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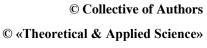
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### EVALUATION OF SPRING SOFT WHEAT VARIETIES BY TECHNOLOGICAL CHARACTERISTICS

**Abstract**: The article presents the characteristics of technological features of spring soft wheat on the example of varieties Shortandinskaya 2012, Shortandinskaya 2014, Taimas for 5 studies. The following characteristics are shown to be the most stable on average for varieties: nature (67%), gluten content (80%), specific work of dough deformation (80%), valorimetric assessment (67%), baking assessment (100%).

*Key words*: technological features, protein and gluten content, dough rheology, bakery evaluation. *Language*: Russian

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#### ОЦЕНКА СОРТОВ ЯРОВОЙ МЯГКОЙ ПШЕНИЦЫ ПО ТЕХНОЛОГИЧЕСКИМ ПРИЗНАКАМ

Аннотация: В статье представлена характеристика технологических признаков яровой мягкой пшеницы на примере сортов Шортандинская 2012, Шортандинская 2014, Таймас за 5 исследований. Наиболее устойчивы в среднем по сортам показаны следующие признаки: натура (67%), содержание клейковины (80%), удельная работа деформации теста (80%), валориметрическая оценка (67%), хлебопекарная оценка (100%).

Ключевые слова: технологические признаки, содержание белка и клейковины, реология теста, хлебопекарная оценка.



#### Введение

#### УДК 633.11:581(13:45):577.95

Влияние почвенно-климатических условий региона на качество зерна пшеницы неоспоримо, в то же время имеются результаты исследований, убедительно доказывающие наличие сортов с высокими хлебопекарными и мукомольными свойствами более адаптивных по параметрам качества зерна [1].

Ежегодные объемы производства зерна в Казахстане в среднем составляют порядка 20 млн. тонн, в том числе, мягкой пшеницы около 14 млн. свидетельствует о значительном тонн, что потенциале зернового производства, экспортируется до 6-7 млн. тонн в год [2]. Большое влияние на экспорт оказывают качественные показатели казахстанского зерна. Они обусловлены сортовыми и климатическими особенностями, а также применяемыми в производстве технологиями.

Селекция яровой мягкой пшеницы в условиях Северного Казахстана ориентирована на создание сортов с высокими технологическими показателями, сортов-улучшителей, стабильно формирующих высокое качество. Для создания таких сортов в СССР была разработана и принята классификация пшеницы, направляемой на хлебопекарные цели. Помимо требований к зерну, в нее были включены показатели качества муки, реологические свойства теста и результаты пробной лабораторной выпечки хлеба [3].

Основные признаки качества данной классификации и в настоящее время используются селекционном процессе при оценке селекционного материала, исходных форм, новых сортов. Без комплексной оценки с учетом всех показателей классификации невозможно оценить технологический потенциал сорта и разработать рекомендации для дальнейшего использования его зерна. Качественные признаки и их параметры очень сложны, часто полигенны и до сих пор недостаточно четко определены [4].

В ТОО «НПЦ ЗХ им. А.И.Бараева», расположенном В Шортандинском районе Акмолинской области, селекцией яровой пшеницы занимаются с середины 20 века. Создано большое количество высококачественных сортов, собраны признаковые коллекции яровой мягкой пшеницы. Многие сорта в Северном Казахстане занимают большие площади. Хорошие результаты были получены, когда при гибридизации в качестве материнской формы брались высокоурожайные сорта местной пшеницы селекции, в генотипе которых в процессе ступенчатых скрещиваний был накоплен ряд ценных признаков, в том числе и качество зерна [5].

 SIS (USA)
 = 0.912
 ICV (Poland)
 = 6.630

 PHHII (Russia)
 = 3.939
 PIF (India)
 = 1.940

 ESJI (KZ)
 = 8.771
 IBI (India)
 = 4.260

 SJIF (Morocco)
 = 7.184
 OAJI (USA)
 = 0.350

Лучшие современные сорта являются источниками и донорами высокого качества в дальнейшей селекционной работе. Это сорта Шортандинская 2012, Шортандинская 2014, Таймас.

Ранжирование технологических признаков соответствии проводится в с Классификационными нормами Госкомиссии по сортоиспытанию сельскохозяйственных культур, для характеристики пшеницы, направляемой на хлебопекарные цели. Основные признаки качества данной классификации и в настоящее время используются в селекционном процессе при оценке селекционного материала, исходных форм, новых сортов. Такая комплексная оценка позволяет оценить потенциал сорта по его качественным характеристикам и разработать рекомендации для дальнейшего использования его зерна. Согласно вышеупомянутой классификации сорта пшеницы делятся на следующие категории: сильные пшеницы, ценные, филлеры и слабые. В свою очередь сильные пшеницы могут быть отличными, хорошими И удовлетворительными улучшителями, а филлерыхорошими И удовлетворительными филлерами.

Целью наших исследований было обобщение данных по качеству зерна за 5 лет, характеристика и выделение технологических признаков, наиболее стабильных по годам в данной зоне.

При рассмотрении средних данных по качеству за 5 лет исследований установлено, что средний показатель натуры зерна в пределах 791-796 наблюдался у всех трех сортов (таблица 1). Из большое качественных показателей зерна значение придаётся количеству и качеству клейковины. Содержание и качество клейковины в зерне сортов пшеницы контролируется генетически, хотя во многом зависит и от условий внешней среды [6]. По содержанию белка и клейковины хорошего качества преимущество показал сорт Таймас соответственно 14,98%, 32,5% и 73 ед. ИДК.

Одной ИЗ важных характеристик муки хлебопекарного качества являются реологические свойства теста [7]. При определении реологических свойств теста на фаринографе определяется водопоглотительная способность муки, под ней понимается точный объем воды, добавляемой при замесе образца, требуемой соответствующий консистенции, равной 500 ЕФ. Степень разжижения теста рассчитывается как разница между значением центра фаринограммы В конце времени образования теста значением И центра фаринограммы через 12 мин после прохождения этой точки [8]. По данным Сухорукова А. А. и др., 2017 показатели «разжижение теста» И



Impost Foston	<b>ISRA</b> (India) = <b>6.317</b> <b>ISI</b> (Dubai, UAE) = <b>1.582</b>	SIS (USA) = 0.912 РИНЦ (Russia) = 3.939		= 6.630 = 1.940
<b>Impact Factor:</b>	<b>GIF</b> (Australia) = <b>0.564</b>	$\mathbf{ESJI} (\mathrm{KZ}) = 8.771$	IBI (India)	= 4.260
	$\mathbf{JIF} = 1.500$	<b>SJIF</b> (Morocco) = <b>7.184</b>	OAJI (USA)	= 0.350

«устойчивость теста» имеют высокую фенотипическую изменчивость, «валориметрическая оценка» - среднюю [9].

Максимальная удельная работа деформации теста по альвеографу W 330 е.а. и сбалансированная альвеограмма p/l -1,00 была у сорта Шортандинская 2012, у двух других сортов уровень W в пределах 312-319 е.а. при соотношении упругости и растяжимости p/l- 0,741,19. Валориметрическая оценка по фаринографу была на уровне удовлетворительного улучшителя 75-76 е.в. Разжижение теста для всех сортов соответствовало характеристикам филлеров (106-131 е.ф).

Хорошими характеристиками хлеба и высокой хлебопекарной оценкой в 4,6-4,7 балла отличались сорта Шортандинская 2012 и Шортандинская 2014.

Таблица 1 – Средний уровень показателей качества лучших сортов яровой мягкой пшеницы (данные
за 2017-2020 годы)

Сорта/показатели	Шортандинская	Шортандинская	Таймас
	2012	2014	
Стекловидность, %	46	57	56
Масса 1000 зерен, г	38,0	34,6	35,8
Натура, г/л	796	796	791
Содержание белка в зерне, %	14,60	14,57	14,98
Содержание сырой клейковины	30,9	31,0	32,5
в зерне, %			
Качество клейковины, ед. ИДК	77	76	73
Удельная работа деформации	330	312	319
теста, W, e.a			
Отношение упругости теста к	1,00	0,74	1,19
его растяжимости (p/l)			
Разжижение теста по	131	120	106
фаринографу, е.ф			
Валориметрическая оценка, е.в.	76	75	76
Хлебопекарная оценка, балл	4,6	4,7	4,4

Для оценки и их использования в селекции разработан классификатор технологических признаков зерновых культур [10]. Характеризуя зерно по признакам качества на примере сорта Шортандинская 2012 (таблица 2) можно сказать, что в течение 5 лет исследований сорт формировал, в основном, полумучнистое (51-70% стекловидность) в 60% случаев, средней и малой массы 31,0-42,0 г (20 и 80% соответственно) зерно, в 60% случаев со средней натурой (771-790 г/л).

Таблица 2 – Классификация технологических признаков яровой мягкой пшеницы сорта Шортандинская 2012 (данные за 2017-2020 годы)

Показатели	Уровень признака	Характеристика	Устойчивость
		признака	признака, % (за 5
			лет)
Стекловидность, %	21-30	очень мучнистая	20
консистенция зерна	31-50	мучнистая	20
	51-70	полумучнистая	60
Масса 1000 зерен, г	31-38	малая	80
_	39-42	средняя	20
Натура, г/л	791-830	высокая	40
	771-790	средняя	60
Содержание белка в зерне, %	10,3-12,6	низкое	20
	12,7-15,0	среднее	20
	15,1-18,0	высокое	60
Содержание сырой	20,1-28,0	низкое	20
клейковины в зерне, %	28,0-36,0	среднее	80



	ISRA (India)	= 6.317	<b>SIS</b> (USA) $=$	0.912	ICV (Poland)	= 6.630
Impost Fostor	ISI (Dubai, UAE	() = <b>1.582</b>	РИНЦ (Russia) =	= 3.939	<b>PIF</b> (India)	<b>= 1.940</b>
<b>Impact Factor:</b>	<b>GIF</b> (Australia)	= 0.564	<b>ESJI</b> (KZ) $=$	= <b>8.771</b>	IBI (India)	= 4.260
	JIF	= 1.500	<b>SJIF</b> (Morocco) =	= <b>7.184</b>	OAJI (USA)	= 0.350

Качество клейковины, ед. ИДК	80-100	удовлетворительная слабая	40
	45-75	хорошая	60
Удельная работа деформации	150-279	средняя	40
теста, W, e.a	280-399	высокая	60
Отношение упругости теста к его растяжимости (p/l)	Менее 0,8 и более 2,0	несбалансированная	40
	0,8-2,0	сбалансированная	60
Водопоглотительная	60,1-64,0	высокая	20
способность муки на фаринографе, %	Более 64,0	очень высокая	80
Разжижение теста по	Более 100	сильное	80
фаринографу, е.ф	40-100	среднее	20
Валориметрическая оценка,	60-70	средняя	20
е.в.	70-90	высокая	80
Хлебопекарная оценка, балл	3,9-4,4	высокая	20
	4,5-5,0	очень высокая	80

Содержание белка в зерне варьировало от низкого 10,3-12,6% (20%) до высокого уровня 15,1-18,0 % (60%), по содержанию клейковины показано преимущество среднего показателя в градации 28,0-36,0%. Качество клейковины было хорошее (45-75 ед. ИДК) в 60 % случаев.

При определении реологических свойств теста с помощью приборов установлен высокий уровень показателя W (280-399 е.а.) по альвеографу в 60% случаев. Водопоглотительная способность муки у сорта Шортандинская 2012 изменялась от высокой 60,1-64,0% (в 20% лет) до

очень высокой, более 64,0% в (80% лет). Разжижение теста при фаринографической оценке (изменение консистенции теста через 12 мин от начала снижения, е.ф.) было низкоустойчивым (80%) за 5 лет исследований. Сорт характеризовался высокой 3,9-4,4 балла (20% лет) и очень высокой хлебопекарной оценкой 4,5-5,0 (80% лет).

В таблице 3 представлена характеристика технологических признаков качества зерна сорта Шортандинская 2014.

Показатели	Уровень признака	Характеристика признака	Устойчивость признака, % (за 5 лет)
Стекловидность, %	31-50	мучнистая	40
консистенция зерна	51-70	полумучнистая	60
Масса 1000 зерен, г	31-38	малая	100
Натура, г/л	791-830	высокая	80
	740-770	низкая	20
Содержание белка в зерне, %	10,3-12,6	низкое	20
	12,7-15,0	среднее	20
	15,1-18,0	высокое	60
Содержание сырой	20,1-28,0	низкое	20
клейковины в зерне, %	28,0-36,0	среднее	80
Качество клейковины, ед. ИДК	80-100	удовлетворительная слабая	40
	45-75	хорошая	60
Удельная работа деформации теста, W, e.a	280-399	высокая	100
Отношение упругости теста к его растяжимости (p/l)	Менее 0,8 и более 2,0	несбалансированная	20
	0,8-2,0	сбалансированная	80

Таблица 3 – Классификация технологических признаков яровой мягкой пшеницы сорта Шортандинская 2014 (данные за 2017-2020 годы)



**ISRA** (India) = 6.317 SIS (USA) = 0.912**ICV** (Poland) = 6.630**PIF** (India) **ISI** (Dubai, UAE) = 1.582 РИНЦ (Russia) = 3.939 = 1.940 **Impact Factor: = 8.771 IBI** (India) = 4.260 **GIF** (Australia) = **0.564** ESJI (KZ) = 0.350 JIF = 1.500 **SJIF** (Morocco) = 7.184 **OAJI** (USA)

Водопоглотительная	Более 64,0	очень высокая	100
способность муки на			
фаринографе, %			
Разжижение теста по	Более 100	сильное	80
фаринографу, е.ф	40-100	среднее	20
Валориметрическая оценка,	60-70	средняя	40
е.в.	70-90	высокая	60
Хлебопекарная оценка, балл	3,9-4,4	высокая	20
	4,5-5,0	очень высокая	80

Особенностью технологических свойств сорта Шортандинская 2014 (таблица 3) являются малая масса 1000 зерен-31-38 г, высокая 791-830 г/л (80% случаев) натура и среднее 28,0-36,0% (80% лет) содержание сырой клейковины в зерне, в основном, хорошего качества 45-75 ед. ИДК (60% лет). Удельная работа деформации теста в течение всех лет исследований соответствовала требованиям улучшителя (280-399 е.а.), и была, в основном, сбалансированной.

Среди трех изучаемых сортов у сорта Таймас зерно характеризовалось как полумучнистое 80% лет, с малой массой 1000 зерен в пределах 31-38 г (100% случаев), высокой натурой 791-830 г/л в 80% лет (таблица 4).

Содержание белка варьировало от низкого 10,3-12,6 (20% лет) до высокого 15,1-18,0% (80% лет), клейковина формировалась среднего уровня 28,0-36%, (80%), в 60% случаев хорошего качества 45-75 ед. ИДК. Реологические свойства теста высокие W (280- 399 е.а.), альвеограмма сбалансирована в 60% случаев.

Данные фаринографа показывали среднее разжижение теста и высокую валориметрическую оценку в течение 60% лет исследований.

Все сорта селекции ТОО «НПЦ ЗХ им. А.И.Бараева» характеризовались высокой и очень высокой хлебопекарной оценкой при пробной лабораторной выпечке хлеба 3,9-5,0 баллов.

Таблица 4- Классификация технологических признаков яровой мягкой пшеницы сорта Таймас
(данные за 2017-2020 годы)

Показатели	Уровень признака	Характеристика признака	Устойчивость признака, % (за 5 лет)
Стекловидность, %	31-50	мучнистая	20
консистенция зерна	51-70	полумучнистая	80
Масса 1000 зерен, г	31-38	малая	100
Натура, г/л	791-830	высокая	80
	740-770	низкая	20
Содержание белка в зерне, %	10,3-12,6	низкое	20
	15,1-18,0	высокое	80
Содержание сырой	20,1-28,0	низкое	20
клейковины в зерне, %	28,0-36,0	среднее	80
Качество клейковины, ед. ИДК	80-100	удовлетворительная слабая	40
	45-75	хорошая	60
Удельная работа деформации	150-279	средняя	20
теста, W, e.a	280-399	высокая	80
Отношение упругости теста к его растяжимости (p/l)	Менее 0,8 и более 2,0	несбалансированная	40
	0,8-2,0	сбалансированная	60
Водопоглотительная способность муки на фаринографе, %	Более 64,0	очень высокая	100
Разжижение теста по	Более 100	сильное	60
фаринографу, е.ф	40-100	среднее	40
Валориметрическая оценка,	60-70	средняя	40
е.в.	70-90	высокая	60



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	<b>GIF</b> (Australia) = <b>0.564</b> <b>JIF</b> = <b>1.500</b>	<b>ESJI</b> (KZ) = <b>8.771</b> <b>SJIF</b> (Morocco) = <b>7.184</b>		= 4.260 = 0.350

Хлебопекарная оценка, балл	3,9-4,4	высокая	40
	4,5-5,0	очень высокая	60

Таким образом, наиболее устойчивы в течение 5 лет в среднем по сортам оказались следующие технологические признаки: натура (67%), содержание клейковины (80%), удельная работа деформации теста (80%), валориметрическая оценка (67%), хлебопекарная оценка (100%).

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## SA'D AL-DĪN TAFTĀZĀNĪ'S METHOD OF CLASSIFYING AND PROVING CREEDAL MATTERS

Abstract: Sa'd al-Dīn al-Taftāzānī al-Ḥanafī (722-792 / 1322-1390) is regarded as a prominent representative of the Second Eastern Renaissance. He is a scholar who wrote in Arabic, ancient Turkic, and Persian languages, and produced valuable works on al-nahw, al-sarf, balāğa (eloquence) uşūl al-fiqh, and furū' al-fiqh (ḥanafī, shāfì ī, and mālikī), logic, 'aqīdah, ḥadīth, tafsīr, geometry, astronomy, and other similar fields of science. In particular, in his books, Sa'd al-Dīn al-Taftāzānī separately explored the levels of Sharī 'ah issues and their evidence that serve the correct understanding of Islam. In addition to the Qur'an and ḥadīths, the scholar also used the exact sciences to substantiate doctrinal issues. Indeed, the scholar's approach serves as an important impetus to create a scientific perception in the general public about the call of Islam for enlightenment and peace. His scientific views are also of great importance in overcoming biased, unscientific views on the interdependence of Islam and science. This article addresses these issues.

Key words: hanafī, māturīdī, ash 'arī, fìqh, īmān (faith), kalām, 'aqīdah (creed), mantīq (logic), dalīl (evidence), heaven, hell, tafsīr, al-'Isrā', al-Mi 'rāj.

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#### Introduction

Understanding the creedal matters of Islam in their original form and correctly interpreting and comprehending the evidence is not only important in history but also relevant in today's globalization process. Because it is a historical fact that various conflicts and conspiracies have arisen between people as a result of distorted interpretations of creedal matters. In this context, this topic is relevant and sensitive and has been the focus of the attention of scholars who have lived and worked in different periods and regions. In particular, Sa'd al-Dīn Taftāzānī paid special attention to this topic and did an in-depth scientific analysis of the subject. It should be noted that, on the one hand, the scholar was faced with the issue of scientifically substantiating the fact that the teachings of Māturīdīya and Ash'arīya are from the Ahl as-Sunnah and mutual agreement between both teachings, and on the other hand, the problem of proving the falsity of the views of such

misguided sects as *Khawārij*, *Mu'tazila*, *Murji'ah*, *and Jahmīya*. He cited that only the most learned scholars of the proponents of the teachings of Māturīdīya and Ash'arīya do not accuse each other of being misguided, although there are some differences between these two teachings [17 : 231-232]. He, therefore, tried to reconcile the ideas of these two doctrines as much as possible. However, the scholar fully supported the views of the teachings of Māturīdīya on matters on which it was impossible to reconcile ideas. An example of this is the fact that there is wisdom in the actions of the Almighty Allah [14 : 93].

An analysis of Sa'd al-Dīn Taftāzānī's works on the subject shows that there are four cases on this issue. The first of them is the division of doctrinal issues into topics; the second is the classification and definition of *Sharī'ah* rulings; the third is the classification of *Sharī'ah* matters into categories such



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	JIF	= 1.500	SJIF (Morocco	) = 7.184	OAJI (USA)	= 0.350

as doctrinal and jurisprudential; the fourth is the interpretation of creedal evidence.

**1.** Separation of creedal issues by topics within their scope. Although each of the scholars in the field had their own acceptable, separate approach to the division of creedal issues into topics within their scope, they did not cause any contradiction or controversy.

Sa'd al-Dīn Taftāzānī also has his approach to this issue, which he first described in "Maqāsid alțālibīn" and then in his book "Sharh al-Maqāşid". In his book "Sharh al-Maqāsid", the scholar stated that the doctrinal issues are divided into five chapters: alumūr al- 'āmmah (general issues), al-a 'rād (accident), al-jawāhir (substance), al-ilāhīyah (theology) and alsam'īvah (text evidence) [16:159]. Then, he presented the issues in the same order and, at the same time, added a chapter entitled *al-mabādi*' (principles), and called them *al-maqāşid* (goals). Sheikh Muhammad Sadiq, one of the modern scholars, divided the creedal issues related to theology into four main topics, which are called such as *al-ilāhīyah* (theology), *al-nubuwwa* (prophecy), al-kawnīyyah (cosmology), and alsam'īyah (text evidence) [8]. A comparative analysis of the modern approach with Sa'd al-Dīn Taftāzānī's method on this issue can make a certain difference between them. In particular, the scholar's peculiarity in the classification of doctrinal issues is that he described the subject of *al-nubuwwa* (prophecy) in the modern classification by adding the part of alsam'īyāt and some of the issues of al-kawnīyyah (cosmology) to al-umūr al-'āmmah (general issues) and the rest to *al-jawāhir* (substance).

