занят актерством. Все его разговоры и речи имеют одну тему – это он сам. Он играет свою роль, в так называемой, жизненной сцене» [7, p. 9].

В романе больше всех со Степаном Трофимовичем общается Варвара Петровна, которая много лет прожила с ним и лучше всех знает его характер, хотя ей тоже не хватает терпения выслушать его до конца. Речь Степана Верховенского настолько длинна, что раздражает человека: «Сократите, если можете, Степан Трофимович» [1, p. 48], - обращается к нему Варвара Петровна. Или же: “ Довольно, Степан Трофимович, дайте покой; измучилась. Успеем наговориться... Ну довольно, довольно, устала! Можно же, наконец, пощадить человека!” [1, p. 52]. Из наглядных примеров («Stepan Trofimoviç, mümkünsə qısa eyləyin» [6, p. 66]. «Kifayətdir, Stepan Trofimoviç, məni rahat buraxın; lap əldən düşdüm. Söhbət etməyə vaxtımız olacaq... Hə, kifayətdir, kifayətdir, yoruldu! Adama, nəhayət ki, rəhm etmək lazımdır!» [6, p. 71-72] выясняется, что переводчик передал эти ремарки и реплики на азербайджанский язык полноценно.

Одним из героев романа «Бесы», отличающийся со своей речью является Алексей Нилич Кириллов. В противовес речи Степана Верховенского, речь Кириллова коротка и лаконична. Рассмотрим пример: “Вы уже здесь? Это хорошо. Входите” [1, p. 319]. Читаем на азербайджанском: “Siz artıq buradasınız? Bu, yaxşı oldu. Keçin” [6, p. 409]. Лаконичность речи также отражен в переводе. Писатель сразу же после изображения портрета Кириллова сообщает о его речи. Достоевский характеризует речь героя следующим образом: “Он казался несколько задумчивым и рассеянным, говорил отрывисто и как-то не грамматически, как-то странно переставлял слова и путался, если приходилось составить фразу подлиннее” [1, p. 75]. В переводе Коджаева читаем: “O, bir az fikirlə və dalğın görünürdü, kəsik-kəsik və qrammatik qaydalara riayət etmədən danışır; uzun cümlə quranda sözlərin yerini necəsə dəyişdirir və çaşırdı” [6, p. 100-101]. Переводчик

смог частично сохранить структуру и синтаксис предложения писателя, сохранив, создающее неопределенное значение повторяющегося местоимение «как-то» в форме придаточного предложения.

Несовершенная и деффектная речь образованного инженера резко отличается от речи других героев. К. Умудова, подробно и всесторонне исследовавшая в своей кандидатской диссертации характер Кириллова, объясняет это так: «Язык Кириллова говорит о его глубокой трансформации, прошедшей в его внутреннем мире» (10, p. 256). Поклонникам Федора Достоевского Кириллов запомнился больше всего одной репликой. Вспомним эти известные слова: “А я думал, вы чаю... Я чай люблю... ночью; много хожу и пью; до рассвета. За границей чай ночью неудобно.” [1, p. 91-92]. Daha sonra: “Всегда; давно. Я мало ем; все чай” [1, p. 92]. Найдем цитаты на языке переведенного текста: “Elə bilirdim siz çay... Mən çay sevirməm... gecə; çoxlu gəzir və içirəm; düz sübhədən. Xaricdə gecə çay ləzzət eləmir” [6, p. 121]. “Həmişə və çoxdan. Az ueyirəm; elə hey çay içirəm” [6, p. 121]. Речь была представлена азербайджаноязычному читателю в отредактированной и отточенной форме. Если слово «неудобно» использовалось бы как «rahat deyil», то оригинальность речи была сохранена, а фраза «ləzzət eləmir» нейтрализует ее. «Все чай» звучит на языке Кириллова, как мысль назывная и не завершенная, точнее, не имеющая сказуемого из основных членов предложения. А в азербайджанской версии сообщения добавляется глагол «içirəm» и тем самым предложение приобретает завершенность. В таких предложениях, как «elə hey çay içirəm», «düz sübhədən» усиливаются мысли героя, благодаря словам «elə» и «düz», что приводит частичной гиперболизации первоначального текста.

Человек, которому настойчиво предлагал чай Кириллов, был повествователь. Он поражен желанием героя поговорить с ним, т.к. Кириллов избегает общения с людьми. Хроникер говорит: «Меня удивило, что он хотел разговаривать; я решил воспользоваться минутой» [1, p. 92]. Повествователь, воспользуясь минутой, старается пояснить многие существенные моменты. Из его диалога с Кирилловым о Человеке и Боге становится известным жизненная философия героя, т.е. его идеи человекобога, его претензия на место Бога. Кириллов рассказывает собеседнику, что осилит в себе чувства страха и совершит самоубийство, и это будет способствовать физической перемене в человеке, т.е. в нем самом. По его мнению, именно в этом случае человек может трансформироваться в Бога. «Чтоб человеку стать Богом, он должен преодолеть страх смерти, стать абсолютно свободным. По этому пути пошел Кириллов» [3, p. 253]. Этот отрывок

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

диалога в оригинале звучит так: «Кто победит боль и страх, тот сам станет Бог. Тогда новая жизнь, тогда новый человек, все новое... Будет Богом человек и переменится физически. И мир переменится, и дела переменятся, и мысли, и чувства» [1, p. 94]. На азербайджанском языке читаем: “Kim ki ağrıya və qorxuuya qalib gələcək, o özü Allah olacaq. Onda yeni həyat, yeni insan yaranaacaq: hər şey yeni olacaq... Dünya da dəyişəcək, işlər də, fikirlər də, bütün duyğular da” [6, p. 124]. Во втором предложении образца повторение союза «тогда» («onda») суммируется, и к простому назывному предложению с однородными членами добавляется сказуемое («yaranaacaq», «olacaq») и оно приподносится в форме сложного предложения. Основная мысль Кириллова («Будет Богом человек и переменится физически») не отражена в переводе. Важно отметить факт, что это единственная мысль, упущенная из текста романа на азербайджанском языке.

В конце диалога хроникер спрашивает Кириллова: «почему вы не так правильно по-русски говорите? Неужели за границей в пять лет разучились?» [1, p. 94]. Данная версия опровергается героем: «Разве я неправильно? ... Нет, не потому, что за границей. Я так всю жизнь говорил... мне все равно» [1, p. 94]. Речь Кириллова переведено так: «Məgər düzgün danışmıram? ... Xeyr, ona görə yox ki, xaricdə unutmuşam. Mən ömrüm boyu bu cür danışmışam... mənimçün fərqi yoxdur» [6, p. 125]. Как видно из сравнений примеров, незаконченные (неполные) предложения без сказуемого (односоставные) интерпретируются в переводе как двусоставные простые предложения. Такое преобразование речи Кириллова в тексте может сбить читателя с толку. Если он говорит по-русски правильно, то как хроникер приходит к своему выше процитированному выводу? Из приведенных цитат выясняется, что в большинстве случаев речь Кириллова изобилует названиями предметов (существительные), движение (глагол) отсутствует, а без движения не существует и жизнь. Такой стиль (вернее искаженность) речи свидетельствует о беспочвенности героя. Этот метод, использованный Достоевским, несколько сглажен в переводе, и особенность стиля речи главного героя до конца не сохранилась.

В речи Кириллова, на первый взгляд, мысль, вызывающая впечатление паразитного предложения «мне все равно», повторяется многократно, почти в каждой реплике. Для него говорит ли он правильно или нет, будет ли он Богом после того, как убьет себя или нет, будет ли наказан за самоубийства в потустороннем мире или нет и т.д. не имеет никакого значения. Кириллов горит желанием реализовать идею, которая властвует и доминирует в его разуме и мыслях. Вот почему все на свете для него

неважно. Важно, чтобы эта идея («Мне все равно», «это все равно») была адекватно выражена в соответствующих частях азербайджанского текста. Это не осталось незамеченным переводчиком.

В переводе М. Коджаева значение речи Кириллова было полностью выражено на азербайджанском языке, но иногда речевая неполнота заканчивалась там, где речь была сглажена, а вокализация уменьшена. Клиент смог частично сохранить стиль речи и частично исправить его.

В галереи героев романа «Бесы» уникальное место отведено простым русским людей. Их речь – олицетворение живого народного языка. Интересно, каковы различия речи крестьян, слуг и заключенных и как они отражены в переводе? Агаша, слуга Варвары Петровны, простая деревенская женщина. Когда госпожа повелевает ей позвать Дарью, она говорит: «Он-с не здоров-с» [1, p. 129]. Это предложение прозвучало нейтрально в переведенном варианте: «O, özünü pis hiss edir» [6, p. 169] («Она чувствует себя плохо»). Невозможно полноценно передавать колорит частицы «-с» на азербайджанский язык, поскольку нет адекватного употребления той или иной частицы, которая выразила бы уважение, приклонение и т.д. Такие, с первого взгляда не значительные, казалось бы, мелкие элементы создают русский национальный колорит речи между сословиями в России XIX в..

Один из представителей простого народа в романе – Федор Федорович Каторжный. Фамилия «Каторжный» - это, на самом деле, его прозвище. Он был в ссылке, откуда сбежал, и теперь вовлечен в грабеж, кражу, убийство и, одним словом, в зло преступного мира. Речь Федьки также имеет свои особенности, эта речь необразованного и неграмотного преступного человека. Переводчик должен сохранять «живую «неправильность» речи, если это было необходимо для целого» (5, p. 25). Например, он употребляет «Рассе» вместо «Россия», «зеньчуг» вместо «жемчуг», «лествица» вместо «лестница». Примеры показывают, что фонетические нормы были нарушены, и это невозможно отследить на азербайджанском языке. По этой причине речь героя звучит нейтрально, полностью подчиненный к литературным нормам.

Обратимся еще к одному примеру: Федор, характеризуя город, где они живут, говорит Ставрогину: «здешний город – это все равно, что черт в корзине нес, да растрес» [1, p. 206], что переводится как: «bu şəhər, sanki, şeytan səbətindən tökülmüş kimi qarışıqdır» [6, p. 263]. Судя по примеру, билингвист сумел адекватно передать значение, хотя он выбрал отчасти изобразительный метод для сохранения всего содержания, значения и смысла колорита реплики

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

Федора. В эмоциональной, простонародной речи не грамотного человека, обогащенной пословицами и поговорками – живыми единицами народного творчества, «найден созвучная адекватность, сохранился русский национальный колорит» [8, р. 124]. «Национальная специфика пронизывает всю структуру художественного произведения, является неперенным условием его высокохудожественности, поэтому сохранить, передать его при переводе трудно, но необходимо» [4, р. 9].

Заклучение

Таким образом, изучая стилистические особенности речи героев (на примере Степана Трофимовича, Алексея Кириллова, Федыки Каторжного) романа «Бесы», можно сделать вывод, что М. Коджаев тщательно продумал смысл каждого слова, каждый элемент от их интонации до действий, совершаемых героями. Это один из самых важных и ответственных условий, стоящих перед переводчиком.

Однако, обязательно нужно подчеркнуть, что не только Степан Трофимович, Кириллов, Федька

заговорили на своем языке, своими голосами и своими стилями на азербайджанском варианте романа «Бесы», но и все герои в том числе. Скрупулезный труд Заслуженного деятеля науки Азербайджана М. Коджаева, как знатока художественного наследия Достоевского, как истинного ученого-исследователя и ведущего достоевоведа Постсоветского Азербайджана, автора первого и единственного перевода романа «Бесы» показатель непогасаемого интереса к творчеству великого мастера слова. Он «своим высококвалифицированным переводом заложил начало большого пути, ведущего к открытию и постижению нового мира – творческому освоению богатого и неповторимого художественно-эстетического опыта «другой» культуры в целях воссоздания «своей» [4, р. 7]. Работа переводчика – ценный вклад как в пропаганду русской литературы в нашей республике, так и в развитие азербайджанского литературоведения.

References:

1. Dostoevskii, F. (1974). *Besy*. (p.520). Leningrad: Nauka.
2. Feizullaeva, A. (2019). *V svete komparativistiki (k izucheniiu russkoi literatury v period Nezavisimosti v Azerbaidzhane)*. (p.192). Baku: Elm ve takhsil.
3. Kodzhaev, M. (2007). *Kharaktery i idei*. (p.464). Baku: Mutardzhim.
4. Quluzade, Y. (1999). *Khudozhestvennyi perevod i literaturnye sviazi*. (p.148). Baku: Mutardzhim.
5. Rzaev, F. (2016). *Aktual'niye voprosi teorii i praktiki khudozhestvennoqo perevoda*. (p.154). Baku.
6. Dostoyevski, F. (2011). *Seçilmiş eserleri. Sheytanlar*. (p.704). Baki: Sherq-Qerb.
7. Qocayev, M. (2011). *Eybecerliyin iflasi // F. M. Dostoyevski. Seçilmiş eserleri. Şeytanlar. III cild*. (p.5-11). Baki: Sherq-Qerb.
8. Samedova, L. (2016). *Tercüme metninin redaktesi*. (p.124). Baki: Sabah.
9. Tağıyeva, M. (2020). *Fyodor Dostoyevski Azerbaycan dilinde*. (p.224). Baki: Mutarchim.
10. Umudova, K. (2016). *F.M. Dostoyevskinin "Sheytanlar" romaninin Azerbaycan diline tercumesinin semantik-uslubu problemleri // Elm ve meneviyyat zirvesi*. (pp.245-259). Baki: Mutarchim.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 30.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Alisher Shomurodovich Fazilov

Tashkent Institute of Architecture and Civil Engineering
Candidate of Technical Sciences, Associate Professor,
Tashkent, Uzbekistan

Maruf Kuchimovich Kuchimov

Tashkent Institute of Architecture and Civil Engineering
Senior Lecturer

DEVELOPMENT OF A VISUAL PROGRAMMING ALGORITHM FOR BIM-MODELS USING MODULE OF STRUCTURES BY DYNAMO MODULE

Abstract: The article discusses the issues of optimizing the process of developing an information model of buildings and introducing BIM technology. An algorithm has been developed to improve information modeling technology using visual programming in Dynamo.

Key words: Algorithm, computer modeling, information model of structures, three-dimensional visual programming.

Language: English

Citation: Fazilov, A. S., & Kuchimov, M. K. (2020). Development of a visual programming algorithm for bim-models using module of structures by dynamo module. *ISJ Theoretical & Applied Science*, 03 (83), 30-33.

Soi: <http://s-o-i.org/1.1/TAS-03-83-8> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.8>

Scopus ASCC: 2201.

Introduction

Three-dimensional computer modeling (3D) in the design and development of a 3D model of the installation and technological part of the project, as well as the release of 3D documentation from the 3D model of the project documentation and drawings are an integral part of BIM technologies.

In construction, a modern system of computer-aided design of metal structures in three-dimensional space, adapted to modern standards, is actively used. When modeling, an object is laid not only its geometry, but also the parameters corresponding to the real design, such as material, coating, standard, position number and shipping mark, with which objects the connection was made, the type of connection and so on.

After the model of the structure is built, all these data are processed and automatically reflected on the drawings, statements and specifications. This allows you to create a common project model in three-dimensional space and combine the work of departments into a single whole, ensuring a consistent

release of documentation. When checking the model, collisions (intersections) of structures with equipment and piping of the designed structures are eliminated.

Using BIM authorization tools such as Autodesk Revit® or Graphisoft ArchiCAD®, It has become common practice for users who have already made contact with BIM. Using these tools, you can create detailed BIM models. However, when the level of development of these models increases, the productivity of the modeling process begins to decline.

The development of BIM models requires more attention to the design rules of the simulated building system, so that the final result matches what needs to be done on site. For example, in masonry design, the designer uses a set of rules to do your work. Some of these rules are associated with a recurring task called stone modulation.

This task mainly consists in the manual assembly of wall components (blocks, prefabricated structures, fittings, etc.). Simulation performance in this case is

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

affected if the BIM tool used does not have the functions to effectively complete this task.

Materials and Methods

The same goes for the formwork design. This type of design also uses a set of rules and has repetitive tasks that can affect performance if performed manually.

Therefore, it is advisable to use visual programming tools to automate the design and obtain the optimal BIM model. The purpose of this article is to develop BIM-model design algorithms using visual programming language tools, in particular, Dynamo visual programming language. Dynamo is a platform that extends the standard Revit functionality and allows you to perform any calculations with the click of a button. Any engineer who designs residential buildings in Autodesk Revit knows that there are no turnkey solutions that take into account all the subtleties of the process of calculating the parameters of a residential complex. Dynamo was created to extend the core functionality of Revit and save designers time.

Tools based on VPL (Visual Programming Language) allow you to encode design rules and then process them to create 3D models. Tools such as Dynamo®, Grasshopper®, and Generative Components® are examples of applications that use this type of language.

This study aims to explore the possibility of using VPL-based tools to reduce simulation time in the production of LoD 400 BIM models. To achieve this, Autodesk Revit® and Dynamo® applications were selected.

The research was conducted in terms of limitations, capabilities and ease of use of the Dynamo® tool with an emphasis on the development of BIM LoD 400 masonry models.

Visual programming languages were developed in the 70 s and arose as a result of combining work in the field of computer graphics, programming languages and human-computer interaction

The main idea of such a language is easier to use and learn through the use of graphic artifacts, rather than a text programming language.

In text-based programming languages, users need to learn the language syntax before they can code programs. In VPL tools, logic programs are constructed using diagrams called graphs, which consist of elements called nodes.

Nodes contain encapsulated structures used by the visual programming language. When a user creates a program graph indirectly, he creates program codes that are hidden in the nodes of the graph. Using the Grasshopper® module, a graph is created on the basis of this graph, when this graph is working, three-dimensional geometry is generated from the built-in processing code in its nodes. VPL tools offer a more user-friendly interface between humans and

computers, making it easier to learn and use a programming language. VPL tools have been used in the BIM context for several years, particularly in the study of complex architectural forms and to support digital production. Sharing VPL and BIM model development tools is an interesting strategy that users should use. The three VPL tools mentioned above enable integrated work with BIM model authorization tools. Dynamo® is integrated with Autodesk Revit®, Graphisoft ArchiCAD integrates with Rhinoceros 3D and Grasshopper®. The fact that VPL is relatively easy to learn than textual programming languages is related to who will use this type of language.

The focus is on users of BIM model development tools. However, architects, engineers, and technicians do not have software development classes at their graduate courses, because this, of course, is not the subject of their release.

Based on the foregoing, a program design algorithm was developed in Dynamo. An example of using the algorithm to develop a stained-glass window is given below.

Results

BUILDING AN ALGORITHM IN DYNAMO: Stage-1.

1. Panel selection. *In the tree, select Revit-Selection-Categories. We put Node on the field and select "Stained Glass Panels" (CurtainWallPanels).*

2. The selection of panels. *Select the node "All Elements of Category". Connect 2 Nodes.*

3. View selected. *Put the "Watch" node, connect.*

4. Run the algorithm. *Click Launch and check the number of selected panels.*

5. Installation parameters. *Delete Watch. We put the SetParametrByName node. Connect the Elements-Element. We put the Code Block node (double-click LMB). Enter the parameter name in quotation marks ("Color"). We connect the parameter name to the input "ParametrName".*

6. Material selection. *To select a material, put the MaterialByName node and in front of it a Code Block with the text "Color1". We connect the Code Block to the input name, and the output Material to the input value. We start the algorithm and see the appearance of a list of elements.*

Stage- 2.

1. Counting elements. *We put the counter node List.Count from the output Elements. When the algorithm starts, we see the number of elements in the node.*

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

2. **Sampling the proportion of elements.** We put Code Block with a variable *c*, multiplied by a fraction of 0.2.

3. **Rounding a number.** We put the Round node and attach the input to the output of the variable *c*.

4. **Sample of the second share.** In the same Code Block node, put the second line with * 0.2, and copy the rounding node and attach it to the second line. Copy - Ctrl + move.

5. **Shuffle items in a list.** Create a List.Shuffle node that distributes the selected elements in a chaotic manner. Attach it to the output of the All Elements of Category node.

6. **Fetching items from a list.** We create a List.TakeItems node that selects several elements from the top of the list (in our case, from an already formed chaotic list). We connect the quantity from the rounded values of the fractions from the counter.

7. **Selecting the remaining items in the list.** Create List.DropItems, connect in the same way.

8. **Sample of the second share.** From the remaining elements, we make a selection with several elements equal to the number of elements in the second fraction. Copy the List.TakeItems node, take the list and the List.DropItems node, and the quantity from the rounded second beat.

9. **Sample third share.** The remaining list items are also selected using the List.DropItems node with the same input as in section 8. As a result, we get three lists.

Stage-3.

10. Creating a group of nodes in the algorithm.

Disconnect the Elements-Element bundle and select several nodes with the mouse. Create a group: Editing - Create a group. The group is designed for the convenience of simultaneously moving and copying multiple nodes. Move the group to the right side of the working field. We duplicate it twice by moving it with the pressed Ctrl key. Assign three colors to three groups (right button - color selection).

Joining groups to input. Rename the lines in the blocks with the names of the colors - Color1, Color2, Color3. We connect the outputs from three lists of elements to the inputs of Element. We start the algorithm. The panels in the model change randomly.

Conclusion

Designers can use Dynamo at all stages of design: when creating conceptual forms; when developing structures according to the geometry of the building specified by the architects; to form specifications. An important advantage of the developed algorithm is that the user or designer can get the necessary information from Revit and transfer it back. There is an opportunity to create new elements according to the necessary parameters: build a wall along given lines, arrange columns with a given step. Using Dynamo, you can quickly create a heat engineering calculation, calculation of interior decoration, arrangement of fixtures, connect engineering equipment, optimize the path of utility networks, calculate load-bearing structures. In addition, engineers can draw up the necessary documentation here, and form estimates. Dynamo can easily be modified to fit your needs. This is a great opportunity to leverage Revit and BIM technology.

References:

1. Grigoryeva, M. I. (2017). The use of BIM technologies in construction. *Architecture. Construction. Design*, No. 3, pp. 100 - 123.
2. Frolova, E. V. (2017). Information modeling of a building object (BIM). *Innovations*, No. 4, pp. 109 - 123.
3. Zarubin, V.N., & Astakhov, S.V. (2001). *Innovative methods of project management in construction on Learn and BIM technologies: a training manual*. (p.100). Moscow: Publishing House of the RAGS.
4. Imai, M. (2014). *Gemba Kaizen: A Way to Lower Costs and Improve Quality*. Moscow: Alpina Business Books.
5. (n.d.). *Institute for Integrated Strategic Research (ICSI)*. Website of the Institute for Integrated Strategic Research (ICSI): Retrieved from <http://www.icss.ac.ru>
6. Kirillova, D. I. (2014). Problems in the field of housing and communal services and ways to solve them. *Young scientist*, No. 14, pp. 162-163. <https://moluch.ru/archive/73/12461/>
7. Kuznetsov, A. (2009). Lean thinking. *Personnel. RU.*, No. 8. Retrieved from

Impact Factor:	ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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

<http://www.Kadrovik.ru/modules.php?op=modload>

8. (n.d.). *Logistics in Russia* [Electronic resource]. Retrieved from <http://logirus.ru>
9. Luttseva, V.A. (2006). The application of the principles of lean production in public institutions. *Methods of quality management*, No. 6, [Electronic resource]. <http://ria-stk.ru/mmj/adetail.php?ID=7596>
10. Nurimbetov, R.I., Davletov, I.H., & Hasanov, T.A. (2018). Improvement of Housing Management in Uzbekistan. *Architecture. Design Scientific and Practical Journal*, Special issue, 2018, p.122.
11. Repina, Y.A. (2016). *Lean housing and communal services* (for example, Kazan), Innovations in science: Sat. Art. by mater. LV Int. scientific-practical conf. No. 3 (52), Part I. (pp.129-134). Novosibirsk: SibAK.
12. Feklistov, O. I. (2010). Improvement and development of the innovative resource potential of housing and communal services. *Innovations*, No. 11 (145).

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 24.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Denis Chemezov

Vladimir Industrial College
M.Sc.Eng., Corresponding Member of International Academy of
Theoretical and Applied Sciences, Lecturer, Russian Federation
<https://orcid.org/0000-0002-2747-552X>
chemezov-da@yandex.ru

Emil Akhmetov

Vladimir Industrial College
Student, Russian Federation

Vasiliy Semenov

School №23
Teacher of chemistry, Vladimir, Russian Federation

Ilya Filippov

Vladimir Industrial College
Student, Russian Federation

Alexandr Petrenko

Vladimir Industrial College
Master of Industrial Training, Russian Federation

Alexey Kuznetsov

Vladimir Industrial College
Student, Russian Federation

Vladimir Serov

Vladimir Industrial College
Student, Russian Federation

Andrey Gradnikov

Vladimir Industrial College
Student, Russian Federation

DESTRUCTION OF THE BILLET MATERIAL DURING PLANING

Abstract: The cutting process of the steel billet with the planing cutter was simulated in the article. Nature of material destruction was described for the specified geometric parameters of the cutting tool. The values of the strain coefficients during destruction of the billet material were determined.

Key words: the model, the cutter, strain, material, destruction.

Language: English

Citation: Chemezov, D., et al. (2020). Destruction of the billet material during planing. *ISJ Theoretical & Applied Science*, 03 (83), 34-38.

Soi: <http://s-o-i.org/1.1/TAS-03-83-9> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.9>

Scopus ASCC: 2210.

Impact Factor:

ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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

Introduction

Planing is the process of machining the flat and shaped surfaces on the billet using the special cutting tool. The cutters are used as the cutting tools. The cutting part of the planing cutter is made in the form of the triangle for reducing cutting forces that occur during machining. The tool movement is straight. The planing process was researched in the works [1-10].

So as the cutting tool moves with high velocity during planing (compared to movement of the cutter during turning) then insignificant temperature loads will be distributed only in the deformed volume of the billet material. Destruction of the material layers during planing leads to strain on the resulting surfaces of the billet. Strain intensity of the processed material

can be determined by calculating the values of the strain coefficients. Let us consider nature of strain of the metal billet during planing with the cutter with the positive rake angle.

Materials and methods

The cutting process with the planing cutter was simulated in the modules of the Ansys program. The three-dimensional statement of the researched problem is presented in the Fig. 1. The conditions for modeling the planing process of the billet in the Autodyn module are presented in the table 1. The mechanical properties and the destruction parameters were set for material of the billet.

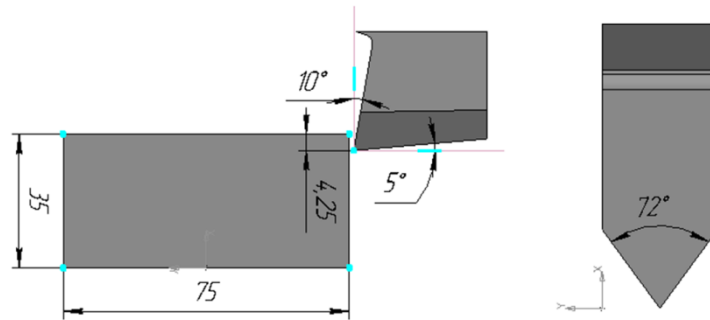


Figure 1 – The problem statement of machining the billet with the blade tool.

Table 1. The conditions for modeling the planing process.

<i>Materials</i>	
Cutter	Rigid
Billet	Structural steel
Reference density	7.85 g/cm ³
<i>EOS</i>	
Model	Linear
Bulk modulus	1.666667×10 ⁸ kPa
Reference temperature	295.149994 K
Specific heat	434 J/kg×K
<i>Strength</i>	
Model	von Mises
Shear modulus	8.1×10 ⁷ kPa
Yield stress	7.5×10 ⁵ kPa
<i>Failure</i>	
Model	Plastic strain
Plastic strain	1.01×10 ²⁰
Stochastic failure	Yes
Stochastic variance (gamma)	16
Minimum fail fraction	0.1
Distribution type	Fixed seed
<i>Erosion</i>	
Model	Geometric strain
Erosion strain	1.5
Type of geometric strain	Instantaneous
<i>Cutoffs</i>	
Maximum expansion	0.1

Impact Factor:

ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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

Minimum density factor	1.0×10 ⁻⁴
Minimum density factor (SPH)	0.2
Maximum density factor (SPH)	3
Minimum velocity	1.0×10 ⁻⁶
Maximum velocity	1.0×10 ¹⁰
Radius cutoff	0.001
Strain rate cutoff	1×10 ⁻¹⁰
<i>Solver</i>	
Hex integration	Exact
Hex hourglass control	AD standard
Viscous coefficient	0.1
Tet integration	ANP
Method for Lagrange/ALE density update	Automatic
Method for Euler strain rate calculation	Weighted
Method for Euler pressure calculation	Averaged
<i>Join</i>	
Join tolerance	0.05
<i>Interactions (Lagrange/Lagrange)</i>	
Type	Trajectory
Method	Penalty
<i>Timestep options</i>	
Safety factor	0.9
Method of calculating characteristic zone dimension	Diagonals
<i>Damping options</i>	
Quadratic viscosity	1
Linear viscosity	0.2
Hourglass damping	0.1
<i>Transport</i>	
Material velocity timestep safety factor	1
Euler-FCT	Multidimensional
ALE/Euler energy	Total
Euler	SLIC

The solid models of the cutting tool and the billet were divided into the finite elements. The minimum length of the element edge was 1.5437×10^{-2} m. The total number of the elements was 111362. Refinement that reduced the size of the finite elements in removed allowance was performed on the processed surface of

the billet model. The billet model was fixed by the side surfaces and the unprocessed flat surface. The cutter model was moved to the billet model with constant velocity. Splitting the three-dimensional models into the finite elements, setting velocity of the cutter and fixing the billet are presented in the Fig. 2.