2. Classification and definition of the Sharīʿah rulings. This issue differs in a certain sense, first between the four madhab (path) of the Ahl as-Sunnah and then from each other within the framework of the views of the scholars of one madhab. The point of the matter is that some of them are directly related to the criterion of one's religious affiliation with a religion or leaving a religion. In particular, some hanafimāturīdī scholars, such as Sa'd al-Dīn Taftāzānī, have divided harām into two types, such as al-harām lidātihi (الحرام لذاته) (original prohibited) and al-harām li-gavri dātihi (الحرام لغير ذاته) (non-original prohibited) [ 10 : 262-263]. Indeed, such a classification of this ruling is important in terms of al-'Aqā'id. This is because there is a general doctrinal principle in the Sharī ah sources that "to regard *al-harām* (prohibited) as al-halāl (lawful) is to turn a person away from Islam".

Therefore, in his book "Sharh al-'Aqā'id", the scholar cited the doctrinal rule that "to regard an original *al-harām* and a deed based on solid evidence of impurity as *al-halāl* is blasphemy" and "to regard a non-original *al-harām* deed as *al-halāl* (lawful) is not blasphemy" [15:383]. An example of this is given by the scholar in another work, "al-Talwīh". In this book, the issues of eating carrion, drinking *al-khamr* 

(intoxicant), and the son marrying his mother were given as examples of the original *al-harām*, and the eating a property without the owner's permission was given as an example of non-original *al-harām* and elaborated them in detail [12 : 262-264]. However, although there is no example of the rule that "an uncertain evidence of impurity", it is consistent with the ruling of *al-makrūh al-taḥrīmī* (close to *al-ḥarām*) [12 : 264]. Therefore, it is clear from these opinions of the scholar that not even doing the *al-harām li-ġayri dātihi* and *al-makrūh al-taḥrīmī* deeds, and even regarding them as *ḥalāl*, is to turn a person away from Islam.

3. Classification of *Sharī*<sup>•</sup>*a* issues into categories such as *al*-<sup>•</sup>*aqīdah* and *al-fiqh* based on certain criteria. The separation of doctrinal and jurisprudential issues within the subject has led to mutual controversy and contradictions, and this situation can be observed even today in many countries.

The essence of the matter is that while doctrinal and jurisprudential issues differ from each other, they will have to be cited in their respective sources. Indeed, due to various factors, some jurisprudential issues have also been included in the creedal texts. The study of this issue shows that its history dates back to the  $2^{nd}$  / the  $8^{th}$  century. In particular, Imām Abū Ḥanīfa's treatise "*al-Fiqh al-Akbar*", the founder of the <code>Ḥanīfa</code> school, deals with matters of jurisprudence, such as the wiping on the inner shoes (الخفان) and performing the *al-tarāwīh* prayer in the month of *Ramadān*, which is fixed by the *sunnah*, and which can be permissible by praying behind sinful or pious believers [4 : 325].

First of all, to shed more light on this issue, it is expedient to clarify the lexical and terminological meanings of the words *al-fiqh* and *al-'aqīdah*. Jamāl al-Dīn Abū al-Fadl Muhammad ibn Mukarram al-Anṣārī (630-711/1232-1311) in his work *"Lisān al-'Arab"*, lexically defined, the word *al-'aqīdah* as "to firmly bind one thing to another" and the word *al-fiqh* as "to know about something specific and to understand it" [3].

Sa'd al-Dīn Taftāzānī, on the other hand, distinguished the two words in terms of terminology as follows: "Some of the Sharī'a rulings are related to the state of implementation, which are called *al-far* i(subsidiary) and *al-'amali* (practical), and some of the Sharī'a rulings are related to the state of belief, which are called *al-aşlī* (original) and *al-iʿtiqād* (creedal)" [15:13-14]. These two definitions are a general rule with which jurisprudential and doctrinal matters differ. 'Alī ibn Muhammad Jurjānī Hanafī (d. 838/1435), a well-known scholar of the Hanafi school known as Sayyid Sharif, also explained the terminological meaning of the word *al-'aqīdah* in his book "al-Ta'rīfāt" as follows: "al- 'Aqīdah only means trust without performing a deed" [11:128]. This also supports the scholar's view. So, this opinion of the



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	JIF =	1.500	SJIF (Morocco)	) = 7.184	OAJI (USA)	= 0.350

scholar clarifies the difference between the two terms. But that's just one aspect of the issue. This is because some  $Shar\bar{i}$ 'a matters, although they seem to belong to *al-fiqh*, are naturally bound to the creed in terms of belief.

In this regard, Sa'd al-Dīn Taftāzānī responded using the "question-answer" method as follows: "If it is said that these issues (that is, praying behind a sinner, the wiping on the inner shoes, etc.) are related to fur $\bar{u}$  ' al-figh, then there is no reason to cite them in the method uşūl al-kalām! If Abū al-Muʿīn al-Nasafī means by this statement that the condition of believing in the reality of this creed is necessary, and of the fundamentals, they should not all the matters of usul*al-figh* also be included in the science of *al-kalām*!? We answer as follows: when he had completed the explanation of the purposes of the science of *al-kalām* in delving into the essence of Allah ta'ala, His attributes and His actions, *al-ma 'ād*, the prophethood, and the imāmah according to the principle of the people of Islam, and the path of Ahl al-sunnah wa aljamaa 'ah, then he endeavored to accentuate to some of the matters by which the People of the approved path are distinguished from others who differ from them, such as the Mu'tazila, or the Shi'ah, or the Philosophers or the *malāhidah* (heretics) or any others of the people of innovation and personal desires. whether these matters are details of *al-fiqh* or some particular matters related to the articles of Belief" [15: 369-3701.

This view of the scholar shows that some issues related to furū ' al-figh and, in part, al- 'aqīdah, have also been included in the books of al-'aqīdah, as required by the socio-scientific situation. In particular, the main reason for the inclusion of jurisprudential issues in "al-Fiqh al-Akbar", such as the wiping on the inner shoes (الخفان) and performing the al-tarāwīh prayer in the month of Ramadān, and praying behind sinful or pious believers, were the activities of the  $Sh\bar{\iota}$  and the *Mu* tazila sects at that time. Compared to the time when "al-Fiqh al-Akbar" was written, it can be seen that in the 3<sup>rd</sup>/9<sup>th</sup> century, as a result of the emergence of the Karrāmiyyah and their misconceptions, the issue of "the difference between al-walī (guardian) and al-nabī (prophet)" was included in the creedal sources of the later period.

Thus, although the issues of al- ' $aq\bar{i}dah$  and alfiqh are different from each other, the scholar's opinion proves that it is a natural process to include in the creedal books some issues related to fur $\bar{u}$  ' al-fiqh and, in part, al- ' $aq\bar{i}dah$ , depending on the situation in each period.

**4. Proofing and interpretation of creedal issues.** The next major problem is to prove the doctrinal issues and to understand and interpret them correctly. In many cases, the misuse and misinterpretation of the evidence were the main reasons for the emergence of creedal sects and the formation of their followers. Due to this, Sa'd al-Dīn

Taftāzānī elaborated on this issue. He even made a scientific and theoretical analysis of the views of not only the Ahl al-Sunnah and the deviant groups, but also the views and arguments of philosophers and other believers on a particular issue and drew possible conclusions.

In this case, the first point to consider is the types of evidence substantiating doctrinal issues. In particular. Sa'd al-Dīn Taftāzānī divided the evidence into two parts, such as narrative and mental [15:281]. This shows that the scholar supported and acknowledged the teachings of Māturīdīya and the method of al-mutakallimun. Indeed, in the period before this doctrine came into being, only narrative evidence was used in the Hanafi school. In general, he used logic as a mental argument and the Our'an, almutawātir (consecutive) and al-mashhūr (popular) alhadīth, al-'ijmā', and al-athar as narrative evidence to substantiate doctrinal issues by this classification. However, as the case may be, it can be observed that in the works of the scholar, to substantiate a particular doctrinal issue, he effectively used both narrative and rational evidence in one place, and only one of them elsewhere.

Sa'd al-Dīn Taftāzānī used two different methods to prove a particular creedal issue when narrative evidence and logical evidence contradict each other. If it is possible to reconcile the arguments, they are interpreted with a method rule or some other specific argument. In particular, if it could be reconciled between two proofs, they were interpreted by a method rule, or other specific evidence.

However, it is not possible to conclude from this that the scholar emphasized the ins of the evidence, not its appearance. This method is directly related to Sa'd al-Dīn Taftāzānī's view of narrative evidence. In this regard, he stated that "if the meaning of the verses and hadiths is not obscured by any conclusive evidence, their apparent meaning will be taken away" [15: 381-382]. As a rule of *al-'aqīdah*, the scholar's analysis of the subject is based on the same principle and has not been taken out of it, nor has it been applied in its place. This can be observed in the second case. That is, if it is not possible to reconcile facts, the truth of the matter has been referred to the knowledge of Allah without any additional explanation or evidence. An example of this is the refutation of the views put forward by the Khawārij, one of the first sects to emerge in Muslim society under the influence of seditionists. In particular, in their view, the one who commits a grave sin is an apostate, and they cited the following verses from the Qur'an as evidence for their opinions:

وَمَنْ لَمْ يَحْكُمْ بِمَا أَنْزَلَ اللَّهُ فَأُولَئِكَ هُمُ الْكَافِرُونَ

And whoever does not judge by what Allah has revealed – then it is those who are the disbelievers. (Sūrah al-Mā'idah, 44)

وَمَنْ كَفَرَ بَعْدَ ذَلِكَ فَأُولَئِكَ هُمُ الْفَاسِقُونَ ﴾



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But whoever disbelieves after that – then those are defiantly disobedient. (Sūrah al-Nūr, 55)

They also cited the following hadīth:

عن أنس أن رسول الله صلى الله عليه وسلم قال: من ترك الصلاة متعمدًا فقد كفر جهارًا.

It is narrated by Anas bin Malik (r.a.), where Rasullullah (PBUH) said: "Whoever intentionally leaves prayer, then he has clearly disbelieved" [9 : 483-484].

Sa'd al-Dīn Taftāzānī, on the other hand, said, "The apparent meanings of the verses and *hadīths* cited as evidence by the *Khawārij* have been omitted. A believer who sins according to the strict narrations (the Qur'an and the *hadīths*) is not a disbeliever, and this is supported by *al-ijmā* (the consensus of the Islamic community) as described above. The *Khawārij*, on the other hand, is the one who denies the *al-ijmā* , whence their views are ignored" [15 : 269-270].

Evidence presented by the Khawārij in this position as proof of their views can be analyzed in two different ways, namely, by interpretation or by the rule of *al-uşūl*. The scholar chose the second way – the rule of *al-uşūl*, in which he pointed out that the apparent meaning of the evidence presented by the Khawarij had been abandoned. This is an indisputable fact. The scholar described zāhir al-dalīl (the apparent meaning of the evidence) in "Kitāb al-hudūd" as follows: "al $z\bar{a}hir$  (apparently) is a concept that has two meanings, one of which has a stronger sign than the other" [13 : 8]. The method used in this case is to cite a stronger document with the argument of the opposing party in the debate. Elsewhere on the subject, the scholar explained the contradiction of the matter by confronting the verse of the Qur'an with the verse of the Qur'an in the method of burhan al-tumani (the argument of antagonism, which is one of the important theological arguments for the oneness of God).

Indeed, it is possible to interpret their arguments. However, if the method of interpretation is used here, there will be a scientific difficulty. Firstly, it is difficult to find equal evidence for it, and secondly, even if the narrations of the Companions on the subject are presented as evidence, it is impossible that the sects will recognize them. For example, if history is wrapped up, it will be clear that in a similar situation, the followers of the Khawārij did not accept the views of the Companions on the interpretations of the Our'an and the hadīths. In particular, when 'Alī (r.a.) sent 'Abd Allāh ibn 'Abbās (r.a.) as a representative to the Khawārij to guide them to the right path, it is a fact that, despite his efforts, most of them remained steadfast in their opinions [5: 64-93]. However, 'Abd Allāh ibn 'Abbās (r.a.) was the most knowledgeable of the Companions in the interpretation of the Qur'an.

In cases where it is not possible to reconcile the doctrinal evidence, Sa'd al-Dīn Taftāzānī chose to refer to the truth of the matter to the knowledge of

Allah. An example of this is the subject of *al-Janna* (paradise) and al-Jahannam (hell). There are three issues directly related to it, the first of which is that heaven and hell exist at the same time or have not yet been created; the second is where they are located, and the last is their mortality or eternity. Thus, the essence of the problem here is that although there is a consensus among the scholars of Ahl as-Sunnah on two of the three issues on this subject, namely, the creation and eternity of heaven and hell, there are several opinions on where they are at the same time [7: 102]. This is due to conflicting evidence about them in the sources. A narration from 'Abdullah ibn Mas'ūd (r.a.) states that Paradise is at the top of the fourth heaven and Hell is at the bottom of the seven layers of the earth. A narration from 'Abd Allāh ibn Abbās (r.a.) states that Paradise is at the top of the seventh heaven and Hell is at the bottom of the seventh sea [2: 156]. So, the proofs on this issue are difficult to reconcile, and there has been a lot of debate about them. For this reason, Sa'd al-Dīn Taftāzānī argues that referring their truth to the knowledge of Allah is the best thing to do [17 : 108-111; 14 : 106-107].

Sa'd al-Dīn Taftāzānī responded according to alusūl, logic, or scientific-theoretical rules, as required by the situation, without providing additional evidence to support the truth, when the primaryexternal meaning of the narrative and mental arguments within a particular doctrinal subject seemed to contradict each other. Including, the similar evidence for the attributes of Allah, such as al-yad (hand) and *al-wajh* (face), which are narrated in verses and hadiths, can be cited as examples. The adjectives that appear in similar evidence presuppose, from the point of view of the mind, that the side and the physicality are required. For this reason, some misguided sects have even described God in human forms, such as a "beardless young man", an "old man with white hair", "composed of flesh and blood" or "a light" [1 : 119]. Indeed, Allah is free from such metaphors. A study on this issue shows that there are three different views on this subject. The first of these is to obtain the apparent meanings of mutashābih (allegorical) proofs without interpreting them. This has been put forward by such sects as *al-Jahmivyah* and *al-Mujassima* in history, and their claims are false. The second is to refer to the truth of the apparent meanings of the *mutashābih* (allegorical) proofs for the knowledge of Allah, considering that there is an interpretation of them. The third is to interpret the mutashābih (allegorical) proofs appropriately. These last two views are narrated by the Companions [6:78-89]. It is important to note that this issue was resolved during the time of the Companions. This first view appeared much later in the 2<sup>nd</sup> / 8<sup>th</sup> century. Sa'd al-Dīn Taftāzānī pointed out that the emergence of this view was due to the thoughts of some misguided groups that "every being is a body". The scholar, on



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the other hand, chose the third way in this matter, the correct interpretation of the *mutashābih* (allegorical) proofs, and refused the misguided sects according to the rules of *al-uşūl* and logic [14:79]. In this case, Sa'd al-Dīn Taftāzānī refused the misguided categories with the logic and scientific-theoretical rules on a particular doctrinal issue. An example of this is the *al-Mi'rāj* event. Existing opinions on the matter can be divided into two categories, initially confirming the event and denying it. The reason for these conflicting opinions was the one-sided understanding of the evidence within the subject and the inability to mentally accept the event. Even from the point of view of that period, the ascension of man to heaven did not fit everyone's mind. The next problem is that there are four conflicting opinions among the proponents of *al-Mi* 'rāj. In particular, four different views have been put forward as to whether he was in a dream or awake, only with the spirit, or with the body. The reason for this is that there are several narrations whose apparent meanings are contradictory.

The scholar cited the following narrations on the subject:

When Mu'āwiyah ibn Abī Sufyān (r.a.) was asked about, said, "*al-Mi*'rāj was a real dream".

عائشة رضى الله عنها أنها قالت ما فقد جسد رسول الله عليه

السلام ليلة المعراج.

 $\bar{A}$ 'ishah bint Abī Bakr (r.a.) said: "The body of Muhammad (PBUH) was not absent the night of *al*-*Mi*' $r\bar{a}j$ ".

Then, he commented on the phrase in the first narration, "Muhammad's (PBUH) body did not disappear (from the world)" that "his body was not separated from his soul, but that his body was with his soul". With this view, the scholar refuted those who say that "the Prophet ascended only with his spirit". The scholar commented on the second narration that "if *al-Mi* 'rāj had taken place in a dream, the believers would not have denied it at that time". With this fact, the scholar refuted those who believed that "al-Mi'rāj took place in a dream". There is a second aspect of the matter, namely, the reasonable rejection of those who deny al-Mi'rāj altogether. In his book "Sharh al-'Aqā'id", Sa'd al-Dīn Taftāzānī commented on this: "the denial of *al-Mi'rāj* and the claim of it as an impossible event are based on the rules of philosophers. Otherwise, it is possible to pierce the heavens and ascend to them if the opinion of philosophers is not taken into account. Because all

bodies are structurally similar to each other. Just as other bodies ascend to heaven, so can mankind. Allah is powerful to perform all possible things" [15 : 335].

The scholar commented on the phrase "piercing the heavens" in his "Sharh al-Maqāşid" with the simple phrase, "It is possible to pierce the heavens just as it pierces the earth" [17 : 48-49]. This scientific theory has found its practical proof in modern science. For example, if the words used by the scholar about the heavens, such as "الخرق" (piercing) and "الالتنام" (ascension), are analyzed from the point of view of modern astrophysics, these expressions are not simple dictionaries but appear to mean a scientific rule about. Also, the phrase "because all bodies are structurally similar to each other" is a clear indication of the fact that substances that have been scientifically proven in chemistry and physics are structurally composed of atoms.

#### CONCLUSION

In conclusion, it should be noted that Sa'd al-Dīn Taftāzānī's views on the science of creed are of great importance in the correct understanding and interpretation of the creedal issues and proofs. The scholar's unique method of analyzing evidence serves a scientific basis for avoiding various as misunderstandings, overcoming useless long-running disputes, and finding the truth. It is especially commendable that different currents and misunderstandings did not damage their dignity by rejecting them. At the same time, there are opinions expressed by him as a refutation of the lost sects, which eventually are being finding their scientific and practical confirmation. It is especially commendable that in refuting, the scholar did not touch on the dignity of the different sects. At the same time, there are opinions expressed by him as a refutation to the misguided sects, which are finding scientific and practical proof over time. The scholar's theory of al-Mi 'rāj found its practical proof 954 years later, on April 12, 1961, when the man went into space on a rocket. In addition, the scholar has other scientific views, the study of which is also important for today's society.

Indeed, Sa'd al-Dīn Taftāzānī has reached this position by reading, examining, understanding, and interpreting the Qur'an and *hadīths*. This is another historical-scientific example of Islam being a religion of peace and enlightenment.

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		Issue		Article







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## THE CONCEPT OF LINGUISTIC PERSONALITY IN LINGUISTICS

*Abstract*: In this article, the author examines the factors of the formation of a secondary linguistic personality. The article also discusses different approaches to teaching a foreign language.

*Key words*: intercultural communication, English, learning, language personality. *Language*: English

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#### Introduction

Intercultural communication is the process of jointly developing a single, most likely new for all participants in the act of communication, the meaning of all actions performed and perceived and their motives. Only such communication can contribute to the "birth of community" of participants, understood as a specific community of cultural mediators, characterized by a unique perception of reality through the double or triple prism of several cultures at the same time.

The term "intercultural communication" is most often used in several other variations. These variations are referred to as "intercultural communication" or "cross-cultural communication". These terms mean interaction and communication of representatives of different cultures.

Intercultural communication is studied at the socalled interdisciplinary level and finds its place in linguistics, psychology, ethnology, anthropology, sociology, cultural studies, etc.

First of all, intercultural communication is a process that causes a close connection of the cultural accessories of the interlocutors, people who interact, communicate with each other.

This term should not be confused or identified with the term interethnic communication, because we know that about 130 nationalities live in Uzbekistan, and all of us, citizens of Uzbekistan, are united by the Uzbek language. For us, the Uzbek language is a language of communication through which we can interact and contact representatives of different ethnic groups.

An example of intercultural communication we can call the communication of a Spaniard and a Japanese. Spaniards are more relaxed in temperament and mentality than the Japanese, and what is acceptable for a Spanish citizen will not be perceived by a representative of Japanese culture. In order to avoid conflicts and disagreements on this ground, it is necessary to take into account such subtleties.

The object of research in this article is the process of interaction, intercultural communication.

The subject is the methodology of teaching a foreign language.

The purpose of the study: based on the study of literature on the topic to identify an acceptable approach to intercultural communication.

The goal determined the solution of the following tasks:

- to study the concept of intercultural communication

- identify approaches to teaching intercultural communication

- consider the issue of secondary linguistic identity

Methodologists distinguish three approaches to teaching this subject:

- linguistic;

- conditional-communicative;

- communicative.



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Comparing two scientific paradigms, systemstructural and anthropological, we can say that the focus of attention of researchers of the word, as an object of cognition in the system-structural paradigm, in the anthropocentric paradigm is transferred to the subject of cognition, it is considered in a dichotomy: "man in language" and "language in man". The emergence of the term "linguistic personality" is connected with the anthropological paradigm. The personality" concept of "linguistic in anthropolinguistics is extremely important, since this concept is a tool that creates varieties of language. If the creation of a language is still considered a question that does not have an unambiguous answer (this is evidenced by the presence of many theories and hypotheses about the origin of language), then the varieties of language, its social and territorial variants are created by people, in other words, by linguistic personalities.

The first appeal to the linguistic personality is associated with the name of the German scientist I. Weisgerber. In his understanding of the language, he emphasized collectivism. In his opinion, language is the most universal cultural asset; no one speaks a language only because of his own linguistic personality, but, on the contrary, a person owns it because he belongs to a certain linguistic community.

In the middle of the twentieth century, the attention of scientists was focused on the study of the philosophical aspects of the "linguistic personality", namely, on highlighting the general and particular, the image of the author-creator of the work, the narrator and the image of the character. The term itself was used generically and did not represent an independent object of study.