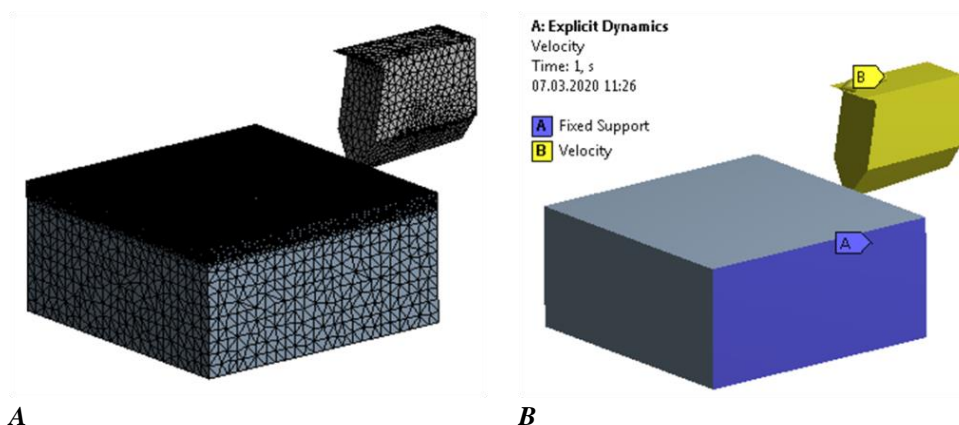


Figure 2 – The conditions for modeling the planing process: A – splitting the billet and cutter models into the finite elements, B – setting velocity of the cutter and fixing the billet.

Impact Factor:

ISRA (India) = 4.971
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

SIS (USA) = 0.912
 PIIHJ (Russia) = 0.126
 ESJI (KZ) = 8.716
 SJIF (Morocco) = 5.667

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

Results and discussion

The cutting process with the planing cutter is presented in the Fig. 3. The cutting part of the planing cutter was moved along the processed surface of the billet by 15 mm. Chips are formed on the front surface of the cutter during the chipping layers of the billet

material. It is known that material in the cutting zone is subjected to maximum strain. The strain degree of the billet material during cutting can be characterized by the values of the strain coefficients. The simulation results are presented by the strains contours of the billet material during planing (the Figs. 4-5).

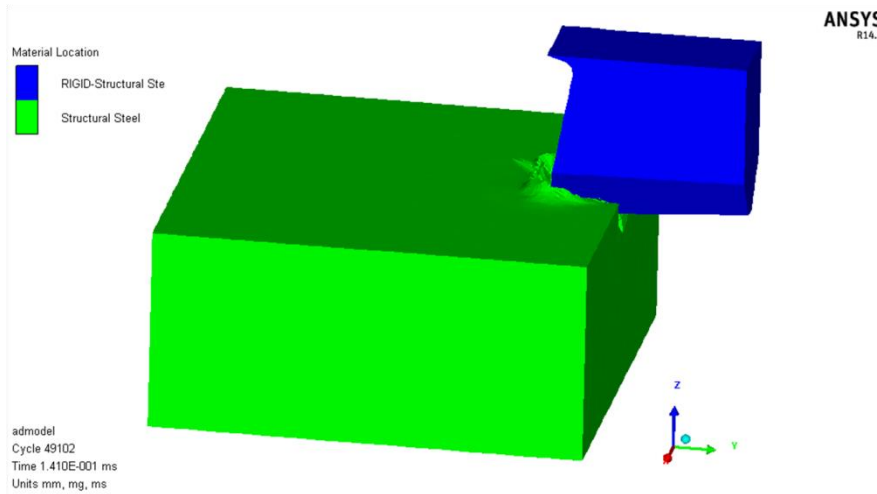


Figure 3 – The cutting process with the planing cutter.

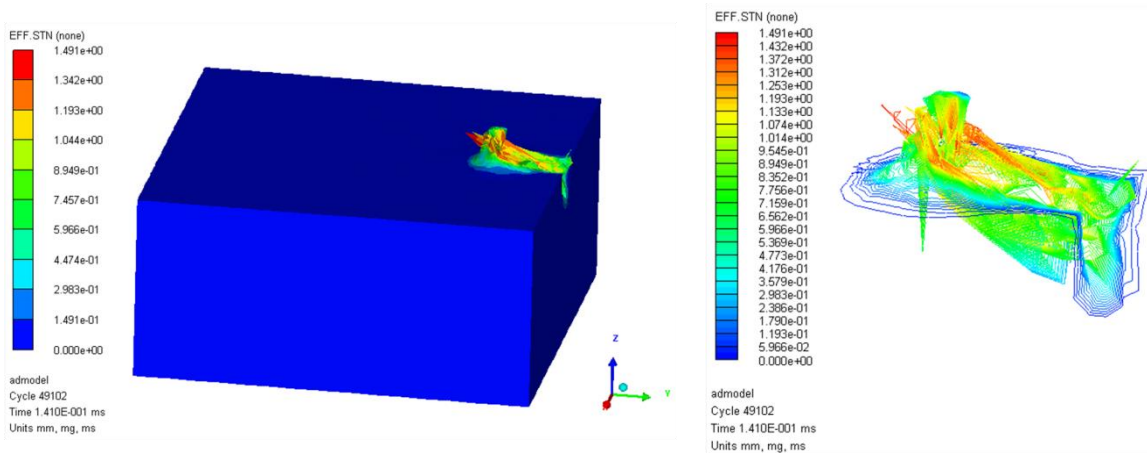


Figure 4 – The contours of effective strain of the billet material during planing.

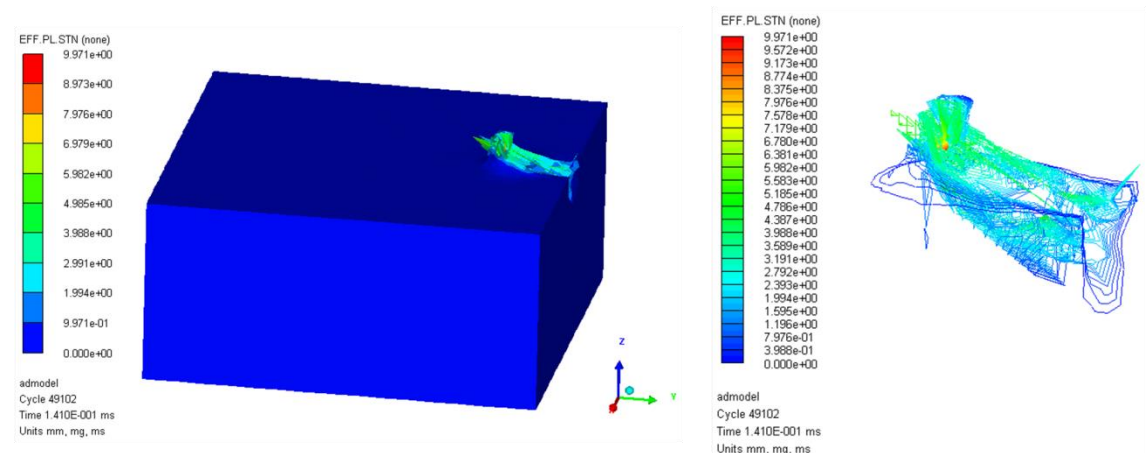


Figure 5 – The contours of effective plastic strain of the billet material during planing.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

The contours of effective strain give an idea of the volume of deformed (destroyed) material of the billet. Strain accumulates during the entire process. Metal is destroyed in the cutting zone at the coefficient of effective strain of 1.1 (with the small positive rake angle of the cutter). The processed side surfaces of the billet after moving the cutting tool are deformed 1.55 times less than material in the cutting zone. So as the cutting process is carried out during the stationary billet then the main factor of maximum strain will be the largest contact area of the front surface of the planing cutter with material.

The contours color of the coefficient of effective plastic strain indicates uniform destruction of the billet material in all layers of removed allowance. Exception is the volume of material that is deformed at the nose of the cutter. On average, the value of the coefficient of effective plastic strain varies in the range of 1.2...3.5. The coefficient of effective plastic strain of

the billet material can reach 10 in the zone of active destruction.

Conclusion

Thus, based on the results of computer modeling, the following conclusions can be drawn:

1. Planing the billet with the proposed positive rake angle of the cutting tool does not lead to active chip formation.

2. Structural steel with the specified mechanical properties is destroyed at the coefficient of effective strain of 1.1. The billet surface in contact with the nose of the cutting tool is deformed at the coefficient of effective strain of 0.89.

3. The coefficient of effective plastic strain during planing varies in the range of 1.2-10. The maximum value of the coefficient is observed in the zone of chip formation.

References:

1. Yakovtsev, A. D. (1966). *Work on planing and slotting machines*. (p.290). Moscow: Higher school.
2. Vereina, L. I. (2002). *Treatment on the planing and slotting machines: The handbook*. Technologist's library. Publisher: Mechanical Engineering, p.304.
3. Vorontsov, A. L., Sultan-Zade, N. M., & Albagachiev, A. Yu. (2008). Development of a new cutting theory. 10. *Planing and stretching. Russian Engineering Research*, №10, 71-72.
4. Vorontsov, A. L. (2008). Development of modern theory of mechanical processing of metals. Part 8. *Planing and broaching. Manufacture of hire*, №8, 3-5.
5. Esterzon, M. A. (2007). The revival of planing. *The Journal of Metalworking «Chip»*, №1, 34-40.
6. Durov, D. S., & Rybinskaya, T. A. (2008). Modeling of the process of planing the part. *Izvestiya SFedU. Engineering Sciences*, 1 (78), 202-203.
7. Katunin, A. V. (2008). Decreasing of the vibrations by planing. *Izvestia Orel State Technical University*, 3-7 (271), 24-29.
8. Nikonov, A. A., & Kameneva, A. L. (2016). *Features of planing the grooves with the figurine tool in long pipes*. Problems and prospects of mechanical engineering development, 177-183.
9. Smaylovskaya, M. S., & Gatovskiy, M. B. (2011). Multipass planing with a controlled movement of the cutter. *Rhythm: Repair. Innovations. Technologies. Modernization*, 10 (68), 22-23.
10. Chemodanov, A. N., Boyarsky, M. V., Gainullin, Ren. Kh., & Gainullin, Rish. Kh. (2011). To the question on accuracy of woodcutting force definition at longitudinal planing. *Bulletin of the Mari State Technical University*. Series: Forest. Ecology. Nature management, №2, 61-67.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 26.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Saodat Toxirovna Toshaliyeva
Termez State University
PhD student, Uzbekistan
saodattoshaliyeva77@mail.ru

THE CONCEPT OF «BUSINESS POTENTIAL»: ESSENCE, ECONOMIC SIGNIFICANCE

Abstract: This article discusses existing approaches to entrepreneurial potential. The term entrepreneurial potential is analyzed by the author, on the basis of which he formulates an integrated definition of the studied concept, takes an attempt to apply a systematic approach to solving the problem.

Key words: entrepreneurship, entrepreneur, innovation, entrepreneurial potential, entrepreneurial activity, opportunities, risk, economic growth, business.

Language: English

Citation: Toshaliyeva, S. T. (2020). The concept of «Business potential»: essence, economic significance. *ISJ Theoretical & Applied Science*, 03 (83), 39-42.

Soi: <http://s-o-i.org/1.1/TAS-03-83-10> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.10>

Scopus ASCC: 2000.

Introduction

The emergence of various forms of ownership in the economy, development of small business and private entrepreneurship has been identified as a priority of the economic policy of the country since the early days of independence.

The essence of the Decree of the President of the Republic of Uzbekistan “On the Strategy of Action for the Further Development of the Republic of Uzbekistan” also envisages the acceleration of socio-economic development and liberalization of the economy, further development of entrepreneurship [15]. One of the most important objectives of the Strategy is to continue institutional and structural reforms aimed at reducing the government's involvement in the economy, protecting its private property and strengthening its prestige, and stimulating the development of small business and private entrepreneurship.

Entrepreneurship, as a type of activity, implies that entrepreneurs have a certain way of thinking, a special style and type of economic behavior, expressed in a creative attitude to the matter, free manifestation of initiative, a constant desire for innovation, the search for innovative solutions and opportunities, expanding the scope and scope of

activities and, which is especially important, constant readiness for risk and finding ways to overcome it.

In economically developed and developing countries, entrepreneurship is recognized as the driving force of the economy, and the degree of its development depends on the formation and implementation of entrepreneurial potential. Being a kind of labor potential, it has specific features, determined both by the nature of a particular type of entrepreneurial activity, and by the characteristics of a particular economic system. Entrepreneurial potential is a complex economic category, the study of which is extremely important in terms of assessing the reserves of entrepreneurship development. The latter, in turn, is the result of the realization of the potential under consideration, a source of economic growth, and the strengthening of the national economic system as a whole.

Literature Review

Entrepreneurial potential of innovations, role implementation form functions, the final product of economic creativity, etc. At the beginning of the 18th century, R. Cantillon and his followers J. Thünen, G. Mangoldt, and F. Knight singled out risk ability as one of the elements of entrepreneurial potential. J. Schumpeter considered innovation, creativity as the

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

leading ability of an entrepreneur. L. Mises, F. Hayek, I. Kirtsner focused on such individual psychological characteristics of the entrepreneur as managerial abilities, independence in choosing and decision making, the ability to respond to changes in economic and social situation [1]. Leading economists of the country Gulyamov SS [13], Hodiyeve B.Yu., Kasimova MS [14] Other scientific and theoretical works and theoretical and practical aspects of business development were analyzed in detail.

Stepanov A. Ya. and Ivanov N. V. considering the entrepreneurial potential of the organization, understand it as "the combined capabilities of the enterprise to determine, shape and maximize the needs of consumers in goods and services in the process of optimal interaction with the environment and rational use of resources" [10]. The most comprehensive assessment of entrepreneurial potential is given by P.V. Zhuravlev [6], which includes its structure are elements such as professional knowledge, innate and acquired abilities, innovative potential, as well as extra-functional qualifications. To the memory of Cheplyaeva I.E. entrepreneurial potential - an economic category, "representing a socially determined set of opportunities and abilities for organization and implementation entrepreneurial activity by its carriers" [12].

Tikhonova N.E. and Chepurenko A.Yu. define entrepreneurial potential as "the totality of all individuals ready for occupation entrepreneurial activity" [11]. M.V. Grachev believes that "entrepreneurial potential is a combination of orientation to achieve success, personal and collective responsibility, freedom of expression and creativity" [4]. Thus, the entrepreneurial potential is identified by the authors, first of all, with a person as his carrier. As a result, the interpretation of the concept under consideration is limited, as a rule, to the structural level and subject of disciplinary research. At the same time, the concept under study, as we believe, is much broader. Indeed, the formation and realization of entrepreneurial potential is impossible to inhuman. However, man, existing in a real socio-economic reality cannot realize their entrepreneurial abilities without an appropriate educational level, resource, infrastructural, legal and other support, i.e., without adequate conditions. Moreover, the creation of the latter requires compliance with the principle of consistency, based on the multilevelness of the national economy, and therefore the concept of entrepreneurial potential is multilevel. Therefore, in our opinion, the above definitions need further determination. To this end, we analyze the concepts of "entrepreneurship" and "potential" and formulate on this basis an integrated definition of entrepreneurial potential.

Analysis and Results

The essence and content invested in the concept "entrepreneurship" in the development of economic theory changed and ordered. It is believed that A. Smith was one of those who first became involved in entrepreneurship. However, another ten years before him, these problems seriously R. Cantillon was interested, formulating the thesis according to which the difference between supply and demand in the market makes it possible individual market entities to buy goods cheaper and selling them more expensive. It was he who called these market entities "entrepreneurs," that is, in translation from French, "intermediaries." [3] There is no clear definition of entrepreneurship in modern economic literature. As a rule, in most cases, its essence is replaced by the goal of entrepreneurial activity, i.e., maximizing profits. However, as suggested by G. Bagiyev and Asaul A.N., this definition cannot be considered complete. "Most practitioners and researchers focus on making a profit, seeing it as the ultimate goal of entrepreneurship. However, entrepreneurship has as its ultimate goal not so much profit as the continuity of the reproduction process associated with the reproduction of demand and the satisfaction of constantly changing, constantly increasing needs of an individual or a social group, society as a whole. In this regard, entrepreneurship is more correctly defined as a process of continuous search for changes in needs, end-user demand for products and services, satisfying this need by organizing production, marketing, marketing, logistics, management, focused on the best innovations that bring maximum productivity in each of stages of the reproduction process" [1]. Thus, the authors focus on the consumer and his needs, the satisfaction of which can bring maximum profit. In our opinion, such a definition is most consistent with modern socio-economic reality, reflecting the principle of the social orientation of market relations. Moreover, this approach does not at all deny the risk, initiative and innovativeness inherent in entrepreneurship.

As Stepanov A.Ya. and Ivanov N.V., and does not exist unambiguous definition of the term "potential" [8]. At all, the potential comes from the Latin Potentialis - powerful, literally powerful [11]. In various sources, potential is defined as power, strength [5] or as "means, stocks, sources available and able to be mobilized, put into action, used to achieve certain goals, implement the plan; solving a problem; the possibilities of an individual, society, state in a certain area" [2]. In other words, the potential characterizes real (and not theoretical) possibilities that currently cannot be implemented due to various reasons or lack of relevant conditions. For entrepreneurial activity as such conditions favors the business environment. Recall that the latter should be understood as "the prevailing in the country (region, municipality) favorable socio-economic, political, civil law situation that provides economic freedom for capable

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

citizens to engage in entrepreneurial activities aimed at meeting the needs of all subjects of a market economy" [7].

Hence, the business environment, in our opinion, can be represented as a reflection of the totality of the real conditions and opportunities for doing business that are already implemented today. In our opinion, the entrepreneurial potential should be considered as a combination of real business opportunities that can be realized through providing a favorable entrepreneurial climate [8]. Note that by "real" we mean those economic, social, legal and other conditions in which entrepreneurship is currently functioning and developing. In this sense, speaking of entrepreneurial potential, we are talking about the current resource, infrastructural and other support, its more efficient use, real people with relevant personal characteristics, ready to become subjects of the activity in question, but not able to do it by virtue of financial and other barriers, adverse conditions created [9]. From this, on the one hand, we can conclude that the "entrepreneurial potential" is logically regarded as a concept similar to the concept of "entrepreneurial resource", which means "the ability to efficiently organize economic resources for carrying out economic activities." On the other hand, the entrepreneurial potential, in addition to the efficient use of resources, also includes the totality of opportunities to do this, and therefore we consider this concept more complex and voluminous.

Conclusions and Suggestions

1. The formation of entrepreneurial potential is the most important factor in the development of the

business sphere, and entrepreneurial potential is its key element. Business sphere also includes the entrepreneurial environment as a condition for the realization of entrepreneurial potential and entrepreneurial activity.

2. To determine the nature and structure of entrepreneurial potential, we propose a multi-level approach, according to which entrepreneurial potential is necessary considered as a system with complex hierarchical and socio-economic structures.

3. To date, there is no single methodology, and also scorecards for assessing entrepreneurial potential. weve consider it appropriate to use the three-component method assessments involving the inclusion in the system of indicators of such factor variables as a socio-economic state subject, socio-economic aging of the subject and its economic performance.

4. In order to improve the qualitative and quantitative characteristics human component of entrepreneurial potential, and also ensuring a positive perception of entrepreneurial potential.

So, the analysis allows us to conclude that entrepreneurial potential must be seen as a multi-level system of resources and real business opportunities that can be realized through risky, innovative activities and the organization of favorable business environment in order to ensure socio-economic the effectiveness of the functioning of the business sector.

References:

1. Asaul, A. (2008). *Patterns and trends in the development of modern entrepreneurship*. (p.280). Moscow: ANO "IPEV".
2. Bagiev, G.L., & Asaul, A.N. (n.d.). *Organization of entrepreneurial activity: The content of entrepreneurial activity*. Retrieved from http://www.aup.ru/books/m72/1_1.html
3. Vasyukova, I.A. (2005). *Dictionary of foreign words*. (p.992). Moscow: Astrel; AST: Transitbook.
4. Grachev, M.V. (1998). *Innovative Economics: Monograph P.V.Zhuravlev. Personnel Management in Entrepreneurial Organizations / P.V.Zhuravlev*. (p.224). Moscow: Russian Academy of Economics.
5. Grachev, M.V. (1993). Entrepreneur in the modern economy. *Society and Economics*, No. 4, pp.28–40.
6. Zhuravlev, P.V. (1998). *Human Resource Management in Entrepreneurship organizations*. (p.224). Moscow: Russian Academy of Economics.
7. Lapusta, M.G. (2000). *Entrepreneurship*. (p.448) Moscow: INFRA-M.
8. Likhanos, E.V., & Baidakov, A.N. (2011). *Entrepreneurial potential. Formation entrepreneurial potential as a factor in the development of the business sphere*. (p.178). LAP LAMBERT Academic Publishing GmbH & CO. KG.

Impact Factor:	ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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

9. Likhanos, E.V. (2010). The resource base of entrepreneurial potential region. *Economic vector of the region StGAU*, No. 1 (5), pp. 48-53.
10. Stepanov, A.Ya., & Ivanov, N.V. (n.d.). Category "potential" in the economy. Encyclopedia of Marketing. Retrieved from <http://www.marketing.spb.ru/read/article/a66.html>
11. Chepurensko, A.Yu. (2004). *Small business in a social context*. (p.480). Moscow: Nauka.
12. Cheplyaeva, I.Ye. (1999). *Entrepreneurial potential: Problems formation and use in the Russian economy*: dis. ... cand. econ. Sciences: 08.00.07. (p.168). Saratov.
13. Gulyamov, S.S. (2008). *Entrepreneurship and small business*. (p.365). Tashkent.
14. Kasymova, M.S., et al. (2003). *Small Business Management*. (p.253). Tashkent.
15. (2017). Decree of the President of the Republic of Uzbekistan "On the Strategy of Action for the Further Development of the Republic of Uzbekistan". "People's Word" G//// 08.02.2017 y. No. 28.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 26.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Ch.B. Normurodov

Termez state University
Ph. D., head of the Department of Applied mathematics,
(+99891) 577-93-16
normchnor2016@umail.uz

A.X. Toyirov

Termez state University
doctoral student of the Department of Applied mathematics and computer science
(+99897) 242-31-50
akbartoyirov@gmail.com

Sh.M. Yuldashev

Termez state University
doctoral student of the Department of Applied mathematics and computer science
(+99894) 512-48-36
shamsiddin4836@gmail.com

NUMERICAL MODELING OF NONLINEAR WAVE SYSTEMS BY THE SPECTRAL-GRID METHOD

Abstract: Numerical methods are increasingly used for the mathematical modeling of nonlinear wave systems. At the same time, their application to the solution of evolutionary problems with large gradients, described by non-stationary partial differential equations, is subject to serious difficulties. They are associated mainly with the presence of a small parameter with the oldest derivative and, as a consequence, the appearance in the solution of regions of strong spatial inhomogeneity. Therefore, the requirements imposed on the approximation property of numerical methods increase sharply. To solve these systems, spectral methods were mainly used. In this paper, the spectral-grid method is used to numerically simulate nonlinear wave systems. In the spectral-grid method, the interval of integration over the spatial variable is divided into a grid, in the grid elements the approximate solution is approximated with the help of a linear combination of a different number of series in Chebyshev polynomials of the first kind. Among the orthogonal polynomials, only Chebyshev polynomials have a minimax property, ie for these polynomials the maximum deviation from the required solution is minimal. In addition, for computational application of Chebyshev polynomials there are convenient recurrence formulas. With the help of these formulas it is easy to calculate the values of polynomials and their derivatives of the required order. When applying the spectral-grid method, the internal nodes of the introduced grid are subject to the continuity requirements of the approximate solution and its derivatives up to $(m-1)$ -th order, where m is the order of the highest derivative of the differential equation. As a result of approximation of the basic differential equation, initial-boundary conditions and continuity conditions by a spectral-grid method, a system of algebraic equations is obtained.

The spectral - grid method is applied to numerical modeling of initial - boundary value problems for heat conduction equations and nonlinear evolution equations. The numerical calculations performed show the high combining efficiency of the spectral-grid method.

Key words: mathematical modeling, nonlinear wave systems, spectral - grid method, evolution problems, interval of integration, approximation grid, Chebyshev polynomials of the first kind, algebraic system, approximate solution, efficiency, numerical results.

Language: Russian

Impact Factor:

ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	РИИЦ (Russia) = 0.126	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

Citation: Normurodov, C. B., Toyirov, A. X., & Yuldashev, S. M. (2020). Numerical modeling of nonlinear wave systems by the spectral-grid method. *ISJ Theoretical & Applied Science*, 03 (83), 43-54.

Soi: <http://s-o-i.org/1.1/TAS-03-83-11> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.11>

Scopus ASCC: 2604.

ЧИСЛЕННОЕ МОДЕЛИРОВАНИЕ НЕЛИНЕЙНЫХ ВОЛНОВЫХ СИСТЕМ СПЕКТРАЛЬНО-СЕТОЧНЫМ МЕТОДОМ

Аннотация: Для математического моделирования нелинейных волновых систем все более шире применяются численные методы. В то же время их применение к решению эволюционных задач с большими градиентами, описываемых нестационарными уравнениями в частных производных наталкиваются на серьезные трудности. Они связаны, главным образом, с наличием малого параметра при старшей производной и, как следствие, появлением в решении областей сильной пространственной неоднородности. Поэтому требования, предъявляемые к аппроксимационным свойствам численных методов, резко возрастают. Для решения указанных систем в основном применялись спектральные методы. В данной работе для численного моделирования нелинейных волновых систем применяется спектрально – сеточный метод. В спектрально-сеточном методе интервал интегрирования по пространственной переменной разбивается на сетку, в элементах сетки приближенное решение аппроксимируется с помощью линейной комбинации различного числа рядов по полиномам Чебышева первого рода. Среди ортогональных полиномов только полиномы Чебышева обладают минимальным свойством, т.е для этих полиномов максимальное отклонение от искомого решения минимально. Кроме того, для вычислительного применения полиномов Чебышева имеются удобные рекуррентные формулы. С помощью этих формул можно легко вычислить значения полиномов и их производных нужного порядка. При применении спектрально – сеточного метода во внутренних узлах введённой сетки налагаются требования непрерывности приближенного решения и его производных до $(t-1)$ – го порядка, где t – порядок старшей производной дифференциального уравнения. В результате аппроксимации основного дифференциального уравнения, начально – краевых условий и условий непрерывности спектрально – сеточным методом получаются система алгебраических уравнений.

Спектрально – сеточный метод применен для численного моделирования начально – краевых задач для уравнений теплопроводности и нелинейных эволюционных уравнений. Проведенные численные расчёты показывают высокую вычислительную эффективность спектрально – сеточного метода.

Ключевые слова: математическое моделирование, нелинейные волновые системы, спектрально – сеточный метод, эволюционные задачи, интервал интегрирования, сетка аппроксимация, полиномы Чебышева первого рода, алгебраическая система, приближенное решение, эффективность, численные результаты.

Введение

УДК 532.536

Одним из наиболее характерных свойств волновых движений является то, что они продолжают существовать и после устранения причин, их вызывающих [1]. Волны обычно сохраняются в течение длительного времени и могут передавать возмущения на очень большие расстояния. В действительности, волны приобретают наиболее характерную для них форму именно после распространения на «большое» расстояние от области, в которой они «зародились». Одна из важных и трудных математических проблем связана с описанием поведения волн малой амплитуды, испытывающих слабую диссипацию на больших интервалах времени.

Среди нелинейных систем особое место занимают автоколебательные системы [2]. Автоколебательными системами являются часы, ламповые генераторы электромагнитных колебаний, паровые машины и двигатели внутреннего сгорания, словом, все реальные

системы, которые способны совершать незатухающие колебания при отсутствии периодических воздействий извне.

Численные решения начально-краевых задач гидроаэродинамики с большими градиентами наталкиваются на серьезные трудности в связи с отсутствием достаточного пространственного разрешения в областях сильной неоднородности. Эти трудности во многих случаях преодолеваются применением спектральных методов и их модификации, обладающих свойством высокоточной пространственной аппроксимации при увеличении числа базисных функций. В прикладных расчётах, однако, не всегда удается увеличить число базисных функций до необходимой величины, поскольку рост порядка матриц в получаемой алгебраической системы существенно ограничен ресурсами компьютеров.

В данной работе для преодоления указанных трудностей применяется спектрально-сеточный метод [3-7]. В зависимости от вида начальных данных или предполагаемого вида решения в интервале интегрирования вводятся сетка. Во внутренних узлах сетки налагается требование

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

непрерывности решения и его производных до $m-1$ порядка, где m – порядок дифференциального уравнения. На граничных узлах сетки ставятся соответствующие краевые условия для рассматриваемой задачи. Приближенное решение на элементах сетки представляется в виде конечных рядов по полиномам Чебышева первого рода. Полученная система уравнений с помощью линейных невырожденных преобразований сводится к двум автономным системам: линейной системе алгебраических уравнений и системе (в общем случае нелинейной) обыкновенных дифференциальных уравнений. Для решения первой системы используются стандартные методы, а для решения второй применяется явный алгоритм, развитый [16].

Поэтому применение спектрально-сеточного метода дает возможность, во-первых, распределить полиномы Чебышева по элементам с учетом поведения градиента решения и, во-вторых, привести к существенному уменьшению порядка матриц в возникающей алгебраической системы. В этом методе при заданном числе элементов сетки N для достижения требуемой точности расчётов необходимо правильно расположить узлы сетки и выбрать количество полиномов p_j на элементах сетки. Эти вопросы тесно связаны, поскольку сближая узлы сетки, можно уменьшать число полиномов на элементах и наоборот. В практических расчётах более удобно выбрать равномерную сетку, задавая разные количество полиномов p_j на каждом элементе сетки. Тогда количество необходимых полиномов зависит от относительной величины градиентов решения на том или ином элементе. Градиенты решения часто можно оценить исходя из асимптотического анализа. В задачах имеющих большие градиенты как известно [17], что вблизи стенки – в так называемом критическом слое-поведение решения определяется быстрым изменением вязких решений, вдали от стенки возмущения медленно затухают.