The units of the second level are activitycommunicative needs. It includes the interests, goals, motives, attitudes and intentions of the individual. At this level, there is a transition from the analysis of the speech act of the individual to the comprehension of reality. This is the highest structural stage in the typology of the linguistic personality, the most susceptible to individualization.

The concept of a three–level structure of a linguistic personality correlates in a certain way with three types of communicative needs - contact-establishing, informational and influencing, as well as with three sides of the communication process – communicative, interactive and perceptual.

The level model of a linguistic personality reflects a generalized personality type. There can be many specific linguistic personalities in a given culture, they differ in variations of the significance of each level in the composition of the personality. Thus, a linguistic personality is a multi–layered and multicomponent paradigm of speech personalities. At the same time, a speech personality is a linguistic personality in the paradigm of real communication, in activity. It is at the level of the speech personality that both the national cultural specificity of the linguistic personality and the national cultural specificity of communication itself are manifested.

The following components are usually included in the content of the linguistic personality:

1) value, worldview, component of the content of education, i.e. a system of values or life meanings. Language provides an initial and in-depth view of the world, forms the linguistic image of the world and the hierarchy of spiritual ideas that underlie the formation of national character and are realized in the process of linguistic dialogue communication;

2) the cultural component, i.e. the level of mastering culture as an effective means of increasing interest in the language. The involvement of the facts of the culture of the language being studied, related to the rules of speech and non-speech behavior, contributes to the formation of skills of adequate use and effective influence on the communication partner;

3) the personal component, i.e. the individual, deep that is in every person.

The term "linguistic personality" today refers to "a set of distinctive personality qualities that are found in her communicative behavior and provide a person with a communicative individuality."

The parameters of the linguistic personality are just beginning to be developed. It is characterized by a certain stock of words having one or another rank of frequency of use, which fill abstract syntactic models. If the models are typical enough for a representative of a given language group, then the lexicon and manner of speaking may indicate his belonging to a certain society, indicate the level of education, type of character, indicate gender and age, etc. The language repertoire of such a person, whose activity is associated with the performance of a dozen social roles, should be assimilated taking into account the speech etiquette adopted in society. So, the linguistic personality is a social phenomenon, but it also has an individual aspect. The individual in a linguistic personality is formed through an internal attitude to language, through the formation of personal linguistic meanings; but it should not be forgotten that a linguistic personality influences the formation of linguistic traditions. Each linguistic personality is formed on the basis of the appropriation by a particular person of all the linguistic wealth created by his predecessors. The language of a particular person consists to a greater extent of a common language and to a lesser extent of individual linguistic features. Each linguistic personality has its own individual thinking, which becomes a component of social thinking, and social thinking, in turn, becomes a component of national thinking.

The linguistic approach is based on the juxtaposition of the concepts of "language" and "speech". The approach assumes a consistent and separate assimilation of the material, the "breakdown" of the material into a system and systematized



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exercises that should develop students' ability to speak the language being studied.

The conditional-communicative approach is focused on the formation of skills and abilities of speech activity, i.e. skills and abilities of constructing a speech utterance or a chain of utterances.

The communicative approach in teaching foreign languages involves teaching the language directly in the function of communication. The communicative approach focuses on the interaction of participants in the communication process.

In our opinion, the most favorable approach for the implementation of the goals and objectives of intercultural learning is a communicative approach based on the following criteria:

- the communicative approach is focused on creating conditions of the educational process that meet the requirements of the real language environment (in monologue and dialogic speech);

- a communicative approach focused on the personality of the student is able to create a motivational background;

- the communicative approach helps in developing the necessary skills for mastering a foreign language.

The formation of a secondary linguistic personality is a key indicator of the assimilation of language education in the field of a foreign language. What do we mean by the phrase "linguistic personality"? It is, first of all, a system, a coherent component of language skills, skills, abilities aimed at the implementation of speech actions. Speech activity, in turn, is divided into the following types: speaking, listening, writing and reading.

A foreign language teacher should understand that in order to form a full-fledged linguistic personality, it is necessary to form not only an idea about the language, but also about national culture, psychology and character. In other words, he should not only teach, for example, English, but at the same time develop a tolerant attitude towards representatives of another culture among students, teach him country studies through the prism of the taught English language.

All of the above components must be reflected and implemented in every English lesson, and this is required by the new standards of the State Educational Standard.

For the competent formation of a secondary language personality by the teacher, various games on situations should be applied directly in the learning process, that is, the creation of an artificial environment for the implementation of the teacher's plans. The teacher can organize festivals, days of cultures in Uzbekistan, where children prepare, read and get acquainted with the culture of the language being studied and hold events timed to this day. If there are opportunities, you can give students a chance to organize a branch of the local history museum.

Students must necessarily familiarize themselves with the oral folk art of the language being studied. These are phraseological units, stable expressions, proverbs, sayings, etc. After all, they are the ones who demonstrate the culture of the people, its identity, and history in the most vivid figurative form.

In conclusion, we would like to say that choosing the right and acceptable approach to teaching a foreign language from an early age, from the lower grades increases the chances of accelerated mastery of a foreign language and significantly facilitates the work of the teacher himself. Living conditions and the new digital era dictate their own rules, where proficiency in elementary English, an international language, is no longer a matter of pride and luxury, but a necessity.

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## WOMAN VOICE AS A GENDER PERSPECTIVE IN AUDIOVISUAL TRANSLATION

Abstract: The interaction between translation and gender has become more apparent in translation studies. As the number and quality of studies published at this intersection increase, feminist translation studies has emerged as one of translation studies' sub-disciplines. However, a gender perspective became available in audiovisual translation, a sub-discipline of translation studies, in the 2000s. Audio description is a type of audiovisual translation that allows the blind and visually impaired to access the visual track of an audiovisual product. The increased dissemination and use of accessible audiovisual products has increased the importance of audio description. This research is being conducted at the crossroads of these two sub-disciplines. The study's goal is to present a gender perspective on the gender of employees, audio description text writers, and audio describers based on data and feedback. The audio description process clearly includes "the voice of the woman audio describers" and "discourse by the woman audio description text writer." When compared to other types of translation, the "woman translator" is an undeniable component of the finished product - her voice can be heard. This provides a research platform for findings about women's voices. The following article presents not only statistical data but also data about receiver preferences, which are interpreted within the context of feminist audiovisual translation studies.

**Key words**: Audiovisual translation, audio description, audio describer, audio description text, feminist translation studies.

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#### Introduction

The clarification of the interdisciplinary nature of translation studies, the impact of cultural studies on the discipline, and the resulting paradigm shift in translation studies and the relationship between translation and gender have gained increasing importance in recent years, and the number and quality of studies in the field have increased both in our country and beyond it. As a result of this, the existence of a sub-field called feminist translation studies has begun to be mentioned.

Although the relationship between gender and language, and even translation, dates back to ancient times, the presence of a feminist perspective in translation studies appeared more than thirty years ago with the contributions of a group of Canadian female translators and theorists. The concept of feminist translation, which can be thought of as an opposition to patriarchal language in its simplest definition, has become more common in time. It sprouted with the contributions of Lori Chamberlain (5; 454-472), Barbara Godard (15; 42-53), Sherry Simon (25) and Luise von Flotow (31, 69-84; 32), who can be considered as the leading names in the field, and later on, queer theory, critical masculinity studies and their relations with translation into the subject of the study, broadened its scope.

In the process, some researchers have adopted a more local and transnational approach, based on the criticism that the studies in the field concentrate on translation studies in the West (local and transnational perspectives) (4). Studies carried out in the context of translation sociology on the position of female translators, based on the idea that the employment of female translators is intensely felt in the sector, in addition to comparative translation studies conducted



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with a gender perspective, especially in the field of literary translation (33), compilations of biographies of female translators with a historical perspective (12), studies on the place of feminist translation in translation education (14, 28, 33) can be given as an example of some of the studies published in the international community in this field.

When we look at the process of translation around the world specifically, we can see that feminist translation studies have gained importance in every country over time, and that means translation history and current translation practices in our country offer an extremely productive research area. These studies, which consist of master's and doctoral theses, original articles and comprehensive compilations, have discussed the place of women in translation, feminist translation theory and practice, the relationship between gender and translation in the context of different translation fields and different translation theories with different perspectives. The fact that the field of audio-visual translation and the concept of audio description in this field are relatively rare in studies dealing with the relationship between gender and gender can be explained by the fact that this field has only recently become visible in the field of translation studies.

As Von Flotow and Josephy-Hernandez stated in their article titled "Gender in Audiovisual Translation Studies Advocating for Gender Awareness", the handling of feminist theory and criticism in the context of literary translation dates back to the 1980s, while gender-focused studies in the field of audiovisual translation took place in 2000' (32; 296). However, the interaction between gender and media studies dates back to the 1970s and even the 1960s (9, 18, 24). Studies in which the translations of audiovisual texts are handled from a feminist perspective have emerged abroad, in addition to comprehensive articles (32; 311) or compilations describing the developments in the field (10), addressing the differences between dubbing and subtitles. comparative studies (10); There have been studies (13; 59-79) and the like, addressing the differences in the approaches of professional and amateur subtitle translators under the heading of gender.

In the case of Uzbekistan, as it can be understood from the examples above, it is seen that there are not many studies in this field, and gender and audio-visual translation fields are mentioned in studies with other focal points.

Addressing the developments in feminist audiovisual translation, Von Flotow and Josephy-Hernandez, who suggested new research areas, underlined that male and female voices in translation are a subject that has hardly been addressed in the context of audio-visual translation (32, 299), They see the results of the use of female and male voices in the field of vocalization as an important field of study. Before considering the female voice as a subject of study in terms of translation, it would be useful to briefly talk about the approaches that deal with the concept of voice, which emerged with the introduction of voice in the history of cinema, from a feminist perspective (6, 29).

Kaja Silverman, one of the leading names in the field, in her study titled "*The Acoustic Voice: The Female Voice in Psychoanalysis and Cinema Theories of Representation and Difference*", has made use of the hierarchical sexist logic (18) of Laura Mulvey's masculine gaze in the use of voice. She emphasizes that the image of the female body, which is discussed from the point of view of feminist and feminist film studies, can also be valid for the female voice.

According to Silverman, while the male subject has linguistic authority, the female subject is the one who echoes the words of the male protagonist. In her feminist film works, where the silence of the woman is as much as her voice, Silverman mentions that the male subject is defined as a higher address, while the woman's voice and body are in the narrative.

He explains that the motherly voice is conceptualized as powerlessness as well as happiness. Starting from Silverman's point of view, Bosseaux also considers voice and sound as part of the translation, explaining that voice is a fundamental element in the representation of the characters and that the voice actors must recreate the characters so that there is no mismatch between the visual and auditory representations on the screen (quoted by Von Flotow and Hernandez, 32; 305). Although Bosseaux's work is not directly gender-focused, this study focuses on the concepts of potential and power. According to Von Flotow and Josephy-Hernandez, because audio provides important information about a character's age, social position, authority, self-awareness, selfconfidence, and sexual orientation, further research on this topic will provide valuable insights into how gender is represented through voice (32; 306). If issues of authority and power are, as Bosseaux says, really about sound, then feminist, queer and genderfocused approaches to audiovisual translation will provide valuable data to address this issue. (32; 306). Based on the idea of Von Flotow and Josephy-Hernandez that the problem of sound in the field of gender and audio-visual translation is a potentially productive field of study, it is appropriate to look at audio description (32; 306), which is another productive research area in audio-visual translation, from a gender perspective.

Audio description is a type of translation developed to provide access to people who do not have access to the visual channel of an audio-visual product. Today, this type of translation has gained importance in terms of meeting the special needs of visually impaired people with the spread and sharing of audio-visual products. Pujol and Orero (21; 49-60) state that this type of access has existed since ancient times. Audio description, which is constantly evolving



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with theoretical studies and examples in practice, has been described as a type of inter-signature translation until recently (2; 154-165). In this type of translation, which has been examined by many researchers, most of the studies have focused on audio description for cinema and television (3, 645-662; 14, 205-295; 20, 179-193; 22, 151-174, 27, 191-198). Audio description in performing arts has been studied (7, 163-179; 29, 139-156). There are also studies on visual arts in this field (8, 189-200; 19, 277-293). Very little work has been done on the gender of the text writer in audio description, and the gender of the person who wrote or voiced the audio description text.

While the audio description is being performed, in the first step, the audio-visual product (with all the necessary attachments) is delivered to the translator, who is the audio description copywriter. Audio description copywriter carefully examines the product; it identifies all the elements that need to be depicted and the silent intervals in which they can be made. He/she writes the audio description text in a way that is suitable for the flow and does not overlap and/or disrupt the auditory code. The generally accepted criterion is to articulate enough visual stimuli to enable understanding of movement and interaction; moreover, it is the transfer of this in a way that allows the visually impaired person to form their own opinion without adding comments (1, 1-13). While researchers emphasize the importance of describing what is on the screen (objects, people, etc.) and what is happening (story flow) in audio description, on the other hand, they also draw attention to the importance of how it is shown (angles, distance, point of view, etc.), why it is shown (narrative effect) (17, 233-234). Later, this expert or another person who will voice the audio description enters this prepared text into the relevant parts of the audio-visual layout. The resulting product is checked by a visually impaired editor and any corrections, additions or deletions, if any, deemed necessary to ensure access as a result of the evaluation, are made at this stage. Then the final assembly of the product can be done.

Gender and the female voice in audio description is a productive research area for contemporary translation scholars. In terms of the receivers, the "voice of female voiceover" or "voiced discourse of the female voice-over copywriter" is clearly felt in the audio description. Compared to other types of translation, in this context, the "female translator" is an undeniably part of the product – her voice is heard. This provides a research platform pregnant with findings on the female voice in this field.

Considering the findings obtained as a result of the research, it is possible to say that audio description buyers first look at quality and then they consider the "sound element" in audio description at the level of preferences. This is actually an expression of the fact that we are faced with a very conscious buyer group. When it comes to preferences, the picture that emerges in this context can be read as a reflection of society's view of women's roles. The association of women with adjectives such as "emotional, delicate, sensitive" has turned into a guide in terms of the harmony of the voiceover with the movie she is singing -sometimes the buyer himself is not aware of it.

As mentioned above, the listener who cannot identify the voiceover with the content he/she voices may feel similar discomfort, just as the receiver feels discomfort when he/she cannot combine the voiceover with the visual. It would not be wrong to say that we see a reflection of the role of women in society, in our example, especially in Uzbek society. When we look at the gender roles attributed to women, a connection can be made between the docile, emotional and conflict-averse traits, which are more preferred by women as voice actors in emotional and family films. Likewise, as Serpil Sancar quotes from Collinson and Hearn, the dominant masculinity values presented as "not avoiding risk, physical toughness and endurance, being persistent and persevering, not being afraid of being aggressive and attacking ... an unemotional rationality, enduring pain and not complaining" (23, 37), it can be said that "man as the voice of authority" is often preferred in adventure, detective and horror movies. At this point, it is useful to underline once again that the gender of the voice actors is not a priority in line. We would like to say that the prejudice and distrust towards female translators (33) in some studies conducted abroad were not seen against female text writers, translators and voice actors in this study, only female or male voices were distinguished when specifically asked.

In addition, starting from the idea that we can draw parallels between the view of gender relations in interpreting studies and audio description and gender relationship, Pascal Singy and Patrice Guex's "Gender" in the Routledge Encyclopedia of Interpreting Studies in other words, their determinations under the title of "Gender" are important. According to Singy and Guex, although studies conducted especially in Western societies underline the similarities between male and female language use, they also mention certain differences. Emphasizing the two basic communication styles, they mention that the masculine style is associated with determination, competitiveness and directness, while the feminine style, on the contrary, exhibits features such as empathy, cooperation and avoidance of conflict, and these features cause some language use (26, 169-170). It is possible that these linguistic features revealed in the oral translation were also revealed during the audio description and therefore caused the preference of female voice actors and male voice actors in the audience. In this context, it is obvious that a comparative content analysis on the TV series and movies to be selected for this purpose will provide us with more data.



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When approaching the subject from a second axis, based on the above data, it would not be wrong to say that women are interested in the field of audio description, they produce with determination, and they are more inclined to work in this field than men. This applies to many types of translation. As Sherry Simon, one of the important names in the field of Feminist Translation Studies, stated in her book Gender in Translation, although translation has a less valuable and secondary historical position next to the act of writing, women sometimes enter the world of literature, and this has emerged as a powerful form of expression for women, allowing them to defend their political cause and engage in writing relationships that will motivate them (25, 36). Again, according to Simon, "the work of female translators should be taken in the context of what they tell us about their interventions in the cultural and intellectual movements of their time" (25, 40). During both individual and collective translation activities in our country, women gained new subject positions and contributed to the intellectual, cultural and political

life of the period in which they lived. When we look at the translation history, we see how many roles women translators have played, and that they are indispensable actors, especially during the activities of the Translation Bureau.

In some cases, the identification of woman and translation can also be interpreted as imprisoned in this secondary role, where women are seen as "only" translators (25, 37), while in the audio description, which is the focus of this study, female voice actors are extremely "hearable" and are in the foreground which is very crucial to pay extra attention.

As a result, women who exist in the audio visual translation, who show themselves not only in the field of translation of literary and social sciences texts, but also in interpreting and social translation, establish an "intermediate space" between the private and public spheres through translation, as in oral translation and audio description from time to time. It can be said that they exist in the public sphere not only with their translation actions but also with their voices.

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## SOLUTION OF THE DIRICHLET PROBLEM FOR THE POISSON EQUATION IN A COMPLEX DOMAIN IN THE MAPLE SYSTEM ENVIRONMENT

**Abstract**: This work is devoted to modeling the solution of problems of bending and vibration of elastic and viscoelastic plates of arbitrary configuration for various friction models. The article discusses the Dirichlet boundary value problem for the Poisson equation in a complex domain. The proposed solution algorithm is shown in the Maple environment. As a result of the work, the corresponding solutions were obtained using the package of applied programs (procedures-libraries) developed to solve these issues. On the basis of the proposed algorithm, the problems of mechanics of a deformable solid body of arbitrary and complex configuration are solved.

*Key words*: Dirichlet problem, stiffness of viscoelastic plates, bending, Poisson's equations, Poisson's coefficient, R – function.

#### Language: English

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#### Introduction

The construction and study of mathematical models of physical phenomena is associated with the study of the solution of the problem of mathematical physics. It is appropriate to trace the main stages of the origin and development of mathematical physics. Mathematical physics has developed since the time of Newton in parallel with the development of physics and mathematics. First, differential and integral calculus was discovered, the methods of mathematical physics began to form in the study of vibrations of strings and rods, as well as in solving problems related to acoustics and hydrodynamics. At the same time, the foundations of analytical mechanics were laid. Then the ideas of mathematical physics received a new development in connection with the problems of heat conduction, diffusion, elasticity and viscoelasticity, optics, and electrodynamics. During this period, the theory of potential and the theory of stability of motion are created, the problems of quantum physics and the theory of relativity are included, as well as new problems of gas dynamics, particle transport and plasma physics. Many problems of classical mathematical physics are reduced to boundary value problems for differential (integral-differential) equations—the equations of mathematical physics.

The main mathematical tools for studying these problems are the theory of differential equations



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(including related areas - integral equations and the calculus of variations), the theory of functions, functional analysis, probability theory, approximate methods, and computational mathematics.

In papers [1,2], the problems of studying dynamic stability and numerical solution of nonlinear problems of the dynamics of viscoelastic systems are considered. Mathematical modeling of dynamic problems of vibrations and stability of viscoelastic systems is also very relevant due to the fact that, on the one hand, the possibilities of using materials with pronounced viscoelastic properties in the aviation industry and other branches of mechanical engineering are expanding, and on the other hand, when using hereditary models [3,4,5] to describe the internal damping of a material, the equations of oscillations of elastic systems are written in the same form as for viscoelastic systems, however, in a viscoelastic formulation, the problem has not been studied in a complex form.

When studying complex technological processes, apparatuses and physical phenomena, a researcher cannot take into account all the factors: some are the most important, and some can be neglected. To take into account these factors, an object model is created, which is then transformed into the "model-algorithmprogram" triad, which is supplemented when solving many problems with the stages of primary processing of the experimental results, checking the adequacy and correction of the model, testing the program and analyzing the results of a computational experiment. The value of a computational experiment can hardly be overestimated, especially if a full-scale experiment is dangerous, expensive or simply impossible. Only a reasonable combination of analytical and numerical methods is a necessary condition for success in solving practical problems.

# Mathematical formulation of the problem and methods of solution.

The mathematical model of the problems of bending viscoelastic plates is described by the equation

$$\frac{\partial^2 M_x^*}{\partial x^2} + 2 \frac{\partial^2 M_{xy}^*}{\partial x \partial y} + \frac{\partial^2 M_y^*}{\partial y^2} + q(x, y, t) = 0 \quad (1)$$

If the hypothesis of the constancy of the Poisson's ratio is used when formulating the basic physical relations, the bending and torque moments are determined by the following dependencies:

$$M_{x}^{*} = -\mathrm{D}(1 - R^{*}) \left\{ \frac{\partial^{2} W}{\partial x^{2}} + \mu \frac{\partial^{2} W}{\partial y^{2}} \right\};$$
$$M_{y}^{*} = -\mathrm{D}(1 - R^{*}) \left\{ \frac{\partial^{2} W}{\partial y^{2}} + \mu \frac{\partial^{2} W}{\partial x^{2}} \right\};$$
$$M_{xy}^{*} = -\mathrm{D}(1 - \mu)(1 - R^{*}) \frac{\partial^{2} W}{\partial x \partial y}$$
(2)

where,

D - the stiffness of the viscoelastic plates;  $R^*$  – an integral operator with relaxation kernels R(t), i.e.

$$R^*W = \int_0^t R(t-\tau)W(x,y,\tau) d\tau;$$
  
W(x, y, t) - plate deflection;

 $\mu$  - Poisson's coefficient;

q(x, y, t) - the intensity of the external load.

If the hypothesis of the elasticity of volumetric deformations is used, then the following dependences are valid for the bending and torque moments:

$$M_{x}^{*} = -\left[2G(1 - R_{c}^{*})\frac{\partial^{2}W}{\partial x^{2}} + L^{*}\left\{\frac{\partial^{2}W}{\partial x^{2}} + \frac{\partial^{2}W}{\partial y^{2}}\right\}\right] \cdot \frac{h^{3}}{12} ;$$
  

$$M_{y}^{*} = -\left[2G(1 - R_{c}^{*})\frac{\partial^{2}W}{\partial y^{2}} + L^{*}\left\{\frac{\partial^{2}W}{\partial x^{2}} + \frac{\partial^{2}W}{\partial y^{2}}\right\}\right] \cdot \frac{h^{3}}{12} ; (3)$$
  

$$M_{xy}^{*} = -D(1 - \mu)(1 - R_{c}^{*})\frac{\partial^{2}W}{\partial x\partial y} \cdot \frac{h^{3}}{12}$$

where,

 $G = E/2(1 + \mu) - \text{shear modulus; } E - \text{the}$ modulus of elasticity;  $R_c^*$  - integral operator with shear relaxation kernels  $R_c(t)$ ;  $L^*$  - an integral operator, i.e.  $L^* = \left\{\frac{2}{3} + K[2G(1 - R_c^*)]^{-1}\right\}^{-1} \left[K - \frac{2}{3}G(1 - R_c^*)\right];$  $K = E/3(1 - 2\mu) - \text{bulk modulus of elasticity; } h$ is the plate thickness.

To obtain the equation of motion, it is sufficient to substitute the expression  $q(x, y, t) - \rho h \frac{\partial^2 W}{\partial t^2}$  instead of q(x, y, t) in equations (1) and obtain the following equation for an oscillating fine viscoelastic plate

$$\frac{\partial^2 M_x^*}{\partial x^2} + 2 \frac{\partial^2 M_{xy}}{\partial x \partial y} + \frac{\partial^2 M_y^*}{\partial y^2} + q(x, y, t) = \rho h \frac{\partial^2 W}{\partial t^2}$$
(4)  
where  $\rho h$  is the mass of the slab per unit surface.

Equations (1) and (4) are solved under the appropriate boundary and initial conditions

$$L_{i}W |_{\Gamma_{i}} = \varphi_{i}(x, y); \quad \Gamma = \bigcup_{i=1}^{n}\Gamma_{i};$$

$$W_{t=0} = W_{0}; \quad \frac{\partial W}{\partial t} |_{t=0} = W_{0}^{t}$$
(5)

where  $L_i$  are differential operators depending on the boundary conditions;  $\Gamma$  is the boundary of the region;  $W_0$  0 and  $W_0^t$  are initial values.

Systems of coordinate functions (SCF) W and the boundary of the studied area  $\Gamma$  are constructed using the R-function method of V.L. Rvachev [6].

Note that when solving the problems of bending and vibrations of elastic and viscoelastic plates of complex shape, orthonormal SCFs are used with respect to the biharmonic and unit operators, respectively. Here, the use of orthonormal SCF greatly facilitates the solution of systems of integral and integral-differential equations (IDEs). To solve



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autonomous systems of integral and IDE, a numerical method based on the use of quadrature formulas is used.

# Solving the Dirichlet problem for the Poisson equation in a complex domain in the Maple environment.

In many cases, the solution of the problem of modeling problems of the theory of viscoelasticity of a complex shape is associated with the study of the solution of the Dirichlet problem for the Poisson equation in a complex domain. The work is devoted to modeling the solution of problems of bending and oscillations of elastic and viscoelastic plates of arbitrary configuration for various viscosity models in the Maple system medium [7,8,9].

The Dirichlet problem for the Poisson equation is one of the classical problems of mathematical physics. To solve partial differential equations, as a rule, grid methods are used, often with the help of a computer, a grid is built in the domain of definition, and a difference equation is compiled in which the desired unknowns are the values of the function at the grid nodes. The solution of the difference equation can also be sought in different ways. In practice, iterative methods are widely used. The computational scheme in this case describes how the next state of the grid depends on the previous one. As a result of computing on a computer, an approximate solution of partial differential equations is obtained [10,11,12,13,14].

In this paper, an application package (procedureslibraries) is developed for solving the Dirichlet problem for the Poisson equation in a complex domain in the Maple system.

To solve the problem of modeling these tasks, we connect the developed RFM package:

#### > restart:

libname:=''F:/Maple/MathPhysics/RFM/lib'',libna me:



Choosing a system of R-operations: > SetRSystem(0);

Set up base areas:
> F1:= nStripX(0,1);

$$FI := (x, y) \to \frac{1^2 - (y - 0)^2}{2 1}$$

> F2:= nStripY(0,1);

$$F2 := (x, y) \rightarrow \frac{1^2 - (x - 0)^2}{21}$$

> F3:= nStripX(1,0.5);

$$F3 := (x, y) \to \frac{0.5^2 - (y - 1)^2}{20.5}$$

$$F4 := (x, y) \rightarrow \frac{0.5^2 - (x-1)^2}{2\ 0.5}$$

$$F5 := (x, y) \to \frac{0.2^2 - (x - (-0.5))^2 - (y - (-0.5))^2}{2.0.2}$$

> F6:= nHalfPlane(0,-0.5,-0.5,-0.5):

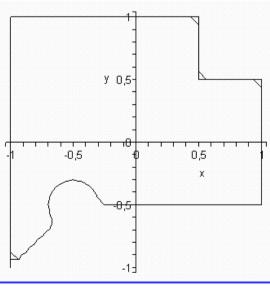
> F7:= nHalfPlane(-0.5,-0.5,-1,-1):

We build a function that describes the boundary of the area under study:

> Omega:= (((F1 &In F2) &In &Not(F3 &In F4)) &In &Not(F5)) &In &Not(F6 &In F7):

We set a rectangle bounding the study area: > **BoundRect:=** [-1,-1,1,1];

We graphically depict the constructed function: > **PlotDomain(Omega,BoundRect);** 



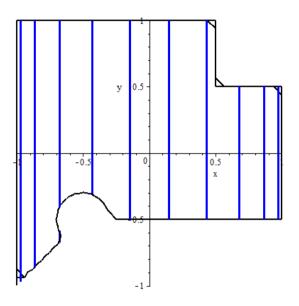


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We start the procedure for preparing for integration: > PrepareForDbInt10(Omega, BoundRect, Mx1, My1, 20);

[-0.9739065285, 0.9999999980] [-0.8650633669, 1.] [-0.6794095684, -0.5883866890, -0.4116133110, 1.] [-0.3114162616, 0.9999999986] [-0.4999992370, 1.] [-0.500000001, 0.9999999987] [-0.4999992370, 1.] [-0.4999992370, 0.5000007630] [-0.4999992370, 0.5000000005] [-0.5000000000, 0.5000000002]

We graphically represent the segments of integration: > PlotIntPaths(Omega, BoundRect, Mx1, My1);



Create an array of power polynomials: > **Basis:= GenPowerPolynoms(3);** 

*Basis* :=  $[1, x, y, xy, y^2, x^2, x^2y, xy^2, y^3, x^3]$ 

We generate coordinate functions: > w:= GenCoordFunctions(Omega(x,y), Basis): We set the common term of the left side of the Ritz system:

#### > GenTerm:= (i,j) -> (Grad(w(x,y)[i]) &. Grad(w(x,y)[j])):

We carry out integrations and fill in the matrix of the Ritz system:

> A:= CreateLeftMatrixHF(GenTerm, Mx1, My1, BoundRect, true);

 A:=
 0.6942063854
 -0.04513281540
 0.1385147851
 -0.000982744665
 0.171520111
 0.2301433417
 0.01983115336
 -0.02807837605
 0.08334872851
 -0.04517829880

 -0.04513281540
 0.2865889179
 -0.000982744594
 0.03253575799
 -0.02807837609
 -0.038344164835
 0.06069662706
 -0.04291975076
 0.1670247356

 0.1385147851
 -0.0000982744594
 0.2279655869
 -0.03170608505
 0.1087579377
 0.01983115335
 0.06288746886
 -0.009471109679
 0.1127190883
 -0.003165030067

 -0.000982744665
 0.03233575799
 -0.03170608505
 0.07127043960
 -0.009471109660
 -0.008344164723
 -0.02929792981
 0.02218216688
 -0.03212255893
 0.01050035715

 0.1715200111
 -0.02807837609
 0.1087579377
 -0.009471109660
 0.1211020590
 0.05231365627
 0.01772423457
 -0.02463779327
 0.8166675620
 -0.02461267152

 0.2301433417
 -0.05243371668
 0.01983115335
 -0.008344164723
 0.05231365627
 0.1775985470
 0.01249155120
 -0.0246314020
 0.033781588
 0.03030876456
 -0.006795209218

 -0.02807

We set the modulus of elasticity, plate thickness and Poisson's coefficient, since they enter the right side of the equation through the cylindrical stiffness: > GenTermB:= i -> w(x,y)[i];

 $GenTermB := i \to w(x, y)$ 

> B:= CreateRightVector(GenTermB, Mx1, My1,BoundRect);



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<i>B</i> :=	-0.02 0.076 -0.01 0.062 0.083 0.013 -0.01 0.033	43012636 354012016 577632291 536378468 252726133 385394667 346953997 170908109 358586553 368908724		Solut :=	-0.0471 0.2494 -0.222 -0.632 -0.353 -0.249 -0.302 0.00560	22331876494990 940335419104296 72492783038430 883413342468778 631291933822171 691752318328168 035388264939288 538571801416911 1785939283478269 115538569656376	
We solve the equation	on and	get:		Building a solution	on:		-

> Solut:= SolveSystem(A, B):

Building a solution: > U:= CreateSolution(Solut, w):

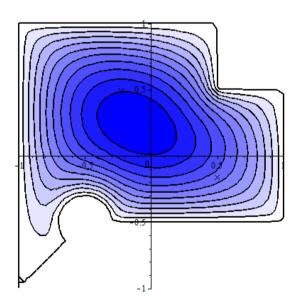
We calculate the value of the deflection at the maximum point:

> evalf(U(-0.1,0.25)); 0.170509276387391

We graphically depict the resulting solution in the form of level lines:

> with(plots):

> PlotSolution(Omega, U, BoundRect, 10);



The graphical results show that the choice of one or another hypothesis when formulating physical relationships leads to a rather significant change in the stress-strain state of the plates.

#### Conclusions

In the course of this work, a numerical-analytical method for solving boundary value problems of mathematical physics was studied using the example of the inhomogeneous Dirichlet problem for the Poisson equation in a complex domain in the Maple system environment. A numerical implementation of the computational method was carried out and a computational experiment was carried out.

On the basis of the proposed algorithm of tasks in the environment of the Maple system, an automated system of a software package has been developed, with the help of which problems in the mechanics of a deformed solid body with an arbitrary configuration are quickly solved. With the help of the developed automated system, a number of practical important boundary value problems of the theory of elasticity and the hereditary theory of viscoelasticity with a complex shape of the region boundary were studied.



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A comparative analysis shows that a partial change in the shape of the region boundary leads to a rather significant change in the stress-strain state of the plates. The convergence of the computational algorithm is investigated and the reliability of the results obtained using an automated system by comparing them with the exact solution or solutions obtained by other authors is shown.

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## THE THEORY OF HUMAN CAPITAL DEVELOPMENT, ITS ESSENCE AND THE MAIN DIRECTIONS OF ITS DEVELOPMENT

Abstract: This article analyzes the essence and types of human capital, the theory of its development, as well as stages and priorities.

Key words: Human capital, labor resource, labor force, labor potential, human resources, human factor. Language: Russian

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#### ТЕОРИЯ РАЗВИТИЯ ЧЕЛОВЕЧЕСКОГО КАПИТАЛА, ЕЁ СУЩНОСТЬ И ОСНОВНЫЕ НАПРАВЛЕНИЯ ЕЕ РАЗВИТИЯ

Аннотация: В данной статье анализируются сущность и виды человеческого капитала, теория её развития. также этапы и приоритеты.

**Ключевые слова**: Человеческий капитал, трудовой ресурс, рабочая сила, трудовой потенциал, человеческие ресурсы, человеческий фактор.

#### Введение

Одним из наиболее широко используемых современной терминов в литературе на сегодняшний лень является понятие «человеческий капитал». Человеческий капитал стал главным критерием, определяющим судьбу человечества, каждого общества и государства. Существует множество определений понятия человеческого капитала, и они меняются по мере расширения теоретических исследований. Потому что авторы различных отраслей науки определяют это понятие, исходя из целей и задач. Например, Л.Туров характеризовал человеческий капитал как «способность производить товары и услуги». В то же время он подчеркнул, что это экономическая способность, которая может влиять на работу других. Э.Долан и Дж.Линдси под человеческим капиталом понимали капитал в виде умственных способностей, приобретенных в результате формального образования или практического опыта. С.Дятлов, А.Добрин И другие

человеческий капитал как представляют совокупность всех положительных качеств и характеристик, производственных мощностей и сил, функциональных ролей и форм, в целом соответствующих современному состоянию общества, научно-технических и введенных в систему рыночных отношений как ведущего общественного фактора производства, характеризуя её как социально-информационную революцию [2, с.11].

Из приведенных соображений можно сделать вывод, что человеческий капитал представляет собой совокупность знаний, умений и навыков, используемых для удовлетворения разнообразных потребностей человека и общества в целом.

Термин впервые был использован в 1958 году американским экономистом Джейкобом статье «Инвестиции Минсером в его в человеческий капитал и распределение личного дохода». Позже, в 1961 году, концепции человеческого капитала были разработаны



	<b>ISRA</b> (India) $= 6.3$	317 S	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
Impact Factor:	<b>ISI</b> (Dubai, UAE) = $1$ .	.582 P	РИНЦ (Russia)	= 3.939	PIF (India)	= 1.940
	<b>GIF</b> (Australia) $= 0.$	564 E	E <b>SJI</b> (KZ)	= <b>8.771</b>	IBI (India)	= 4.260
	JIF = 1.	.500 S	<b>SJIF</b> (Morocco)	<b>= 7.184</b>	OAJI (USA)	= 0.350

Теодором Шульцем, а в 1964 году - Гэри Беккером. Теодор Шульц был удостоен Нобелевской премии по экономике в 1992 году Теодором Шульцем в 1979 году, а затем его учеником Гэри Беккером за создание основ теории человеческого капитала. Семен Кузнец, получивший Нобелевскую премию по экономике в 1971 году, внес большой вклад в развитие теории человеческого капитала. Теория человеческого капитала базируется на лостижениях институциональной теории, неоклассической теории и других частноэкономических теорий. Его появление сформировалось в ответ на запросы экономики и смежных наук о реальной экономике и жизни. В этот период возникла проблема глубокого понимания роли личности и влияния совокупных результатов ее интеллектуальной деятельности на темпы и качество развития реальных обшества и экономики. Анализ процессов развития и экономического роста в современных условиях привел к увеличению спроса на человеческий капитал как ключевой производственный и социальный фактор развития современной экономики и общества.

#### Методология

Сторонники теории человеческого капитала работали тем, чтобы вычислить, какую отдачу государству и обществу принесут инвестиции в здравоохранение, образование, институт рождения и ухода за детьми в денежном эквиваленте. В центре внимания в исследованиях были производство умений человека и разница в доходах, вызываемая различными размерами вложений в это производство.

Консервативные экономисты и психологи называют объяснение разницы в доходах через неодинаковый уровень подготовки и образования работников завышением эффекта обучения. Они считают, что способности человека, прежде всего, зависят от наследственного и биологического фактора.

В настоящее время теоретические вопросы человеческого капитала и связанных с ним концепций совершенствуется С.А.Грачевой, М.А.Гундоровой, В.А.Мошнов, В.В.Адамчук, Г.Борягин, В.А.Галкина, Б.М.Генкин, М.М.Хайкин. А.Я.Кибанова. Г.С.Беккер, И.В.Грузков, А.В.Корицкого других и зарубежных ученых и исследователей.

В этой области ученые нашей страны К.Х.Абдурахмонов, А.Олмасов, А.Вахобов. М.Саидов, И.А.Бакиева, М.Пардаев, Б.Абдукаримов, К.Саидов, М.Мухаммедов, Д.Асланова, Р.Сейтмурадов, С.Исхакова проводят научные исследования и проводят исследования в области человеческого капитала. В данной статье рассматривается сущность человеческого

капитала с использованием методов анализа и синтеза, обобщения, сравнительного анализа.

#### Вывод

Первоначально под человеческим капиталом понималась лишь сумма вложений, повышающих трудоспособность человека, - образования и профессиональных навыков.

Человеческий капитал в самом широком смысле – это фактор интенсивного производства экономического развития, развития общества и знаний. интеллектуальных семьи. и управленческих инструментов, здоровья обитания, населения И среды высокого потенциала современных квалифицированных кадров [3, с.19].

В современном мире развитие высоких технологий, внедрение инновационных продуктов и технологий во все сферы экономической жизни человеческих требуют новых ресурсов. Решающим фактором производства высококвалифицированной рабочей силы признаются интенсивные научно-технические изменения в постиндустриальных обществах, а не современные технологии в пропессе формирования новой технологической базы. В течение многих лет конкурентоспособность в промышленно развитых обществах определялась машинами и технологиями. Эта ситуация в известной степени не утратила своего значения и сегодня. Но технологии нашего времени очень быстро могут быть скопированы конкурентами. Так что, чтобы всегда быть на полшага впереди конкурентов, всегда нужно развиваться и предлагать что-то новое. Это, в свою очередь, создает потребность в интеллектуальном человеческом капитале.

Эволюцию теории интеллектуального капитала можно разделить на несколько этапов:

1. Классический – зарождение идеи о стоимостной оценке человеческих ресурсов, признание важности квалифицированного труда в экономическом развитии государства.

Неоклассический – появление концепций«экономического» человека и максимизирующего экономического поведения.

3. Настоящий(текущий) – расширение понятия интеллектуального капитала, подтверждение теоретических положений эмпирическими результатами. [2, с.7].

В настоящее время существует множество способов оценки стоимости человеческого капитала, и его оценка производится на разных экономических уровнях:

- микроуровень - индивидуальный человеческий капитал и человеческий капитал на уровне предприятий и фирм;

- мезоуровень - человеческий капитал конкретного региона и крупных корпораций;



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	<b>GIF</b> (Australia)	= 0.564	ESJI (KZ)	= <b>8.771</b>	IBI (India)	= 4.260
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- макроуровень - совокупный человеческий капитал на уровне национальной экономики (общества);

- мегауровень - глобальный, глобально интегрированный человеческий капитал [6, с.23].

Необходим ряд реформ для решения ключевых задач, связанных с развитием человеческого капитала, повышением его качества, достижением экономического роста и устойчивого развития.

Во-первых, изменения в следующих трех областях должны обеспечить беспрецедентный прогресс в развитии:

- образование – это система, играющая ведущую роль в формировании человеческого капитала. Современная система образования должна закладывать основы для технического прогресса и экономического роста, способствовать преодолению демографических проблем, достижению социальной стабильности за счет сокращения неравенства в владении ресурсами развития и учить людей извлекать выгоду из своих знаний, навыков и компетенций.

- здоровье - без изменений в этой сфере невозможно сохранить здоровье человека, укрепить здоровье населения, продлить жизнь человека и вести здоровый образ жизни;

- социальная поддержка и защита населения. К ним относятся занятость, трудоустройство пожилых людей, инвалидов, малообеспеченных и многодетных семей, государственная поддержка молодежи и молодых семей, сокращение бедности, доступное жилье, занятость и доступ к высшему образованию.

Во-вторых, если социальные сферы не претерпят серьезных технологических процессов и преобразований, они не смогут выполнять возложенные на них задачи в области формирования и развития человеческого капитала. Технический прогресс должен быть в самих этих областях.

В-третьих, учитывая глобализацию рынков образования и здравоохранения в ближайшем будущем, которая увеличит их вклад в ВВП, необходимо расширить экспортный потенциал этих секторов экономики.

В-четвертых, рост человеческого капитала невозможен без изменения модели рынка труда страны.

#### Обсуждение

Человеческий капитал – это знания, навыки и здоровье, которые люди накапливают в течение жизни, что позволяет им реализовать свой потенциал в качестве полезных членов общества. Инвестиции в людей посредством качественного образования, хорошего питания, здоровья, создания рабочих мест и развития навыков способствуют развитию человеческого капитала, что имеет решающее значение для искоренения крайней нищеты и построения социально сплоченных обществ. Экономический рост и развитие зависят как от человеческого капитала и материальных благ, так и от факторов, влияющих на эффективность. Инвестиции в эти сферы лополняют И усиливают лруг друга. Производительность труда человека зависит от наличия материальных ресурсов, таких как инфраструктура, оборудование и устойчивая, хорошо управляемая экономика. В свою очередь, физически здоровые и образованные люди могут больше зарабатывать и больше вкладывать в материальные блага экономики.

Знание - величайшее сокровище, и его нельзя сравнить ни с каким богатством. Не зря наш великий предок Исмаил аль-Бухари сказал: «Нет в мире спасения, кроме знания». нтеллектуальный потенциал играет важную роль в развитии мира, и образованного спрос на силу и человека квалифицированного растет. Вель именно такими высокопотенциальными кадрами создаются высокие научно-технические открытия в мире. Также необходимо любые открытия использовать только на благо человека, для его счастья.

B современном процессе глобализации инновании являются олним из важнейших ресурсов стратегических любой страны. Успешное решение социально-экономических задач, внедрение новых промышленных и финансовых технологий, развитие инновационной и инвестиционной инфраструктуры, повышение интеллектуального потенциала, производство экспортоориентированной продукции, импортозамещение, накопление валютных резервов в той или иной мере связаны с инновационной деятельностью.

Действительно, инновационное развитие невозможно без развития человеческого капитала. Известные экономисты считают, что небрежное отношение к инвестированию в человеческий капитал может резко снизить конкурентоспособность страны. Чтобы страна развивалась экономически, необходимо взращивать талантливых людей. [4, с.1].