2. Постановка задачи

Одна из важных и трудных математических проблем связана с описанием поведения волн малой амплитуды, испытывающих слабую диссипацию на больших интервалах времени [1]. Эти ограничения не такие уже специальные, как может показаться на первый взгляд. Поскольку, как следует из наблюдений, волны действительно способны долго существовать вне источников, ограничения, связанные с предположением о малой диссипации и больших интервалах времени, являются вполне естественным. В газовой динамике, имеется слабая диссипация,

характеризуемая безразмерным параметром Re^{-1} , где Re число Рейнольдса. В этом случае величина амплитуды волны ε мала, но конечна. В случаях, представляющий наибольший интерес, соответствующее нелинейное уравнение следует рассматривать на интервалах времени порядка ε^{-1} .

Изучаемый процесс описывается уравнением Бюргерса. Рассматривается следующая начально-краевая задача

$$\frac{\partial u}{\partial t} = \frac{1}{\mu} \frac{\partial^2 u}{\partial \eta^2} - u \frac{\partial u}{\partial \eta}, a < \eta < b, \quad (1)$$

$$u(a, t) = 0, \quad (2)$$

$$u(b, t) = 0, \quad (3)$$

$$u(\eta, 0) = u_0(\eta).$$

3. Спектрально-сеточный метод

Разобьем интервал интегрирования $[a, b]$ на M различных элементов:

$$[\eta_0, \eta_1], [\eta_1, \eta_2], [\eta_2, \eta_3], \dots, [\eta_{i-1}, \eta_i], \dots, [\eta_{M-1}, \eta_M],$$

где $\eta_0 = a$, $\eta_M = b$. Для представления приближенного решения в виде рядов по полиномам Чебышева каждый элемент $[\eta_{i-1}, \eta_i]$ интервала интегрирования $[a, b]$ отображаем на интервал $[-1, 1]$ с помощью следующей замены независимой переменной

$$\eta_i = \frac{m_i}{2} + \frac{k_i}{2} y, \quad (4)$$

где $m_i = \eta_i + \eta_{i-1}$, $k_i = \eta_i - \eta_{i-1}$ – длина i -го элемента сетки и $y \in [-1, 1]$. После этого преобразования задача (1) – (3) принимают вид:

$$\frac{\partial u_i}{\partial t} = \frac{1}{\mu} \left(\frac{2}{k_i} \right)^2 \frac{\partial^2 u_i}{\partial y^2} - \frac{2}{k_i} u_i \frac{\partial u_i}{\partial y} \quad (5)$$

$$i = 1, 2, \dots, M, \quad (5)$$

$$u_i(1) = u_{i+1}(-1), \quad i = 1, 2, \dots, M-1, \quad (6)$$

$$\frac{1}{k_i} \frac{\partial u_i}{\partial y}(1) = \frac{1}{k_{i+1}} \frac{\partial u_{i+1}}{\partial y}, \quad i = 1, 2, \dots, M-1, \quad (7)$$

$$u_1(-1) = u_M(1) = 0, \quad (8)$$

$$u_i(y, 0) = u_0 \left(\frac{m_i}{2} + \frac{k_i}{2} y, 0 \right), \quad i = 1, 2, \dots, M, \quad (9)$$

где уравнения (6)–(7) требования непрерывности приближенного решения и его первой производной во внутренних узлах сетки, уравнение (8) – вид начальных данных (начальные данные для последующего положения принципиального значения не имеют и поэтому не рассматривается).

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

Приближенное решение уравнений (5) – (8) будем искать в виде рядов по полиномам Чебышева первого рода $T_n(y)$ [8-15]:

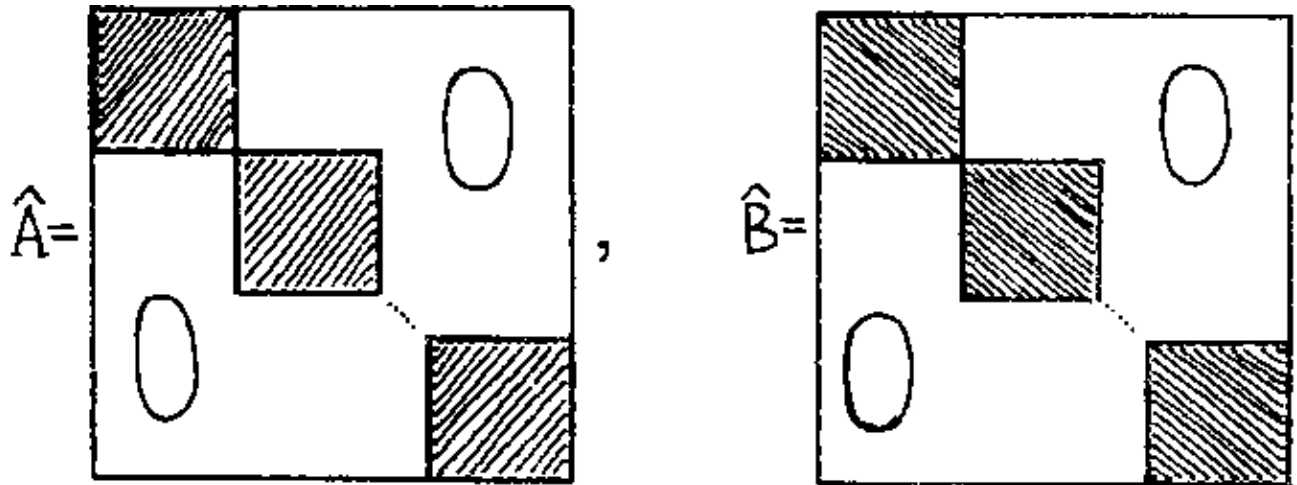
$$u_j(y) = \sum_{n=0}^N a_n^j T_n(y),$$

$$T_n(y) = \cos(n \cdot \arccos y) \quad (10)$$

где N – количество полиномов, используемых для аппроксимации на j -ом элементе. Выберем на каждом из M элементов $N+1$ дискретную точку: $y_l = -\cos(\pi l/N), l = 0, 1, \dots, N$ и запишем систему (5)–(8) и этих точках.

$$v \equiv \{u_1(y_0) \dots u_1(y_N), u_2(y_0) \dots u_2(y_N), u_3(y_0) \dots u_M(y_0) \dots u_M(y_N)\} \quad (13)$$

в \hat{A} и \hat{B} – квадратные матрицы размерности $((N+1)M) \times ((N+1)M)$, имеющие блочно-диагональную структуру:



Выведем формулы для коэффициентов матриц \hat{A} и \hat{B} .

Коэффициенты разложения a_m^j для функции $u_j(y_e)$ определяются обратным преобразованием [3]:

$$a_m^j = \frac{2}{NC_m} \sum_{l=0}^N u_j(y_l) T_m(y_l) \quad (14)$$

$m = 0, 1, \dots, N, j = 1, 2, \dots, M$

Для этого введем матричные обозначения следующим образом. Заменим в (5)–(7) с учетом (10) производные по y выражениями:

$$\frac{\partial v}{\partial y} = \hat{B}v, \quad (11)$$

$$\frac{\partial^2 v}{\partial y^2} = \hat{A}v, \quad (12)$$

где v – вектор длины $(N+1)M$ с компонентами:

$$C_0 = C_N = 2, C_m = 1, \text{ при } m \neq 0, N.$$

Для удобства дальнейшего изложения запишем формулы (10) и (14) в матричном виде:

$$v = Ta, \quad (15)$$

$$a = T^*v, \quad (16)$$

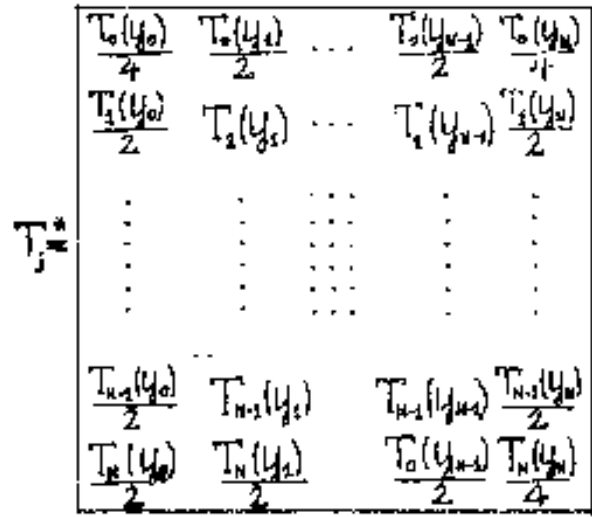
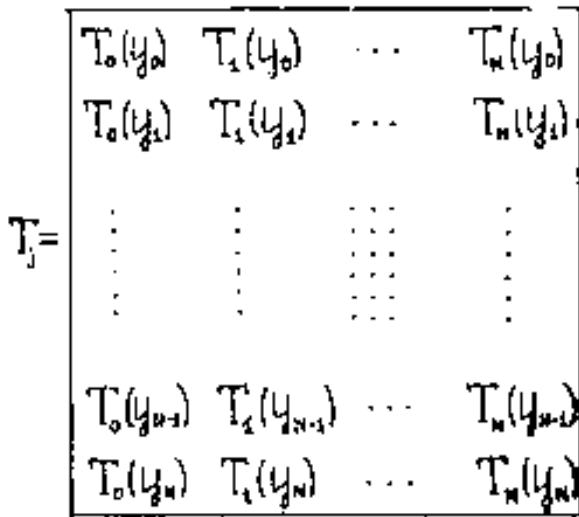
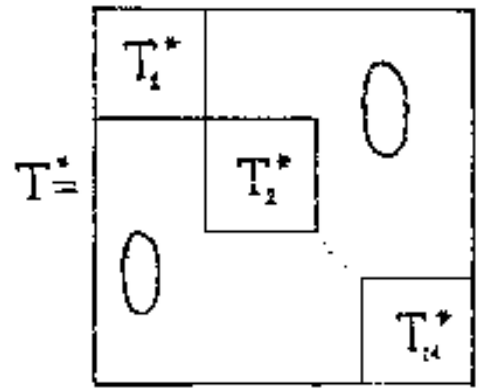
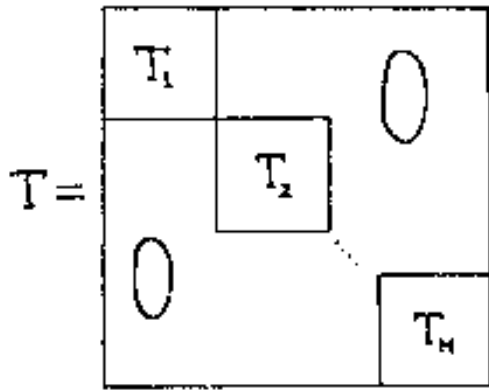
где $a = \{a_0^1, a_1^1, \dots, a_N^1, a_0^2, a_1^2, \dots, a_N^2, \dots, a_0^M, a_1^M, \dots, a_N^M\}$,
 – вектор (см. (13)), T и T^* – блочно-диагональные матрицы размерности $((N+1)M) \times ((N+1)M)$:

Impact Factor:

ISRA (India) = 4.971
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

SIS (USA) = 0.912
 PIIHC (Russia) = 0.126
 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 аналогичном виде в тех же дискретных точках y_l могут быть представлены первая и вторая пространственные производные:

$$\frac{\partial v}{\partial y} = Tb, \quad (17)$$

$$\frac{\partial^2 v}{\partial y^2} = Td, \quad (18)$$

причем, компоненты векторов b и d определяются через компоненты вектора a [1]

$$c_m b_m^j = 2 \sum_{\substack{P=m+1 \\ P \equiv m \pmod{2}}}^N P a_P^j, \quad m \geq 0, \quad j=1, \dots, M \quad (19)$$

$$c_m d_m^j = 2 \sum_{\substack{P=m+2 \\ P \equiv m \pmod{2}}}^N P(P^2 - m^2) a_P^j, \quad m \geq 0, \quad j=1, \dots, M \quad (20)$$

Запись $a \equiv b \pmod{2}$ означает, что $a - b$ делится на 2. Формулы (19) и (20) также запишем в матричном виде:

$$b = Ra, \quad (21)$$

$$d = Pa. \quad (22)$$

Подставляя (21) и (22) соответственно в (17) и (18) и учитывая (21), приходим к псевдоспектральной аппроксимации пространственных производных:

$$\frac{\partial v}{\partial y} = \hat{B}v, \quad (23)$$

$$\frac{\partial^2 v}{\partial y^2} = \hat{A}v, \quad (24)$$

где через \hat{A} и \hat{B} обозначены следующие матричные произведения размерности $((N+1)M) \times ((N+1)M)$:

$$\hat{A} = TPT^*, \quad \hat{B} = TRT^*. \quad (25)$$

Введем также матрицы \tilde{A} и \tilde{B} :

$$\tilde{A} = \frac{1}{\mu} k^2 \hat{A}, \quad \tilde{B} = k \hat{B}, \quad (26)$$

где k – вектор длины M с компонентами:

$$k \equiv \{k_1, k_2, k_3, \dots, k_{M-1}, k_M\}$$

Записывая дифференциальные уравнения (5) только во внутренних точках элементов ($l=1, \dots, N-1$), условия (6) и (7) в граничных

Impact Factor:

ISRA (India) = 4.971
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

SIS (USA) = 0.912
 ПИИЦ (Russia) = 0.126
 ESJI (KZ) = 8.716
 SJIF (Morocco) = 5.667

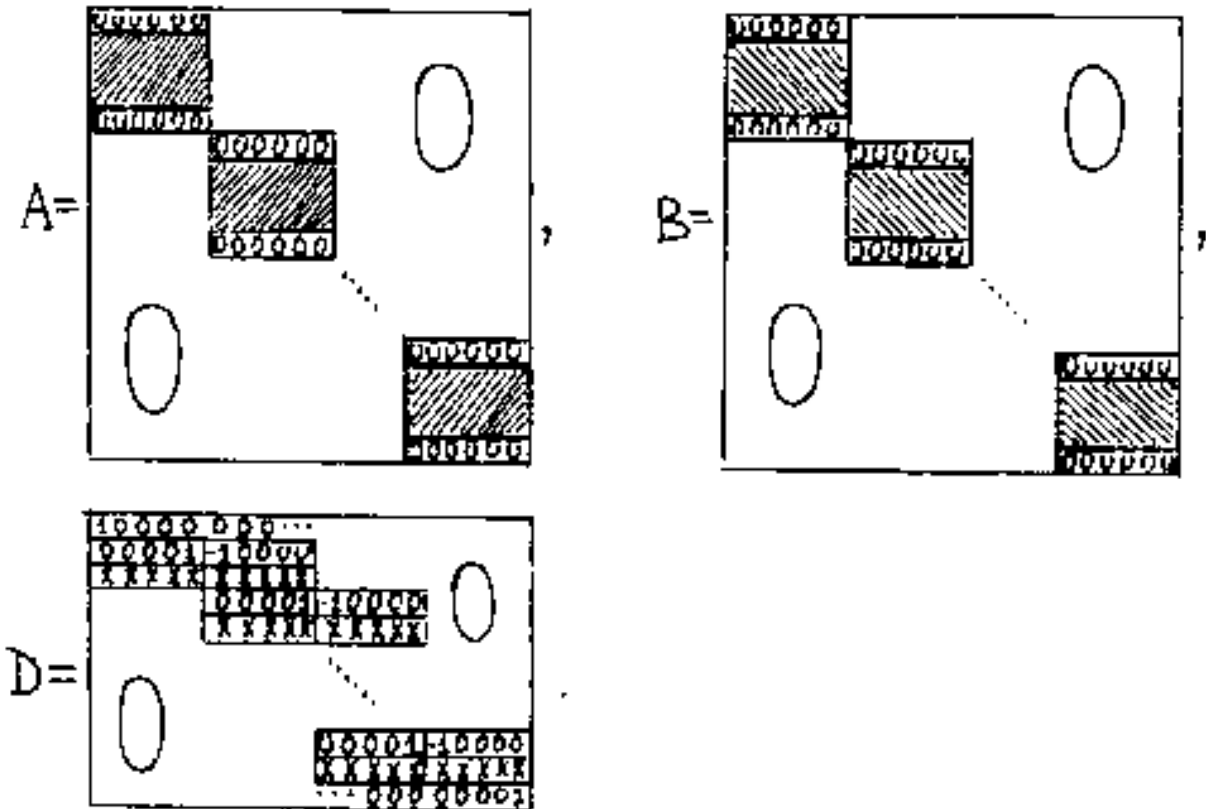
ICV (Poland) = 6.630
 PIF (India) = 1.940
 IBI (India) = 4.260
 OAJI (USA) = 0.350

точках соседних элементов, а (8) в граничных точках интервала, приходим к следующей системе:

$$\frac{dS}{dt} = Av - v \cdot Bv, \quad (27)$$

$$Dv = 0. \quad (28)$$

Здесь точка означает покомпонентное произведение двух векторов, через S обозначен вектор длины $(N+1)M$:



Коэффициенты каждого заштрихованного блока матриц A и B совпадают с соответствующими коэффициентами матриц \tilde{A} и \tilde{B} . Что касается матрицы D , то в первой и последней ее строке стоят коэффициенты условий (8), в оставшихся четных строках ($l = 2j, j = 2, \dots, M-1$) - коэффициенты уравнений (6), а в нечетных ($l = 2j-1, j = 2, \dots, M$) - коэффициенты уравнений (29) (соответствующие строки матрицы \tilde{B}).

Система (27)–(28) является "дифференциально-алгебраической" - она содержит $(N-1)M$ обыкновенных дифференциальных уравнений (26) и $2M$ линейных алгебраических условий (28) с $(N+1)M$ неизвестными. Покажем, что путем невырожденных линейных преобразований она может быть сведена к двум автономным системам уравнений: дифференциальной системе меньшего

$$S \equiv \{0, u_1(y_1) \dots u_1(y_{N-1}), 0, 0, u_2(y_1) \dots u_2(y_{N-1}), 0, 0, u_3(y_1) \dots u_3(y_{N-1}), \dots, u_M(y_1) \dots u_M(y_{N-1}), 0\}, \quad (29)$$

матрицы A , B размерности $((N+1)M) \times ((N+1)M)$ и матрица D размерности $2M \times ((N+1)M)$ имеют вид:

порядка $(N-1)M$ только во внутренних точках интервала и алгебраической системе стандартного вида $Ax = b$ для оставшихся компонент решения (в граничных точках элементов).

Обозначим через X, Y, V_j и W_j комбинации переменных в условиях (27) и будем рассматривать их как новые зависимые переменные:

$$V_j \equiv u_j(y_N) - u_{j+1}(y_1) = 0, \quad j = 1, \dots, M-1$$

$$W_j \equiv \frac{1}{K_j} \frac{\partial u_j}{\partial y}(y_N) - \frac{1}{K_{j+1}} \frac{\partial u_{j+1}}{\partial y}(y_1) = 0,$$

$$j = 1, \dots, M-1 \quad (30)$$

$$X \equiv u_1(y_0) = 0,$$

$$Y \equiv u_N(y_N) = 0,$$

тогда вектор

$$w = \{X, u_1(y_1) \dots u_1(y_{N-1}), V_1, W_1, u_2(y_1) \dots u_2(y_{N-1}), V_2, W_2, \dots, V_{M-1}, W_{M-1}, u_M(y_1) \dots u_M(y_{N-1}), Y\} \quad (31)$$

Impact Factor:

ISRA (India) = 4.971
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

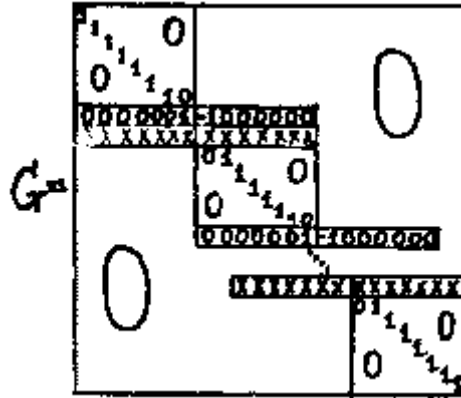
SIS (USA) = 0.912
 ПИИЦ (Russia) = 0.126
 ESJI (KZ) = 8.716
 SJIF (Morocco) = 5.667

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

совпадает с S из (30) и связан с v из (13) соотношением:

$$w = Gv. \quad (32)$$

Здесь G - невырожденная матрица размерности $((N+1)M) \times ((N+1)M)$



в которой строки с номерами $j(N+1)$ ($j=1, \dots, M-1$) суть строки матрицы D с номерами $2j$ ($j=1, \dots, M-1$), а строки с номерами $j(N+1)+1$ ($j=1, \dots, M-1$) - ее строки с номерами $2j+1$.

Введем также обозначения:

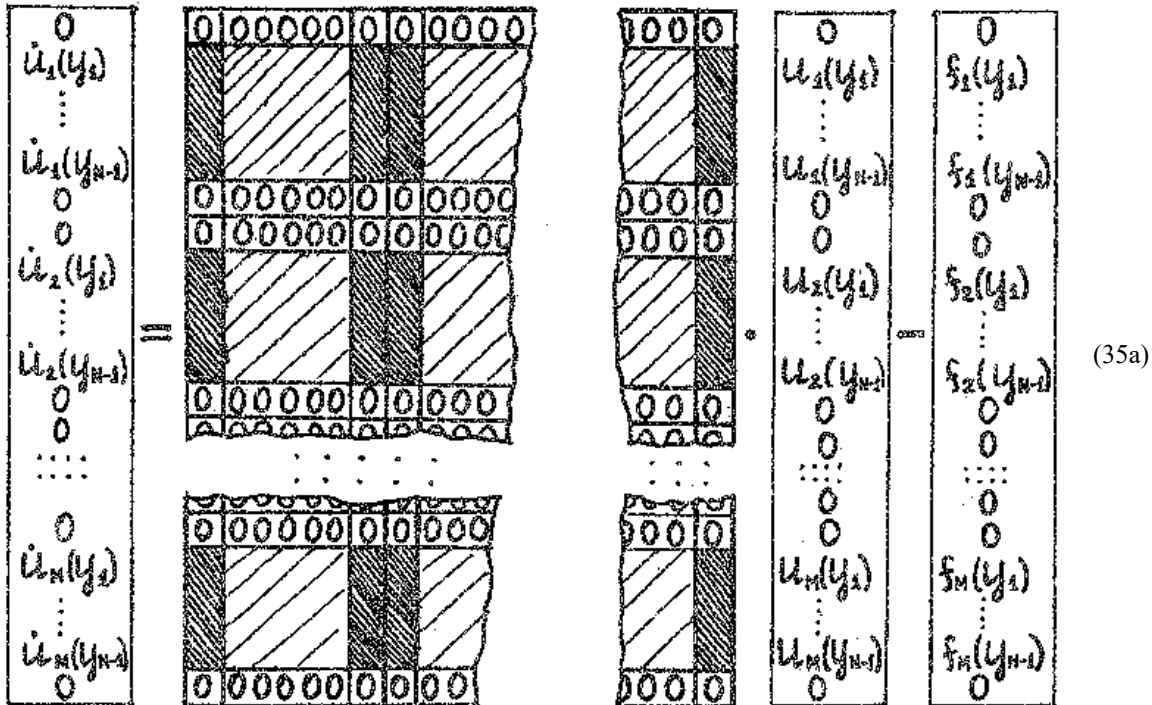
$$\hat{H} = AG^{-1}, \quad (33)$$

$$\hat{f} = v \cdot Bv, \quad (34)$$

в которых (26) принимает вид:

$$\frac{dw}{dt} = \hat{H}w - \hat{f}, \quad (35)$$

или покомпонентно:



Таким образом, из (35a) видно, что система обыкновенных дифференциальных уравнений (26) свелась к системе меньшей размерности, причем с невырожденной матрицей H (из матрицы \hat{H} исключаются все нулевые строки и все столбцы, элементы которых умножаются на соответствующие нулевые элементы вектора w ;

несколько таких столбцов выделено на рис.(35a) штриховкой):

$$\frac{dr}{dt} = Hr - f, \quad (36)$$

Здесь $H : (M(N-1)) \times (M(N-1))$, а размерность

Impact Factor:

ISRA (India) = 4.971
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

SIS (USA) = 0.912
 ПИНЦ (Russia) = 0.126
 ESJI (KZ) = 8.716
 SJIF (Morocco) = 5.667

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

$$r = \{u_1(y_1) \dots u_1(y_{N-1}), u_2(y_1) \dots u_2(y_{N-1}), \dots, u_M(y_1) \dots u_M(y_{N-1})\},$$

$$f = \{f_1(y_1) \dots f_1(y_{N-1}), f_2(y_1) \dots f_2(y_{N-1}), \dots, f_M(y_1) \dots f_M(y_{N-1})\}$$

- векторы длины $(M(N-1))$, причем, r вектор отличается от вектора v только отсутствием компонент с номерами $(j-1)N+1$ и jN , где $j=1, \dots, M$. Недостающие компоненты вектора v находятся путем решения линейной алгебраической системы (32).

Система уравнений (36) является эволюционной. Для ее численного решения в данной работе, как уже говорилось, применялся метод [16,17] Именно, для перехода на следующий временной слой использовалась явная схема вида:

$$r(t+\tau) = r(t) + RQr(t) + Rf(t),$$

$$R\varphi(t) = \frac{\tau}{12} [23\varphi(t) - 16\varphi(t-\tau) + 5\varphi(t-2\tau)], \quad (37)$$

$$Q = \frac{12(e^{H\tau} - E)}{\tau(23E - 16e^{-H\tau} + 5e^{-2H\tau})},$$

где матрица Q получена с помощью специальных преобразований системы (36) - см. [16], R - оператор схемы Адамса-Бэшфорда 3-его порядка, E - единичная матрица, τ - шаг интегрирования. Применение схемы (37) в сравнении с обычной схемой Адамса-Бэшфорда дает возможность существенно ослабить ограничения на τ , связанные с требованиями ее устойчивости.

Таким образом, последовательность вычислений следующая:

- 1) область интегрирования разбивается на некоторое число элементов M ;
- 2) одношаговым алгоритмом (например, методом Рунге-Кутты) находится решение на первых двух временных слоях: $t = \tau, t = 2\tau$;
- 3) осуществляется ряд невырожденных преобразований матрицы H с целью ослабления условия устойчивости;
- 4) по формуле (37) осуществляется переход на новый временной слой $t = \tau$;

5) компоненты вектора v в граничных точках элементов находятся из решения алгебраической системы (32).

4. Результаты расчётов

Построенный алгоритм был применен к расчетам одномерных начально-краевых задач для уравнений теплопроводности и Бюргерса.

В случае уравнения теплопроводности:

$$\frac{\partial u}{\partial t} = \frac{1}{\mu} \frac{\partial^2 u}{\partial \eta^2}, \quad (38)$$

проводилось сравнение с аналитическим решением по нормам ошибок: абсолютной:

$$\Delta = \max_j |u_r(\eta_j, t_\phi) - u_\tau(\eta_j, t_\phi)|, \quad (39)$$

и относительной:

$$\varepsilon = \frac{\Delta}{\max_j |u_r(\eta_j, t_\phi)|}, \quad (40)$$

где $u_r(\eta, t_\phi)$ и $u_\tau(\eta, t_\phi)$ - соответственно численное и аналитическое решение в фиксированный момент t_ϕ . Начальные условия в момент $t=0$ выбирались в виде гауссова распределения, нормированного на 1. Точное аналитическое решение в этом случае имеет вид:

$$u_r(\eta, t) = \sqrt{\frac{t_0}{t+t_0}} \cdot \exp\left[-\frac{\eta^2}{4R(t+t_0)}\right], \quad (41)$$

$$R = \frac{1}{\mu}, \quad \eta \in]-\infty, \infty[.$$

Постоянная t_0 определяет полуширину начального распределения:

чем меньше t_0 , тем она уже. Всюду в расчетах: $t_0 = 0.15$, $\mu = \pi \cdot 10^2$, $n = 32$, $\tau = 0.01$. Интервал интегрирования выбран $[-1, 1]$. При заданной полуширине начального распределения функция (41) в граничных точках равна нулю с точностью 10^{-12} . Поэтому уравнение (41) решалось при следующих граничных условиях:

$$u(\pm 1, t) = 0, \quad (42)$$

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	РИИЦ (Russia)	= 0.126	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

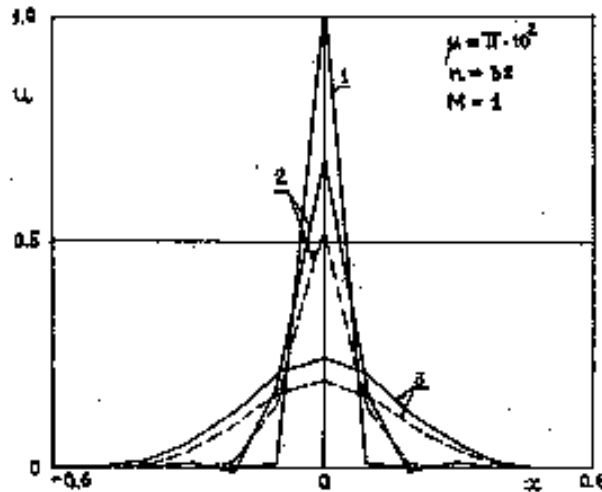


Рис.1 - эволюция численного решения

На рис.1 показана эволюция численного решения задачи (38), (42), найденного с использованием построенного метода в случае, когда область интегрирования не разбивалась на элементы ($M=1$). Сплошные кривые 1, 2, 3 соответствуют численному решению в моменты времени $t=0, 40\tau, 400\tau$. Пунктирные кривые 2, 3 соответствуют точному решению (41) в те же

моменты времени. Видно, что при использовании полиномов Чебышева узлы на интервале расположены не рационально - они сгущаются к краям интервала, в то время как в области быстрого изменения решения находится всего лишь 14% узлов. В результате точность решения оказывается низкой:

ε и Δ имеют порядок 10^{-1} (см. табл. 1).