В современном мире развитие высоких технологий, внедрение инновационных продуктов и технологий во все сферы экономической жизни человеческих требуют новых ресурсов. производства Решаюшим фактором высококвалифицированной рабочей силы признаются интенсивные научно-технические изменения в постиндустриальных обществах, а не технологии современные в пропессе формирования новой технологической базы. В течение многих лет конкурентоспособность в промышленно развитых обществах определялась машинами и технологиями. Эта ситуация в



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	<b>GIF</b> (Australia)	= 0.564	ESJI (KZ)	= <b>8.771</b>	IBI (India)	= <b>4.260</b>
	JIF	= 1.500	SJIF (Morocco	o) = <b>7.184</b>	OAJI (USA)	= 0.350

известной степени не утратила своего значения и сегодня. Но технологии нашего времени очень быстро могут быть скопированы конкурентами. Так что, чтобы всегда быть на полшага впереди конкурентов, всегда нужно развиваться предлагать что-то новое. Это, в свою очередь, создает потребность в интеллектуальном человеческом капитале. Эту потребность можно удовлетворить путем постепенного увеличения уровня охвата высшим образованием в стране. Для решения этой проблемы в нашей стране выполнены следующие задачи:

Во-первых, открытие новых высших учебных заведений и филиалов престижных вузов в зарубежных странах, а также негосударственных высших учебных заведений по востребованным направлениям.

Во-вторых, постепенная отмена квот на прием студентов в высшие учебные заведения на платной основе.

В-третьих, предоставить вузу право устанавливать квоты приема на платной основе исходя из своих возможностей и потребностей своих студентов.

В-четвертых, создать возможности для поступления абитуриентов в несколько вузов одновременно.

Человеческий капитал можно разделить на отрицательный человеческий капитал (деструктивный) и положительный (творческий) человеческий капитал как производительный фактор по уровню эффективности.

Отрицательный человеческий капитал - это часть накопленного человеческого капитала, которая не приносит пользы обществу и экономике, препятствует росту уровня жизни, развитию общества и личности. Инвестиции в образование и воспитание не всегда окупаются. убийцы Безнадежные преступники И потерянный актив для общества и семьи. Коррумпированные чиновники, уголовники, наркоманы, алкоголики, лентяи, воры — все они способствуют увеличению отрицательного человеческого капитала. Активная часть нации ее элита - может внести большой вклад в vвеличение отрицательного человеческого капитала, поскольку они определяют политику и стратегию развития страны, ведут нацию по пути развития или ведут к стагнации или кризису. Отрицательный человеческий капитал требует изменения характера знаний и опыта, а также вложений лополнительных в человеческий капитап

Потребуются реформы, направленные на изменение образовательного процесса, инновационного и инвестиционного потенциала, повышение менталитета и культуры населения. Накопленный отрицательный человеческий капитал начинает в полной мере проявлять себя в период бифуркации.

Положительный человеческий капитал (творческий или инновационный) определяется как человеческий капитал, обеспечивающий возврат инвестиций в него в периоды развития и роста. Положительный человеческий капитал вносит неоценимый вклад в развитие системы образования, рост знаний, развитие науки, улучшение здоровья населения, повышение качества информации.

Пассивный человеческий капитал – это человеческий капитал, который не способствует развитию страны, инновационной экономики, а в основном ориентирован на собственное потребление материальных благ.

Человеческий капитал невозможно изменить за короткий промежуток времени, особенно при большом объеме накопленного отрицательного человеческого капитала, что создает большие трудности для развития экономики страны.

#### Заключение

В XXI веке человеческий капитал стал критерием, определяющим судьбу человечества, каждого государства. Настало время быстрого использования информационных технологий. Ученые прогнозируют окончание этого периода в ближайшие десять-пятнадцать лет. Третий этап цивилизации может быть общекультурным или интеллектуально-духовным [5, с.1].

С годами материальные и природные ресурсы, промышленный и сельскохозяйственный секторы экономики, золотовалютные резервы и т.д. превратились в постоянно сокращающуюся часть национального богатства. По мнению некоторых экспертов, к 2030 году они не будут равняться даже 10% национального богатства развитых стран. Иными словами. интеллектуально-духовный фактор является решающим условием национального богатства, важнейшим показателем государственной мощи и определяет уровень развития общества. [5, с.3].

Для того, чтобы поднять Узбекистан на уровень развитых стран, нужна огромная мощь, большой потенциал. Что это за сила? Эта сила и потенциал заключены в человеческом капитале нашей нации. В знаниях каждого человека, в умении делать что какой подготовкой и навыками, в безграничной преданности Родине, народу. Каждая инвестиция, сделанная для поддержки гражданского общества, гарантирует, что люди проявляют творческий подход и подчиняются обществе возникает закону. В атмосфера оптимизма, формируется конструктивное и рациональное мировоззрение. Появятся неправительственные институты, улучшающие качество жизни. Люди учатся здоровому образу жизни. Все это создает чувство уверенности в



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	<b>GIF</b> (Australia) =	= 0.564	ESJI (KZ)	= <b>8.771</b>	IBI (India)	= 4.260
	JIF :	= 1.500	SJIF (Morocco)	) = 7.184	OAJI (USA)	= 0.350

завтрашнем дне нашего народа, повышает качество жизни. Процесс глобализации и модернизации каждый день привносит в нашу жизнь новые концепции. Модернизация - это обновление объекта на основе новых требований При этом обновляются И норм. и модернизируются машины. оборудование, приборы, технологические процессы. Кто остановится в этом процессе, тот отстанет в развитии.

В Узбекистане, находящемся на пути вхождения в число развитых стран, приоритет отдается трансформации человеческого капитала в этот фактор. Ведь чтобы не отставать от времени, в первую очередь человек должен расширять, совершенствовать и модернизировать свои знания. Только тогда его интеллектуальный уровень и потенциал повысятся, и он станет современным кадром, способным внести достойный вклад в развитие Родины.

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# COGNITIVE FEATURES OF TRANSLATING HUMAN RIGHTS TEXTS

Abstract: The article aims to study the concept and cognition of international human rights texts and cognitive models for translating such texts. The main content of the study is to consider how the legal and general language in the global and national context is defined by the unconscious features associated with the method of conceptualization and classification of human. The article first discusses the role and importance of the cognitive approach in the translation process and scholars' views on it. The concept of human rights and its cognitive features were introduced. This article examines and illustrates translation theories and legal interpretation strategies through empirical data in the field of human rights. Translation analysis and understanding and conceptualization have been identified as key aspects of people's way of thinking rather than a skill to be studied. Cognitive linguistics appears to provide solutions to the issues of human rights translation, and this research backs up this claim. Standard legal language and expressions linked to the legal process and human rights may have been translated in so many various ways in current translations, and what obstacles the translator faces when working on human rights materials, according to cognitive models.

*Key words*: concept, cognitive approach, cognitive model, cognitive act, stereotype, human rights texts, metaphor theory.

Language: English

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#### Introduction

From a cognitive perspective, the concept of human rights involves the study of its mental structures, which include stereotypes and standard images of the legal world that are noted for the stability of structures, images, and emotions. Human rights texts can be analyzed and translated in a variety of areas, including historical, legal, linguistic, cognitive, and political, and the more a translator uses these areas, the more complex the translation process becomes. In many cases, they have to work with legal texts in legal systems and enter the field of jurisprudence by trying to determine the meaning of legal texts to be able to translate them. In addition, if a translator wants to communicate with other members of the legal world and have the same understanding of terms as them, it is important to become familiar with the legal world and adopt institutionalized cognitive models in the legal world. Our cognitive models play an essential role in all parts of the translation process. Cognitive models develop

through experience and influence, not constantly or by nature. That's why translators need to be involved in the texts and topics they work on. This article will give you more insight and information about it.

# The importance of a cognitive approach in translation.

The concept of cognition includes a wide range mental activities such as knowledge, of consciousness, reasoning, thinking, presenting, creativity, developing plans and strategies, reflecting, representing, drawing logical conclusions, problemsolving, and classification, and it is determined by processes such as cognition, mental imagery, memory, and attention span. Cognition, therefore, plays a key role in the translation process and requires the translator to be able to translate the text-based on cognitive activity while maintaining its national diversity while performing its communicative and pragmatic functions. When translating a text from one language to another, the translator must also consider



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the cultural and social context of the language. In addition, the authors (O'Brien, 2015; Alves, Pagano & Silva, 2010) emphasize the processes that can and cannot be observed in translation, i.e., they view translation first as a product and then as an activity.

The commonality of all cognitive scientific approaches is not limited to mental actions such as studying their descriptions, problem-solving, and translation; rather, their main purpose is to explain the development and functioning of mental processes that allow them to perform complex cognitive behaviors such as translation. Halverson, 2010, Thagard, 2005, Minchenckov, 2007, Zlobin, 2012. Cognitive approaches in translation, therefore, differ from other linguistic and psychological approaches. They refer to and expand on existing cognitive scientific models of reasoning to describe the processes that can serve to explain the behavior and choice of translators. For example, foreign researchers such as Danica Seleskovitch and Marianne Lederer identify three interrelated stages of the translation process: 1) understanding, 2) deverbalization, and 3) reexpression (15, p101). On the other hand, Kiraly sees translation as both a socially external and cognitively internal activity. It presents two models of the translation process: the social model and the cognitive model based on psycholinguistics.

# The concept of "human rights" and its cognitive features.

The linguistic view of the legal world represents complex unit of mental objects (concepts, stereotypes, scenarios, conceptual areas, etc.) related to legal relations and legal discourse. Most of these objects do not change in terms of words, abbreviations, phrases, or phraseological units in the language. They impose on the individual at any level a clear view of the world, especially in its classification and evaluation. According to cognitivists, a person thinks by combining concepts and forming new concepts in thinking (18, p3). According to E.S Kubryakova, a concept is a practical, meaningful unit of thinking, a unit of programmed knowledge, or a quantum (12, p90).

Modern linguistics views a concept as a mental object defined by a word as phraseological units, abbreviations, phrases, etc. Concepts are ideal abstract units with meanings used in the process of thinking. They reflect the acquired knowledge, experiments, the results of all human activities, and the world's study in terms of certain units, "quanta". In general, the transmission of any information or communication process and the transmission or exchange of concepts in verbal or non-verbal forms. The concepts reflect key elements of national legal consciousness. Such a set of concepts forms a range of concepts that serve as the heart of the nation's legal culture.

The concept of human rights is abstract in its own right. It has a complex structure with individual words and phrases, phraseological units, abbreviations, sentences, and full texts. The content of which is partially revealed through its representation in speech. The meaning of a concept is significantly broader than the meaning that defines this concept, as the meaning of a concept includes not only conceptual but also emotional, value, cultural, and historical components, and images.

# Cognitive models in understanding and translating human rights texts.

Cognitive models play an essential role in how we understand and translate texts, and evidence for this can be found in language itself, its structure and expression. As mentioned above, to translate legal texts, we must first have a better and deeper understanding of the field of law. In addition, most states are constantly contributing to the development of international human rights, particularly bringing human rights cases to international courts. When a case in a national legal system is referred to an international court, international law is influenced by a particular national system. Although the cases heard by international courts are related to international legal instruments, the traditions and characteristics of national legal systems cannot be completely separated from the international context. At the same time, many states have chosen aspects of human rights law from the international system and voluntarily incorporated them into their legal systems.

It is important to determine whether all legal concepts and problems stem from the interactions between individuals or legal entities. In many cases, we learn about the legal concepts of other countries through the international human rights system. Initially, the exchange of legal concepts and ideas poses problems in understanding and translating, but as each national legal system adopts new and foreign concepts, first within its legal system and then as part of international law, they eventually become the consequence and are eliminated as an integral part of its national legal system. From international legal instruments and judicial practice, it is possible to determine how legal concepts emerge, where they come from, and how new ideas are accepted by both lawyers and ordinary people in different legal systems. But it's even harder to move forward in this research and learn how people understand these new concepts. Comprehension is a key issue in translating international human rights texts. including understanding the text to be translated, understanding the languages involved in the process, and understanding the texts in both languages in general. By focusing on all these aspects of comprehension, the translator may not be able to get a clear answer to specific translation problems, but he/she will be in a better position to understand and translate the language by understanding the process. This helps him to make a more conscious choice between



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linguistics and translation, giving him a more consistent approach to stable platform translation.

Metaphor theory offers a very optimistic view of the possibility of translating a text. If languages have different conceptual systems, people cannot learn languages with other conceptual systems. If people speak and understand multiple languages, it is strongly denied that these languages should have the same conceptual systems (14, p311). One of the main assumptions of metaphor theory is that people have conceptual systems and conceptual abilities. Human cognition allows us to understand new concepts and develop new levels, so understanding is not a stable process but a changing process.

The clash between law and cognitive science arose because we expected the law to be objective and clear and the concepts of the law to be understood in the same way by everyone. However, cognitive science has shown that we understand in terms of imagination and metaphor, not objective reality. We have almost no definitive answers, and we must recognize that understanding legal concepts will change in different contexts over time. There is no law in the world; human beings create it, and therefore, this creation is also determined by the cognitive abilities of its creators. Winter argues that experience ultimately determines the meaning or scope of legal concepts (21, p145).

For these rights to be meaningful, they must be based on people's life experiences, not on the rules or principles of the offer. [...] In short, rights are an imaginary product of the human mind, and their meaning depends on the human experience. And the law is the path to our future, which is always in line with the contribution of the faithful.

Throughout his career, Winter clearly demonstrated his personal beliefs, and he embarked on a very interesting process of merging two very different fields of science. There is no denying that the law is primarily about human relationships. Winter makes this point very clear in the following concluding statement of his article (22, p146).

### Cognitive models in translation.

Metaphor theory explains human cognition, how we classify and conceptualize, and how important negotiation and flexibility are for communication and answering questions. It focuses on aspects that everyone involved in language and the law needs to know. Based on numerous examples and research, metaphor theory suggests how people understand explicit and abstract concepts using prototypes, stereotypes, categories, metaphors, and imagination. Our understanding governs how we think and how we express ourselves and how we act. Metaphor theory deals with understanding what we hear or read and how we speak the language. In this last part of the process, the interpreter no longer looks at other people's phrases and language choices. At this stage, he/she should know why he/she chose another word and how his/her choice will affect the students' understanding of the text. When addressing the issue of translation separately, George Lakoff identifies the difference between comprehension and translation according to cognitive theory; comprehension is internal, and translation involves translating text from one language to another.

Research by cognitive scholars shows that the methods and abilities of classification and conceptualization in communication and translation are more closely linked to personal experience and imagination than to culture or language. Research has repeatedly shown that certain levels of experience in key aspects of life change from culture to culture and from person to person. The impact of these experiences is reflected in our language as we try to understand and communicate. This information is very relevant for translators, both readers and text analysts. Metaphor theory provides translators with a new understanding of translation and translation skills. This knowledge of human cognition suggests that in translation, we should focus not only on text function and analysis but also on categories and concepts at the stages of perception and production. The cognitive linguistic approach and hermeneutic translation combine many features and are based on a fundamental approach similar to knowing the views of a language user or translator. However, suppose hermeneutics is concerned with the individual and his/her independence and understanding of the world. In that case, cognitive linguistics places the individual in a broader context and considers his/her status as a member of a group in society.

Metaphor theory deals with the most basic aspects of human cognition. It provides a number of general answers, and at the same time, it provides specific tips for language users to better understand what they are reading and writing. While translation theories focus primarily on methods of analyzing specific texts, directing the translator to consider the specific features of each text, metaphor theory provides information on how we use the common language. It can enter the translation process from a completely different angle. Legal professionals and translators can't clearly define what these personally created categories fall into. Still, metaphor theory shows everyone the basis for categorization and how we categorize it and how it affects legal language that may be easier to understand.

When we talk about cognitive models in translation, we are not just talking about the ability to translate traditional metaphors or idioms. All of this is to understand how language is built on experience and metaphor, how differences can arise between different languages and cultures, and how much it depends on the person and his/her "personal" categories and concepts.



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#### Conclusion.

In short, understanding and conceptualization are key aspects of people's ways of thinking, not the skills they have learned. In the process of translating, a translator enhances his/her cognitive perspective only through experience so that the meaning of the texts he/she is translating can be understood and accepted by the majority. In addition, when translating legal texts, the translator must be able to translate the

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text and have sufficient knowledge and understanding of jurisprudence. In jurisprudence, certain terms can be translated verbatim from one language to another, but they do not have a specific meaning. The interpreter should be able to solve such problems using his/her cognitive knowledge. Of course, in this case, the translator must have a cognitive approach to translation.

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Aynura Reymbaeva Nukus branch of Uzbekistan State Institute of Arts and Culture faculty of playwriting on the 3 rd year student.

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# THE OWNER OF THE MAGIC TONES

Abstract: Engaging in creativity means not bowing to challenges. Because a creative person has to go through many ways to bring a new creative work, whether it is a piece of poetry, to the world. Whether it's a heartfelt word, or a melody, he works tirelessly to deliver it to other heartfelt owners. Of course, taking a place in the hearts of other enthusiasts is not an easy task. But there are such creative people among us that you can't help but be inspired by their creative work.

Key words: music, a composer, a conductor, a scene decoration, a theatre.

Language: English

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### Introduction

One of such creative people is the artist of Uzbekistan and Karakalpakstan, laureate of the Berdakh State Prize, a composer, a conductor, a choirmaster, a professor Kurbanbay Zaretdinov. If we look at his life, Kurbanbay Zaretdinov was born on February 25, 1953 in Kegeyli district. In 1975 he graduated from the Tashkent Conservatory, Faculty of Choral Conducting. Kurbanbay Zaretdinov was a teacher and deputy director of Nukus Art School in 1975-1981, a conducter, a chief conductor and art director of the Karakalpak State Philharmonic Symphony Orchestra in 1981-1989. He has been the chief choirmaster of the Karakalpak State Musical Theater, and since 1999 he has been the head of the Department of Musical Education and Upbringing at Karakalpak State University. Today we get acquainted with the most wonderful melodies and music of the great creative person Kurbanbay Zaretdinov. Kurbanbay Zaretdinov is a creative person who has been contributing to our art, as well as music, for many years and preparing young artists. The melodies and music he created are rich in national calories and lyrics, enriching our musical art. Along with wonderful, heartfelt melodies and music, we

present the ballet "Kryk kiz" operas "Tumaris", "Kalik ushin", musical drama "Berdakh", as well as creative works that educate people in the spirit of love and devotion to the motherland are closely acquainted Most importantly, the musical drama with. "Berdakh", dedicated to the son of the great thinker, classical poet Berdakh Gargabay, who was our pride, was presented to the audience on the Stage of the Karakalpak State Academic Musical Theatre named after Berdakh. The conductor of this musical drama was also Kurbanbay Zaretdinov, who wrote the music for the drama well. We witnessed that it made a high impact on the audience while watching the show. With the start of the show, great music rang out on stage. On stage, the life of the people of Berdakh's time begins to be reflected. Berdakh was a thinker of his time, a great democratic poet. He is known for his poems and has a deep place in the hearts of the people. His poems served as the words and language of the people at that time. Berdakh was also a witch. He learns the art of witchcraft from Akimbet, the master of witchcraft. The play reflects the life of Berdakh from the middle age to the last days of his life. The main conflict of the play is that Berdakh's daughter Hurliman is also interested in witchcraft, but at the



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same time women are not allowed to do witchcraft. However, the poet does not oppose Berdakh's daughter Hurliman's interest in the profession of witchcraft, but rather supports her. Despite the contradictions of the time in which he lived, Hurliman sang among the people and practiced witchcraft. At the end of the performance, Akimbet Bakshi entrusts his dutar to Berdakh's daughter Hurliman. During such a wonderful performance, the mastery of the conductor was clearly demonstrated, as well as the music that touched and touched his heart. The audience enjoyed and volunteered.

The play is not a play in itself. To do this, the connection between the play and the stage must meet all the requirements. The stage decoration also plays an important role in seeing the play's stage face. When it comes to creating stage decoration, the role of the artist is unique. The scenery of the musical drama "Berdakh" was also very beautiful, in accordance with the living conditions of the time. We realized this while watching the show. A creative person does not stop with a single creative work of his or her own. He tries to create new creative works, to write in a unique way. Composer Kurbanbay Zaretdinov is one of such creative people. He worked tirelessly. He conveyed the heartfelt melody to the hearts of the people. In addition to the musical drama "Berdakh" we are talking about above, he soon wrote the opera "Kalik ushin" and gave it to our people. The opera was performed at the Karakalpak State Academic Musical Theatre named after Berdakh. During this time, the Karakalpak opera "Ajiniyaz", "Tumaris" and "Gulayim" were staged in the theatre, while the opera "Kalik ushin" dedicated to the life and work of the great master of words of our people Berdakh was staged among other operas, was a wonderful gift to our people. If we take a brief look at the story in the play, the story begins with a plaque in the house of the poet Berdakh. The poet recites his poem "Ernazar biy" written in recent years by his student Kulmurat. After that, the audience was fascinated by the hard life of our people in the time of Berdakh, the hardships of hardworking peasants, the forced sale of women and girls, the deportation of people. No matter how difficult the people were during this period, the poems of the poet Berdakh helped them in their difficult life. Most importantly, the lines "Kalik ushin" and "El ushin" in Berdakh's poems became the main theme of the people at that time. All this is connected with music, and the life of this period was well embodied on the stage.

The richness of our Karakalpak literature is that it has a large number of epics, which are our national pride. Take, for example, the epic "Kryk kiz". It has been the source of our literature for many years and has survived to this day. We are well acquainted by reading this epic from books. As we read the epic "Kryk kiz", we imagine the events of reading and rejoice in the courage, bravery and loyalty of the image of Gulayim, the protagonist of the epic. That being said, the one we imagined was the one who saw his live action on stage. Kurbanbay Zaretdinov is also a creative person who was able to bring this live action to life on the stage with music, work tirelessly and make a significant contribution to the brilliant performance of the opera "Gulayim". This opera was another great success of the Karakalpak State Academic Musical Theater named after Berdakh.

Broadly speaking of the opera "Gulayim", the music of the opera combines nationalism and is written by the composer in a skillful and elegant way. The scenery and magical, wonderful musical tones are intertwined, quickly captivating the audience and reminiscent of the distant past, history. This is the composer's greatest achievement.

Wide spectacular field on stage. It attracts our attention with its beautiful scenery, the revival of nature, the chirping of birds, the sprouting of delicate green buds that are now sprouting. Then a crowd enters the stage. He takes the shell in his hand and describes the spirit of the time in which he lives. This is the composer's great attention to our nationality. The opera was staged by Karakalpak artists, directors Bawetdin Baymurzaev, Berdibay Utebaev and Markabay Usenov. The libretto was written by Gulistan Matyakuboya, a well-known poet. The role of the orchestra in conveying the events of the opera to the audience with music is invaluable. Aida Abdullaeva, people's artist of Karakalpakstan, is the musical conductor of the opera. He was able to connect events with music. As for the events of the opera, the courageous, brave daughter of the Karakalpak people Gulayim's relentless struggle against the enemy, his battle with his rival Surtaysha on the battlefield and his defeat are described in action. The audience cannot ignore the joy of Guloyim's courage in watching the opera, his struggle for the homeland, for his freedom and liberty. Guloyim's father, Allayar, refuses to send his daughter to the battlefield. But the people need freedom, liberty. At such a time, his father Allayar thinks a lot and comes to the right decision. That is, he allows his daughter Gulayim to go to the battlefield, to fight the enemies. Encouraging his daughter, he sends her to the battlefield. At such a difficult time, Sarbinaz a wise comrade who was Gulayim's close companion and tried to help him, came to his aid. He takes forty girls to the battlefield. At this point, the mysterious, magical aspects of the music are revealed and inspire the audience. All of this is the composer's skillful method. In addition, one of the brightest heroes in the opera is the image of Arislan. He will be open to Gulayim. Arislan and Gulayim both help and support each other. Gulayim shows such strong courage that he saves Arislan's mother and sister Altinay from an enemy named Nadirshah. At this point, Arislan is amazed to her hatred of Gulayim. A



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	<b>GIF</b> (Australia)	= 0.564	ESJI (KZ)	= <b>8.771</b>	IBI (India)	= <b>4.260</b>
	JIF	= 1.500	SJIF (Morocco	) = <b>7.184</b>	OAJI (USA)	= 0.350

good look at him, feelings of love will awaken even more. This is how the opera ends.

One of the great achievements of the composer Kurbanbay Zaretdinov was the staging of the two-act historical opera "Tumaris". Seeing the stage of this historical opera turned out to be one of the biggest achievements of the Karakalpak State Academic Musical Theatre named after Berdakh. Delivering the idea of an event with music alone is not an easy task. The composer, who was able to excite many people with such a difficult task, was able to show the magic of music through historical essays. Tumaris – massegets brave, brave female king. He fights heroically against the Persian invasion and shows courage. The king who founded the kingdom of Persia calls him King of the East in the Eastern kingdom.

Initially, a wide field appears on the scene. In this vast field, deer roam the desert. It draws our attention and inevitably reminds us of the time of our ancestors who lived on their. The life of this period, the way of life, our nationality, everything is concentrated in the opera. Then Tumaris' son Sparganis comes on stage. He leads the tribe of Massaget and invades the armies of king Kyr with his soldiers. Initially, the Massaget tribe won and defeated some of the soldiers of the kingdom of Kyr. At this time, the Massagets rejoiced in their victory, spread the table, ate food, and drank the honors. Kyr is waiting for this. At this point, Kyr takes advantage of the Massagets' drunkenness to capture their soldiers and tie their hands and feet. Sparganis is forced to submit to the enemy. He confesses and kills himself after surrendering. King Kyr on the other hand, marveled at the hero's bravery, trembling with fear. Kyr orders his soldiers to deliver the death of king Sparganis to his mother. The Persians built the game and rejoiced at the event.

In the second picture, the Massaget tribe. Holds a ceremony to bury the Sparganis. His mother, Tumaris weeps bitterly, her life seems uninteresting, and her heart beats. Overcoming himself in such a difficult situation, Tumaris came to his senses and turned a blind eye to such a tragedy. He thinks of fighting for the freedom of his homeland, of going to the enemy with all his heart for the homeland. Everyone supports this. In the third picture, Tumaris consults before the war begins. The soldier summons his commander and sends him to the embassy, telling his enemy that he will return from the railroad. The Massaget tribe begins to prepare for war. In the fourth picture, Tumaris Kyr does not get a good answer from the king. That is why he comes to the battlefield to fight for his homeland, to protect his place, his people from evil enemies. Massagets support it. At this point, war music plays. Tumaris eventually achieves his goal. He cuts off Kir's head and brings it to Tumaris. He says he will put the king's head in a bowl full of blood. Everyone sings the anthem of freedom. This is the end of the historical story about Tumaris, the brave daughter of the Karakalpak people.

In conclusion, the creative person Kurbanbay Zaretdinov is a highly talented person who makes a great contribution to our art with his music. Because he didn't stop at the music industry, he created new melodies and brought them to his rhythm. People lived in the music he created. Kurbanbay Zaretdinov is a great teacher who knew the secrets of magic and was able to reach the heights of music. Today, even though our teacher is a little older, he is a great teacher who works tirelessly to teach the new generation the secrets of music, to deliver new melodies to our people. His high priced labor is unforgettable no matter how many years pass. Because we are inspired by the melodies he wrote. We wish our teacher a long life and high flights on the path of creativity.

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# THE ROLE OF IRANIAN ACADEMIES OF LANGUAGE AND LITERATURE IN THE DEVELOPMENT OF PERSIAN LEXICON

Abstract: Now, as in all languages, the number of borrowings in Persian is increasing day by day. Issues such as squeezing borrowed words out of the Persian lexicon and maintaining its purity are among the current problems of Iranian linguistics. The article discusses the state language policy in Iran, the Purism movement, and the activities of the first, second, and third Persian language and literature academies. It is also said that the Iranian Academy of Language and Literature were engaged in the methods of substituting borrowings from Arabic, Turkish, and European languages for the original Persian words and for making new words.

Key words: state language policy, purism, borrowings, the Iranian Academy of Language and Literature, new words, terminology.

Language: English

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### Introduction

As the state and society develop, new achievements are made in science and technology, the process of emergence of new words in each language is observed. These processes are regulated by the state language policy. L.B. Nikolsky, a prominent sociolinguist and orientalist, in his article "Language, Ideology, Politics" [5:69-77] argues that there is a specific connection between language, ideology and politics.

#### The main part. Degree of the investigating of the topic:

In the case of the state language policy in Iran, we are convinced that the above statements are correct. Indeed, the language policy of the Pahlavi dynasty in Iran was also aimed at "restoring the great Persian language" and "cleansing" it of all borrowings. For this purpose, the Iranian Academy of Language and Literature was established in 19351941 [3:195]. As a result of the activities of this academy, the Turkish word قشون γošun "army" was changed to ارتش arteš, the Arabic محكمه mahkame "court" was changed to دادگاه dādgāh, and the French برنامه prāgram "programme" was changed to براگرم barnāme[3:195].

By the end of 1941, the Iranian Academy of Language and Literature had virtually ceased to exist. However, efforts to "cleanse" the Persian language continued to develop in the following years. Finally, on October 31, 1970, by order of the king, the Iranian Language Academy (فر هنگستان زبان ایر آن Farhangestāne zabān-e Irān) was established. The Iranian Academy of Languages had 13 terminological groups, which include specialists in economics, trade, medicine, language, literature and other similar fields. According to the data, in the early 70s, the Academy suggested 6,650 Persian alternatives to borrowed words [2:89-90]. In her article [7:137], M.S. Uzina



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states that the new Iranian language academy, unlike the previous academy, is "committed to the fight against English and American words in its language purification policy" and gives the following example: نوین novin "modern", "new" instead of the word مدرن šodāmad "traffic" suggested instead of the word ترافیک t(e)rāfik.

Before 1979 the February revolution, Yu.A. Rubinchik notes that 8 pamphlets have been published, including new words named "Pišnehād-e šomā čist?" "What is your suggestion? In his article, the author notes that 40,000 Persian alternative words have been suggested for about 20,000 borrowings [6:134].

Among the words suggested by the Academy, we can observe that there are not only new words, but also words that have already been widely used, previously suggested by individual experts and scholars. For example, معوند hamvand "member", نيم سال guyeš "dialect", واڑ vāž "phoneme", imsāl "semester", حارايي kārāyi "productive", "fertile" [6:134-135].

It is impossible not to acknowledge the creative work of observing the activities of the Iranian Language Academy, such as arranging terms, creating new words for concepts that do not yet exist in the For example, نويسه language. navise "grapheme", گردانی نويسه navisegardāni شناسى "transliteration", گويش guyeššenāsi "dialectology", گویشور guyešvar "dialectologist", -hodzavāri "self خودزواری ,virāyešgar "editor" ويرايشگر service" and others.

However, the main direction of the academy's activity was not to enrich the lexical structure of the language at the expense of new words, but to create Persian words instead of assimilations. From this it can be said that the new academy was a continuation of the work of the Iranian Academy of Language and Literature (1934-1941), which was in many respects driven by the Purist movement.

Attempts were made to squeeze out not only Western European words from the Persian lexicon, but also Arabic words that had a strong place in the language. A number of international words have also been replaced by Persian alternatives: The word komisyun "commission" was replaced کمیسیون bākteri باکتری hamgomāreš, the word همگمارش "bacterium" was replaced by نراكيزه tarākize, the word زیاچه mikrob "microbe" was replaced by میکروب ziyāče, the word کمپيونر kompyuter "computer" was "rāyāne, the word رايانه māsk "mask was replaced by پوشانه "pušāne". The following alternative words are also suggested for the following common Arabic words: محدود mahdud "limited"  $\rightarrow$ مرحله markale "stage"  $\rightarrow$  مرزمند ترتيب ,hāsel "result" → فرآمد hāsel حاصل ,hāsel حاصل tartib "order"  $\rightarrow$  دایش rāyeš and others [6:135].

A. Kuranbekov, one of the Uzbek Iranian scholars, in his article on the problems of formation of

scientific and technical terms in modern Persian, emphasizes that the proposed word should fully comply with the rules of modern Persian, the phonetic aspects of the language [8:16-18].

Yu.A. Rubinchik considers it expedient to determine the fate of words used by the Iranian Academy of Language and Literature during 1935-1941 and analyze them in order to objectively evaluate the activities of the Iranian Language Academy and give an opinion on the newly proposed words. The author cites the following words that have a strong place in the language: نامه آبين āyinnāme "regulation", "test", آزمايش āzmāyeš آسایشگاه āsāyešgāh "sanatorium"، ارز arz "currency"، ارز āmār برنامه "statistics"، آموزشکاه (āmuzešgāh "school"، برنامه barnāme "program", پزشک bāšgāh "club", پزشک pezešk "doctor", دانشجو dānešju "student", دانگا dādgāh " court ", زایشکاه zāyešgāh "maternity hospital", شناسنامه šenāsnāme "passport".

All of the suggested words didn't take a firm place in the structure of the language and could not squeeze out the borrowed words. New words were used in addition to borrowings and caused to an increase in the synonymy of terms that were unnecessary for the language [6:136].

As a result of the language policy pursued in Iran, new words and terms began to be created not only by certain institutions and organizations, but also by individuals. For example, Dr. Sodeq Kiyo, in the preface to his book "كويش آشتيان" proposes his new terms instead of the following terms, which have a strong place in Persian linguistics: word like بندواژه instead of the word حرف ربط conjunction", نعل instead of the word خرف ربط instead of conjunction" فعل instead of alter more difficult to explain the need to change popular and common linguistic words like the above to new ones.

The language policy pursued by the academy and supported by the Iranian government is seen to be imbued with the spirit of purism. These processes were related to the national policy of the state at that time under the slogan "Rebirth of Iran". The members of the academy worked to create a "great Persian language" and "cleanse" it of foreign Turkish-Mongolian, Arabic and European words. The old names of the cities and other non-Persian geographical names were also changed. They were replaced by old Persian words or artificially created new words. Some of them have taken a firm place in the language lexicon. For example: Arabic بلديه  $\rightarrow$  Persian  $\omega_{\rm scl}(z)$ "icity government", Arabic حار الفنون  $\rightarrow$  Persian  $\omega_{\rm scl}$ ".

The following words introduced by the Academy are used in addition to their equivalents: Persian بنگاه - Arabic مؤسسه "institution", "organization", Persian - آموز شگاه - Arabic و اژ هword" and others.

After the Islamic Revolution, in 1370 AH (1991 AD), the third "Academy of Iranian Language and



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Literature" began its work [1]. While the academy drew the right conclusions from the activities of the above two academies, it began its activities by selecting words that corresponded to concepts related to different areas of society. In 1997, the academy published a collection entitled "Rules and methods of word selection", which describes the methods of making and choosing the original Persian words instead of borrowed words in Persian language. In doing so, the scholars also paid special attention to the original Persian words that were forgotten and consumed. The words proposed by the Iranian Academy of Language and Literature have been published in the media and in special collections, and public opinion has been studied for six months. After the above processes, the words were approved by the academy and submitted to the President of the country. It is also noteworthy that the newly proposed words cover 17 areas of science and technology. They include international words of English, French and German origin. In this regard, we consider it appropriate to mention the question of A. Kuronbekov, whether it is necessary to replace international words, which are used internationally in almost all languages, with national words. In his article [8:16-18], the author emphasizes that there are almost no attempts to change words that are widely used in all languages, such as academy, test, operator, e-mail, bulletin, fax, catalog, into national words. However, in some languages they are said to have been mastered, confirms his opinion on Arabic language: Majma' ul-ilmi - "academy", ma'had -"institute", ikhtibar - "test", a'mil - "operator", albarid - "e-mail", fihrist - "catalog".

During 1384-1386 the Hijri-Shamsi years (2005-2007 AD), the Iranian Academy of Language and Literature published a new three-volume dictionary of words called "نفرهنگ واژه های مصوب فرهنگستان". According to the former chairman of the academy, Gholam-Ali Haddad-Adel, the first volume of the published dictionary contains words approved by the academy in 1376-1382 (1997-2003 AD) [10:30].

The words approved by the academy in 1379-1383 h.sh. (2000-2004 AD) and 1382-1385 h.sh. (2003-2006 AD) were included in the second and third volumes of the dictionary. In the introductory part of the dictionary, the chairman of the Iranian Academy of Language and Literature, Hassan Habibi, discusses in detail the process from the creation of a new word to its approval. It is noted that this process consists of a total of 14 steps [11:3-22]. According to the preface to Volume 1 of the dictionary published by the Academy, there are currently about 50 wordformation groups within the Academy [10:13]. It is obvious that the word-formation process is still going on at the Iranian Academy of Language and Literature.

It is obvious that the Academy does not have a unified approach to the creation of modern

terminology. There are also misunderstandings between proponents of changing all borrowings to the original Persian words and linguists who oppose it. We can only observe a consensus on the fate of European words that linguists are trying to squeeze out by force [4]. In this regard, we consider it appropriate to note the resolution of the Parliament of the Islamic Republic of Iran on November 18, 1995 "On the prohibition of the use of Western-European vocabulary in government agencies". The law consists of 10 articles, Article 1 of which stipulates that the Academy of Language and Literature of Iran, in cooperation with research centers, must create new words in accordance with applicable law and report on its activities to the relevant parliamentary committees every six months. Articles 5-9 of the law stipulate that relevant enterprises, ministries, agencies and the media must use the original Persian words in their activities within two years from the date of entry into force of the law instead of non-Persian words [12:17].

The former president of the academy, Dr. Hassan Habibi, said in an interview on June 25, 2006 that the tasks had not been achieved to date, despite the fact that more than a decade had passed since the adoption of the above laws: "Our problem today is not only with the influx of Western-European words, but also with the fact that some of the proposed words are losing their original Eastern features".

As an integral part of the years-long policy of the state language, President Mahmoud Ahmadi Najod signed a special decree in late July 2006 "On measures to prevent the use of foreign words (Western – European words) in official government agencies."

In particular, the country's current religious leader, Ayatollah Ali Khamenei, is in a state of extreme opposition to Western-European words, which he describes as "peculiar poison." He said that a large-scale fight against such influences and processes is needed [4]. Today, the state's attitude towards arabisms is completely different from the policy of a few years ago. This can be seen from the opinion of the Iranian Academy of Language and Literature that the Arabic lexicon has a strong place in the Persian language, should not be considered a foreign lexicon and should be actively used in the creation of new terminology.

## **Conclusion:**

Analyzing the activities of the academies of "Iranian language and literature", which have been operating since 1935 with some breaks, we have come to the following conclusions:

1. While the first academy of "Iranian language and literature" aims to "cleanse" the Persian language from Arabic and Turkish words, the second and third academies try to "cleanse" the language of Western European words.

2. Unlike the activities of the first academy, the second "Iranian language academy" and the third



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"Iranian language and literature academy" aimed not only at choosing alternative Persian words instead of borrowed words, but also at creating new words and phrases for concepts that have not yet appeared in the language lexicon.

3. In the activities of the three academies of "Iranian language and literature" there are bright manifestations of the Purism movement. These efforts are explained by the desire to create a "great Persian language" in the world.

4. Currently, the level of productivity of the word-formation process in the activities of academies is assessed differently by researchers. The fact that

some of the words developed by the first and second academies have a strong place in the language shows that the activities of these academies have not gone unnoticed. As for the activities of the Third Academy of Iranian Language and Literature, the words proposed and made by it have to go through years. Only then will it be possible to come to a reasonable conclusion about them.

5. Analyzing the activities of the academies, we can also observe that certain words suggested by them are artificial and do not have a strong place in the language.

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# STUDYING RUSSIAN LANGUAGE THROUGH A WIDE RANGE OF **PLATFORMS**

Abstract: Excessive TV watching is being main task of learners because they are learning Russian language through a great number of channels where documentaries are depicted with a wide range of scenarios, enabling Russian language speakers to improve their communicative and interpersonal and vocabulary, consequently, phonetic rules of how to pronounce terms in this language. Furthermore, TV is not only media resource by which mean they can be enhanced their knowledge and practice, but also radio broadcasting is necessary tool to improve listening and horizons of vocabulary knowledge as well. This paper highlights some specific features of language learning.

Key words: teaching and learning Russian language, TV and radio broadcasting. Language: English

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### Introduction

In studying a language, particularly, Russian one, a learner feels a lack of having sufficient theoretical knowledge and practical experience. Consequently, a language requires a long-life learning because young listeners should firstly acquire the technical vocabulary with broadened exercises to perform. Besides, L2 is complicated to pronounce because of grammatical construction indicating in written and spoken context. Apart from that, students studying engineering should acquire engineering science through L2 where they often encounter with a wide range of technical vocabulary characterizing the specialty in that field of study and they need to gain that vocabulary words in order to communicate in spoken and written forms in the specific settings. In this paper, we broadly make some analysis in accepting different possible methods in acquiring Russian language via broadcasting on TV or by radio or by telecommunication platforms.

### Outcomes of broadcasting in studying Russian language

There are wide range of choices in learning Russian language via social and media platforms which opens golden opportunities to fast learning and increasing the lexical and phonetic outcomes, solving errors learners do in their written and spoken interactions in different domains of life. What's more, some scholars also indicated some statements according to learning Russian language: words that sound similar in related languages are known under various names in theoretical literature "false friends" (Budagov. 1974). "interlingual homonyms", "deceptive interlingual similarities" (Grosbart, 1984), "interlingual paronyms" (Balalykina, 1988), etc. According to N.V.Krushevsky, such processes are



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	JIF	= 1.500	SJIF (Morocco	) = 7.184	OAJI (USA)	= 0.350

explained by the fact, that language can never have as many words, as required to name the infinite, always changing and increasing mass of concepts (1998).

There are a wide range of choices to learn Russian language

• Via social platforms: face book, telegram, Instagram, tik-tok and twitter

• Via TV programs: Russian channel (1<sup>st</sup>, NTV, Domashniy TV, and others)

- Via Radio
- Via different shows
- Via musical platforms

These platforms not only enhance the knowledge of learners in Russian language but it also develops their interpersonal traits and skills to socialize with population in that communication.

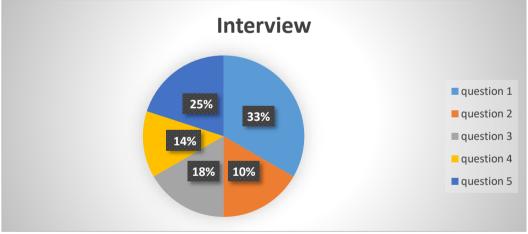
# Opportunities for learners in acquisition Russian language

Some researchers (Teng, 2021; Vanderplank, 2016, Montero Perez, Peters, Clarebout, & Desmet, 2014; Teng, 2019a,b) made a huge contribution to audiovisual input supported by captions or second language (L2) on-screen text and their attention was given to incidental vocabulary learning. Additionally, according to the statement indicated by Teng and Zhang (2021) a short-term phonological memory and complex working memory impact learners'

vocabulary learning through multimedia input and they suggested that learners' proficiency level may influence incidental vocabulary learning from captioned audiovisual material. Besides, the effects of learners' L2 proficiency level and language aptitude on incidental vocabulary learning from captioned videos remain unclear. The L2 proficiency level. conceptualized as one's overall L2 competence in terms of organizational and pragmatic knowledge, may affect the mechanism of multimedia/multimodal learning. Learners in the present study viewed an original TV documentary. Moreover, radio is also one of the broadly broadcasting, and news spreading platform which fast conveys or delivers any information to listeners or citizens without any barriers: time and place. We can listen to any radio telecommunications from every corner of the globe, being aware of events happening on the earth.