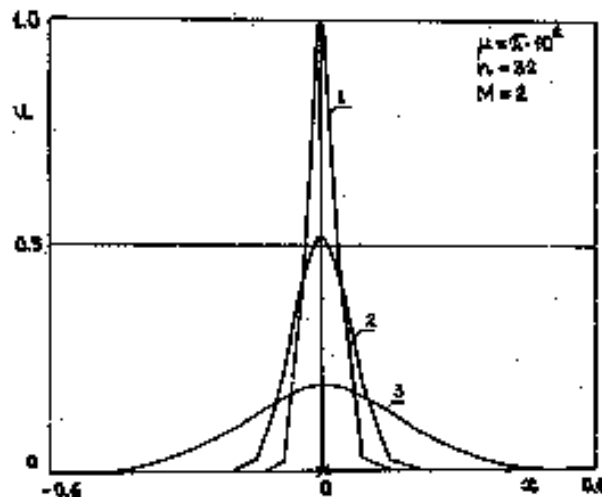


Рис.2 - эволюцию численного решения

Рис. 2 показывает эволюцию численного решения той же задачи для случая, когда область интегрирования разбивалась на 2 элемента: $[-1,0][0,1]$. Такое разбиение является более удачным – в область неоднородности попадает

около 30% узлов сетки. Точность в этом случае на 2 порядка выше (см. табл. 2), поэтому сплошные кривые (численное решение) и пунктирные (точное решение) на рис. практически неразличимы.

Impact Factor:

ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	РИИЦ (Russia) = 0.126	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

Таблица 1. Результаты расчетов

t	0.01	0.1	0.4	2.0	4.2
Δ	$2 \cdot 10^{-2}$	10^{-1}	$2 \cdot 10^{-1}$	$9 \cdot 10^{-2}$	$6 \cdot 10^{-2}$
ε	$2 \cdot 10^{-2}$	10^{-1}	$3 \cdot 10^{-1}$	$3 \cdot 10^{-1}$	$2 \cdot 10^{-1}$

Таблица 2. Результаты расчетов

t	0.01	0.1	0.4	2.0	4.2
Δ	$2 \cdot 10^{-2}$	$5 \cdot 10^{-3}$	$2 \cdot 10^{-3}$	$7 \cdot 10^{-4}$	$5 \cdot 10^{-4}$
ε	$2 \cdot 10^{-2}$	$6 \cdot 10^{-3}$	$4 \cdot 10^{-3}$	$3 \cdot 10^{-3}$	$2 \cdot 10^{-3}$

Аналогичный эффект можно наблюдать и в случае нелинейных эволюционных уравнений. Ниже рассматривается начально-краевая задача для уравнения Бюргерса:

$$\frac{\partial u}{\partial t} = \frac{1}{\mu} \frac{\partial^2 u}{\partial \eta^2} - u \frac{\partial u}{\partial \eta}, \quad (43)$$

$$u(\eta, 0) = -\sin \pi \eta, \quad (44)$$

$$u(\pm 1, t) = 0.$$

Аналитическое решение задачи (43) - (44) имеет вид отношения рядов из функций Бесселя [16]. При больших числах μ ($\mu \geq 10^2$) сравнение численного решения задачи (43)-(44) с аналитическим затруднено ввиду медленной сходимости рядов в аналитическом решении [16]. Поэтому точность вычислений оценивалась по порядку величины последних коэффициентов a_n^j в разложении (10) (порядок ошибки не превосходит указанной величины).

Конкретные вычисления были проведены при значениях параметров:

$$\mu = \pi \cdot 10^2, n = 64, \tau = 10^{-2} / 6\pi.$$

Результаты представлены на рис.3 и 4. На обоих рисунках кривые 1,2,3,4 показывают поведение численного решения, в момент времени $t = 0, 0.2, 0.5, 1.0$, а кривая 5 на рис.4 соответствует моменту $t = 2.0$. На рис.3 ($M = 1$) видно, что с ростом первой производной в точке $\eta = 0$ численное решение начинает осциллировать и при $t = 1.0$ амплитуда осцилляций вырастает настолько, что в решении не остается ни одного верного знака. В случае разбиения области интегрирования на 2 элемента: $[-1, 0][0, 1]$ (рис.4) амплитуда осцилляций при $t = 0.5$ существенно меньше - решение имеет 2 верных знака. Когда $t > 0.5$ осцилляции сглаживаются, точность решения вновь возрастает - к моменту $t = 2.0$, например, она достигает величины $\varepsilon \sim 10^{-4}$.

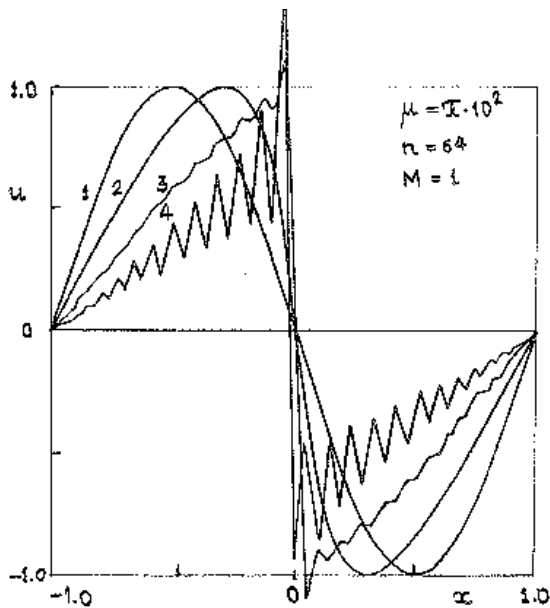


Рис.3

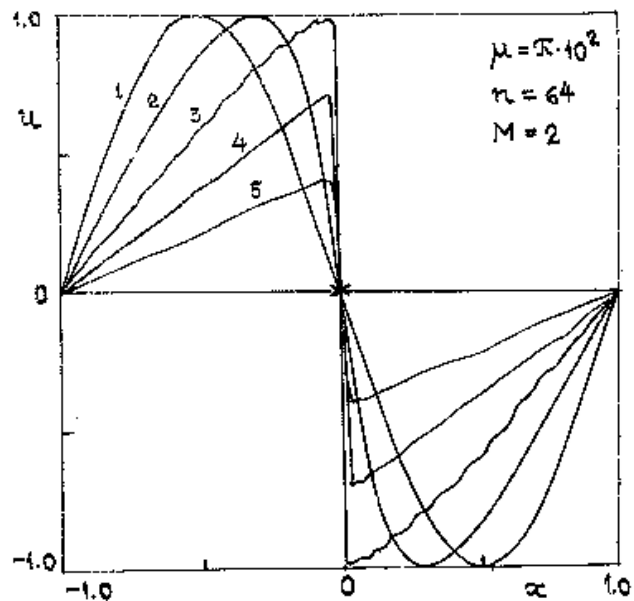


Рис.4

Impact Factor:

ISRA (India) = 4.971
 ISI (Dubai, UAE) = 0.829
 GIF (Australia) = 0.564
 JIF = 1.500

SIS (USA) = 0.912
 PИИИЦ (Russia) = 0.126
 ESJI (KZ) = 8.716
 SJIF (Morocco) = 5.667

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

На рис.5 показана эволюция численного решения для случая, когда интервал интегрирования разбит на большее число элементов ($M=8$). Значения всех параметров те же, что и в предыдущих расчетах. Длины элементов соотносятся следующим образом:

$K_1 : K_2 : K_3 : K_4 = 8 : 4 : 2 : 1$; $K_5 = K_4$, $K_6 = K_3$, $K_7 = K_2$, $K_8 = K_1$. Видно, что при всех η за исключением узкой области вблизи $\eta = 0$, где амплитуда осцилляций пренебрежимо мала, осцилляции отсутствуют для всех значений t .

Результаты расчетов, таким образом, показывают, что за чет разбиения интервала интегрирования на элементы точность численного решения в области больших градиентов может быть существенно повышена.

Представляет также определенный интерес сравнение изложенного метода с методом, описанным в [16]. Как и в данной работе в [16] использована спектрально-сеточная аппроксимация пространственных производных, причем на элементах решение аппроксимировалось рядами по полиномам Чебышева. В табл. 3 приведена величина $\max \left| \frac{\partial u}{\partial \eta} \right|$

, вычисленная обоими методами, а также точное значение этой величины, найденное из аналитического решения.

Через t_{\max} здесь обозначен момент времени, на который

Таблица 3. Результаты расчетов (здесь $\mu = 100\pi$)

Метод	интервал	$\left \frac{\partial u}{\partial \eta} \right _{\max}$	π_{\max}	$N \times M$	π
1.Спектрально-сеточный метод (данная работа)	[-1,1]	152.4	1.6038	16×4	10 ⁻² %
2.Спектрально-элементный (Patera. А.Т [9])	[-1,1]	152.0	1.6033	16×4	10 ⁻² %
3.Аналитическое решение		152.0	1.6037		

достигает максимума. Значения всех параметров в обоих случаях совпадают. Видно, что и в том и в другом случае точность расчетов имеет одинаковый порядок. Преимущество предлагаемого метода однако, заключается в

большей общности, поскольку в отличие от [18] в нем не содержится каких-либо предположений о форме решения, а следовательно не требуется введения, дополнительных параметров, определяемых в процессе расчета.

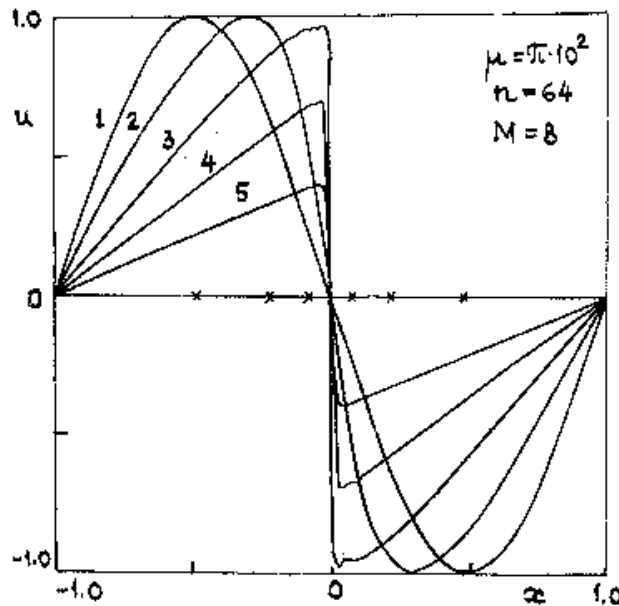


Рис. 5

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
ПИИЦ (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

5. Заключение

1. Построен спектрально-сеточный явный метод решения эволюционных задач с большими градиентами. В зависимости от местоположения областей неоднородности интервал интегрирования разбивается на конечное число элементов. На каждом из элементов используется спектральная аппроксимация конечными рядами по базисным функциям.

2. Выполнены конкретные расчеты для одномерного уравнения Бюргерса, проведено сравнение с одноэлементным псевдоспектральным методом.

3. Показано, что применение спектрально-сеточной аппроксимации дает возможность значительно повысить точность расчетов, не увеличивая общее число базисных функций.

References:

1. Lejbovicha, C., & Sibassa, A. (1977). *Nelinejnye volny*. (p.320). Moscow: Mir.
2. Butenin, N.V., Nejmark, Ju.I., & Fufaev, N.A. (1976). *Vvedenie v teoriju nelinejnyh kolebanij*. (p.384). Moscow: Nauka.
3. Narmuradov, Ch.B. (2005). Ob odnom jeffektivnom metode reshenija uravnenija Orro–Zommerfel'da. *Matematicheskoe modelirovanie*, Moskva, № 9 (17), pp. 35-42.
4. Narmuradov, Ch.B. (2007). Matematicheskoe modelirovanie gidrodinamicheskikh zadach dlja dvuhfaznyh ploskoparallelnyh techenij. *Matematicheskoe modelirovanie*, Moskva, № 6 (19), pp. 53-60.
5. Abutaliev, F.B., & Narmuradov, Ch.B. (2011). *Matematicheskoe modelirovanie problemy gidrodinamicheskoy ustojchivosti*. (p.188). Tashkent: «Fan va texnologiya».
6. Narmuradov, Ch.B. (2001). Algoritm spektral'no-setochnogo metoda dlja reshenija zadachi gidrodinamicheskoy ustojchivosti pograničnogo sloja. *Uzbekskij zhurnal «Problemy informatiki i jenergetiki»*, Tashkent, № 5-6, pp. 57-60.
7. Narmuradov, Ch.B. (2004). Ob jeffektivnom metode reshenija zadachi gidrodinamicheskoy ustojchivosti dlja dvuhfaznyh potokov. *Dokl. AN RUz.*, Tashkent, № 1, pp. 19-26.
8. Pashkovskij, S. (1983). *Vychislitel'nye primenenija mnogochlenov i rjadov Chebysheva*. Moscow: Nauka.
9. Basdevant, C., et al. (1986). Spectral and finite-difference solutions of the Burgers equation. *Computers & Fluids*, V. 14, pp. 23-41.
10. Orszag, S.A. (1971). Numerical simulation of incompressible flows within simple boundaries I. Galerkin (spectral) representations. *Stud. appl. math.*, № 4(50), pp. 293-327.
11. Orszag, S.A. (1971). Galerkin approximations to flows within slabs, spheres and cylinders. *Phys. rev. lett.*, № 18(26), pp.1100-1103.
12. Orszag, S.A. (1971). Accurate Solution of the Orr–Sommerfeld stability equation. *J. fluid mech.*, № 4(50), pp. 689-701.
13. Ku, H.G., & Hatzivramidis, D. (1985). Solutions of the two–dimensional Navier – Stokes equations by Chebyshev expansion methods. *Computers and fluids*, № 1(13), pp. 99-113.
14. Fulton, S.R., & Taylor, G.D. (1984). On the Gottlieb–Turkel time filter for Chebyshev spectral methods. *J. comput. phys.*, № 2(55), pp. 302-312.
15. Gottlieb, D. (1981). The stability of pseudospectral–Chebyshev methods. *Math. comput.*, № 153(36), pp. 107-108.
16. Igumnov, A.B., & Solov'ev, A.S. (1986). Ustojchivyy psevdospektral'nyj metod reshenija nachal'no–kraevykh zadach. *Zh. vychisl. matem. i matem. fiz.*, T. 26, № 12, pp. 1895-1900.
17. Igumnov, A.B., Solov'ev, A.S., & Janenko, N.N. (1983). Chislennoe izuchenie volnovykh javlenij v nelinejnyh sredah s dispersiej. (p.25). Novosibirsk. (Preprint / AN SSSR Sib. otd-nie. In-t teoret, i prikl. mehaniki; № 25 - 83).
18. Patera, A.T. (1984). A spectral element method for fluid dynamics: laminar flow in a channel expansion. *J. Comp. Phys.*, V. 54, pp. 468-488.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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/10.1/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: 2020 Issue: 03 Volume: 83

Published: 26.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Akmal Mamadiyarov
Termez State University
Master's degree from
+998 94 5100107

LINGUISTIC FEATURES OF SOCIAL EUPHEMISMS IN THE UZBEK LANGUAGE

Abstract: In this article, we aimed to cover one of the problems studied in Uzbek linguistics of the present time – the phenomenon of social euphemism, its composition, linguistic, functional features, and semantic expression.

Key words: euphemism, social euphemism, linguistic factors, taboo, language fact, passive lexical layer.

Language: English

Citation: Mamadiyarov, A. (2020). Linguistic features of social euphemisms in the Uzbek language. *ISJ Theoretical & Applied Science*, 03 (83), 55-60.

Soi: <http://s-o-i.org/1.1/TAS-03-83-12> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.12>

Scopus ASCC: 1203.

Introduction

The speech activity of a person largely adheres to moral norms. Morally and culturally applied the use of other words and phrases instead of words that are considered forbidden or unfavorable is called. Euphemisms serve as an expression of something-phenomenon in a much softer form, for the enrichment of the visual possibilities of the language. Also, social stylistic differences (differentiation) are reflected in the types of euphemism and the ways of their expression. All this, in turn, is manifested in different manifestations of euphemisms. The use of other words and phrases instead of words, which are found to be morally and culturally unfavorable, is called euphemisms. The study of works in different languages, which are devoted to the issues of itemization of concepts, makes it possible to divide the theoretical views expressed on this phenomenon into three main groups. According to the theoretical views of the first group, “euphemisms arise under the influence of a primitive worldview (taboo) and disappear at the cultural stage of society”. The second group advocates the idea that “euphemisms exist as a fact of language, a passive lexical layer.” Theoretical views of the third group N. Ismatullaev's” “Эвфемизмы в современном узбекском языке” is reflected in the candidate's dissertation. In his opinion, euphemisms serve, at the same time, as a means of speech, for style. In the “Explanatory Dictionary of

linguistic terms” of. A. Hojiev, euphemism is described as follows: “Eufemism (Yun. Euphemismas). Thing-the expression of the phenomenon in a much softer form; use a rude, cynical word, phrase and a rude non-sinking word (phrase) in place of taboo. For example, the words” pregnant, heavy-footed in place of the words of the twin, the strait...”, passed from the world in place of the dead, closed his eyes, his heart stopped; in place of lying, the phrases of making mistakes are used. The meaning and features of euphemisms are a variety. They will also have a different value according to the purposes of the application. Some factors influence the emergence of euphemisms and their use in speech. Among such factors, socio-stylistic differentiation of the Uzbek language and emotional-expressiveness of words (in addition to the main meaning (meaning)), emotional-expressiveness of words; emotional lexical – words that have the property of expressing the emotions of the speaker; emotional coloring words. For example, the words jilmaymoq, chehra, tabassum, o'ktam, do'ndirmoq; ustomon, ityaloq, mechkay, imonsiz, unbelievers can be denoted by negative coloring words).

In different stages of the development of personality society, especially in the primitive stages of personality society, some things, actions are prohibited. Such a phenomenon of prohibition is called taboo. Tabu soy is derived from the Polynesian

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

language (the language of nomadic elites living on the islands of the Pacific Ocean) and is associated with the Prohibition of something in terms of personal and religious habits, including hunting a particular animal or the Prohibition of breaking a plant. This phenomenon is also three on the language. In the early stages of the development of society, it was very strong to believe in demons, ghosts and similar divine things among people. Such peoples thought that if the name of a person or subject close to demons and ghosts is not mentioned, they can be avoided. In the ancient peoples, as well as in the peoples that now live as a tribe, it was forbidden to touch their things, to pronounce their name after the death of tribal leaders. If their things are touched or the name of these things is mentioned, those who imagine that ghosts, demons, will strike, will do something harmful. Similarly, it was also forbidden to say the names of some wild, poisonous animals. As soon as the name of such animals in the fur is mentioned, it can cause harm to suck. The remains of the taboo can now also be met. For example, if among Muslim women they call their husbands by their name, such a situation is considered disrespectful to the husband. Ultimately, the need arises to use another word that expresses the concept instead of the forbidden words. The use of other words instead of such forbidden words is called euphemism. For example, the use of the words is one of the phenomena of euphemism. In later periods of Community Development, the phenomenon of the use of more pleasant, slick words instead of vulgar, crude, awkward words are also one of the manifestations of euphemism. For example, the deceased died instead of the deceased, died, earned, passed away from the world, went out of the world, handed over his soul to the owner, used words or word combinations as blindfolded. Euphemism plays a huge role in literature as a stylistic tool.

The meaning and features of euphemisms are a variety. They will also have a different value according to the purposes of the application. A certain part of the euphemisms will be related to the taboo. Most of the euphemisms are words and phrases that are used in place of words that are found to be unfavorable to be said Morally and culturally. For example in place of measles (in some districts of Samarkand region); flower in place of smallpox; long pain in place of tuberculosis; white in place of pes; pale in place of bald, life partner in place of wife, wife, slavery, family; marry in place of a wife take; I give my daughter to the husband in a place I transfer my daughter, I marry my daughter the application of such words and phrases is a euphemism. Taboos and euphemisms are used not only in literary and artistic works, but their application requires great art from the speaker. As already mentioned above, under the term euphemisms, it is understood to use a rude, cynical word, phrase and a rude non-sinking word (phrase) in place of taboo. The use of euphemistic phrases is not

the result of prohibition, but because of “linguistic and social factors”. One such factor is associated with the emergence of euphemisms about ethics and politeness.

In the appeal, it is necessary to observe the rules of politeness, decency, to react to the behavior of a person or to change the words and phrases that seem to be unique in the process of its description into words of courtesy. Besides, the euphemistic use of this or that word, replacing it with an acceptable option, depends not only on the desire to react to an event but also on the legal status (status) of the person who is talking (explaining) or writing.

The phenomenon of euphemism in general science at the beginning of the XX century J. Vandries, L.A. Such linguists as noted in the literature related to the field, and their views play an important role in the formation of a description of the essence of euphemism. Among the scientists who studied this phenomenon on the example of a separate nation, representatives of separate sex (Altai women's speech), it was noted that A.N.Y. Samoylovich, N.A. Baskovs can be entered. They monitor euphemism as an ethnic phenomenon and try to illuminate its multifaceted aspects. E.A. Agayan, A.N.Y. Turbachevs also studied this language phenomenon within the framework of a certain group of mentalities. S. Otayev Turkmen language euphemisms, G.G. Musabayev Kazakh language euphemisms, V.P. Dorbakova euphemisms of the mongol people, N.G. Mikhailovskaya analyzed the euphemisms encountered in the language of the peoples of the Far Eastern Languages – chukot, Khanty-Mansiysk, Nanai. Also in the case of euphemisms in the tuva language, the word S.P.Vanshteyn, Sh. Ch. Sat, about the English-speaking euphemisms I.V. Researchers, like Arnold, have also expressed some thoughts in their work. A.A.Reformatsky considers the euphemistic units used in the place of taboos related to ethnic development. Saying that the emergence of Tabu was caused by various heresies and superstitions, euphemisms emphasize that it serves to “close” its name. But R. A. Budagov recognized that the emergence of Tabu was the motivation of mankind, and in a certain sense it was one of the factors of the narrative of thought. The phenomenon of euphemism B.A. Ler (1961), A.M. Katsev (1977), N.S. Boschayeva (1989), L.V. Artyushkina (2002), G.G. It has been studied by Kujim (2003) and other linguists and its various aspects have been covered. For example, L.V. Artyushkina studied the alternation and semantic types of euphemisms, then his pragmatic aspect was widely studied by Boschayeva. G.G. Kujim studies euphemism as a “meliorative” means of language, A.M. Katsev interpreted it from a social psychological point of view. And the side associated with the renaming of this phenomenon is N.M. Studied by Berdova, Ye.P. Senechkina showed the affected signs of euphemisms. Since the XXI century in

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

Russian linguistics about 156 candidate dissertations have been selected within the framework of the theme of euphemism, this phenomenon is evidenced by the development of the study. Considering only the direct and indirect influence of Russian linguistics on the linguistics of Uzbek and all post-Soviet countries, it seems that this indicator is of great importance.

In Uzbek linguistics, this term was used in 1963-64. Ismatullaev settled through the dissertation "euphemisms in the current Uzbek language". In 1997, A.Omonturdiyev studies euphemism in a wide range as a "subject that should already find its solution as an object of research in Stylistics", exploring the evfemic foundations of Uzbek speech. In the monograph of I. Mirtojiev "semasiology of the Uzbek language", special attention is paid to the issues of the relationship between taboo and euphemism phenomena, the history of their study. The scientist points out that the evfemic meaning is a derivative, that the derivative meanings occur in metaphorical, metonymic ways, that the evfemic meaning does not arise based on synechism and functionalism. It should be noted that on the way to evfemism was also expressed by linguist scientists, who supported him from different sides. For Example, H. Shamsiddinov expressed his views on the euphemical functional-semantic synonyms of words, In the doctoral work E. Mamatov will dwell separately on the evfemic and systemic formation of phraseologisms. Also in some works related to artistic language, attention is also paid to the evfemic meaning of language units. In particular, the scientist who specially studied the lexicon of "Boburnoma" Z.Kholmonova expressed some thoughts about the euphemisms used in it. In the monograph of mirtojiev "semasiology of the Uzbek language" euphemisms are allocated a special place.

In the "Explanatory Dictionary of linguistic terms", re-published in the 1985 year by A. Hojiev, euphemism is interpreted. It is known that euphemism was studied in Uzbek linguistics more widely than dysphemism, and to this day its main features of speech were studied by the above-mentioned scientists. Currently, linguistics has conducted several studies on the phenomenon of Euphemia and euphemisms. However, in Uzbek linguistics, although the impact of this phenomenon is great, there is no unanimity in its interpretation within the framework of linguistics. Although the attention of many scientists is focused on the fact that euphemism has the property of performing the task of Banning and masking, they note that euphemism does not have a single interpretation (meaning). Blessing Ismatullaev first covered rich data on the phenomenon of taboo and euphemism, expressed his attitude to them, summarized, covered the phenomenon of taboo and euphemism, based on scientific and practical aspects. N.Y. Ismatullaev when spoke about the reasons for the emergence of euphemisms in the Uzbek language, he classified them, grouped them and analyzed the

significance of euphemisms in circulation, the value of which is used in the speech of each social stratum, enriching the composition of the dictionary and came to scientific and practical conclusions. As a result, this work will serve as the basis for the study of issues related to this area, including euphemisms at a later stage, that is, its functional stylistic nature in a monographic plan. The theme of taboo and euphemism is widely covered in the textbook "Uzbek language Stylistics", which was created for the first time in 1983 for the Higher School with creative use of these existing works. In it, the authors, along with giving general information on taboos and euphemisms, also touched on its importance as a means of speech, and even contextual individual euphemisms. Tabu and euphemism are primitive religion, the remnants of, which appeared under the influence of the supernatural worldview, superstition, heresy, painting of the unconscious people, and which disappear in the later development of society-in the cultured stages, the views do not justify itself. The reason, necessity, and legalities in the emergence of taboos and euphemism, their evolutionary development, the basis of tabulation, character, the object of study of euphemisms, criteria and norms, scale, limit, attitude to the language system (level), the role of metaphors, metonymy, synecdoche, functionalism in the formation of euphemism, euphemism in the formation, euphemism in migration; 1) homonymy, polysemia, the relationship of the evfemic meaning to; 2) artistic means of speech (phraseology, proverb, aphorism, epitet, allegory, etc.), that is, lexical-syntactic figures are, attitude to expressive-emotional expressions, in short, the basis of classification and classification of stylistic functional features, methods of study, etc., are not worked out in the scientific plan. In some sources, euphemistic means were considered a narrow circle, a fact of language, a passive lexical unit. The fact is that the euphemistic phenomenon was analyzed not only at a certain level of language but also as a colloquial layer, that is, artistic figurative means based on a semantic-functional method: a trop or lexical-syntactic figurehead. With the development of the language, its evfemic layer also develops. New morals, new forms of tabulation based on new norms of worldview, thanks to which even new forms of evfems applied come to the field. In place of many words and phrases, which in contrast to the requirements of primitive tabulation, Bunda has become the norm to say, it is more convenient for him (the previous one) to use phrases that are more pleasant for the speaker and listener.

Just as human speech goes beyond its need, it does not matter how beautiful, carefree, subtle the euphemisms are, it does not fully illuminate the negative essence – properties of the tabulated concepts, it can not be overcome by memory. In other words, no matter how tabulated the utterance is a

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

shameful or unpleasant, unpleasant terrible reality, no new euphemisms are applied to it, the same shameful or unpleasant reality-consciousness (as a bad overgrowth in a member) does not manifest itself. For example, touching the pronoun, the pronoun evfemas can not eliminate those shameful words and the concept that is perceived through it from memory. Therefore, as there is a tendency to express unfavorable, unpleasant concepts in a speech in an indecent form, this is guided by the natural and necessary need of language owners, certain moral norms. Social classification holds a special place in the opening of the essence of euphemisms. It is made based on the belonging of the word to a certain social group. As an example, B.A. Larin classification can be cited. Linguistic classification of euphemisms was also carried out by some researchers. The classification of the phenomenon under study did not remain without the attention of Uzbek linguists. N.Y. Ismatullaev divides euphemisms into 5 large groups. These are taboo-related euphemisms, superstitions, euphemisms related to heredity, euphemisms used in place of words and phrases whose meaning is rude, inconvenient to say, slang euphemisms used for speech decoration, uplifting and religious purposes, stylistic euphemisms. And the classification of expressions divided into semantic groups is called A. It is reflected in the scientific work studied by Omonturdiyev.