### **Data Analysis**

The sixty students studying for bachelor's degree in the area of petroleum engineering at the faculty of oil and gas, Karshi Engineeering-Economic institute, were invited for the interview to be directly requested with the assistance of questionnaire consisted of 5 closed questions concerning the issues aimed at learning Russian language through digital world such as TV, radio and social platforms, and other channels, music platforms. Their response was following:





According the results of the survey carried out in the research showed in the above-mentioned diagram. 33% of learners agree that excessive TV watching enhance listening comprehension, especially, Russian language. 25% of respondents were sure that social media platforms are very supportive and helpful in proving them needful materials or news which increase their knowledge in Russian one. 18 % of students in the sphere of petroleum engineering found radio telecommunication broadcasting and music useful in comprehending a language better than other resources. 14% of adult learners stated that they were sure that they could improve their language comprehension and horizons in knowledge through internet channel programs such as documentaries depicting culture, cuisine.

#### Conclusion

In studying Russian language, learners should be aware of grammatical, phonetical rules as well as increase their vocabulary range in order to write and speak in this language because vocabulary is the fundamental in acquisition L2 which enriches learners with a variety of topics to demonstrate their



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knowledge in different specializations. Besides, in learning and realizing any language, a learner should use all audio video platforms because in this way of learning let him/her of how to enhance their knowledge in vocabulary and in phonetics how to pronounce exactly as native-speakers without doing any errors. Furthermore, video data depicts essential episodes which may change learners' language skills and affect their traits. Therefore, learners should give their time in learning language though TV channels, radio and social platforms.

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# **RUSSIAN PAINTING IN THE LESSONS OF THE RCI**

**Abstract**: speaking is a form of oral communication, through which information is exchanged, carried out by means of language, contact and mutual understanding are established, the interlocutor is influenced in accordance with the communicative intention of the speaker. Written speech is the result of expressing thoughts using a writing system of a certain language. Productive types of speech activity involve the creation of texts in oral and written form. Study and description of the features of working with illustrative material aimed at the development of monologue speech.

Key words: speaking, dialogue, monologue, writing, written speech, authentic texts, elementary level, basic level.

Language: Russian

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## РУССКАЯ ЖИВОПИСЬ НА УРОКАХ РКИ

Аннотация: говорение представляет собой форму устного общения, с помощью которой происходит обмен информацией, осуществляемой средствами языка, устанавливаются контакт и взаимопонимание, оказывается воздействие на собеседника в соответствии с коммуникативным намерением говорящего. Письменная речь — это результат выражения мыслей при помощи системы письма определенного языка. Продуктивные виды речевой деятельности, предполагают создание текстов в устной форме и письменной форме. Изучение и описание особенностей работы с иллюстративным материалом, направленной на развитие монологической речи.

**Ключевые слова**: говорение, диалог, монолог, письмо, письменная речь, аутентичные тексты, элементарный уровень, базовый уровень.

#### Введение

Говорение – это вид речевой деятельности, который реализуется, когда в сознании говорящего возникает потребность в речевом воздействии на собеседника.

На процесс говорения влияют разные факторы, которые включают в себя:

• цель, ради которой совершается речевое действие (передать информацию, совет, согласие и т.д.);

тему общения;

• время и место общения;

• отношения между собеседниками (нейтральные, официальные, дружеские, родственные и др.);

• социально-коммуникативную роль партнеров (сокурсники, преподаватель и студент, начальник и подчинённый и т.д.) [Крючкова Л.С, с. 230].

При говорении учащийся воспроизводит свои мысли, подбирая из имеющегося у него запаса языковых средств те, которые ему необходимы для выражения речи, и объединяет их в предложения.



Главная роль в говорении, это процесс воспроизведения языкового материала.

Говорение можно разделить на диалогическое и монологическое.

Диалогом называются высказывания, когда говорящие обмениваются информацией между собой и дают высказаться друг другу.

Монологом называется речь одного говорящего.

В начале обучения даются небольшие диалоги, которые состоят из двух простых предложений. Например, вопрос-ответ (Откуда вы? – Из Туркменистана.).

Но с каждым разом состав предложения усложняется. Нужно учитывать, кто участники диалога, зачем и почему они говорят, в каких обстоятельствах происходит разговор. На начальных этапах обучения даются простые диалоги, объем 5-6 предложений, а при монологе для начала дается 6-7 фраз, происходящих в ситуации неофициального общения [Новикова O.B., c.80].

Эффективность обучения повышается, если материал, который используется на уроке интересен учащимся. Работа в парах и группах, всего разыгрывание это чаще заранее подготовленных диалогов и монологов. Пересказ парах со сменой партнёров позволяет в одновременно половине говорить группы. является Эффективной формой работы выполнение упражнений, воспроизводящих эпизоды реальных речевых ситуаций общения; игры и соревнования.

В методической литературе отмечается, какими значениями, умениями и навыками должен овладеть учащийся.

На элементарном уровне учащийся должен уметь:

при монологической речи:

- самостоятельно высказывать свои мысли;

- строить монологи на основе прочитанного текста

при диалогической речи:

- понимать высказывания;

- отвечать на реплики;

- вести диалог.

На базовом уровне учащийся должен уметь: при монологической речи:

- выражать отношение к фактам, событиям, изложенным в тексте, действующим лицам и их поступкам.

при диалогической речи:

- вести диалог, выражать коммуникативные намерения в ограниченном числе ситуаций и тем общения [Крючкова Л.С., с.238].

Письмо – продуктивный вид речевой деятельности, связанный с порождением и фиксацией письменного текста [Балыхина Т.М., с.148]. Письмо возникло на основе звучащей речи как способ сохранения речевых произведений во времени, как хранилище человеческих знаний, опыта, традиций, культуры. Если звучащая речь существует около полумиллиона лет, то письмо – сравнительно недавнее средство общения: ему не более пяти тысяч лет [Ганеев Б.Т., с. 102].

Письмо стимулирует процесс обучения новому языку, делает его осмысленным и направленным формулирование целей и задач обучения.

Есть виды упражнений, которые стимулируют процесс обучения письму:

языковые (подготовительные, овладеть языком используя модели подстановки, переводов): и речевые (передачи мыслей в письменной форме).

Для письменной речи характерны следующие особенности:

1) учащийся ведет диалог на листе бумаге;

2) учащийся более тщательно строит фразу, внимание направлено на форму речи;

3) учащийся имеет возможность перечитать написанное, может устранить ошибки;

4) учащийся не может использовать мимику, жесты, также не может недоговаривать фразы, поэтому его речь грамматически оформлена всегда более строго.

В методике преподавания используется два термина - «письмо» и «письменная речь», которые следует различать.

Л.С.Курючкова разграничивает эти понятия так: письмо — это «овладение графической и орфографической системами языка для фиксирования отдельных слов и предложений», а «умение сочетать эти слова в письменной форме для выражения мысли в соответствии с потребностями общения» называют письменной речью. Письменная речь в преподавании русского языка может рассматриваться как методическое средство обучения другим видам речевой деятельности на русском языке [Крючкова Л.С., с. 338].

Мы рассмотрели особенности говорения и письма как видов речевой деятельности на материале методической литературы. Следует также изучить требования нормативных актов по данному вопросу.

На уровнях A1 и A2 владения языком, учащийся должен владеть определенными знаниями, умениями и навыками в области устной монологической речи так, учащийся должен уметь:

- высказывать связные, логичные высказывания, которые соответствуют теме;

- вести монолог, на основе текста, который был прочтен или прослушан;



SIS (USA)

ESJI (KZ)

**РИНЦ** (Russia) = **3.939** 

**SJIF** (Morocco) = **7.184** 

- улавливать суть текста и передавать содержание текста и основу прочитанного или прослушанного.

**Impact Factor:** 

Объем предъявляемого текста: 600—700 слов.

Количество незнакомых слов в предъявляемом тексте может доходить до 3 %. Тип предъявляемого текста может быть представлен повествованием. описанием. сообщением, а также текстами смешанного типа с элементами рассуждения. Тексты должен быть аутентичные (допустима минимальная степень адаптации).

Объем продуцируемого учащимся текста должен быть не менее 20 фраз.

Что касается устной диалогической речи, то учащийся должен уметь:

- понимать, что говорит собеседник и уметь репродуцировать прослушанное;

- правильно реагировать на высказывания собеседника;

- воспроизводить диалог, выражать свое мнение на ситуации.

Предполагаются такие, типы диалога, как диалог-расспрос, диалог-сообщение, диалог-побуждение.

Высказывания учащихся должны быть оформлены в соответствии с нормами современного русского языка, включая общепринятые и социально обусловленные нормы речевого этикета [Андрюшина Н.П., с.10-11].

В соответствии с требованиями стандарта учащийся должен уметь:

- письменно строить монолог продуктивного характера по теме;

- письменно строить монолог репродуктивного характера по теме.

Типы предъявляемого текста могут быть представлены повествованием, описанием, сообщением, а также текстами смешанного типа с элементами рассуждения. Тексты аутентичные (допустима минимальная степень адаптации).

На этом уровне тематика текста актуальна для социально-бытовой и социально - культурной сфер общения.

Объем предъявляемого текста: 600—700 слов. Количество незнакомых слов в предъявляемом тексте — до 5 %. Письменные тексты учащегося должны быть оформлены в соответствии с нормами современного русского языка. Тексты продуктивного характера должны содержать не менее 20 предложений [Андрюшина Н.П., с.10].

На уровнях В1 и В2 при ведении диалога и монолога, учащийся должен владеть определенными знаниями:

При монологической речи: учащийся должен уметь:

- высказываться логично и связно в соответствии темой урока;

**ICV** (Poland)

**PIF** (India)

**IBI** (India)

**OAJI** (USA)

= 6.630

= 1.940

= 4.260

= 0.350

= 0.912

= 8.771

 строить монолог репродуктивного типа, на основе текста которой прослушал либо прочитан;

 выражать собственное мнение по теме, уметь объяснить текст и выявить главную цель и задачу.

Объём предъявляемого текста: 600—700 слов.

Количество незнакомых слов в предъявляемом тексте может достигать 3%.

Тип предъявляемого текста: повествование, описание, сообщение, а также тексты смешанного типа с элементами рассуждения.

Рекомендуется использовать аутентичные тексты, при этом допустима минимальная степень адаптации.

Объём продуцируемого учащимся текста: не менее 25 фраз.

При диалогической речи учащийся должен:

 понимать смысл высказываний собеседника, понимать смысл;

- верно реагировать на высказывания собеседника;

- воспроизводить диалог, выражать собственное мнение по ситуации.

Тип диалога: диалог-расспрос, диалогсообщение, диалог-побуждение.

Высказывания учащихся должны быть оформлены в соответствии с нормами современного русского языка, включая общепринятые социально обусловленные нормы речевого этикета [Андрюшина Н.П., с.11].

На уровнях С1 и С2 при ведении диалога и монолога, учащийся должен владеть такими знаниями, умениями и навыками, которые позволят ему:

- правильно и рассудительно организовывать диалог, тактично вести общение;

- быть инициатором диалога, обеспечивать психологический комфорт, вербально выражая коммуникативную задачу, подхватывать и развивать мысль собеседника, добиваясь достижения коммуникативной цели;

- вести монолог, который будет построен на взаимопроникновении основных функциональносмысловых типов речи с преобладанием рассуждения, а также использованием описания и оценки; использовать для построения дискурса стилистические средства, адекватные ситуации общения;

- аргументировать собственное мнение в беседе по теме.

При диалогической речи предполагается такой тип текста, как диалог, регулирующий конфликтную ситуацию или диалог в условиях отстаивания своего мнения.



Тематика текста должна быть актуальна для официально-деловой и социальнокультурной сфер общения.

Количество реплик должно достигать от 6 до 10 и более.

Время беседы: 5—15 мин. (в зависимости от задания).

При монологической речи заявлен такой тип текста, как монолог смешанного типа, включающий разные функционально-смысловые типы речи (с преобладанием рассуждения) и оценку. Тематика текста должна быть актуальна для социально-культурной и социальнобытовой сфер общения.

Время звучания монолога должно составлять 6—7 мин.

Объём продуцируемого текста зависит от типа задания [Андрюшина Н.П., с.10].

Подводя итог, можно сделать вывод о том, что на каждом уровне, учащиеся должны владеть определенными знаниями, учащиеся должны уметь выражать свои мысли, вести диалоги и монологи, также письменно выражать свое мнение.

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# **CONSTRUCTION OF A MATRIX OF A SELF-ADJOINT OPERATOR IN** AN ORTHONORMAL BASIS IN THE MAPLE COMPUTER ALGEBRA PACKAGE

Abstract: A mathematical program has been developed for constructing a matrix of a self-adjoint operator of Euclidean space using the Maple computer mathematics package, which will allow finding solutions with a high degree of automation with minimal time.

Key words: eigenvalues and vectors of the matrix, orthonormal basis, diagonal matrix. Language: Russian

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## ПОСТРОЕНИЕ МАТРИЦЫ САМОСОПРЯЖЕННОГО ОПЕРАТОРА В ОРТОНОРМИРОВАННОМ БАЗИСЕ В ПАКЕТЕ КОМПЪЮТЕРНОЙ АЛГЕБРЫ MAPLE

Аннотация: Разработана математическая программа построения матрицы самосопряженного оператора евклидова пространства с применением пакета компьютерной математики Maple, которая позволит с минимальными затратами времени находить решения с высокой степенью автоматизации.

Ключевые слова: собственные значения и векторы матрицы, ортонормированный базис, диагональная матрица.

### Введение

Линейные операторы, действующие в евклидовых пространствах, обладают рядом специальных свойств, которые весьма важны для приложений линейной алгебры в различных предметных областях. Учитывая размерность пространств и трудоемкость при матричных вычислениях, в вопросах, возникающих при матриц операторов. построении базисах евклидова пространства, возрастает значение их способов, которые способны минимизировать процесс с гарантией точности вычислений. Одним из рациональных методов решения этого вопроса является применение средств компьютерной алгебры. Использование символьных математических пакетов дает такие преимущества, как высокая степень автоматизации решения задач, минимизация

затрат времени, повышение эффективности методов решения.

Рассмотрим построение в пакете Maple матрицы самосопряженного оператора в евклидовом пространстве. Пусть матрица оператора имеет вид:

1	(17	16	16)	
A =	16	41	32	
	16	32	41)	

Подключаем специализированный пакет линейной алгебры linalg. Вводим коэффициенты матрицы А самосопряженного оператора С eigenvectors помошью команлы находим собственные значения и собственные векторы матрицы.



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a11:=17;a12:=16;a13:=16;a21:=16;a22:=41;a23:=32; a31:=16;a32:=32;a33:=41; A:=matrix(3,3,[[a11,a12,a13],[a21,a22,a23],[a31,a32,a33]]); a1:=charpoly(A,x); a2:=eigenvectors(A);

$$A := \begin{bmatrix} 8 & 4 & -1 \\ 4 & -7 & 4 \\ -1 & 4 & 8 \end{bmatrix}$$
$$aI := x^3 - 9 x^2 - 81 x + 729$$
$$a2 := \begin{bmatrix} 9, 2, \{ [-1, 0, 1], [4, 1, 0] \} \}, \begin{bmatrix} -9, 1, \{ [1, -4, 1] \} \end{bmatrix}$$

Как видно, в квадратных скобках записаны собственные значения, затем их кратность, и собственные этого значения векторы. Согласно теории конечномерных линейных пространств собственные значения матрицы оператора действительны. Собственные векторы этого значения не ортогональны, так как они принадлежат одному и тому же собственному значению. Находим решение системы с  $\lambda_1 = 9$ :

$$sysI \coloneqq \{-yI + 4 \ y2 - y3 = 0, 4 \ yI - 16 \ y2 + 4 \ y3 = 0 \}$$
$$AI \coloneqq \begin{bmatrix} -1 & 4 & -1 \\ 4 & -16 & 4 \\ -1 & 4 & -1 \end{bmatrix}$$
$$BI \coloneqq \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$
$$HI \coloneqq \begin{bmatrix} 4 \\ -t_1 \\ -t_1 \\ -t_1 \\ -t_1 \\ 2 \end{bmatrix}$$

Получив общее решение, выделяем вектор фундаментальной системы:

y11:=4\*a-b;y21:=a;y31:=b; V1:=vector([y11,y21,y31]); V11:=vector([-1,0,1]);

$$y11 \coloneqq 4 \ a - b$$
$$y21 \coloneqq a$$
$$y31 \coloneqq b$$
$$V1 \coloneqq [4 \ a - b, a, b]$$
$$V11 \coloneqq [-1, 0, 1]$$



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Полученный вектор, совпадает по координатам вектора из а2. Нормируем его и каждую координату записываем отдельно, как элементы будущей ортогональной матрицы:

q12:=simplify(nS2[1]);q22:=simplify(nS2[2]);;q32:=simplify(nS2[3]);

$$q11 := -\frac{\sqrt{2}}{2}$$
$$q21 := 0$$
$$q31 := \frac{\sqrt{2}}{2}$$

Решаем вторую систему с  $\lambda_2 = -9$ :

lambda2)\*y3=b3};

A2:=matrix(3,3,[a11-lambda2,a12,a13,a21,a22-lambda2,a23,a31,a32,a33-lambda2]); B2:=matrix(3,1,[b1,b2,b3]); Y2:=linsolve(A2,B2);

$$sys2 \coloneqq \{-yI + 4\ y2 + 17\ y3 = 0, 4\ yI + 2\ y2 + 4\ y3 = 0, 17\ yI + 4\ y2 - y3 = 0\}$$
$$A2 \coloneqq \begin{bmatrix} 17 & 4 & -1\\ 4 & 2 & 4\\ -1 & 4 & 17 \end{bmatrix}$$
$$B2 \coloneqq \begin{bmatrix} 0\\ 0\\ 0\\ 0 \end{bmatrix}$$
$$Y2 \coloneqq \begin{bmatrix} -t_1\\ -4\\ -t_1\\ -t_1\\ 1 \end{bmatrix}$$

Аналогично, выделяем вектор фундаментальной системы: y12:=h;y22:=-4\*h;y32:=h; V2:=vector([v12,v22,v32]); V22:=vector([1,-4,1]);

$$V2 \coloneqq [c, -4 c, c] V22 \coloneqq [1, -4, 1]$$

Находим векторное произведение векторов *v*11и *v*22: S2:=crossprod(V11,V22);

$$S2 := [4, 2, 4]$$

Нормируем вектор записываем И координаты в виде элементов 2-го столбца ортогональной матрицы:



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$$nS2 := \left[\frac{2}{3}, \frac{1}{3}, \frac{2}{3}\right]$$
$$q12 := \frac{2}{3}$$
$$q22 := \frac{1}{3}$$
$$q32 := \frac{2}{3}$$

Собственный вектор для собственного значения  $\lambda_2 = -9$  из a2 нормируем. Записываем

координаты, как элементы третьего столбца матрицы:

$$S3 := [1, -4, 1]$$

$$nS3 := \left[\frac{\sqrt{2}}{6}, -\frac{2\sqrt{2}}{3}, \frac{\sqrt{2}}{6}\right]$$

$$q13 := \frac{\sqrt{2}}{6}$$

$$q23 := -\frac{2\sqrt{2}}{3}$$

$$q33 := \frac{\sqrt{2}}{6}$$

Матрица оператора имеет вид:

$$Q := \begin{bmatrix} -\frac{\sqrt{2}}{2} & \frac{2}{3} & \frac{\sqrt{2}}{6} \\ 0 & \frac{1}{3} & -\frac{2\sqrt{2}}{3} \\ \frac{\sqrt{2}}{2} & \frac{2}{3} & \frac{\sqrt{2}}{6} \end{bmatrix}$$

Убеждаемся в правильности ее построения:

## orthog(Q);

true,

что означает истина. Переходим к построению матрицы ортогонального оператора в ортонормированном базисе: QT:=transpose(Q);

## QTA:=multiply(QT,A); QTAQ:=multiply(QTA,Q);

$$QT := \begin{bmatrix} -\frac{\sqrt{2}}{2} & 0 & \frac{\sqrt{2}}{2} \\ \frac{2}{3} & \frac{1}{3} & \frac{2}{3} \\ \frac{\sqrt{2}}{6} & -\frac{2\sqrt{2}}{3} & \frac{\sqrt{2}}{6} \end{bmatrix}$$



	<b>ISRA</b> (India) $= 6$	.317	SIS (USA)	= <b>0.912</b>	ICV (Poland)	= 6.630
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	JIF = 1	L.500	SJIF (Morocco)	) = 7.184	OAJI (USA)	= 0.350

$$QTA := \begin{bmatrix} -\frac{9\sqrt{2}}{2} & 0 & \frac{9\sqrt{2}}{2} \\ 6 & 3 & 6 \\ -\frac{3\sqrt{2}}{2} & 6\sqrt{2} & -\frac{3\sqrt{2}}{2} \end{bmatrix}$$
$$QTAQ := \begin{bmatrix} 9 & 0 & 0 \\ 0 & 9 & 0 \\ 0 & 0 & -9 \end{bmatrix}$$

Рассмотрен случай, когда матрица самосопряженного оператора имеет одно из собственных значений имеет кратность 2, a 1. Необходимо рассмотреть все кратность случаи кратностей собственных возможные значений для разработки автоматизированной Для матрицы самосопряженного программ. оператора возможны несколько случаев числа кратности собственных значений: 1) кратность равна 1, т.е. собственные значения различны; 2)

кратность равна 2 первого собственного значения и кратность равна 1 второго собственного значения; 3) кратность равна 1 первого собственного значения и кратность равна 2 второго собственного значения; 4) кратность равна 3 единственного собственного значения. Рассмотрим 1-й случай на примере матрицы *А* самосопряженного оператора:

$$A := \begin{bmatrix} 6 & -2 & 2 \\ -2 & 5 & 0 \\ 2 & 0 & 7 \end{bmatrix}$$
$$aI := x^3 - 18 x^2 + 99 x - 162$$
$$a2 := \begin{bmatrix} 6, 1, \{ \begin{bmatrix} 1, -2, -2 \end{bmatrix} \} \end{bmatrix}, \begin{bmatrix} 3, 1, \{ \begin{bmatrix} -2, -2, 1 \end{bmatrix} \} ], \begin{bmatrix} 9, 1, \{ \begin{bmatrix} -2, 1, -2 \end{bmatrix} \} \end{bmatrix}$$