The criterion of the evfemic meaning, limiting it from side phenomena, is primarily concerned with the extent to which the figurative means, figurative, movable, trop, syntactic or colloquial figures are processed. Although great achievements have been achieved in this field, there are still several issues, the functional classification of the literary style (colloquial, official, scientific, publicist, artistic), criteria and boundaries, the level of emotional expressiveness (upper, middle, lower style levels), the types of professional speech or the speech of the social layer (teacher, Imam-preacher, doctor, lawyer, breeder, merchant, hunter, fisherman etc. speech), linguist, extralinguistic, sociolinguistic, psycholinguistic, ethic-aesthetic, intonation basis is a research requirement. Successful study of speech styles is most often associated with the phenomenon of migration, and migration is the basis for the formation of all kinds of artistic means, figurative concepts, including euphemistic meanings, tilni "enriches" with a treasure of meanings. Below we will dwell on 1) setting the criteria and scope of the euphemistic meaning; 2) distinguishing them from concomitant, similar, genus or genus phenomena and generally defining the object of the study of Euphemia. When determining the criterion of the evfemic meaning and its scope, object, it is important to first refer to the sociopsychological, ethnolinguistic home, which is the basis for the formation of the evfemic layer of the language. Because

sociopsychological, ethnolinguistic factors cause the formation of various customs, rituals, which are caused by people in connection with their attitude to the existence, and then this process is transferred to the language. A.A. Reformatsky used to say that "Evfemism is a historical-ethnographic category", referring to this period in the formation of the evfemic meaning. Then, with the development of science, enlightenment, and spirituality, the spiritual and secular thinking of members of society, the growth of ethic-aesthetic views, the formation of new norms of decency, the character of the evfemic layer of language, the linguistic, sociopsychological basis will change, and this process will also move to the language. At first, this condition determines the of the evfemic layer of the tongue. In cultural society, euphemistic means serve not as a "force" that protects language owners from any danger, but rather to drive away the negative impact of situations considered shameful, indecent, indecent, indecent, indecent, or, directly speaking, the negative impact of hidden realities on one's self-esteem, to drive away from memory, to hide, to close, to give an unpleasant message in a more

Sh. Rakhmatullaev in connection with the interpretation of the issue of "stylistic painting on Phraseological synonyms "divides the synonym nests into positive and negative phraseological units, and writes: "some of the synonym nests that represent a negative reality are euphemism. Evfemism serves to avoid naming negative realities, to mitigate the negative impact of such realities. It seems that in such euphemism phrases there is a positive-stylistic coloring of fur. For example, to pass through the world, to close one's eyes, to leave the world all three phrases in the synonym nest are euphemism, and to soften the negative influence of the so-called reality is the strongest in the second. As already mentioned above, euphemisms serve as an expression of a much softer form of something-phenomenon, for the enrichment of the visual possibilities of the language. From the analysis conducted, the following conclusions are drawn. Although the use of evfemic means has a long history, it is the least studied in the Uzbek language. Eufemia means were originally formed based on religious, later secular thinking, for example, norms of decency, manners of behavior. Eufemia means to form an evfemic synonym.

The application of words in a portable sense, the fact that they form a new meaning based on metaphors, is considered one of the functions of evfemic means. Evfemisms " trop (Yun. tropos-and extract oborot, the irony) although one of the manifestations is" quot; from it differs seriously in its function. If the tropes, that is, the transports serve for the figurative expression of reality, the euphemisms are used when applying something-phenomenon in a soft form. Below we will consider several types of

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

social euphemisms in the Uzbek language. The main role in this is played by the linguistic factor.

Euphemisms associated with the body organs of man. The euphemisms in this group include, first of all, the members of which it is shameful to say that a person and the euphemism means associated with them. Although it is not so difficult to name many tabulated objects by their names, it is sometimes inconvenient to say, write, say, the names of things related to the activity of the human stomach, in particular, its consequences. As a rule, the researcher avoids himself from saying or writing the name of such realities. This is correct from morality, of course. However, linguistic analysis requires a different approach to the issue. Because the main meaning of any concept is realized in its original name. The Real (usual) meaning is the basis for determining the evfemic meaning. In other words, the vulgar, rude, the word" in vain", that is, in the face of a tabulated concept is a soft colloquial meaning. These should be studied by putting the opposite (oppositions) (as the concept of good is defined concerning evil). Hence, science dictates that the subject of reality is named employing its expression. It remains only to say that for the fact that the word expresses the name of the concept of shame (this is a natural thing), it is illegal not to write it when it is necessary, "to expel from the language". Otherwise, the tabulated words and phrases would have disappeared "alienated" from the objects of their expression or the means of euphemism centuries later.

Sotsial euphemisms. In addition to the above-mentioned euphemisms, in the composition of household euphemisms, euphemisms of heredity, superstition, and fear are noted. Such euphemisms were used for the name of the subject or action" cowardly "(that is, for example, in the Uzbek language" there is no horse "instead of" Scorpion"). In ancient times it was believed that when they say the name of poisonous insects such as snakes, scorpions, they appear and cause harm to people. At the same time, concerning wild animals, euphemisms were also used. For example, about the Wolf used euphemism, such as.

Sacral-meaning euphemisms. The concept of supernatural forces, mainly associated with religious factors, caused the origin of a group of euphemisms. In the emergence of such euphemisms, the emotional state of people, the feeling of fear of supernatural forces and weakness before they occupied a great place. From ancient times people were very afraid to pronounce the names of demons, dev, nymph, poisonous insects and natural disasters. Those who believed that if one of these is mentioned, a catastrophe will befall their head. Some part of this state has been preserved in the language to this day. For example, we can observe the use of several words in place of the question" God". Allah, Mercy, The Merciful, the open, the Lord, The Lord, etc.

Evfemisms associated with the disease. Evfemisms that characterize the disease also have a distinctive feature. Such euphemisms have existed in the language for a long time. Because in ancient times people suffering from a disease evoked a sense of fear. Therefore, instead of openly saying the name of these diseases in speech, euphemisms appeared. Instead of" measles "rose, the use of euphemisms instead of" cancer" was observed. At the same time, among the Iranian people, there are hereditary euphemisms associated with the disease, which eliminate various misfortunes and diseases by changing their names. Such superstitious euphemisms were also found in the historical sources of many Eastern peoples.

In the works devoted to the study of units formed in language and speech in connection with the way of life of a particular nation, ethnic development, historical period, also in a certain sense, separate sections for dysphemism are distinguished, characterized by its essence, semantics, speech characteristic. For example, A.V.Potapova studied the ethnic pattern of the Belarusian, Russian and Polish people's language in the nineteenth century, adding that "the stylistic differentiation of lexemes plays an important role in the environment of anonymization. To give the same lexeme a connotation of "belonging to a particular ethnic community" leads to the formation of synonyms in a certain lexical-spiritual group. In the bun, two main methods are used" itemization and dissemination. In the research work on the essence of the concepts of war and peace in the current German language, I.P. Pasechnikova also touches on euphemism and dysphemisms: "the evaluation of the polar phenomena of War and peace is conditioned by the perception of the subject's own – alien archetypical socioconflict. In the functional plan, there is also a possibility that war and peace will occur ambivalence of the price of a particular situation. An evaluation variation on the negativity of war and peace dichotomy can occur in the form of evemization and systemization, which provides for "improvement" or "deterioration" of "social evil." Modern Uzbek linguistics was initially focused on the task of developing literary norms and integrating them into public consciousness (formal Uzbek linguistics), and then on the task of identifying linguistic units of the Uzbek language and their capabilities (theoretical linguistics), so the study of dysphemisms of speech character was not on the agenda. Today, the study of dysphemisms, which have a purely national and speech character, is also becoming a topical issue of the day, as our science begins to deal with the problems of language and society, the narrative of language, the expansion of the scope of practical use of language.

It should be noted that evfemic means do not serve only for positive, aromatization of concepts that are not intended to be said openly. Because even when logically negative concepts are itemized, the essence

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

remains. But this process is governed by the norm of aesthetic demand for the application of evfema anyway.

The ethic-aesthetic requirement norm of applying evfema also dictates adherence to linguistic, psycholinguistic, social or ethnolinguistic, linguistic factors of linguistics. Because the phenomenon of tabulation in a language, regardless of its peculiarity, can be common to all people.

G'. Salomov said that the Japanese manners do not allow them to give a direct rejection answer to their interlocutor, that during the conversation they do not use the words "no", "impossible", "I do not know", that the meaning of the refusal is expressed by other means, since these are words that offend a person, even when the second dish is transferred to tea, instead of; or, before responding to a familiar Tokio proposal, he wrote that it was a refusal to say "no" when he said "Let me consult with my wife", which, is a euphemism of the concept of "no" with speech etiquette. In Uzbek, too, this phenomenon is not absent: when it is said to eat, drink tea, instead of saying "No", "I do not eat", "I do not drink", the use of softened means such as "Thank you", "I ate", "I drank" is also considered a euphemistic speech etiquette. Well, in most cases (more often in colloquial speech), the usual means by which denial or confirmation should be used, the specific situation is evoked by the norm of speech etiquette.

In the formation of evfemic speech, an important role is played by the members of society, in particular, the intellectual speech, their spiritual level, morality, tastes and tastes, consciousness, level of thinking, profession, age, social status, etc. It is necessary to admit that the application of evfema has a certain degree of subordinate character. Otherwise, it would

not have been said about colloquial, individual, occasional revelations. Evfema differs from the phraseology in that it is a stable unit, including, even with the fact that the tongue does not turn into fact (except for the linguistic evfema). True, the evfema, which has the status of linguistic evfema, loses its individuality, collisionality, becomes without the "discovery" of the writer or the speaker. But this is not a saying that linguistic phenomena are prepared exactly for speech. Because even the real-life of stable units are within the speech. B. Yuldoshev noted that in the process of applying phraseological units in New, individual author's variants, all its features look more exaggerated, are enriched with additional meanings. This is directly attributed to euphemisms.

Elimination of reality-the degree of mitigation is different, which in most cases is guided by a subordinate attitude. The casual ability of the speaker or writer, aesthetic taste, outlook, which is a representative of the social layer or class, age, gender, profession, level of upbringing play an important role. For example, in relations between people, the names of some things and behavior are considered not only unfavorable or rude but also absolutely unacceptable. There fore, such words are replaced by euphemisms.

The scientific study of linguistic phenomena develops in harmony with the times. Accordingly, in each period, new facets of the object of study are manifested. The essence of evfemic units should be viewed not only as tools used in place of socially prohibited language units but also as tools for methodological painting, speech decoration, a subtle statement of thought, as well as for respect for oriental culture, providing the speaker's manipulative tactics, without learning to associate them with the phenomenon of taboo.

References:

1. Nurmatov, A., Maxmudov, N., Solihyzaeva, S., & Axmedov, A. (1992). *Ŷzbek tilining mazmunij sintaksisi / A.Xozhiev taxriri ostida*. (p. 296, 2.18.). Toshkent: Fan.
2. Omonturdiyev, Zh., & Omonturdiyev, A. (1994). *SŶz kŶyllash san#ati*. (p.60). Termiz: Zhajxun.
3. Salomov, F. (1966). *Til va tarzhima*. (p.384, 2.21). Tashkent: Fan.
4. Salomov, F. (1978). *Tarzhima nazarijasiga kirish*. (p.220). Tashkent: Ŷkituvchi.
5. Berdaliev, A. (1993). *Nutqning ba#zi lisonij va kommunikativ asoslari xaqida // Nutq madaniyati masalalari*. (pp.12-16).Toshkent.
6. Ismatullaev, N. (1964). *Jevfemizmlarning luzat sostavini va sŶz ma#nolarini bojitishdagi axamijati*: ToshDShI Ilmij asarlar tŶplami. 2-kitob. (pp.3-12).
7. Ne#matov, X.G. (1988). *SŶz, uning til va nutkdagi Ŷrni. Ŷzbek tili va adabijoti*, Toshkent, № 6, pp.38-41. 3.60.
8. Nurmonov, A. (1979). *Tasdiq va inkorning paralingvistik vositalar jordamida ifodalanishi. Ŷzbek tili va adabijoti*, Toshkent, №.1, pp.132-137.
9. Rustamov, H. (1975). *SŶz kŶyllash jestetikasiga doir ba#zi muloxazalar. Ŷzbek tili va adabijoti*, Toshkent, №5, pp.54-60.
10. Kacev, A.M. (1999). *Jevfemizmy v sovremennom anglijskom jazyke*. (p.65). L.: Nauka.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 26.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Gulmira Allaberdi qizi Xudoyberdiyeva

Termez State University

Master's degree

+998997499129

LEXICAL SYNONYM LEVEL IN UZBEK

Abstract: In this article, the issues such as lexical synonyms in the Uzbek language, their degree, the features of the phenomenon of synonym on the lexical level, the synonym pragmatic synonym in the adjective of the linguistic category, the phenomenon of synonym in the linguistic stage are discussed in detail.

Key words: synonyms, types of synonyms, pragmatic synonym, lexical synonym degree, semantic or functional-stylistic differences.

Language: English

Citation: Xudoyberdiyeva, G. A. (2020). Lexical synonym level in Uzbek. *ISJ Theoretical & Applied Science*, 03 (83), 61-66.

Soi: <http://s-o-i.org/1.1/TAS-03-83-13> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.13>

Scopus ASCC: 1203.

Introduction

The phenomenon of synonymy is one of the issues studied in linguistics in detail. But the current development of our linguistics requires the study of the phenomenon of synonymy not only on the lexical, grammatical level but also on the grammatical level. In particular, the study of this phenomenon at the stage of language and speech interrelation reveals its distinctive new features. Because the system exposes the problem of studying the issue of lexical synonym, which is described in detail in linguistics as well as current semasiology and onomatology, from a new point of view. Therefore, there is a need to analyze this phenomenon both about language and at the stage of speech, and independence (in opposition). At the language stage, the phenomenon of synonym exists as a certain pattern, forming a commonality with the meaning of designation and expression.

It has become a tradition to analyze the phenomenon of synonymy based on four different approaches to its properties on the lexical level. Lexical synonymy is studied through such grounds as monotony from the side of meaning, free exchange in a mutual paradigm, stylistic similarity and contextual-text coherence.

Synonyms, separated based on logical connotation, are determined by the similarity of meanings associated with the colloquial situation in the colloquial process. Therefore, they can be called

synonyms, and in some works, they are also called denotative synonyms, and the fact that they are limited for a while from the linguistic synonym is justified.

If we approach the phenomenon of synonym as a category, it becomes clear that it is a linguistic, meaningful, pragmatic category. The synonym in the adjective of the linguistic category does not stand in an equal relationship with the pragmatic synonym. The basics of making them form a hive are also varied. A lexical synonym is defined as a linguistic category, forming a hive with a common denominator meaning. And the pragmatic synonym is a category of meaning, it forms a hive by the mutual equal origin of the meanings of words that are expressed in a colloquial situation.

The meaning of words in connection with the colloquial process is an occasional meaning, and in another colloquial case does not participate in this meaning. Even it is possible that it acquires a meaning that does not resemble the meaning of the term. The occurrence of such a state is influenced by the process of speech, the situation of the speech, the tone beyond speech, the sign, the contractual relationship between the speaker and the listener. For example balance sheet-a calm, the stable state under the influence of equal forces lexically directed against the dependent of bodies; dependence-represents a relative stagnation, calmness, which occurs due to the equalization, harmonization of opposing forces. This

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

word can form a synonym nest with the word "attitude" in a certain colloquial situation: the relationship between the natural phenomena-the balance between natural phenomena.

Sometimes it forms a synonym based on reciprocity. Therefore, summarizing all of them in the name of one common name-pragmatic synonym, it is now relevant to clarify the specific aspects or distinctive features of the micro-systems that stand in it.

Onomasiological analysis of the phenomenon of synonymy reveals its specific new facets.

A synonym is the most vivid manifestation of systemic relations in the dictionary. From the proximity of developing associations and identified concepts, similar words enter into synonym combinations. Lexical synonyms (rp. Synonyms-the same name) are words that are close or similar in meaning, which in different ways call the same concept. Synonyms differ from each other by the nuance of meaning (close) or stylistic coloring (the same, that is, the same) or by one and the other sign at the same time. For example pink, pink cheek, pink face, red cheek; neighborhood - small home, district (colloquial); prematurely-early, untimely (written in words high, death, death, death, etc.). The first, in principle, is different in meaning. In addition to the next two synonyms, along with semantic differences, there are also stylistic differences.

Depending on the semantic or functional-stylistic differences, the three main types of synonyms are conditionally distinguished:

1) ideological (gr. Idea-concept + graphic-writing) or semantically correct, 2) style (by referring to one of the functional styles, 3) stylistic (IE. for example, if there are additional evaluative and expressive meanings.) The last two species are usually closely related to each other. Attitude to the style is often determined by indicating an additional evaluation or addition, that is, it corresponds to the stylistic character. Synonyms like this are often also called semantic-stylistic because they are all different in meaning.

The appearance in the language of synonyms of the above species depends on several reasons. One of them is the desire of a person to discover some new features of an object or phenomenon in reality and to designate them with a new word, similar to the already existing name of this object, phenomenon, quality (for example, rumor, message, the use of words; News, communication, etc., so that they determine a single concept).

Sometimes words that are close in meaning appear in the language because the same subject, the same phenomenon can be expressed differently in different expressionist-stylistic groups of words, in different styles of speech.

Some common words can have synonyms of word combinations that convey their meaning in phraseological terms

Synonyms also arise when a different emotional assessment of the subject, sign or phenomenon of reality is made (angry - cruel, tolerant, inhuman, heartless, etc.).

Synonymy is closely related to the phenomenon of polysemia.

In synonyms, one dominant (lat. There is a so-called dominant (dominant-dominant), usually stylistically neutral, Core (Main) word. For example, a stylistic coloring verb "speak" about the words "exclaim", "describe".

The role of synonyms in speech is very important: they help to avoid unnecessary repetition of the same word, more accurately convey thoughts. In the process of its use in speech (especially in the artistic literature), general literature, accepted, customary (lat.in addition to synonyms (uses - usual), the importance of synonyms is expressed in words in which there is nothing at all in their meanings in the usual use. Only due to the individual selection of words for this context, such use is allowed from time to time (lat. Occasional-random) is called. For such words, there is no stable consolidation of synonymous meanings in the language system. They are not reflected in dictionaries.

A group of words consisting of several synonyms is called a synonym series (or slots). The synonymic series can consist of synonyms with many roots and one root. The first place in the synonym line is usually meaningful and stylistically neutral word-dominant (lat. Dominans-dominant) is given (it is also called the main word). Other members of the row determine, the semantic structure of, filling it with approximate values. So, in the last example, the main feature of the series is a bold plot, which combined all the synonyms - "not to feel fear", and means a case of an expressionist-stylistic coloring. The remaining synonyms are distinguished by their characteristics of use in the semantic-stylistic sense and speech. For example, daring is a book Word, which is interpreted as "very brave"; bold - colloquial - "brave, taking into account the danger". Brave, intrepid, fearless, courageous synonyms are distinguished not only by semantic meanings but also by the possibilities of lexical compatibility (they are united only by nouns about people; can not speak of "brave project", "bold decision", etc.).

Members of a synonymic series can be not only individual words but also unstressed phrases (phraseological units). All of them, as a rule, perform the same syntactic function in the sentence.

Synonyms always belong to one part of the speech. However, in the system of Word formation, there are words in each of them that are related to other parts of speech and have entered into the same synonymic relations with each other. The Uzbek

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

language is rich in synonyms, rarely encountered synonyms consist of two or three members, often more. At the same time, compilers of dictionaries of synonyms use different criteria in their selection. This leads to the fact that the synonym series of different lexicography often does not fit. The reason for such discrepancies lies in a different understanding of the essence of a lexical synonym.

Some scientists believe that the obligatory sign of a synonym connection of words is their designation of the same concept. Others take synonyms to replace each other. From the third point of view, the lexical meanings of words are close to each other, which means that the synonym is recognized as a decisive condition. In this case, the following criteria are put:

- 1) proximity or specificity of lexical meanings;
- 2) uniqueness of lexical meanings only;
- 3) proximity, but not the uniqueness of lexical meanings.

In our opinion, the most important condition for synonymous words is their semantic closeness and their uniqueness in exceptional cases. Depending on the degree of semantic proximity, the synonym can manifest itself to a greater or lesser extent. The most complete synonym is expressed by the semantic uniqueness of the words: linguistics - linguistics. However, in the language several words are completely identical to each other; as a rule, they develop semantic meanings, stylistic features that determine their uniqueness in the dictionary.

Full (absolute) synonyms are often parallel scientific terms: like spelling – orthography, as well as single-root words formed with the help of synonyms.

With the development of the language, one pair of absolute synonyms can disappear. Synonyms, as a rule, denote the objectektiv the same phenomenon of reality. The nominative function also allows you to combine them into open rows, which will be filled as a result of the development of line with the emergence of new meanings of words. On the other hand, a synonym relationship can be broken, then individual words are excluded from the synonym series, they receive other semantic relations. Accordingly, the structural combinations of related words also change. The semantic structures of the given lexical units influenced the formation of such, for example, synonym rows.

Since synonyms, like most words, are characterized by uncertainty, they participate in complex synonymous relationships with other consonants, forming a wide hierarchy of the synonym row. In other words, synonyms are connected through dependent relationships, forming antonym pairs with them.

Synonyms of words confirm the structural character of the dictionary of the Uzbek language.

There are several types of synonyms, these are::

One of them. Synonyms that differ in meaning are called semantic (spiritual). For example, the heel -

damp, shabby reflect all sorts of manifestations of the - "has a significant moisture content, is saturated with moisture".

The presence of semantic synonyms in a language reflects the analytical depth and accuracy of human thinking. The surrounding objects, their properties, actions, states are known by man in different variations. The language conveys the subtle meanings of the observed Fakt, each time accumulating new words to adequately express the relevant ideas. Thus, some synonyms have a common semantic core and allow you to describe in detail the phenomena of reality, which are described with careful clarity. Semantic synonyms enrich the speech, make it transparent and expressive.

Two. Synonyms that have differences in expressive-emotional colors, and therefore are used in different styles of speech, are called stylistic; wife (colloquial) - spouse (official).

The expressiveness of synonyms allows us to choose a word that is stylistically based every time in a certain context, best suited to a particular colloquial situation. The richness of stylistic meanings in the Uzbek language creates unlimited opportunities for creativity, their unexpected form or resistance is appreciated by the artists of this word.

The three. Synonyms that differ in both types, both semantic and stylistic, are called semantic-stylistic. For example, it is a biblical question, which means "to go in search of someone or something without a goal, without taking a specific direction".

In the language, semantic-stylistic synonyms prevail. This is because the functional coherence and stylistic meanings of the word often complement each other.

To create a bright, expressive artistic speech, writers often use different synonyms in one sentence.

The semantic difference of words that are close in meaning in context is often eliminated, it is called the neutralization of meanings, and synonyms can be used in the lexical system of the language from words that do not fall into the same synonym row. In such cases, they talk about contextual synonyms.

Thus, words that have meaning in one context are called contextual (situational, random, authorship) synonyms. For their rapprochement, only concretion correlation is sufficient. Therefore, in the context, words that cause certain associations in our consciousness can be synonyms. In the speech, species and common names can be used interchangeably: a dog, a lapdog, a wolf. However, such a synonym is limited by the context, it is determined by the content of the statement and is not repeated in the language. Therefore, contextual synonyms are named from time to time (Latin. Case-case, case); they accidentally entered into a synonymous relationship, their rapprochement depends on the situation (hence another name - situation). Contextual synonyms are not reflected in

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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 dictionaries of synonyms since they are by nature individual, author.

All of the above raises doubts about the legality of highlighting contextual synonyms in the lexical-semantic system of the language. Studying the dictionary as a system requires a strict differentiation of linguistic phenomena, the convergence of words in speech does not affect the language system at all.

The use of synonyms in speech.

The richness and clarity of synonyms in the Uzbek language creates unlimited opportunities for their purposeful selection and careful use in speech. Writers who work in the language of their works attach special importance to synonyms that make speech clear and vivid.

The author of many words, the meaning of which is close to each other, uses the only word that is most justified from this point of view. Often the reader does not know that behind this word there is a sequence of synonyms, rival words, and the author chooses one of the most correctly. Such a wide application of synonyms is reflected only in the manuscripts of the work.

The obvious use of synonyms is the technique of working together in the text, which performs various functions. Thus, synonyms can clarify this or that concept. Often synonyms are used to clarify words.

The author can compare synonyms, paying attention to the differences in the shade of their meanings.

Every word that is synonymous due to stable system relations is felt in a speech in comparison with other members of the synonym series. At the same time, the coloring words are stylistically "oriented" to their neural synonyms.

Uzbek linguistics has gained a lot of experience in dealing with problems of synonymy, and various researches have been carried out in this regard. The first views on the synonymic phenomenon in the Uzbek language and the mutual relations between the units of the language during this phenomenon are devoted to the coverage of the direction of the lexicology of the Uzbek language and are expressed in textbooks and manuals created for use in different stages of Education. Fahri Kamol's "Uzbek language lexicon" (t. 1954) and "Uzbek language of the present time" (T., 1957), Ya. D. Pinkhasov's "modern Uzbek language lexicon" (t. 1960) and "present Uzbek literary language" (t., 1969), M. Mirzayev and others "Uzbek language" (t., 1962), "the current Uzbek language of literature, two-part. 1 Full" (t., 1966), U.Tursunov and others "current Uzbek language of literature" (t., 1965,1992), U.Tursunov and N.Rajabov's "some issues of the Uzbek language lexicon" (Samarkand, 1971), Sh. Shoabdurakhmonov and others "the current Uzbek language of literature" (t., 1980) and "Uzbek language lexicology" (t., 1981) academic publications can be cited as an example. The linguistilistic nature of the Uzbek language synonyms

was also a special monographic research subject. S. Isamuhamedova and A. Doniyorovs wrote candidate dissertations on the topic of synonymy. Articles written in Uzbek linguistics related to synonyms constitute a significant amount. Unfortunately, it is not possible to list all of them in this place. Only R.Beetles and S. "Uzbek language stylistics and culture of speech" compiled by Karimov (Samarkand, 1984) and S. Karimov and T. Let us recall such publications as "Uzbek language stylistics and culture of speech" (Samarkand, 2001), organized by Juraevs. Among these are M. "On the issue of studying synonyms in Alisher Navoi language" (t., 1965). it is worth noting the candidate's dissertation written on the topic.

In most of the listed literature, lexical units as synonyms and the relationship of meaning between them are considered, and they are evaluated as words whose meanings are the same or whose meanings are close to each other. But the analysis of several examples from the Uzbek language shows that none of these definitions presented can fully cover the essence of the linguistic phenomenon, which is also called synonymy.

First, in nature and society, it is difficult to find two or more words that are the same to each other and reflect their very essence, as if it were not the case itself. Republic-Republic in our language} university-dorm fun, architecture-architecture, linguistics-linguistics, Stylistics-Stylistics, such as live doublets. Although the doublet is considered, in speech, the inability of one to replace the other ensures their survival. Although in official documents and speeches it is noted that the Republic of Uzbekistan, the unity of the Republic is limited by colloquial speech. You can say Samarkand State University, Samarkand State University. but since life can be called, it can not be supported in the way of Life University.

And this is because the word republic, Universitet, is international, the word republic is somewhat outdated, it has a territorial boundary, the meaning of the word is wider in coverage than university, in general, in the word university, it is more accurate in meaning, in the meaning of the term. So we can conclude that the meaning of these words is one only when we look superficially. And the texts confirm that this is not the case in reality. They differ, at least, with the limitation of the task method, that is, from a methodical point of view.

Secondly, the meanings are the same synonyms when they are in the language, but not all of them can live in multiples, in a constant state. According to the laws of the practice of the language, let's say because it does not tolerate parallelism, over time, one of them will be forced to give the other one his place. For example: let's look at the party-party, citizen-citizen, agitation-propaganda, at least-propaganda, committee-committee, Soldier-Soldier, intelligent-educated, lecture-lecture, program-program, student-

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

student, Economy-Economy, International-International, Social-Social, satirical-satiric, secretary-secretary, Symbol-Symbol. If during the pre-Independence period of the Uzbek language they received lexical duplicates, looking at them as options and supporting the fold, then in the post-independence period, the attitude to these words and, accordingly, the balance in their application has radically changed in favor of the latter.

As we have already noted, if the sentence were only in the same sense of the meaning, they could live in our language in a fold. But from the situation, they also had to obey the laws of the general residence of our language. So the meanings of all synonyms are not the same, all that is considered to be the same can not live parallel in the language. From what has been said, it follows the conclusion that the study of this group of synonyms can not provide interesting material for Stylistics.

Therefore, when we consider the study of synonyms as one of the central issues of Stylistics, we think that it will be correct for us to understand a set of language elements that serve them to mean a common meaning or concept, which in this way converge and converge in the text with each other in meaning, and at the same time, differ from

The synonymic relationship in the language exists not only in the middle of lexical units but also invariants of the pronunciation of phonemes, among unstressed compounds, morphological means, and syntactic devices. The general rules and requirements for synonyms apply to all of them, as well as to all.

Unfortunately, in Uzbek linguistics synonyms are not comprehensively analyzed in the task-methodological direction, regardless of the existence of the above-mentioned studies. However, such observations are incredibly necessary for the development of national language methodology. When it comes to role, it should be noted that the study of the synonymic relationship between the word and euphemism, the word and the periphery can also give interesting materials for our Stylistics. Observations on individual author synonyms that arise in the process of artistic creativity are also valuable in demonstrating the richness of our native language. Thus, the Greek word "synonym" means "the same", and around this concept, the words and phrases that correspond to each other in the context, the units of language that are formed in the style of word combinations and sentence devices are united in the text.

There are also variants in the language and, as we have already mentioned above, groups of words called duplicates, many linguists distinguish them from synonyms. From the fact that each of the linguistic processes has its characteristics, this is also true. But no matter how different they are, according to their function in speech, they are close to each other, one thing and the event is two different names

in the language, which have appeared for different reasons.

Let's take such cases as linguistics-linguistics, Stylistics-Stylistics, orthography-correct writing, or sepia-correct pronunciation, corresponding to each other. It seems that the first part of them is a different language element. The bab in the application of these units can last only for a certain period. Over time, the attitude toward them will change. This attitude at least affects the frequency of their application.

From a lexical point of view, the presence of variants and doublets is not considered a positive phenomenon, but stylistically they are not considered to be an excessive element in the language. Even if they do not serve to express the idea in subtle Ottomans, at least they will save the speaker and the writer from repetition. Therefore, the essence is no less important for the conversational process. Therefore, there are full grounds to view them as stylistic resources in our language as well.

Linguistic options, manifested in phonetic and grammatical forms, can be viewed in a group, taking into account the stylistic coloring of some texts, even if the stylistic options are not equated to synonyms, which are incredibly broad and colorful.

"Variability in the norm is an anti-dependence concept on the stagnation of the literary norm –" says A. Boboyeva. – Stability is an objective necessity for the literary norm, allowing the literature to pass its specific function of the language, although it is not a positive phenomenon, on the second hand, stability can also be a negative factor that breaks into a mold, restricts and impoverishes the possibility of its means, makes speech boring, deprives of stylistic diversity. If there were absolute stagnation, the language tools would have hardened, molded phenomena according to the form and function of the expression of meaning. As a result, one word was used only in one meaning and form throughout the entire historical narrative of the language, and one meaning in the language was expressed only in one way, all people spoke absolutely the same and were the same writers.

Without the possibility of free and purposeful choice invariant speech, the literary language could not provide for its important artistic aesthetic function, the sides of impressiveness, expressiveness. The human speech consisted of sensory, dead molds, refusals, and would remain.

It will not be correct to limit the variability only in the framework of lexical options and duplicates. It also refers to synonymous units in all layers of the language. Only with such coverage will we be able to comprehensively understand the above considerations. When it comes to methodologies, it is also worthwhile to distinguish between the general and divergent sides of synonyms and variants, which are considered an extremely important element of it.

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PИИИ (Russia)	= 0.126	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

L the differences between them. G. Barlas explains: variability is the same, the synonym is a feature inherent in different language units. When called variants, different manifestations of one language unit are understood, which differ slightly in form. Since they constitute a word, a word form or construction, there should not be differences in both lexical and grammatical meanings. And synonyms are different words, word forms, devices, whose meanings are close to each other.

The classification of synonyms has also been in the spotlight of its researchers. Thanks to the fact that this phenomenon exists in the language layers, Sh. Rakhmatullaev initially divides them into the dictionary and grammatical synonyms. In turn, the dictionary synonym will be lexical, phraseological and lexical-phraseological types. According to the difference of the edges of meaning, they are listed by their types, such as synonyms of meaning (ideological synonyms), stylistic synonyms and colloquial synonyms.

Among such classifications that facilitate the study and understanding of synonyms is I. B. Golub's classification deserves attention. In his opinion, synonyms that differ in meaning from attacks are semantic, having the same meaning, synonyms that are distinguished by stylistic coloring are called stylistic synonyms. Stylistic synonyms include

synonyms that are subordinate to different task styles, as well as belonging to a single task style, differentiated by different emotional-express consonants. Synonyms that differ both in their meanings and in their stylistic coloring are semantic-stylistic.

About the classification of synonyms Z. I. Khovanskaya writes quot; dictionary synonyms are a unit of language that belongs to one category of words, retains in its meaning the signs of gender and species, is related to the same level of the abstract and differs by denotative or stylistic components of meaning.

For methodological research, the same is important, that the synonym relations arise not only in the language system, but also in the text, which is created on the account of all language level units, which participate in the stylistic networking of language units, and perform stylistic functions in the process of treatment. Synonyms in this mode are called text synonyms"quot;

In conclusion, we can say that like the lexicology of all languages, the lexicology of the Uzbek language is very rich. Expressing each word in its place and impactful requires great skill. The fact that synonyms are considered an integral part of this linguistics is also a vivid proof of our opinion.

References:

1. Safarov, Sh. (2006). *Kognitiv tilshunoslik*. Jizzax.
2. Mahkamova, G. (2011). *Lingvokul'turnaja kompetencija i metody i formirovani*. Tashkent.
3. Mirzayev, M., Usmonov, S., & Rasulov, I. (1966). *O`zbek tili*. (p.189). Tashkent.
4. Usmonov, U. (1999). *Dialogicheskaja rech' kak porozhdajushhij faktor nepolnyh predlozhenij*. Samarkand.
5. Norxo`jayeva, X. (2006). *O`zbek tilining eskirgan so`zlar o`quv izohli lug`ati*, "Yangi asr avlodi". Toshkent.
6. (1983). *Adabiy norma va nutq madaniyati*. (pp.63-65). Tashkent: «Fan».
7. Turniyozov, N., & Rahimov, A. (n.d.). *O`zbek tili*. (pp.5-16).
8. (n.d.). Retrieved from <http://www.referat.ru>
9. (n.d.). Retrieved from www.ziyonet.uz
10. (n.d.). Retrieved from www.edu.uz
11. (n.d.). Retrieved from www.pedagog.uz

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 26.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Saodat Jubatkhonova Shinnazarova

Nukus State Pedagogical Institute named after Azhiniyaz
candidate of philological sciences Associate Professor of the Department of Karakalpak language

Gulnaz Jaksimuratovna Mambetova

Nukus State Pedagogical Institute named after Azhiniyaz
Doctor of Philosophy in Philological Sciences Senior Lecturer, Karakalpak language department

PARONIMIA IN THE KARAKALPAK LANGUAGE

Abstract: The article considers the paronyms of the Karakalpak language. Sound, syllable, morphological, lexical varieties of paronyms are considered. The differences between paronyms and homophones are studied. Variants of literary and dialectal synonyms are given. Based on examples, the characteristic features of paronyms in the Karakalpak language are analyzed.

Key words: Paronym, homonym, omafon, homoform, homograph, synonym, morpheme, dictionary, lexicology, semasiology, pun, linguistics.

Language: English

Citation: Shinnazarova, S. J., & Mambetova, G. J. (2020). Paronimia in the Karakalpak language. *ISJ Theoretical & Applied Science*, 03 (83), 67-70.

Soi: <http://s-o-i.org/1.1/TAS-03-83-14> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.14>

Scopus ASCC: 1203.

Introduction

Discussion

Paronymy is a concept related to the meaning of a word. Therefore, in linguistic literature, paronyms are considered dividing into a number of groups, according to the meanings. In linguistic dictionaries it is indicated: "Paronyms are cognates that are similar in sound, but do not coincide in meaning and are used erroneously or as a joke". And in Russian linguistics, paronyms are associated with the seismiological nature of words; in sounding, paronyms are close to homonyms. The first feature, paronyms are written in different ways. The second feature, the word-synonyms do not always coincide in meaning. In Kazakh linguistics, paronyms are considered as part of lexical-semantic groups. It is also noted that "paronyms are words that sound equally, but with different morphemic composition. Paronyms are words that are completely unrelated in meaning, but having similarity in sound, even sometimes sounding alike, but with different meanings. And, sometimes, jokingly use homonyms and homographs, homoforms and paronyms as puns. ("Calembuor" in French, means a joke word that came from different foundations, sounding alike, but having different

meanings)". And also, in the indicated work of M. Belbaeva in lexico-semantic groups, homonyms, homophones, oma-forms, paronyms, puns, synonyms, plenasms, antonyms, antonyms are analyzed. And in Uzbek linguistics in a number of literatures we are talking about paronyms. Sh. Rakhmatullaev analyzes them in the systemic-lexicological direction and considers that the following 5 signs are necessary for paronyms:

1. Tokens should be formed according to word-formation patterns;
2. Obtained from a certain token (i.e. a word formed from a root word, from one root);
3. Relate to one part of speech;
4. Word-forming morphemes should be common in content;
5. Word-building morphemes should be similar in meaning".

In the above work, Sh. Rakhmatullaev presents the following borrowings from the Russian language as synonyms. For example:

1. Subscriber - owner of the subscription. Subscription - a document giving the right to use something for a certain period. Here: a) word-

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
ПИИЦ (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

formation basis - subscriber, b) educators: - ent, - element;

2. Addressee - the person or organization to which the mail is addressed. Addressee - A person or organization that sends mail. Here: a) word-formation basis - address, b) educators: - at; -ant.

3. A diplomat is an official having authority in relations of one state with another. A graduate is a person writing a thesis. Here: a) word-formation basis - diploma; b) educators - at; ant.

And in Karakalpak linguistics in the works of the lexicological direction there is no talk of paronyms at all, only the work of the author's team provides a few examples such as *шаппат -шапалақ, домалақ - дөңгелек*. In Karakalpak language, the phenomenon of paronyms is considered unproductive. They are similar in value to homophones. The similarity with homophones lies in the fact that paronyms are very similar in sound. Homophones are words that sound the same but are spelled differently". Homophones, despite the similarities, even for exactly the same sound, mean different values. Of course, in order for a word to serve as a homophone or a paronym, they must have their own pairs for comparison. If synonyms are expressed in synonyms in two, three or more units, then in paronyms and homophones their meanings are clarified through a comparison of only two units.

The term paronym in linguistic dictionaries gives the following definitions. Paronym - English paronym, dumb - patronym, gr. - para - "similar, close" + onoma - name. Words that are similar in sound but different in meaning, mistakenly used one instead of the other. Paronyms differ from homonyms (homophones, homographs). If the word-paronyms both sound and are written differently, then homophones are written differently, but sound the same. Homographs are written in the same way, they sound differently". A section of lexicology that studies paronyms is called paronymy.

In Karakalpak language there are a number of paronymic words. In most cases, they, especially in colloquial style, are actively used one instead of the other, and when they are analyzed separately, both components often denote the same meaning, there are cases when the second component, when considered separately, does not meet these requirements. For example: *ғәзыйне - ғазна* (treasury). If in colloquial style the words *ғәзыйне - наазна* means wealth, treasure, the word *назыйне* - means a banking term. *Kazna* - cash desk, associated with monetary concepts.

Аңла - аңғар (realize - notice) - words with an imperative meaning, used in referring to a person in the second person. One word can be replaced by a second word. The roots of these words *аң*, the word *аңла* are synonymous with the words *байқа, серле* (note, be alert). And the word *аңғар* with a separate application is a word associated with the semantics of a water body, denotes the direction, the course of the

flow of water. Basically, the paronymic pair of *аңла* is never used in the meaning of the direction of water flow. Paronyms in the Karakalpak language are not only pairs of the same root words, but also serve as synonyms through similar objects. *Жарық қауын* (cracked melon) - denotes a cracked melon, and for a cracked melon a combination of *жақты қауын* is not used. For example: *жақты-жарық*. *Хана жақты* (bright room), *хана жарық* (bright room) - in both examples we mean the state of the room. And the word *жарық* together with the word *жақты* in the meaning of light, radiant denotes a cracked place of something. For example: *мәйек жарық* (cracked egg), i.e. cracked, or crashed, *дийәлдың жарығы* (cracked place on the wall), *жараның жарылыуы* (abscess on the wound), *шардың жарылыуы* (bursting ball) - all this means a violation of the integrity of the object. In the above examples, a wall, a wound, a ball, a melon are not light objects at all. *Жақты* - it is applied only in the light value. *Жарық* - conveys both meanings: both light and cracked place or gap.

Бақ - бахыт (happiness). And in these words, although different sounds *қ х м х* are written, they are pronounced and heard the same way. For example: *Бақ қарасын, қыдыр дарысын* (so that happiness smiles at you) (kind of blessing, phrase). *Бахыт* - a happy life, a happy future, etc. The word *бақ* in the phrase *бақ қарасын* can be a synonymous series with the words *бахыт, ығбал* (happiness, fate). And also, the word *бақ* is used both in the meaning of happiness, and as a pure homonym in the meaning of see, look. For example: *Ақсақтың аяғына, соқырдың соңына бақ* - look at the lame man as he puts his foot, and at the blind man - with what he will end (proverb). *Қас-қабағына бағып отырыу* (meaning to adapt to his mood).

Арза - Арзы (statement - complaint). A statement is a type of official paper, complaint, statement of a person, i.e. document's name. The word *арзы* is used in the meaning of the state, position of a person. Despite the fact that these words are sometimes mistakenly used one instead of the other, individually they have features in meaning.

Тау - тап. These monosyllabic words differ in sounds *у* and *п*, when used in the imperative meaning, both words are used in the meaning of movement or both can perform the same function. For example: in the forms of *kitapta tan, kitapta tap* are used in the same meaning. And with a separate consideration, *tan* is a geographical name, an object, and the word *tap* cannot be used in the meaning of a geographical object. *Тауысыу - табысыу* (to finish something - to find each other). The words *тауысыу* and *табысыу* mean to meet each other, find each other and can be used one instead of the other. And in the paronymic pair *тауысыу* means to finish, bring to the end something.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
РИИЦ (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

For example: even if *ауқатты тауысын ишин қой* is used - you reach the dish until the end, it cannot be used in the form of *ауықатты тауысын ишин қой*. These examples are different from words with homophonous functions.

In the homophone, for example, the current is electric current and toba (a well-fed child) (not a hungry child) in an allomorphic function, the electric current in the form of that is pronounced with phonetic changes, but the ball current cannot be called a hungry child.

Урна – урнақ. Урна - a small amount of flour used in rolling dough, for other kitchen work. In the northern dialect, on a par with the word *урна*, the word *урнақ* is used, i.e. one instead of the other can be used on an equal footing. In analysis, the word *урнақ* means generation, but the paronymic couple of *игра* does not at all express the meaning of a person or generation.

Руу/уруу - these two words, similar in sound, can be used one instead of the other. The word *руу* means a tribe, the name of a clan, i.e. means ethnonym. For example: *қостамғалы рууы, қанлы рууы* - kind of *қостамғалы*, kind of *canla*. But the word *уруу* is used both in the meaning of the ethnonym and in the meaning of beat (verb).

Қостар/қосақ. These words are also formed from one root through the word *қос*. These words mean spouse, couple, couple and apply one instead of the other. For example: in the cases “*қудай қосқан қостары* - a pair predetermined by God”, “*Қосакун менен тедей Картай* - so that they grow old together with their soul mate” means a married couple. When considered separately, the word *қосақ* means to walk or move in a pair or shoulder to shoulder, to ride side by side (horses). And the word *қостар* is not used when walking or jumping nearby. *Аң - аң* (hunting, fishing). This paronymic pair is associated with a vowel - and, the basics, words, both words are associated with wild animals. For example: *аңға шығыу, аўға шығыу* combinations are used. If the word *аўлау* is used when fishing - *балықты аўлау*, the word *аң* does not fulfill a paronymic function with *балықты аңлау* in the meaning of fishing. *Аңға шығыу - аўға шығыу* (go hunting) - both combinations are used in the meaning of hunting for wild animals. The word *аў* when used separately means a piece of clothing, fishing tackle, cobwebs and is a homonym.

Ақлау – хәклеу (to cover the surface with lime). When designating whitewashing a building with lime, both words are used equally. Especially, the population of Muynak region actively uses the word *ақлау* instead of *хәклеу* when whitewashing buildings and other surfaces. And when considered separately, the word *ақлау* means justification or acceptance of someone else's side.

Күлгиш (dimple on the cheek - a person who can laugh quickly) - *Күлгиш* (a person who can make

people laugh). These paronyms are equally used when designating dimples on the cheek, and individually they give different meanings.

Сырықты-сырғыды (low bird flight) or *сырқыу* (dig to the last drop) - *сырғыу* (plenty of fruits on a tree). The words *сырықты, сырғыды* are used on an equal footing in connection with the low flight of birds. If the word is *сырқыу*, in the third person *сырқытуу* is used in digging up any liquid, dish, oil, etc. to the last drop, the word *сырыды* in this sense is not used. *Қурық болыу* (to be a trap) – *қурық болыу* (to be a laying hen). These paronyms apply to chickens hatching chickens, and the word *қурық* alone is used only in the meaning of a trap.

Жағыс – жаға. These paronymic units are equally used in the meaning of the shore of a water body, for example, *суудың жағасы, дәрьяның жағысы* and can freely replace one another. *Жаға* (collar) - a word related to the profession of a tailor, a piece of clothing. But at the same time, the word *жағыс* cannot be used in the meaning of the collar, the neck of the clothes.

Әмір (emir) – хәмір(order). Both words in the paronymic series are used in the meaning of the order. The word *әмір* is sometimes used with the aspiration of *хәмір*. And separately, the word *әмір* means title, position. For example: *Бухара әмири, Хийуа әмири* (Bukhara emir, Khiva emir), but not Bukhara Emiri.

Азыу – азғын. The root word is *аз*. Word-forms *-уу/-ғын* in both forms convey the meaning of a thinner. *Арзыу* is the name of the molar. The word *азғын* is not used in the meaning of a tooth.

Бек-бекем/беккем. In this paronymic series, both words are used in the meaning of being silent or not blinking too much. And the word *бек* in a separate use gives the meaning of a post that existed before. The adjective *беккем/беккем* does not mean a position. If the adjective *беккем* more often means tight tying something, then the form of *бек байлау* is not used in the meaning of tightly tying.

Самаллау-шамаллау. Both paronyms can be used one instead of the other in the meaning of going out into the fresh air, ventilating, taking a walk. And *шамаллау* - means a cold, runny nose.

Ақ жол (peeled, white painted road) - *хақ жол* (correct, honest, bright road, etiquette word.). The root of the paronym is *ақ*. The sound feature is *звук* sound. *Ақ жол/хақ жол* - means a right, righteous, bright road, this is an etiquette word. And *ақ жол* - means a road cleared, painted white.

Қона сақал/қана сақал - both words only in combination with the word *сақал* means a fluffy beard and can freely replace one another. Sound feature - sound - about. And the word *қана* when used separately means chagrin.

Тақыр-тықыр. The sound feature is sound. Both words, when used separately, fulfill the function of the imitative part of speech (*шапты тақырлап*

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
ПИИЦ (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

алдырыў - an adverb). *Тақыр* - geographical name, toponymic indicator. Not used in the form of *тықыр жер*.

Қат-қабат. The root of the paronym is *қат*. The word contains an additional element –аб, қ (ab) at. *Қабат* - used in the meaning of floor. However, if you mean two rooms of the same house or building, it is said: 2 қат / 2 қабат жай. The same words *еки қат / еки қабат жай* in spoken language means a pregnant woman. The word *ққ не* does not apply to a floor. Although it says *қатлап кийиниў/қабатлап кийиниў* when dressing several clothes on each other, the word *қырыққат* is not used to designate the internal organ of the animal *қырыққабат*.

Қонақ жай – қонық жай. The root of the paronym is *қон*. Paronymic affixes: - ақ / ық. Both words are used one instead of the other, but they mainly have separate lexical meanings. *Қонақ жай* - a place intended for receiving guests, a hall, etc., etc., *қонық жай* - a house or a room intended for overnight guests who come from far away.

Домилақ/дөңгелек. Due to the fact that both words describe objects of a round shape, they are used equally productively. The word *дөңгелек*, when used separately, means part of the vehicle-wheel, although it is in the shape of a circle, and not in the shape of a ball, like a watermelon.

Шаппат – шапалақ. The root of the paronym is *шап*. Formative forms: - пат; алақ. Both examples can be used in the sense of giving a slap in the face - *шаппат пенен урыў, шапалақ пенен урыў*.

However, when transmitting the meaning of encouragement, it is productively used in the form of *қол шаппатлады*, but not *қол шапалақлады*.

Based on the foregoing, we present you the following conclusions:

1. Paronyms are an unproductive phenomenon in the Karakalpak language.

2. Paronyms in the Karakalpak language can be formed through the same or similar syllables, and through the root words.

3. Paronyms in the Karakalpak language can be formed not only through the root word, in some cases in the form of phrases form paronymic pairs.

4. Paronyms are also comparable root words, each of which can make up a separate synonymous series.

5. Since paronyms are associated with pronunciation, they meet with allomorphic features.

6. Paronyms in combination with dialect words inherent in colloquial spoken language can be used one instead of the other.

7. Paronyms, although they are used by meaning one instead of the other, are written differently in the writing and separately mean different meanings.

8. Paronyms are one of the signs indicating the lexical richness of the Karakalpak national literary language.

References:

1. Nasyrov, D.S., Bekbergenov, A., Zharimbetov, A. (1992). *Dictionary of Russian-Karakalpak terms*. Nukus: Bilim.
2. Fomina, M.N. (1983). *Modern Russian language. Lexicology*. Moscow: Graduate School.
3. Belbaeva, M. (1976). *Lexicology of the modern Kazakh language*. Almaty: School.
4. Rakhmatullaev, Sh. (2006). *Modern literary Uzbek language*. Tashkent.
5. Pirniyazova, A., & Shynnazarova, S. (2014). *Teaching interactive methods in the discipline Modern Karakalpak literary language (Lexicology)*. Tashkent: Bayaz.
6. Yesemurat, B. (1994). *Modern Karakalpak language. Lexicology*. Nukus: Bilim.
7. Kenesbaev, S., & Zhanuzakov, T. (1966). *Russian - Cossack dictionary of linguistic terms*. Alma-ata.
8. (2017). *Tatar lexicology: three volumes / project serious*. In M. Z. Zakiev; ed. G. R. Galiullina (Ed.). Kazan: TAHSI, 2017. - T. III. Part 1 - p. 536.
9. Maufov, A. (1974). *Dictionary of Paronymes (Pronunciation words) Approved by the Ministry of Education of the Uzbek SSR*. "TEACHER" PUBLISHING. Tashkent.
10. (1973). *Problems of lexicology and grammar of the Uzbek language*. Tashkent.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 26.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



D.E. Omonov
Samarkand State University
Samarkand, Uzbekistan
dilomon77@mail.ru

DEVELOPMENT OF KNOWLEDGE AND SKILLS IN CHEMICAL STRUCTURES AND PROPERTIES OF PAINTS IN PAINTING ART LESSONS

Abstract: Explaining the chemical composition and properties of paints in visual arts classes, explaining the interdependency between the science and the science of chemistry, plays an important role in forming the concepts about the chemical composition and properties of dyes.

Key words: color, acquaintance, art, fine arts, gouache, tempera, watercolor, oil paint.

Language: English

Citation: Omonov, D. E. (2020). Development of knowledge and skills in chemical structures and properties of paints in painting art lessons. *ISJ Theoretical & Applied Science*, 03 (83), 71-73.

Soi: <http://s-o-i.org/1.1/TAS-03-83-15> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.15>

Scopus ASCC: 3304.

Introduction

Our ancestors left us a lot of spiritual treasures about color and its role in human life, about healing, educational, philosophical and spiritual aspects. Unfortunately, we can not take full advantage of this spiritual heritage. Indeed, in education and training, in medicine, technology, agriculture, economy and other areas, these issues are not sufficiently emphasized. However, in the developed countries of the world, much importance is attached to the replacement of colors in human life. It is known that in the educational system the science of colorology is taught. But the textbook, electronic version, etc., which meets the modern demand, is not enough. Scientific research work on the teaching methodology of color science is almost not carried out.

Each color means a person. "Why is nature created in green? What is the reason for this? What does it mean if nature is red or yellow. "Why is nature created in green? What is the reason for this? If nature was red or yellow, What did they mean? What colors raise the mood of a person? Which one has a negative or positive effect? Through the colors of human or animal, can they accurately determine their health? I'm sorry " [1.160 p] the world is an expression from infinite mysteries. It can be symbolically likened to the work of the bamisoli painter "black square". After

all, if the" square " – means its literary creation, the four sides – the symbol of Infinity, then the" Black color " indicates that the abstract world mystery is an inexplicable mystery. No matter how much humanity does not try to know these secrets, but the fact that his vision is impotent, it is natural.

Main part

Giving information about the chemical composition and properties of paints in the lessons of Fine Arts, explaining the inseparable relationship between the science and the science of chemistry, in which the chemical composition and properties of paints take an important place in the formation of concepts.

Paints used in fine arts are divided into watercolor, gouache, tempera and oil paints. [1.160 p].

Watercolor paints-have the property of rapid solubility in water, through its use, a film coating forms on the surface of the paper. The main reason for this is the presence of water-soluble kamedil (gummiarabik, cherry glue) in the composition of watercolor paints. Watercolor paints can be used mainly on paper surfaces.

Gouache paint-this paint is prepared with a dextrin substance that has a water-soluble property.

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

These paints are darker than watercolor paints, and it can be used mainly on paper, cardboard and fabrics.

Tempera-this is an aqueous solution made of water-soluble egg yolk, gummiarabic, (or cherry glue) or casein and ointment. The difference of this paint from other paints is that after using this paint on the surface, it is impossible to melt it for the second time. In many cases of these paints, the color to the tree bark (papemashe) is processed in the image, it will not be correct to use it on the surface of the holster, since it does not have elasticity.

Oil paints-are refined and cleaned, prepared with nuts or sunflower oil. After using the surface (special polotno), it can be seriously changed. These paints are mainly used for grounding and painting wood materials.

If we cut a circle out of cardboard and paint it in red, orange, yellow, green, air, blue, in the order of the spectral colors, we can set it on the axis of the fan. If we rotate quickly around the qi, we see a gray hue in the general view. In the same way, when we turn the three primary colors, red, yellow, and blue, we get a brighter light gray. When we mix these seven colors in a palette, we get a dark, unobtrusive mixture.

The difference between achromatic colors and chromatic colors is that they have selective absorption and return properties. All colors except achromatic colors, that is, colors that have a certain color, are included in chromatic colors.

Each chromatic color has three properties: hue, color brightness (i.e., more or less brightness), and color intensity (i.e., color intensity).

If we look closely at the spectrum, we can see the similarities between the red and purple colors at the very edges. When the two colors are mixed together, red is formed between them.

There can be many shades of color, but our eyes can distinguish up to 150.

Cold colors include ice, water, blue color, bluish, violet, air color, dark green, blue red, reminiscent of the color of the sky. Existing colors in nature can be further divided into warm and cold colors, respectively. Warm colors include such colors as yellow, garland, red, yellowish green, reminiscent of Taft of alanga, heated iron.

The world consists of endless mysteries-industries. To learn them you will need unlimited human life. Our ancestors tried to study the mysterious world, the causes of all the blessings created by nature, and came to such a conclusion that nothing in the world was created without reason, although the term "color" consists of four letters, it does not reach the meaning of it and the study of the mysterious world, the life of people does not reach. For the scientific study of color, the science of "Colorology" was formed.

The pupil of the eye becomes larger, the heart rate changes, this condition negatively affects the health of people. Let's reflect on this every spring

when you go to the tulip election, in addition to the fresh air, in the countryside you can see flowers of different colors, lawns, the gloomy sky, snow-white snow in the depths of the Mountain, your soul will rise, your love for life and nature will increase even more. Our world-famous ancestors such as Alisher Navoi, Abu Rayhon Beruni, Abu Ali Ibn Sina, Komoliddin Bekhzad, Firsisiy, Zahiriddin Muhammad Babur wrote a lot about color, its types, names, symbolic meanings, effects on human health and so on, conducted scientific research. [4.386 p] Chunonchi: Abu Rayhon Beruni listed more than 200 names of colors in his book Al Jawahir-Ma'rifat al Jawahir (Mineralogy) and wrote about the origin of these colors. In the east, scientists, poets, musicians, engravers, calligraphers distinguish more than a hundred types of colors, and also know their name, and even the symbolic meaning of each color. Among them, we will get acquainted with some examples that have reached US: avlon, rahuvon, leaf cabbage, Violet, Willow color, gray rose, brown color, bluish, saffron, Emerald, Amber, Gray, Blue lozhuward, Tulip color, cranberry, blue, mosh color, nefarmon, White, pistachio, pistachio pink, yellow, savsar Sky color, sur, turquoise, flying, honeycomb red, crimson, black, black kernels, Snowdrop, air color anordona, Agate, bayzo flower, leaf color, bullish night, biga, burul, gulnor, gulobi, Dani Farang, jigari, jiyron, Chick, glitter, ZAR, zarchava, gargle, dove neck, blue, lilovi, limurang, monkey mikori, Baker color, nilobi, nimatir, nim pink, norgul, fire color, olmatakor, White upa juice, carrot color, samak kesaksiyo, glaze, armor, surma color, tilla color, saliva full, tutiyoyi etc. Unfortunately, over the years, centuries, gradually the name, types and symbolism of colors, as well as their language, came to the threshold of extinction.

In addition to these paints, there are decorative paints, light-emitting and heat-sensitive paints. Decorative paints are mainly used for primer. [2.48 b]

Light-emitting paints contain substances that exhibit the properties of light-emitting phosphors, which are used in low-light sources, structures, and in various advertisements, clocks, and numbers.

There are two types of heat-sensitive paints, namely, the composition is unchanged and variable. The working temperature of the unchanged paint is 100⁰C, which after cooling returns to its previous state. As a result of the heating of the paint loses its crystallization layer, after 2-4 hours it cools, swallowing moisture from the basin again returns to its carpet. In changing paints, the working temperature is up to 950⁰C, and after cooling over time, it does not return to the previous color case. For example; NiNH₄PO₄ 6H₂O (nickel (II) ammonium phosphate hexane gidriti) Gray from light green at 120⁰, CONH₄PO₄ H₂O (cobalt (II) ammonium phosphate gidriti) from bright red at 140⁰ to dark blue, Cd(OH)₂ (cadmium (II) hydroxide) White at 200⁰, CuCO₃

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

(Copper (II) carbonate) from light green to dark brown in 400°. [5.40 p]

Conclusion

Color is of infinite importance in human life. Therefore, a lot of scientific research work on Colors has been carried out and is being conducted by scientists for centuries. Currently, hattoki is developing special color institutes and scientific

laboratories in several countries. Especially the Color Institute in Tokyo, Japan, is famous for the world. Speaking symbolically through color by prominent scientists of the world; treating people through color; nurturing; giving philosophical thought through color jargon; knowing the inner world of man through color; increase the productivity of agricultural products; formation of the spirituality of people and other issues are being studied.

References:

- (2020). "Chemical structures and properties of paints - Google Scholar." [Online]. [Accessed: 25-Mar-2020]. Retrieved from https://scholar.google.com/scholar?start=10&q=chemical+structures+and+properties+of+paints+&hl=en&as_sdt=0,5&as_ylo=2020
- (2020). 220 RL Dahlstrom - US Patent App. 16/558 and undefined 2020, "Indoor and outdoor aerial vehicles for painting and related applications," Google Patents.
- (2020). S. S.-T. and Creativity and undefined 2020, "The Alchemy of Painting: How the Technology of Oil Paint Transmuted Art." Springer, pp. 37–62, 2020, doi: 10.1007/978-3-030-17566-5_3.
- Wang, Y., Xu, J., & Wang, C. (2016). J. Z.-I. J. of E. and, and undefined 2020, "International Journal of Education and Management".
- Bulatov, S. (2009). *Painting*. (p.160). Tashkent: Publishing House of the National Society of Philosophers of Uzbekistan.
- Nabiyev, M. (1995). "Painting and painting technology". (p.48). Tashkent.
- Egamov, H. (1981). *Working with paints*. (p.56). Tashkent: Teacher.
- Bulatov, S. (1991). *Uzbek folk decorative arts*. (p.386). Tashkent: Mehnat.
- Nabiyev, M. (1985). *Coloring*. (p.40). Tashkent: Teacher.
- Shavqiyev, E. (2012). *Pedagogical technologies for the development of students' knowledge of color*. (Methodical manual). (p.14). Tashkent: Tafakkur bostoni.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 26.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Sunnatillo Mavlonovich Rahmonov

Samarkand State Institute of Foreign Languages
Doctoral student (PhD), Uzbekistan

SOCIAL AND MORAL WORLDVIEW OF AMIR TEMUR AND SUFISM

Abstract: The article analyzes the attitude of Amir Temur to Islam and Sufism. Sufism is a religious and philosophical doctrine which originated in the middle of the 8th century in the Islamic world and left a deep mark on the history of the peoples of the East. Adherents of Sufism were called Sufis, and they became real saints, sheikhs and murshids. In particular, Amir Temur accepted several Sufi sheikhs as his spiritual mentors. Amir Temur honored scientists and created all conditions for them to conduct their scientific activities. Preaching Islam, he ruled his state under Sharia law. Amir Temur praised the Sufis and sheikhs of the Islamic world and acted on their advice. He paid special attention to the development and improvement of Islam. For Amir Temur, the role of his spiritual mentors was great in the successful management of the state.

Key words: Sharia, Tasawwuf, Tariqat, feast, shaykh, Temur's Code, Tafsir, Cadiz, Fiqh, Sayyid, Sufi, Mutasawwuf.

Language: English

Citation: Rahmonov, S. M. (2020). Social and moral worldview of Amir Temur and Sufism. *ISJ Theoretical & Applied Science*, 03 (83), 74-77.

Soi: <http://s-o-i.org/1.1/TAS-03-83-16> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.16>

Scopus ASCC: 1202.

Introduction

“As you know, our region is, first of all, one of the ancient cradles of Islamic science and culture. In order to comprehensively study the rich historical, scientific, spiritual heritage of our people, to get acquainted with the world community, and, most importantly, to deeply reveal the true humanistic essence of the Islamic religion, we decided to create the Islamic Culture Center of Uzbekistan in the capital of our Motherland. It is planned to create this center on the territory of the famous Hastimom complex, which will provide rich information about the great Islamic scientists, thinkers, great poets and writers, artists and calligraphers who made an unforgettable contribution to the development of world culture. At one time, the Uthman copy of the Holy Quran brought to our country by our great ancestor Amir Temur will illuminate the entire hall in the center of this museum.

[1]

**President of the Republic of Uzbekistan
Shavkat Mirziyoyev**

The great statesman Amir Temur (1336-1405), who left a name in the history of Maverannahr, with

his sharp mind, unique leadership talent and military prowess, took a worthy place not only in our country, but also in world history. The life path and successes of the commander in governing the state, achieved during his activity, are reflected in a number of historical works.

Amir Temur founded a huge centralized state, covering a vast territory from India and China to the Black Sea, from the Syr Darya and the Aral Sea to the Persian Gulf. In addition, the countries of Asia Minor, Syria, Egypt and the northwest to the Lower Volga Region, the Don, in the northeast to Lake Balkhash and the Ili River, and in the southeast to North India are subordinated to the state of Amir Temur.

Amir Temur is valuable not only as a great statesman and commander who liberated our Motherland, our country and people from the half-century colonial oppression of the Mongols, but also as a person - the liberator of the European world and a unique person who gave rise to the Renaissance of these peoples.

In particular, the French explorer Louis Bazin, in his work “Amir Temur or “Temur Ruler”, mentioned few changed the wheel of history: his powerful victory over Boyazid Yildirim at the battle of Ankara in 1402

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

extended the life of Constantinople for half a century, thereby saving Europe from the Turkish invasion; Strong blows inflicted on Tohtamyshkhan and the Golden Horde freed the Russians from Mongolian colonization and allowed Moscow to carry out reforms; his campaigns in the Middle East, Iran and Northwest India fundamentally changed the political balance of these regions.” [5]

A comprehensive study, analysis of the life and work of Amir Temur is one of the most important stages in the history of our country. The reign of Amir Temur in Maverannahr and its Muslim population based on Islamic traditions testifies to the role of Islam in the life of Amir Temur.

In the XIV-XV centuries, religious thinking was important in the socio-cultural life of the state of Amir Temur and the society of that time. The attention and respect of Amir Temur to the Islamic religion and its mature manifestations is noted in almost all sources of that time. According to sources, "Amir Temur, as a wise politician, has always been very friendly with all the clergy of the Muslim clergy, demonstrating his continued commitment to Islam." [2]

Amir Temur's father, Taragay Bahodir, was also supportive of the clergy and dervishes, especially with the famous sheikh Shamsuddin Kulol. Sharafuddin Ali Yazdi mentioned in his "Zafarnoma" the name of Sheikh Shamsuddin Kulol, and Ibn Arabsha mentioned by name as Shamsuddin al-Fokhuriy.

Amir Temur had close relations with the clergy and Muslim clergy, showed full respect for them, and kept in his palace the mature sheikhs of the Islamic religion. Temur has always strictly abided by Sharia law.

"I brought Sayyids, scholars and sheikhs closer to me. They always came to my palace and decorated my meetings. They put forward religious, legal, mental questions, expressed valuable thoughts. And I also learned from them what is legal and illegal" - said Temur in his code. [7]

Amir Temur paid attention to the people of science, spirituality, showed goodwill and sought to use them in the cultural life of society. As the historian Ibn Arabshah wrote, "Temur was kind to scientists and thinkers whose he brought close to him. He was full of respect for scientists and saw them completely holy from any person. Each of them was appointed by job so that they could make a career and showed high respect for him. [4]

In the palace of Amir Temur, many enlightening scholars such as Mavlon Abdujabbor Khorezmi, Mavlon Shamsuddin Munshi, Mavlon Abdullo Lison, Mavlon Badriddin Ahmad, Mavlon Numoniddin Khorezmi, Xoja Afzal, Mavlon Alouddin Koshiy, Jalol Xokiy enjoying the blessing of Amir Temur, were at his service. Amir Temur paid great attention to the development of science, medicine, mathematics, geography, architecture, astronomy, literature, history and music and talked a

lot with scientists, about this scientist L.Lyange writes: "Timur had a great respect for scientists. He often came down from the throne and came to them to talk with historians, philosophers, as well as with everyone who was talented in science, management, and other matters. Amir Temur also added to the ability to subjugate his people, the talent to make them happy under his rule". [6]

The mature historian of his time Ibn Arabshah writes in his work "Ajoyib al-maqdur fi tarixi Taymur": "When Amir Temur was in the presence of Shamsuddin al-Fokhuri (Sheikh Shamsuddin Kulal), he was busy with references to Allah, filled with deep fantasies from his followers adherents. As soon as the sheikh looked at him, Timur rushed to the sheikh. Sheikh told his people: "Oh people! You pray for him that he will achieve his desired goals". Amir Temur regarded this sheikh's prayer as the first reason for his success." [4]

One of the feasts of Amir Temur is Mir Sayyid Baraka, whose ancestors belonged to the Meccan family. Before the conquest of the Balkh fortress in 1370, he came to Amir Temur and gave him a drum and a flag (signs of strength). And he predicted that his future would be bright. It should be noted that from the very beginning of his political career, Amir Temur established strong ties with Muslim priests, and this relationship continued throughout the entire period of his reign. [1]

Amir Temur, in any case, always favored representatives of religion. Even in the conquered countries, spiritual leaders were taken under protection, often they personally came to Amir Temur, he liked to talk with scientists. In particular, he had conversations with theologians, philosophers, historians, astrologers and mathematicians.

He allowed scientists to freely communicate with him in such discussions and encouraged them. If they made a great impression on Amir Temur, then he either invited them to serve in his palace, or in Samarkand, or allowed them to stay in his country. [8]

Amir Temur always honored the saints and with special respect for their memory. For example, Syrian scholar Akram Hasan al-Alabi writes that during his stay in Damascus, Amir Temur built worthy domes over the tombs of the wives of the prophet Muhammad (s.a.s.) Umm Salama and Umm Habiba.

According to the "Zafarnoma" Amir Temur visited the grave of Ahmad Yassavi in Yassi many times. By his decree, a huge mausoleum was erected on the grave of the sheikh. Visiting the temples of saints and shrines was a strict tradition for Amir Temur, who always, even during military campaigns, strictly abided by this habit. He also did not allow the cities where the saints' graves are located to suffer damage to their souls. [9]

In addition, Amir Temur ordered his military commanders and troops not to destroy the city of Homs, where the grave of one of the companions of

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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 Prophet Muhammad, the great Muslim commander Khalid ibn Walid, is located. [4]

The relationship of Amir Temur to the shrines, patrons of religious Islam, their temples is described in detail in the "Temur code": I ordered the worship of the descendants of the Prophet, scholars, and holy people. To donate funds to the graves and shrines of the clergy. To provide carpets, food and lamps for these shrines. [7]

It is known that Amir Temur respected scientists, took into account their views and talked with them on various topics.

The famous Arab historian and thinker Ibn Khaldun (1332-1406), who arrived in Damascus, which was besieged by the forces of Amir Temur, was received by Amir Temur and a long and interesting conversation took place between two great people. During the meeting, when the famous historian presented Amir Temur with a beautiful copy of the Holy Quran, he immediately got up and kissed the holy book.

Amir Temur paid special attention to strengthening the foundations of Sharia, strict observance of the laws of the Islamic religion. Those who acted contrary to Sharia law were severely punished. Justice and law enforcement were the structural foundations of Amir Temur. He did his best to spread the religion of Islam. That is why he described a campaign in some non-Muslim countries (for example, Georgia, Armenia, India), primarily by spreading Islam in these countries and eliminating oppression against Muslims there.

The knowledge and keen mind of Amir Temur in his youth was highly appreciated by his teachers and mentors who advised the father of Temur: "the son took us enough science, and now give it to the mentor better than us."

"At a very young age, Amir Temur remembered the Holy Quran for three years. He studied the book of Allah to such an extent that the experience of Amir Temur has still not been done by anyone else. Just as Amir Temur read every sura from beginning to end, he read it in the opposite direction, that is, vice versa. Although this work is not encouraged by anyone, it is proof of how thorough Amir Temur was". [10]

Amir Temur not only remembered the Holy Quran, but also knew its meaning and was well versed in other sciences. He was particularly famous in the field of jurisprudence. This, in turn, gave him a reputation and increased respect for the people.

Amir Temur was awarded the title of Qutbiddin¹, which is given once every hundred years. By accepting Islam and sincerely accepting its humane and living doctrines, Amir Temur achieved high standards of the so-called "Muslimity", as well as

peace, solidarity, charity, fraternity, prosperity in all aspects of his activities. Amir Temur called on the people to actively participate in public life, to be fair, enlightened and honest.

In written sources, numerous data cited in historical works indicate that pilgrims traveling from Maverannahr and Khorasan to Mecca for pilgrimage have long suffered from attacks by robbers in places passing through the territory of Iraq, as well as from not only the Central Asian commercial people and trade caravans suffered from the robbers, but also local merchants. For this reason, local merchants turned to Amir Temur in search of salvation when the Amir Temur was in Baghdad. Amir Temur quickly carried out the relevant work in this direction, eliminated the robbers and putschists, and also eliminated the threat on Iraqi roads, ensuring calm.

In his personal life, Amir Temur accepted Islamic mysticism as a faith, deeply accepted its theoretical foundations and directly followed it in his political activities. He included mysticists and famous scholars in his pillars and used his ideas to address important political issues. In particular, Ibn Arabshah noted with surprise that, in addition to Muslims, Amir Temur was faithfully served by Christians, Zoroastrians, Buddhists and people of other religions.

"In addition to God, they considered Timur their leader and patron, and they were proud of it. Their blasphemy and love for him were so great that if Timur had declared prophecy or divinity, they would certainly have confirmed their claim. Each of them loved Temur and kept close to Allah". [4]

He also patronized sheikhs such as Xoja Ali Muayyad al-Tusiy, Sheikh Ibrohim, Sayyid Muhammad as-Sarbadol and sheikhs of Samarkand such as al-Islom, Xoja Abdul al-Avval, Sheikh Xoja Isomiddin as-Islom al-Malik, Sheikhs of Kesh brother Sheikh Islom Abdulhamid and Sheikh Abdurakhmon. Amir Temur accepted Khoja Ahmad Yassavi, Sul-ton Burhoniddin Qilich, Sheikh Nuriddin Basir and Sheikh Burkhoniddin Sogarji as his spiritual feasts, received divine support from their spirits and ruled his country. From historical data it is clear that Shamsiddin Kulol, Amir Said Kulol, Mir Sayyid Baraka, Abu Bakr Toyobodiy taught Temur the principles of the path of spiritual perfection.

At the same time, the Timurid princes, like their father and grandfather Timur, believed in Sharia and noble teachings and followed the advice of the sheikhs of their time. Muhammad Porso, Hasan Attor Samarqandiy, Yaqub Charkhiy, Sadididdin Qoshgariy, Nizomiddin Khomush, Xoja Ahror Valiy, Shoh Nematulloh Vali, Abdurahmon Jomiy, Alisher Navoiy, Makhdumi A'zam Dahbediy and others lived

¹ Qutbiddin - ("polar", "arrow" in Arabic;) - the ideal, only and greatest leader in the Sufi view. (Encyclopedia of Islam, Tashkent 2017 p. 625)

Impact Factor:	ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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

during the time of the Temurids dynasty and had an excellent reputation.

In the palace of Amir Temur and Temurids (his descendants), the richest libraries functioned - "Dor ul - Kutub" ("house of books"), in which books and rare manuscripts of various subjects were stored. The rulers showed particular concern for enriching this knowledge with treasures with completely new manuscripts, allocating the necessary funds for this purpose.

Thus, Amir Temur was a commander with deep knowledge, theology and deep knowledge of the world. The reign of Amir Temur pays great attention

to Islam. It would not be an exaggeration to say that Islam at that time served as the main ideology and theoretical basis for creating a centralized state and achieving its goals in the field of economics, culture and science.

Amir Temur fought for justice, correctness and purity, not engaging in adultery and bad deeds, avoiding dirty deeds, honestly working, practicing a profession, showing compassion for those in need. Amir Temur relied on Islam not only as a government, but also as a humane institution with high human interests.

References:

- (2017). 2017 yil 15 iyunda, Toshkent shahrida "Ijtimoiy barqarorlikni ta'minlash, muqaddas dinimizning sofliqini asrash - davr talabi" mavzusida anjumanda Prezident Shavkat Mirziyoyevning so`zlagan nutqi.
- Ju, A. (2003). «Zolotaja Orda i ejo padenie». (p.505). Moscow.
- Bartol'd, V.V. (n.d.). «Carstvovanie Temura». Retrieved from biography.wikireading.ru
- Ibn Arabshoh (2017). «Ajoyib al-maqdur fi tarixi Taymur». Toshkent.
- Karen, L. (2018). «Amir Temur saltanati». (p.245). Toshkent -"O`zbekiston".
- (2018). «Amir Temur zhahon tarixida». (p.300). Toshkent: "O`zbekiston".
- (2018). *Temur tuzuklari*. (p.180). Tashkent: O`zbekiston.
- Hukhem, H. (1995). «Vlastitel' semi sozvezdij». Toshkent.
- Sharafuddin, A. Y. (2008). «Zafarnoma». (p.250). Tashkent.
- Shayx, M., & Sodiq, M. Y. (1996). «Amir Temur va Islom». Tashkent.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 25.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Sherbek Naimovich Xayitov

The Bukhara Engineering and Technological institute

Head of the Management Department,

Assistant Professor

SOCIO-ECONOMIC SIGNIFICANCE OF HUMAN RESOURCE MANAGEMENT

Abstract: *it is known that employment is one of the most important macroeconomic indicators. At the same time, employment has a social character. It reflects not only people's need for income, but also the need for self-expression through social activities, as well as the satisfaction of society at a certain level of socio-economic development. The need for paid work, the priority of a socially useful activity, the criteria for participation in labor, the choice of profession and place of work, the reason for work, the interest in high-performance work and the possibility of such work based on professional skills and ability to work - all of them arise as a result of the social orientation of man in society, the state's fiscal and distribution policy, structural changes in the national economy, the development of the service sector, education and health policy, and so on. In this regard, it is necessary to warn the population against the mistake based on a simple understanding of the nature of employment.*

Key words: *labor resources, employment, macroeconomic indicators, employment problems, supply and demand.*

Language: English

Citation: Xayitov, S. N. (2020). Socio-economic significance of human resource management. *ISJ Theoretical & Applied Science*, 03 (83), 78-81.

Soi: <http://s-o-i.org/1.1/TAS-03-83-17> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.17>

Scopus ASCC: 1400.

Introduction

Employment is often defined as the supply and demand for labor. When there is no unemployment, there are no unresolved employment problems. In this way, the category of employment and the labor market will be similar. The proposed economic program to overcome the crisis does not take into account the deep processes of employment. For example, these processes are related to the characteristics of labor of different socio-demographic groups, the level of education, social orientation, including the cause of labor, and so on.

II. Literature review

Looking at employment as a problem of unemployment leads to an underestimation of the objective necessity of shifts in the use of labor resources, which lead to a new approach to solving the problem of full and effective employment, achieving high levels of labor productivity and progressive employment, formation of the sectoral structure: meeting the needs of the national labor force, taking

into account its quantity and quality, improving the socio-professional characteristics of labor resources, linking employment with the goals of demographic development.

III. Analysis

Macro-level employment policy is aimed at shaping the main features of employment in a socially oriented market economy: ensuring full employment with the necessary conditions for the realization of the right of citizens to work and achieve a high standard of living. It is known that the market is divided into groups to increase the efficiency of the economy through these appropriate management methods, to squeeze out economically inefficient jobs from the management sector, to increase production efficiency and to meet the consumer needs of the population. In this context, promoting full employment remains a strategic goal. As a result of increased labor productivity and the functioning of the economy as a whole, to ensure modern living standards, reduce employment, and expand part-time work. There is a

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

financial basis for reducing the working week. In order to fulfill the social need for the professional activity of the individual as a means of self-expression, even the most optimal combination of working and leisure time, and for every citizen to work, study, rest, children should be able to engage in parenting. The most important criterion of a socially oriented market economy is the attitude to employment. Employment remains an integral part of comprehensive social policy. The social nature of employment problems is determined by the fact that it is primarily focused on the person, his interests and needs in the field of labor. There are at least four social aspects to employment that need to be considered:

a) employment is inextricably linked with the most important human right enshrined in the Constitution, the right to work;

b) the crucial role of employment in shaping living standards and decent living conditions. It is precisely the increase in employment activity that is currently the most important guarantee of improving the living standards of able-bodied citizens and their families;

c) the formation of a new cause of highly productive labor, which is the basis for the increase of the well-being of everyone and of society as a whole;

d) it is labor activity that changes a person, reveals and increases his professional potential, stimulates the development of the individual. Together with other aspects of social policy, it should be considered as one of the main directions of employment development, which determines the redistribution of financial, material and labor resources in the national economy, the priorities of scientific and technological development. It also identifies ways to deploy productive forces and improve quality of life. This is one of the most important problems, and the solution to the problem of employment, and therefore the success of the reform of the whole economy, depends to some extent on the recognition and solution of this problem.

The source of the wealth of any society, the main factor in the creation of material and spiritual wealth by human, is labor. Regardless of the social form of society, labor remains a necessary activity in the production of tangible and intangible goods. This shows the economic nature of labor and its economic category. People are constantly improving the production process, expanding the scope of labor activities. Because all the problems of economic development are related to the economical use of limited resources to meet growing needs, labor is the basis of economic development of society. In the process of labor, a person expends a certain amount of physical and mental energy, resulting in functional changes in his body, which are explained by the biological aspect of labor. From a biological point of view, labor is the movement of nerves and muscles in the body using energy and changes in protein. A

person's basic need to work is primarily related to his or her need to live. It is also possible to exemplify the needs and interests, desires and aspirations, values and ideals of the internal motivating forces that lead to work. The role of labor in the development of man and society is manifested in such a way that in the process of labor not only material and spiritual wealth is created to meet human needs, but also the workers themselves develop, develop new skills, demonstrate their abilities, increase and enrich their knowledge. Also in the reproduction of the working population and labor resources, also influences the formation of labor supply and demand in the labor market. As a result of the changes that take place as a result of labor, a new quality of labor is created, that is, in the new working conditions, more physically and spiritually mature workers armed with serum tools are employed, and their productivity is much higher than previous results will have indicators. This circular cycle always continues and new aspects of labor, its new results, are discovered.

Effective use of social partnership methods in the process of human resource management. Social partnership is the development of coordinated socio-economic policies, implementation of socio-economic development programs of non-governmental non-profit organizations, public authorities and administration, as well as business entities. The solution of humanitarian problems is the interaction of different segments of the population in protecting the rights, freedoms and interests. The main tasks of social partnership in the process of human resource management are:

- development and implementation of socio-economic policy of social partners in the process of human resources management;

- implementation of targeted programs of human resource management, ensuring concerted and goal-oriented joint efforts to address humanitarian issues;

- formation of strong partnership relations of the subjects of social partnership in addressing issues of social significance;

- support non-governmental non-profit organizations in the management of labor resources in the implementation of socially useful activities, the development of civic initiatives;

- development and promotion of initiatives of social partnership entities in addressing labor management issues;

- strengthening the confidence of citizens in public authorities and administration on the basis of ensuring transparency and openness in their decision-making and implementation of human resources management;

- improvement of existing forms and effective models of social partnership and development of new ones;

- creating conditions for the development of civil society institutions representing the interests of young

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

people, women, people with disabilities, as well as other persons in need of social protection, support for the development of programs to protect their rights and legitimate interests and the expansion of partnerships.

The main principles of social partnership in the process of human resource management are:

- equal partnership and mutual interest;
- respect and consideration of the interests of the subjects of social partnership;
- voluntary commitment;
- freedom to choose and discuss issues of social importance;
- transparency;
- collegiality in the development of joint decisions;
- obligation to fulfill the obligations assumed by the subjects of social partnership;
- integrating the actions of social partners in order to ensure their active participation in the formation and implementation of effective social policy;
- regular monitoring of the fulfillment of obligations by social partners.

IV. Discussion

Sectoral and intersectoral movement of labor resources another type of mobilization of labor resources in the system of production processes, which reflects the laws of division of labor, is the movement of employees across sectors of the economy. The mobilization of the labor force between one or another sector (intra-sectoral or inter-sectoral mobilization) is observed within small regions (cities, districts and regions) or over large distances outside them - in economic zones. It should be noted that during this process, the regional mobilization of labor resources is also observed. Intra-network and inter-network connections should be made in a smooth manner. But it is very difficult to strike a balance between them. Because not all sectors of the economy can develop at the same time. Of course, as such cases have been observed, it is a difficult task to strike a balance both within the network and in the inter-sectoral monitoring of staff mobilization efforts. The technical level of production, as well as the need for labor in poorly developed sectors of the economy, will vary depending on how the stages of technological development in these sectors continue. In some industries, these needs may increase or decrease for a number of reasons, a process that in turn leads to cross-sectoral redistribution of employees. Another important factor in this process is the intersectoral wage gap. This factor is the main force driving the mobilization of employees of enterprises operating in various sectors in the region, slightly above the level of material and spiritual life indicators. Achieving a balance between sectors through wage increases will have a strong impact on the redistribution process. The impact of self-employment on mobilization efforts

will be reduced, and staff mobilization will be low. In addition, changes in cross-sectoral wages do not always lead to changes in employment. As a result, it is important to note that redistribution of wages is not always a decisive factor. Intersectoral mobilization efforts are related to the labor efforts of the production team, which is explained by the reduction of the workforce operating in the production team and its outward orientation. It is this redirection that becomes the object of redistribution within and between networks. The availability of favorable conditions for cross-sectoral mobilization of employees leads to a technological convergence of networks. In addition, the growing focus on technologists has led to the unification of labor processes in many industries, allowing employees to switch jobs not only in one industry, but between several industries. The mobilization of labor resources in the sectors of the economy, in a sense, also depends on the specific characteristics of the sector. It is important to keep in mind the ongoing development processes in some sectors. The contingent of network employees is, in a sense, formed by the movement of employees within the network, that is, as a result of the movement within the enterprise operating in the same network. According to the data, the total mobilization efforts observed within the network can range from 3 percent to 45 percent. In such cases, the increase in the level of cross-sectoral mobilization is also indicative of the high level of professional training of employees: for example, in the group of employees engaged in agriculture intra-network mobilization as a result of neglect of occupations metallurgist in the field of metallurgy, while 2.9 percent of the movement 38.9 percent in the staff group. Such advantages of the mobilization of employees within the network are manifested, first of all, in the availability of opportunities to maintain their profession, moving from one workplace in the network to another, that is, to a workplace with favorable working conditions. The breadth of the scale of mobilization of employees within the network, the differences between the location of enterprises operating in a particular network in the region, the number of employees employed in these enterprises, the conditions and characteristics of labor activity in the network, the level of labor intensity, is determined by the preferences created for labor consumption. It should be noted that with the increase in the number of small businesses, the level of mobilization will also increase. Therefore, in order to reduce the mass mobilization of workers, it is necessary to increase the concentration of the production process in all sectors, especially in sectors of the economy with a large number of small enterprises. Convergence of working conditions in different sectors and industries of the economy leading to an increase and an increase in the overall production dynamics will come.

Impact Factor:

ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PИHИЦ (Russia) = 0.126	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

Professional mobility of labor resources. The laws of occupational mobility are one of the least studied. This problem is due to the large number of professions in the economy, the very complex and contradictory nature of this process. Professional mobility of labor resources is a dynamic process, the implementation of which ensures a quantitative and qualitative correspondence between the labor force and the available jobs. This is determined by changes in the professional structure of employment. The professional structure of employment, in turn, is determined by the level of development of the productive forces of society. The state of the material and technical base of society predetermines the professional composition of labor resources. They say that many economic laws, primarily the social division of labor, are directly reflected in changes in labor. Advances in science and technology are constantly improving the division of labor and determining changes in the occupational structure of employment. Technological advances, on the other hand, are changing the division of social labor. This makes it necessary to change labor, to move labor resources. The law of labor change provides for the existence of a comprehensively developed employee, and the qualitative composition of labor resources is the most important factor determining the change in the professional structure of employment, is

calculated. Alternative employment structure and professionalism changes in mobility occur in conjunction with improvements in the employment network structure.

V. Conclusion

At different stages of society's development, certain sectors of the economy become of primary importance. For example, today the share of industries that determine the development of technology in the total volume of production has increased. Such changes in the pace of development of some sectors of the economy lead to changes in the professional structure of employment. Changes in the professional structure of employment within a particular socio-economic formation are determined by the improvement of:

- the level of implementation of the achievements of the scientific and technological revolution in production;
- quality structure of labor resources;
- sectoral structure of production and employment.

All these factors are dialectically interconnected and interdependent. Occupational mobility has a certain degree of independence and can change when employment of labor resources does not depend on the improvement of the professional structure.

References:

1. Abdurahmonov, Q.X., & Abdurahmonov, X.X. (n.d.). "Mehnat resurslarini boshqarish".
2. Kibanov, A.Ja. (2010). *Osnovy upravleniya personalom.*
3. Marenkov, N.L., & Alimarina, E.A. (2004). *Upravlenie trudovymi resursami.*
4. Mumladze, R.G., & Guzhina, G.N. (2007). *Jekonomika i sociologija truda.*
5. Potemkin, V.K. (2010). *Upravlenie personalom.* (p.421).
6. Rahimova, D., Abulqosimov, X., Abdurahmonov, O., Kattaev, K., & Ro'zmetov, R. (2009). *Milliy mehnat bozori uchun kadrlar tayyorlashni boshqarishni takomillashtirish yo'nalishlari.*
7. Sokolova, M.I., & Dement'eva, A.G. (2005). *Upravlenie chelovecheskimi resursami.*
8. Travin, V.V., Magura, M.I., & Kurbatova, M.B. (2005). *Upravleniya chelovecheskimi resursami.*
9. (2002). *Upravlenie chelovecheskimi resursami: opyt industrial'no razvitmh stran.*
10. Xolmo'minov, Sh.R., & Xolmurodov, S.E. (2013). *Mehnat bozori iqtisodiyoti.* Toshkent.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 25.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Bakhodir Yakhshimurodovich Akhmedov

the Bukhara Regional Center for Retraining and Advanced Training of Public Education

Associate Professor,

Candidate of Pedagogical Sciences

TECHNOLOGY OF TEACHING LISTENING COMPREHENSION IN RUSSIAN LANGUAGE

Abstract: *Teaching Russian requires a lot of practice. While listening the thought of what the interlocutor is saying, at times is arduous to repeat. Thus, in the process of learning a language, forming and improving listening skills, a number of problems arise: common to the process of listening, and personal, associated with an attempt to understand foreign speech. This article will elucidate overwhelming majority of employing methods to teach listening comprehension in Russian language.*

Key words: *listening, communicative approach, speech, individual characteristics, foreign language, rhyming words, text, audio text, listening skill, verbal action.*

Language: English

Citation: Akhmedov, B. Y. (2020). Technology of teaching listening comprehension in Russian language. *ISJ Theoretical & Applied Science*, 03 (83), 82-85.

Soi: <http://s-o-i.org/1.1/TAS-03-83-18> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.18>

Scopus ASCC: 1203.

Introduction

Listening includes the oral perception of textual material of various types and genres: from descriptions of events, stories, radio and television news, lectures, conversations to pragmatic texts (instructions). In the Foreign Language Program, in addition to those mentioned, such types of texts as interviews, announcements, advertising are also recorded.

The communicative approach prevails in the methodology of teaching foreign languages, which reflects to the greatest degree both the main goals of teaching and the psychological and pedagogical ideas of the present, which underlie the methodological provisions as the Russian linguist notes.

The analysis of the phenomena that impede the perception of speech by ear, allows one to correctly select and graduate the material used to teach listening comprehension, and serves as the basis for developing a system of exercises aimed at teaching students how to overcome the difficulties considered. To achieve the desired results in teaching listening, you should apply both special and non-special speech exercises, as well as, of course, linguistic ones.

The main means of teaching listening as a goal is audio text and the skillful organization of working with it is designed to solve a number of the most important tasks of teaching listening comprehension of foreign language. Here are the difficulties that can be faced learning a listening skill and ways to combat it.

There are a number of objective difficulties that impede the understanding of speech the first time:

-difficulties due to listening conditions (external noise, interference, poor acoustics);

-difficulties caused by the individual characteristics of the speech source (especially diction, timbre, pause, articulation disturbance (burr, lisping, stuttering, age-related features, various accents and dialects);

-difficulties caused by the linguistic features of the perceived material (the use of a large number of unfamiliar vocabulary, idiomatic expressions, colloquial formulas, special terms, abbreviations).

Ways to overcome the difficulties of the first group:

-when presenting the text, use facial expressions, gestures, lip movements, eye contact, as well as maintaining the average pace of natural foreign

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

language speech, but provided that to facilitate understanding at the initial stage there will be pauses between phrases, proper use of audio tapes in the lesson.

Ways to overcome the difficulties of the second group:

-it is very important that the trainees have the opportunity to listen to both male and female voices in a foreign language, to listen to people of different ages.

Ways to overcome the difficulties of the third group:

-knowledge of speech models serving specific communication situations, the most frequent phraseological units and clichés can greatly facilitate the understanding of speech by ear;

-the number of unfamiliar words can be 3% of all words in the text;

-unfamiliar words should not be keywords;

-the formation of the ability to guess the meaning of new words, as well as the ability to understand the meaning of the phrase and the text as a whole, despite the presence of unfamiliar elements in it.

All the considered difficulties of listening can be overcome with the help of the correct selection of texts and methodologically appropriate organization of students' activities on their basis.

II.Literature review.

When working on listening, such techniques can be used as: teaching the perception of individual sounds, syllables, words, phrases; learning to perceive individual sentences; learning to perceive small texts (4-5 phrases); learning to read texts in parts; text comprehension training; training in the perception of texts on the basis of various supports (filmstrip, video film, film fragment).

Listening exercises can be of two types according to I.L.Bim:

a) non-specialized;

b) special.

Special exercises, in turn, can be:

a) conditionally speech;

b) speech and

c) controlling.

Some methodologists distinguish 4 types of exercises for learning to listen: preparatory and speech.

1) Exercises for the perception and recognition of sounds, sound combinations, intonation drawing of a phrase, grammatical forms of the word:

a) listen to the words and raise your hand if you hear a sound in the word;

b) listen to a few sentences and raise your hand when you hear an interrogative sentence;

c) listen to the words and select those that correspond to the picture;

d) listen to the verbs and name the ones used in Past Simple.

2) Exercises in the repetition of words, phrases, phrases, texts. R.K.Minyar - Beloruchev calls this type of exercise basic, as it helps to develop such important listening mechanisms as speech hearing, memory, articulation, probabilistic forecasting.

A special place is occupied by the exercise in repeating the expanding snowball syntagmas, for example: a cat - a black cat - a big black cat - a big black cat in the room - there is a big black cat in the room.

3) Exercises for the development of a probabilistic forecasting mechanism:

a) listen to the words to the audio text and name its subject;

b) listen to the headline and say what will be discussed in the audio text; c) complete sentences based on the meanings of connectors (unions, union words).

4) The exercises in teaching comparison (identification) orientate students to compare familiar lexical units, phrases corresponding to or inappropriate speech passages, to identify words, phrases, that were not present at the first presentation.

a) listen to 2 sentences and tell how they differ from each other, what clarifying information appeared in the second sentence;

b) listen to the sentences and mark those that do not correspond to the content of the text you have listened to.

III.Analysis.

In the process of learning at school, listening comprehension consists in listening and understanding speech: in a lesson, messages of classmates, teachers. Outside of school, listening and understanding of native speakers, listening to lectures in a foreign language is not excluded.

Listening is closely related to other types of speech activity (speaking, reading). It can enter into dialogue dialog as its receptive component, while the listener and the speaker can periodically change roles.

Teacher actions when learning listening:

1. Definition of a specific task of teaching listening (the most important thing for a teacher is to find out whether listening in this particular case is the goal of learning or a means of teaching another type of speech activity, that is, communicative or educational listening).

2. Selection and compilation of a text for listening, taking into account the requirements of the program, specific learning conditions (the most important condition is the level of language proficiency of students) and the interests of students. Sometimes it is necessary to partially adapt the text from the Book for the teacher or manuals to help the teacher. The text can be small, consisting of several sentences, and be intended for the development of certain mechanisms of listening (auditory memory, anticipation, conjecture, reflection, etc.).

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667
ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

3. Analysis of possible difficulties (linguistic / linguistic, substantive) of this text.

4. Determination of the conditions for the presentation of the text (using audio recording or directly the voice of the teacher or an unfamiliar voice, with or without deployed supports).

5. The definition of preparatory work at the pretext stage, taking into account the identified difficulties.

6. The wording of the installation before listening and determining the number of listening or presenting the text (one or two times), which depends on the goal set by the teacher: listening is the goal or learning tool. At the senior stage of training, the installation should aim students to understand the content, not the facts from the text), therefore, based on the foregoing, it is necessary to pay attention to the formulation of the installation, since the success of students' understanding of the text largely depends on it.

7. Definition of ways to control understanding of the text: the use of linguistic or non-linguistic methods of control.

The requirements for mastering listening in different classes are distinguished by the volume of texts intended for listening (sound duration) and by the degree of complexity of the language material (the presence of an allowable number of unfamiliar words). In the listening process, two goals are achieved: to teach students to understand the general meaning of the text and to teach to implement a (full) detailed understanding of the content of the text. Pupils master a certain amount of vocabulary receptively, which is mandatory in the learning process. According to the linguist, the main means of teaching a foreign language is the language environment, and all other means are auxiliary, their purpose is to create a pronounced illusion of introducing students to the natural language environment. A lesson in a foreign language using audiovisual and adaptive means creates a prototype of a foreign language environment, brings the learning process closer to the conditions of real communication in this language. In the learning process, according to Russian linguists and, the installation of a slander can be associated with an understanding of basic and personally significant information, obtaining data of value for practical activities and for communication in a peer team.

For the formation of listening skills, teachers should use certain communication exercises that can be used to acquire students the skills of other types of speech activity: speaking and writing. Performing these exercises can be used for monitoring and control.

Tasks for checking the understanding of the text can be of three levels:

- tasks for understanding the contents of the listened;

- tasks for creative processing of perceived information;

- assignments for the use of the information received in communication and other activities.

Without competent and timely control, the process of learning to listen is not complete. In learning to listen, two stages can be distinguished:

1) the stage of formation of the basics of the ability to listen;

2) the stage of improvement of listening skills.

There are 2 programs for mastering listening:

1) the general program (listening and speaking function simultaneously);

2) a special program (listening is considered as an independent type of communicative activity to extract information from sounding speech).

Learning to listen to texts can be built on a specific pattern. Such work involves:

1) introductory conversation of the teacher, setting goals in the process of work;

2) the removal of linguistic difficulties in the text;

3) the formulation of the preliminary task;

4) initial listening to the text;

5) control of the preliminary task;

6) the formulation of a new communicative task;

7) secondary listening to the text;

8) monitoring the implementation of a communicative task;

9) speaking exercises based on the listened text;

10) summarizing the work on the text.

IV. Discussion.

When working on listening, such techniques can be used as: teaching the perception of individual sounds, syllables, words, phrases; learning to perceive individual sentences; learning to perceive small texts (4-5 phrases); learning to read texts in parts; text comprehension training; training in the perception of texts on the basis of various supports (filmstrip, video film, film fragment).

Listening exercises can be of two types according to I.L.Bim:

a) non-specialized;

b) special.

Special exercises, in turn, can be:

a) conditionally speech;

b) speech and

c) controlling.

Speech exercises control the speech activity, imply the semantic perception of a speech product in conditions approaching natural communication and the implementation of the communicative function of audio activity, aimed at improving the process of semantic perception and at achieving a certain level of understanding.

Preparatory exercises are often called exercises in the actual listening, which are performed at the level of the completed speech whole, that is, expanded text:

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHHI (Russia)	= 0.126	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

- listen and understand who and what is meant;
- headline;
- break the plot text into semantic pieces;
- write down the main content in the form of keywords;
- transmit the content in the native language.

The choice of a particular speech exercise depends on the type of listening (global, selective, detailed). Speech exercises with audio text are performed interrogations, in the process of listening and after listening. Stages of working with text: pre-text, text and post-text.

The tasks of the pre-text stage:

- Creation of motivation;
- Removing difficulties (we give unfamiliar words: names, geographical names, dates);
- “Turning on” the mechanism of expectation and probabilistic forecasting (we give keywords, visual impulses in the form of clarity, we discuss the topic of text in our native or foreign languages, reading and discussing text that is similar in theme to audio text);
- Updating existing knowledge and experience;
- Instruction.

Text Stage Exercises:

- Students answer questions, correlate illustrations, points of the plan with the content; outline dates, names, geographical names;
- Recognize types of texts, actors in the context, arrange text fragments or replicas of the dialogue in the desired order;

Exercises of the post-text stage involve students in active creative activity, serve to control the understanding and success of the communication act. These are exercises of a textual nature (right-wrong, yes-no), answers to questions, drawing up a plan, retelling, completing a text, conversation, discussion, evaluating the characters, their actions and the text itself, etc.

V. Conclusion.

Audit control can be carried out in verbal and non-verbal, traditional and non-traditional ways. Traditional forms of listening control - answers to questions on the text content, a complete or short retelling of the heard text in the native or foreign languages, determination of the main thoughts of the text, drawing up a plan of the text, proof of theses, conversation, discussion, evaluation of the characters, their actions and the text itself.

Unconventional forms of listening control - digital coding, the use of signal cards, test tasks. Thus, in this paper, we considered the main theoretical issues related to learning to listen. Having studied all the possible materials, we can draw the following conclusions: Currently, the methodology of teaching listening includes teaching this type of speech activity as a learning goal, and as a means of mastering other types of speech activity. Listening is closely connected with other types of speech activity, therefore, on the basis of its expanded application, it is possible to make teaching a foreign language much more effective. (True - False, Yes - No).

References:

- Azarovskaya, A.E. (2012). “Texts of various necessities, text of various forms”. *“Communicative methodology”*, No. 5.
- Bazina, M.P. (2009). “Listening: where to start?”. *“Communicative technique”*, No. 3.
- Gez, N. I. (1982). “Methods of teaching foreign languages in high school”. Moscow: “Higher School”.
- Eluxina, N.V. (2013). “Oral communication in the lesson, means and methods of its organization”. *“Foreign languages at school”*, No. 2.
- Winter, I.A. (2011). *“Psychology of teaching foreign languages”*. Moscow.
- Konysheva, A.V. (2012). *“Monitoring the results of teaching a foreign language”*. - St. Petersburg.
- Kuzovlev, V.P. (2012). *“A book for the teacher. In 6 books”*. Moscow: “Education”.
- Maslyko, E.A., & Babinskaya, P.K. (2010). *“Handbook of a teacher of a foreign language”*, (p.58). Minsk.
- Rogova, G.V. (2008). *“The methodology of teaching a foreign language at the initial stage”*. Moscow.
- (2015). Tver “Technologies for working with youth”. (p.114). Publishing House “SKF-office”.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 25.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Dilorom Aminovna Barakatova

Bukhara Engineering and Technology Institute
A senior teacher of Uzbek language and literature

CLASSICAL IMAGES IN CHOLPON'S POETRY

Abstract: Abdulhamid Cholpon is considered to be one of the most prominent poets in Uzbek literature. This article will elucidate peculiarity of images in his works.

Key words: poetry, poetic image, content, poetic symbol, love, main characters.

Language: English

Citation: Barakatova, D. A. (2020). Classical images in Cholpon's poetry. *ISJ Theoretical & Applied Science*, 03 (83), 86-88.

Soi: <http://s-o-i.org/1.1/TAS-03-83-19> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.19>

Scopus ASCC: 1208.

Introduction

Although poetic images are developed and completed by well-known artists, they evolve within a particular literary environment, becoming perfect and evolving over time. With the change in the thinking of people in society, there will also be a change in poetic images. In the poetry of the late 19th century, poetic images began to build on a purely secular, national, and social basis. At the same time, there have been changes and development in the composition of images, which have been influenced by classical traditional poetry. In poetry of some poets, poetic images have begun to build on a purely secular, while in others a pure national, social basis. One of the best-known poets in the process is Abdulhamid Cholpon. Especially, in the works of the poet in the beginning of the 20th century revival of poetic images and their application in new interpretations.

II. Literature review.

Professor Dilmurod Kuronov said, "We call Cholpon rightly a new artist... At the same time, no artist, even the greatest of the talents, can ever escape the influence of their own culture. Of course, Cholpon's poetry did not originate in dry land, and the best traditions of our classical literature were based on it. This is especially true in Cholpon's poetry when interpreting images of "love" and "love".

Traditional poetic images: "love", "opponent", "friend" are new interpretations of the poem:

Firstly, in connection with the poet's beliefs, the nature of his talent and his intention to innovate;

Secondly, it emerged as an attempt to overcome existing social tensions and existing conflicts.

One of the most widely used poetic images by Cholpon, the most widely used in classical literature, is that the image has been extensively studied in jadid poetry. He deals with poetic symbols like "nightingale", "slave", "soul", "soul", "tree". Whatever form it may or may not be represented by, the "love" still portrays the poet's "I".

The imagination in the works of classical poets, namely Omar Khayyam, Pahlavon Mahmud and Lutfi is different from that of Cholpon. If these poets are a person or a Creator, then Cholpon is a true, independent and free man. At the same time, a nation growing up in the face of a totalitarian system. In the same vein, Professor Dilmurod Kuronov, in describing his love for his homeland in the interpretation of the "love" in Cholpon's poems: "Lover" is a man who is passionate about thirst. In other words, the moral aesthetic ideal aspired to by the poetic poets was the Right, while Cholpon was the liberator of the socio-aesthetic ideal of the country. It means that the symbols and inner content in the works of Cholpon should be understood with the impetus of our classical poetry. After all, Cholpon is absorbed not only from the poetry of mysticism, but also by its dry form and spirit".

Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PИИИИ (Russia)	= 0.126	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

III. Analysis

In one of his poems, the poet perceives poetically through the description of the deer through the image of a "deer," a deer playing in the open field, a lover of his own country. The deer-eyed love attracts the heart, and the sight of the lover grows worse and his love grows. The poet concludes that since God created love, it is not his job to be a loner, to live among the khan and to fight with enemies. The theme of love in classical literature finds its new interpretation of Cholpon's poetry in the image of freedom. That is, love is spread out in the fields, and it loves freedom, so the deer and the word "pasture" come. Poetry in the poetry also has a distinctive image. The image of the "love" has various forms: "God", "nation", "enlightenment", "angel", "imagination". These forms are directly used by the poet in expressing the social and spiritual content.

The most commonly used version of the "friend" in fiction is "fun", which is interpreted by each artist individually. Although Navoi's poetry has its own variants of the word "soul", such as Arabic – "qalb", Persian – "dil", it uses the same Turkic word many times, and interprets it differently from the essence of each work in a gazelle or other genre. In Lutfi's ghazals, it is thought of as controlling the life of the lover and uncovering the secrets of life. Therefore, scholars who interpret this image point out that although the word "fun" has not changed, the text continues to change its essence.

IV. Discussion.

Cholpon's poetry is associated with social traditions, the expression of freedom, and the expression of the word "fun" or the creation of poetry from thoughts related to the soul. Love is one of the traditional poetic symbols that have been used in the

development of national and classical literature for several millennia. First of all, it has the essence of friendship and the main means of achieving the Truth, the essence of human being, and secondly, it has an admirable quality that is associated with the blessings of the figurative world. And this image is interpreted differently in different artists. Although Cholpon successfully used the image in his poem "Tshq", he uses it in a completely new sense. The lyricist says, "I lost love and religion, but love" is neither symbolic nor divine. When a captivity in a captive country symbolizes the love of the nation, it is sung as a "free" song. Although the poet retains the role of the nightingale in the classical poetry, the nightingale in his interpretation cannot tell the story and tell the story of the poet, rather than his own pain. The poet used the word "nightingale" in philosophical terms to describe the fate, mostly.

Cholpon refers to the centuries-old suffering of labor, as the "old wounded soul", thus revealing that the "essence" of the tale is a national affliction. It is with sadness that the nation understands that the heart is hurt. Although the poet portrays the traditional image of "love" through this image, he is not only a martyr who is in love, but also a person who has sympathized with him as a member of the nation and country. Therefore, in the last verse of the poem, the nightingale's music focuses not only on expressing his love, but also on the sorrow of the people.

V. Conclusion.

As it turns out, in Cholpon's poetry, only a few of the hundreds of traditional images in ancient literature were present, but they were not exactly repeats of classical symbols, but were modernized. It is also observed that while some traditional symbols retained essentially classical features, they served to refine them and to open new layers of meaning.

References:

1. Tojiboyeva, M. (2016). article in "Oriental Star" magazine, 2016-8.
2. Khrapchenko, M.B. (1984). "Horizontal Goddess". Moscow.
3. Kuronov, D. (1998). The substrate in the "Road Remembrance". *The Eastern Star*, Issue 1, p.162.
4. Sharafiddinov, O. (1991). "Understanding Cholpon". Tashkent: Science.
5. Murodov, J. (1994). "Cholpon's fiction world" (collection). Tashkent: Science
6. (2014). Ahangaran Life Newspaper.
7. Sharafiddinov, O. (1993). "Cholpon's Artistic World". Tashkent.

Impact Factor:	ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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. Kuronov, D. (1994). *“Psychological Review”*. Tashkent.
9. Karimov, N. (2003). *“Poetry Awakening”*, educational novel. Tashkent.
10. Cholpon, A. (1995). *“Day and night”*. First book: Yesterday. Tashkent: East (20th century Uzbek novel).
11. Cholpon, A. (1997). *“Beautiful Turkistan”*. Tashkent: Spirituality.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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: 2020 Issue: 03 Volume: 83

Published: 25.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



Durdona Bahodirovna Akhmedova
school № 1

A teacher of Uzbek language and literature

TEACHING HOMONYMS IN UZBEK AND ENGLISH LANGUAGES

Abstract: *In the lexical system of the Uzbek and English languages, there are words that sound the same, but have completely different meanings. Such words are called lexical homonyms, and the sound and grammatical coincidence of different linguistic units that are not semantically related to each other is called homonymy.*

Key words: *homonym, polysemantic, homoform, homograph, capitonym, homophone.*

Language: *English*

Citation: Akhmedova, D. B. (2020). Teaching homonyms in Uzbek and English languages. *ISJ Theoretical & Applied Science*, 03 (83), 89-91.

Soi: <http://s-o-i.org/1.1/TAS-03-83-20> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.20>

Scopus ASCC: 1203.

Introduction

Unlike polysemantic words, lexical homonyms do not have an objective semantic connection, i.e. they do not have common semantic features by which one could judge the polysemanticism of one word.

Various forms of lexical homonymy are known, as well as related phenomena at other levels of the language (phonetic and morphological).

The complete lexical homonymy is the coincidence of words belonging to one part of speech in all forms. An example of complete homonyms is the words “kul”-ashes, “kul”-smile; they do not differ in pronunciation and spelling, coincide in all case forms of the singular and plural. In the case of incomplete (partial) lexical homonymy, the coincidence in sound and spelling is observed in words belonging to one part of speech, but not in all grammatical forms.

You can better understand the meaning of homonyms if you look at the origin of this linguistic term. In Uzbek there are a large number of various puzzles. Even those who speak Uzbek all their lives make a huge amount of mistakes when communicating: in using certain words, in accenting or in building sentences. Often confusion arises from the fact that two different words are spelled exactly the same. To a foreigner who is just starting to learn Uzbek, these words can cause a lot of problems. After all, their meaning can be understood only by tracing

the context. But this is not the only secret concealed by homonyms. The greatest difficulty arises when you try to explain to a foreigner how the homonyms and polysemantic words differ. If you do not go deeper into the definition, then polysemantic words are also written the same, but have different meanings.

II. Analysis.

Homonymy is a random coincidence of meanings for identical words. Often both words came to Uzbek from a foreign language. Polysemy (polysemy) is the presence of the same word with different meanings, which were fixed historically. But many linguists disagree with this statement, and consider homonymy only a special case of ambiguity. Some linguists include homophones, homographs, homoforms as separate cases of homonymy. Let's take a closer look. Homophones are words that are pronounced the same, but differ in spelling. For example: shox, shoh. Homographs are words that are written the same way, but are pronounced differently due to different stresses. For example: akademik-scholar [noun], akademik- luceum [adjective]. Homoforms - matching grammatical forms of different words, most often from different parts of speech. For example: bor[noun], bor [modal verb]. And now, when the meaning of homonyms in the Uzbek language has become clear, we turn to the most interesting part - to foreign homonyms. And we will start with the English language.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PPIHII (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

The word “homonym” itself came from the merger of two Greek words: “homos” (identical) and “onyma” (name). Today, according to linguists, homonyms account for about 19.5% of all words in the English language. What is the reason for this?

Firstly, this is due to the borrowing of words from the French and Latin languages. As a result of phonetic changes, foreign pronunciation words became similar to previously existing English words, for example: - rite (Latin): To write, right (English); - bank (coast - English), bank (bank - Italian); - fair (honest - English), fair (market - French).

Secondly, there is a historical version. So, some words, as a result of the development of the language, lost their original phonetic form and began to sound, but not in meaning, become similar to others. For example, night and knight were not homonyms (homophones) in the Old English language, since in the word knight the initial letter k was pronounced. However, as a result of changes in pronunciation, the letter k - is lost. Well, the third version is a craving for all kinds of reductions. Moreover, the proportion of such reductions is quite large: 7% of all English homonyms, for example: - fan (fan - English), fan (fan - lat.).

III. Discussion.

Homonyms in English are usually divided into 5 groups: Absolute homonyms or pairs of words with identical sound and spelling. The difference is only in meaning, transcription and spelling are completely the same. Example: band [bænd] is a bandage and band [bænd] is a band. Homophones (heteronyms) or words with the same sound but different spelling. Example: be [bi:] - to be and bee [bi:] - a bee. Homographs. It's the opposite. Words are written the same way, but read differently. Example: bow [bau] - bow and bow [bəu] - bow. Neither here nor here, i.e., these are words with similar pronunciation and spelling. Example: lose [lu:z] - lose, loose [lu:s] - weaken.

In capitonyms, the differences are in the spelling of the first letter (uppercase or lowercase). Example: Mercury ['mɜ:kjəri] - Mercury (planet) and mercury ['mɜ:kjəri] - mercury (chemical element). Let's move from theory to practice. For this, I will give some examples of English sentences with homonyms:

—My mom must accept that my brother likes all vegetables except for turnips. “My mom should add that my brother loves all vegetables except turnips.”

—While baking a cake with flour, I received a flower from my boyfriend. - While I was interfering with a cake with flour, I received a flower from my boyfriend.

—The mailman delivered two packages to me, too. “The postman also (= too) delivered two packages for me.”

—Ben left through the left door. - Ben left through the left door.

—Your house is big enough to house your entire library of books. “Your house is big enough to house your entire library.”

—I scream. You scream. We all scream for ice-cream. - I'm screaming. You're yelling. We all scream about ice cream.

IV. Conclusion.

According to the parts of speech, which include homonyms, they can also be divided into several types: grammatical, lexical and lexical-grammatical. Lexical homonyms - have the same grammatical characteristics and different lexical ones, that is, they belong to the same part of speech, but do not come down to a common semantic meaning. Grammatical homonyms - are characterized by some common sense, but belong to different parts of speech. Lexical and grammatical homonyms - have different grammatical and lexical characteristics, but on the formal side there is some commonality in them.

References:

1. Kachalova, K.A., Semenchuk, L.V., & Konyukhova, E.V. (2019). “Homonyms in Russian, English”. *Young Scientist*, No. 5, pp. 1-4. (date is common. Literature: Retrieved from <https://moluch.ru/young/archive/25/1524/>)
2. Akhmanova, O. S. (1986). “*Dictionary of homonyms of the Russian language*”. Moscow: Moscow: “Russian language”.
3. Malakhovsky, L. V. (1995). “*Dictionary of English homonyms and homophorms*”. Moscow: Russian Language.
4. Crystal, D. A. (2003). “*Dictionary of Linguistics and Phonetics*”. 5th ed. Oxford: Blackwell Publishers Ltd.

Impact Factor:

ISRA (India) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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

5. Fasold, R.W., & Connor-Linton, J. (2006). *“An Introduction to Language and Linguistics”*, Cambridge University Press.
6. Fromkin, V., Rodman, R., & Hyams, N. (2003). *“An Introduction to Language”*. USA: Heinle.
7. Arakin, V.D. (1958). *“Homonyms in English”*., p. 64.
8. Arnold, I.V. (1973). *“Lexicology of modern English”*. Moscow: Higher school.
9. Arnold, I.V. (1969). *“Polysemy of the noun and lexical and grammatical categories”*. \$ 5, pp. 10-20.
10. Arnold, I.V. (1966). *“The semantic structure of the word in modern English and the methodology of its research”*. (p.192). L. enlightenment.
11. Arsenyeva, M.G., & Stroeva, T.V., & Khazanovich, A.P. (1966). *“Ambiguity and homonymy”*. (p.129). Moscow: Leningrad. University.

Impact Factor:	ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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.
1. Kurpayanidi, K. I. On the problem of macroeconomic analysis and forecasting of the economy.	1-6
2. Naumenko, O. Cognitive aspects of ecological consciousness.	7-10
3. Yuldasheva, M. B. History of the English Uzbek translation.	11-14
4. Mamatkulova, N. M. Strategics for improving the competitiveness of innovative marketing in industry enterprises. ..	15-17
5. Yusupdjanova, N., & Karimov, I. Investment projects in the field of construction materials production.	18-21
6. Tojiboeva, M. R. Arabism in Hamza's Enlightenment Works.	22-24
7. Taghiyeva, M. The degree of keeping the speech style in the translation of Dostoyevsky's "The Devils" novel.	25-29
8. Fazilov, A. S., & Kuchimov, M. K. Development of a visual programming algorithm for bim-models using module of structures by dynamo module.	30-33
9. Chemezov, D., et al. Destruction of the billet material during planing.	34-38
10. Toshaliyeva, S. T. The concept of «Business potential»: essence, economic significance.	39-42
11. Normurodov, C. B., Toyirov, A. X., & Yuldashev, S. M. Numerical modeling of nonlinear wave systems by the spectral-grid method.	43-54
12. Mamadiyarov, A. Linguistic features of social euphemisms in the Uzbek language.	55-60
13. Xudoyberdiyeva, G. A. Lexical synonym level in Uzbek.	61-66
14. Shinnazarova, S. J., & Mambetova, G. J. Paronymia in the Karakalpak language.	67-70
15. Omonov, D. E. Development of knowledge and skills in chemical structures and properties of paints in painting art lessons.	71-73
16. Rahmonov, S. M. Social and moral worldview of Amir Temur and Sufism.	74-77
17. Xayitov, S. N. Socio-economic significance of human resource management.	78-81

Impact Factor:	ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHII (Russia) = 0.126	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

18.	Akhmedov, B. Y. Technology of teaching listening comprehension in Russian language.	82-85
19.	Barakatova, D. A. Classical images in Cholpon's poetry.	86-88
20.	Akhmedova, D. B. Teaching homonyms in Uzbek and English languages.	89-91

Impact Factor:	ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	ПИИЦ (Russia) = 0.126	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	4.971
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	0.126	
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) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHII (Russia) = 0.126	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

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>



ПИИИ (Russia)
<http://elibrary.ru/contents.asp?issueid=1246197>



Türk eğitim indeksi

Turk Egitim Indeksi (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>



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) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
ESJI (KZ) = 8.716
SJIF (Morocco) = 5.667

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



UNLOCKING ACADEMIC CAREERS
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) = 4.971
ISI (Dubai, UAE) = 0.829
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHHI (Russia) = 0.126
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>



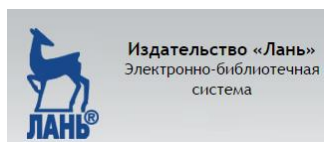
SJIF Impact Factor (Morocco)

<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) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.126	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) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 0.829	PIHII (Russia) = 0.126	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: 30.03.2020. Size 60x84 $\frac{1}{8}$

«Theoretical & Applied Science» (USA, Sweden, KZ)
Scientific publication, p.sh. 31.25. Edition of 90 copies.
<http://T-Science.org> E-mail: T-Science@mail.ru

Printed «Theoretical & Applied Science»