Как видно, собственные значения различны и имеют кратность равную 1. Разделяем *а*2 и

выделяем в первых двух тройках  $\lambda_i$ ,  $k_i$  и собственные векторы :

```
a3:=a2[1];lambda1:=a3[1];k1:=a3[2];v1:=a3[3];
a4:=a2[2];lambda2:=a4[1];k2:=a4[2];
```

$$a3 \coloneqq [6, 1, \{[1, -2, -2]\}]$$
  

$$\lambda1 \coloneqq 6$$
  

$$kI \coloneqq 1$$
  

$$vI \coloneqq \{[1, -2, -2]\}$$
  

$$a4 \coloneqq [3, 1, \{[-2, -2, 1]\}]$$
  

$$\lambda2 \coloneqq 3$$
  

$$k2 \coloneqq 1$$

Так как в программе необходимо рассмотреть все случаи, то каждый из них запишем в цикле с условным оператором *if*. Для этого в цикле сравниваются значения кратности первого и второго собственных значений.. При их равенстве следует, что и кратность третьего собственного значения так же будет равна кратности первого и второго. Тогда собственные векторы симметричной матрицы ортогональны, так как соответствуют различным собственным значениям. И для составления матрицы перехода новому базиса базису от старого к (ортонормированному) каждый собственный вектор необходимо нормировать. Далее, записываем каждую координату ортогональных и нормированных векторов, как элемент требуемой матрицы:



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	JIF =	= <b>1.500</b>	SJIF (Morocco)	) = 7.184	OAJI (USA)	= 0.350

 $if (k1=1)and(k2=1) thenS1:=v1[1];nS1:=normalize(S1); \\q11:=simplify(nS1[1]);q21:=simplify(nS1[2]);;q31:=simplify(nS1[3]); \\v2:=a4[3];S2:=v2[1];nS2:=normalize(S2); \\q12:=simplify(nS2[1]);q22:=simplify(nS2[2]);;q32:=simplify(nS2[3]); \\a5:=a2[3]; \\lambda3:=a5[1];k3:=a5[2];v3:=a5[3];S3:=v3[1];nS3:=normalize(S3); \\q13:=simplify(nS3[1]);q23:=simplify(nS3[2]);;q33:=simplify(nS3[3]); \\endif:$ 

При нахождении элементов матрицы Q, использована команда *simplify* для упрощения выражений, полученных при нормировании

векторов. В результате матрица перехода будет вычислена и проверена на ортогональность командой *orthog*:

$$Q := \begin{bmatrix} \frac{1}{3} & \frac{-2}{3} & \frac{-2}{3} \\ \frac{-2}{3} & \frac{-2}{3} & \frac{1}{3} \\ \frac{-2}{3} & \frac{1}{3} & \frac{-2}{3} \\ \frac{-2}{3} & \frac{1}{3} & \frac{-2}{3} \\ true \end{bmatrix}$$

Далее, второй возможный случай рассмотрен выше. Команда eigenvectors системы Maple по усмотрению записывает тройки с своему позицией (собственное значение, кратность, собственный вектор). Это означает, что могут иметь, как случай 2), так и случай 3) при новой загрузке программы. Поэтому, аналогично 3-го случая. записываем программу для Объединяем все случаи в одну программу. В результате программа вычисления матрицы самосопряженного оператора ортонормированном базисе будет состоять из циклов вкоторых осуществляются вычисления для собственных значений с разными кратностями. Более того, в программе заложен выбор того или

иного цикла исходя из исходных данных. В заключении программы вносятся команда правильности вычисления матрицы самосопряженного оператора, команды, которые позволяют визуально увидеть верность для справедливость теоретических выводов.

Эта программа является автоматизированной и может иметь применение для построения любой симметрической матрицы самосопряженного оператора в ортонормированном базисе евклилова пространства. К достоинствам программы следует отнести избежание сложных вычислений, что непосредственно влияет на трудоемкость процесса решения и возможность использования минимальных временных затрат вычисления.

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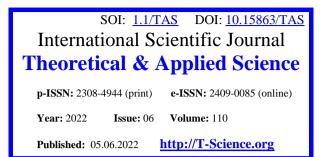
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Issue

Article





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# SOLVING A 2x2 MATRIX GAME IN THE MAPLE COMPUTER ALGEBRA PACKAGE

**Abstract**: An automated mathematical program for solving a  $2 \times 2$  matrix game with a visual graphical solution has been developed in the Maple package. A high degree of automation of problem solving, minimal time spent, and increased efficiency of solution methods are the advantages of using a software tool.

*Key words:* Payment matrix, game price, pure strategy, mixed strategy, equilibrium situation. *Language:* Russian

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## РЕШЕНИЕ МАТРИЧНОЙ ИГРЫ 2x2 В ПАКЕТЕ КОМПЬЮТЕРНОЙ АЛГЕБРЫ МАРLE

Аннотация: Разработана в пакете Maple автоматизированная математическая программа решения матричной игры 2×2 с визуальным графическим решением. Высокая степень автоматизации решения задачи, минимальная затрата времени, повышение эффективности методов решения являются преимуществами использования программного средства.

**Ключевые слова**: Платежная матрица, цена игры, чистая стратегия, смешанная стратегия, равновесная ситуация.

#### Введение

Учитывая трудоемкость и специфичность решения матричных игр известными методами, изыскиваются методы, которые отвечают современному развитию систем аналитических вычислений для эффективного решения той или иной задачи. В настоящее время бурное развитие имеет актуальное научное направление – компьютерная математика.

Программное средство в качестве системы компьютерной математики - Maple при реализации решения матричных игр представляет рациональный метод нахождения их решения. Высокая степень автоматизации решения задач, минимальная затрата времени, повышение эффективности методов решения являются использования преимуществами ланного программного средства.

Пусть имеется простейшая игра, которая описывается платежной матрицей:

$$A = \begin{pmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{pmatrix}.$$

Максиминная стратегия первого игрока осуществляется при определении наименьших значений выигрышей в каждой строке матрицы *A*:

$$\alpha = \max_{i} x \alpha_{i} = \max_{i} \min_{j} a_{ij}, \quad (1)$$

при этом  $\alpha$  называется нижняя цена игры.

Минимаксная стратегия второго игрока осуществляется при выборе наибольшие значения проигрышей для второго игрока в каждом столбце матрицы A:

$$\beta = \min_{j} \beta_{j} = \min_{j} \max_{i} a_{ij}, \quad (2)$$

 $\beta$  - верхняя цена игры.



При  $\alpha = \beta$ , общее значение является ценой игры v:

$$v = \alpha = \beta = \max_{i} \min_{j} a_{ij} = \min_{j} \max_{j} a_{ij} \quad (3).$$

В этом случае цена игры v совпадает с соответствующим элементом  $a^*_{ij}$  матрицы A, которая называется точкой равновесия или седловой точкой матрицы A.Стратегии  $A^*$  и  $B^*$ , соответствующие седловой точке, называются оптимальными, а совокупность пары оптимальных решений  $\{A^*, B^*\}$  и цены игры v называется решением матричной игры с седловой точкой.

Если  $\alpha < \beta$ , то речь пойдет уже об игре без седловой точки. В этом случае предложенный выбор стратегий к равновесной ситуации не приводит и применяют так называемые смешанные стратегии, которые можно представить в виде случайных величин, возможными значениями которых являются чистые стратегии.

Смешанные стратегии игроков имеют вид:

$$S_1 = \begin{pmatrix} A_1 & A_2 \\ p_1 & p_2 \end{pmatrix}, S_2 = \begin{pmatrix} B_1 & B_2 \\ q_1 & q_2 \end{pmatrix},$$

где  $p_i \ge 0$  – вероятность того, что первый игрок применит чистую стратегию  $A_i$ ,  $\sum_{i=1}^m p_i = 1$ ;  $q_j \ge 0$  – вероятность того, что второй игрок применит чистую стратегию  $B_i$ ,  $\sum_{i=1}^n q_i = 1$ .

При реализации ситуации  $\{A_i, B_j\}$ , вероятность составит  $p_i q_j$ , а выигрыш составит величину  $a_{ij}$ .Средний выигрыш первого игрока определяется, как математическое ожидание:

$$H(A, p, q) = \sum_{i=1}^{m} \sum_{j=1}^{n} a_{ij} p_{i} q_{j} \qquad (4)$$

где p, q-вектора с компонентами  $p_i$  и  $q_j$  соответственно.

Стратегии  $p^0 = (p_1^0, p_2^0, ..., p_m^0)$  и  $q^0 = (q_1^0, q_2^0, ..., q_m^0)$  называются оптимальными смешанными стратегиями игроков, если выполнены следующие соотношения:

$$H(A, p, q^{0}) \leq H(A, p^{0}, q^{0}) \leq H(A, p^{0}, q)$$
 (5)  
Величина

$$H(A, p^0, q^0) = v \tag{6}$$

называется ценой игры, а "набор"  $(p^0, q^0, v)$ называется решением матричной игры.

Ответ на вопрос: какие матричные игры имеют решение в смешанных стратегиях и как найти это решение, если оно существует дает основная теорема теории матричных - теорема Неймана: любая матричная игра имеет решение в смешанных стратегиях.

Оптимальная смешанная стратегия  $p^0$  первого игрока смешивается только из тех чистых стратегий  $A_i$  ( $p_i \neq 0$ ), для которых выполнены равенства:

$$\sum_{j=1}^n a_{ij} q_j^0 = v \,.$$

А в оптимальной смешанной стратегии  $q^0$  первого игрока смешивается только из тех чистых стратегий  $B_i$ , для которых выполнены равенства:

$$\sum_{i=1}^m a_{ij} p_i^0 = v \,.$$

Кроме того, справедливы равенства:

$$v = \min_{j} \sum_{i=1}^{m} a_{ij} p_{i}^{0} = \max_{p} \min_{j} \sum_{i=1}^{m} a_{ij} p_{i} = \min_{q} \max_{i} \sum_{j=1}^{n} a_{ij} q_{j} = \max_{i} \sum_{j=1}^{n} a_{ij} q_{j}^{0}$$
(7)

Равенства (7) представляют собой основу для разработки различных методов решения матричных игр.

Для решения матричной игры  $2 \times 2$ оптимальные стратегии  $p_1^0$ ,  $p_2^0 = 1 - p_2^0$  и цена игры  $\nu$  должны удовлетворять условиями:

$$\begin{cases} a_{11}p_1 + a_{21}p_2 = v \\ a_{12}p_1 + a_{22}p_2 = v \end{cases}$$
(8)

$$a_{11}p_1 + a_{21}(1-p_1) = a_{12}p_1 + a_{22}(1-p_1)$$

Откуда получаем следующее решение матричной игры:



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Вычислив оптимальное значение V, можно вычислить и оптимальную смешанную стратегию второго игрока из условия:

$$a_{11}q_1 + a_{12}q_2 = v$$
или  
 $a_{11}q_1 + a_{12}(1-q_1) = v$ .

А именно:

$$q_1^0 = \frac{v - a_{12}}{a_{11} - a_{12}}, \ q_2^0 = 1 - q_1^0 = \frac{a_{11} - v}{a_{11} - a_{12}}$$
 (10)

restart; a11:=3;a12:=8;a21:=7;a22:=4; A:=Matrix(2,2,[a11,a12,a21,a22]);

$$a11 \coloneqq 3$$

$$a12 \coloneqq 8$$

$$a21 \coloneqq 7$$

$$a22 \coloneqq 4$$

$$A \coloneqq \begin{bmatrix} 3 & 8 \\ 7 & 4 \end{bmatrix}$$

Для определения нижней цены игры, сначала необходимо выбрать минимальный элемент в каждой строке матрицы. Для этого составляем

```
if a11>a12 and a21>a22 then k1:=a12;k2:=a22;fi;
if a11>a12 and a21<a22 then k1:=a12;k2:=a21;fi;
if a11<a12 and a21<a22 then k1:=a11;k2:=a22;fi;
if a11<a12 and a21>a22 then k1:=a11;k2:=a22;fi;
```

$$k1 \approx 3$$
$$k2 \approx 4$$

Теперь с помощью условного выражения определим нижнюю цену игры:

if k1>k2 then alfa:=k1;fi; if k1<k2 then alfa:=k2;fi;

alfa  $\approx 4$ 

Зададим условное выражение для выбора программой максимального элемента в столбце матрицы:

```
if a11>a21 and a12>a22 then l1:=a11;l2:=a12;fi;
if a11>a21 and a12<a22 then l1:=a11;l2:=a22;fi;
if a11<a21 and a12<a22 then l1:=a21;l2:=a22;fi;
if a11<a21 and a12>a22 then l1:=a21;l2:=a12;fi;
```

при 
$$a_{11} \neq a_{12}$$
.

Реализуем посредством пакета Maple решение матричной игры с платежной матрицей :

$$A = \begin{pmatrix} 3 & 8 \\ 7 & 4 \end{pmatrix}$$

Вводим элементы платежной матрицы:

условное выражение для сравнения элементов строк матрицы:



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$$\begin{array}{l}ll \coloneqq 7\\l2 \coloneqq 8\end{array}$$

Определим верхнюю цену игры:

if l1>l2 then betta:=l2;fi; if l1<l2 then betta:=l1;fi;

*betta*  $\approx$  7

Так как  $\alpha < \beta$ , то имеем игру без седловой точки, что приводит к необходимости рассмотрения смешанной стратегии:

if alfa<betta then print('Play\_without\_a\_saddle\_point');
else print('Balance');
fi;</pre>

#### Play\_without\_a\_saddle\_point

По формулам (9) находим смешанную стратегию первого игрока: p1:=(a22-a21)/(a11+a22-(a12+a21));

```
p_{1:-(a_{22}-a_{21})/(a_{11}+a_{22}-(a_{12}+a_{21}))},
p_{2:=(a_{11}-a_{12})/(a_{11}+a_{22}-(a_{12}+a_{21}));
```

$$p1 := \frac{3}{8}$$
$$p2 := \frac{5}{8}$$

Вычислим цену игры с позиции первого игрока:

v1:=a11\*p1+a21\*p2; v2:=(a11\*a22-a12\*a21)/(a11+a22-(a12+a21));

$$v1 := \frac{11}{2}$$
$$v2 := \frac{11}{2}$$

Независимо от того, что для определения цены игры использовали разные формулами (для большего убеждения), значение цены, как видим не изменное.

q1:=(v1-a12)/(a11-a12); q2:=(a11-v1)/(a11-a12);

$$q1 := \frac{1}{2}$$
$$q2 := \frac{1}{2}$$

Решение получено:  $p^0 = (0,375;0,625),$  $q^0 = (0,5;0,5), v = 5,5.$  По формулам (9) определим смешанную стратегию второго игрока:

Полученный результат можно, как рекомендует теория игр получить графическим методом. Составим функции(выигрыши первого игрока) и затем воспользуемся командой *plot* :



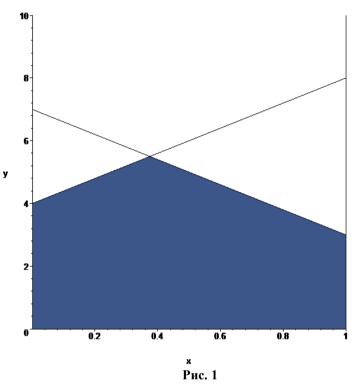
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y1:=a11\*x+a21\*(1-x);

y2:=a12\*x+a22\*(1-x);

with(plots):inequal({x>=0, x<=1, y<=a11\*x+a21\*(1-x), y<=a12\*x+a22\*(1-x)},x=0..1,y=0..10);

$$y1 \coloneqq -4x + 7$$
$$y2 \coloneqq 4x + 4$$



Графическая иллюстрация решения матричной игры 2×2

 $A = \begin{pmatrix} 3 & 8 \\ 7 & 4 \end{pmatrix}$  в системе Maple **p:=(p1,p2); q:=(q1,q2);** 

Как видно, математическая программа решения матричной игры 2×2 \_ автоматизированная: для ее решения на начальном этапе вводятся элементы платежной матрицы и дальнейшие вычисления производятся

Точка пересечения прямых дает решение матричной игры  $(p_1^0, v)$ . Запишем ответ задачи:

$$p := \frac{3}{8}, \frac{5}{8}$$
$$q := \frac{1}{2}, \frac{1}{2}$$
$$v := \frac{11}{2}$$

только с этими элементами. Решение задачи сопровождается визуальным представлением графического метода решения задачи. За счет автоматизации скорость вычисления высокая и явно прослеживается эффективность решения.



v:=v1;

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# INFORMATION IN UZBEKISTAN MANAGEMENT OF INNOVATIVE PROCESSES IN THE FIELD OF COMMUNICATION TECHNOLOGIES

**Abstract**: This article describes a number of research on the development of information and communication technology enterprises, the management of innovative processes in the field of ICT in the context of globalization and the factors influencing this area. Formation of an integrated indicator of effective management of innovative processes in the field of ICT. Methods for evaluating the effectiveness of management of innovative processes in the field of information and communication technologies. The number of Internet users in Uzbekistan has exceeded 23 million, despite the slowdown in recent years. It also highlights the advantages of the regression model, in which the net profit of Uzbektelecom JSC depends on the amount of investment in innovation.

*Key words*: information and communication, innovation, internet, investment, e-government, computer literacy, human intellectual and creative activity, discoveries, inventions and innovators, global network, telecommunications, computer technology.

Language: English

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### Introduction

An important aspect of economic reforms in the world is the development of the digital economy based on information and communication technologies, which are one of the most important elements of a market economy in the era of globalization. In the world, almost 60% of the total cost of innovation is in the field of information and communication technologies.<sup>1</sup>

A number of research projects on the development of information and communication technology enterprises in the context of globalization, including the role of infrastructure in the provision of products and services, the impact of ICT on the world market and the digital economy, e-government, online services Extensive research is being conducted to study the management of innovative processes in the field of ICT. In this regard, special attention should be paid to the application of experience gained in international practice and the management of the infrastructure of enterprises in the field of ICT in the country. Improving the scientific basis for improving efficiency, developing a methodology for evaluating the effectiveness of management of innovative processes is one of the most pressing issues today.

## Analysis of the literature on the subject:

Ilenkovoy S.D. According to him, innovation processes are considered as a process of preparation





	<b>ISRA</b> (India) <b>ISI</b> (Dubai, UAE		SIS (USA) РИНЦ (Russia)		ICV (Poland) PIF (India)	= 6.630 = 1.940
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and implementation of innovative changes, consisting of interrelated stages as a result of the emergence of current innovations.

Zavlina P.N. An innovation process is a process of transforming scientific knowledge into innovations, in which innovations can be expressed as a chain of events that transitions from an idea to a specific product, technology or service and is disseminated in practical use.

Stig Ottosson The process from idea to commercial product is called innovation process.

Approaching the above considerations, we have interpreted the economic classification of the term innovation process as follows: Innovation process is the process of translating scientific knowledge into practical application of an innovative idea with human intellectual and creative activity, discoveries, inventions and rationalization proposals.<sup>2</sup>

#### **Research methodology:**

With the development of the Internet during the pandemic, the development of the ICT sector is

accelerating. The widespread use of ICT in various sectors of the economy has become one of the key factors in improving the socio-economic status of society, stabilizing economic growth. The rapid growth of the global Internet has led to an increase in computer literacy among the general population, the widespread popularity of telecommunications. computer technology and other new means of communication, as well as effective means of exchanging information through the global network. The rapid growth of the process of implementation of innovative products and services has confirmed the expediency of considering the effective management of this sector. Modernization of the ICT sector and the development of innovative processes will allow the construction of e-government, the development of the digital economy, increase the efficiency of government and increase the competitiveness of the country's economy.

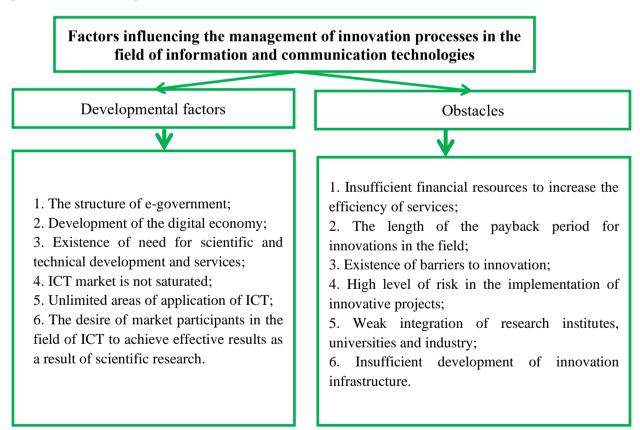


Fig. 1 Factors influencing the management of innovation processes in the field of information and communication technologies<sup>3</sup>

<sup>2</sup>Author's development.

<sup>3</sup>Developed by the authors



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	JIF	= 1.500	<b>SJIF</b> (Morocco) = <b>7.1</b>	84 OAJI (USA)	= 0.350

These factors will help to identify areas that affect the development of innovative activities in the field of ICT, as well as management approaches.

Today, the structure of innovative processes in the field of ICT includes: the emergence of mobile communications and the Internet; mobile internet development; development of mobile applications; creation of cloud technologies; e-commerce and ebusiness development; 3G and 4G mobile internet development; Introduction of Wi-Fi technologies; mass introduction of intelligent platform services; IoT - (Internet of Things) Internet of Things; BigData popularity; proliferation of chat bots and corporate information systems; 5G will be introduced; development of the digital economy.

In recent years, the world experience has a number of ways to assess the innovative development of countries, in which the development of the ICT sector plays an important role. However, there are no indicators of innovative development of the ICT sector. In order to assess the management of innovation processes in the field of ICT, the author selected a number of international indices that reflect the state of management of innovation processes in countries and the results of management in the field of ICT.

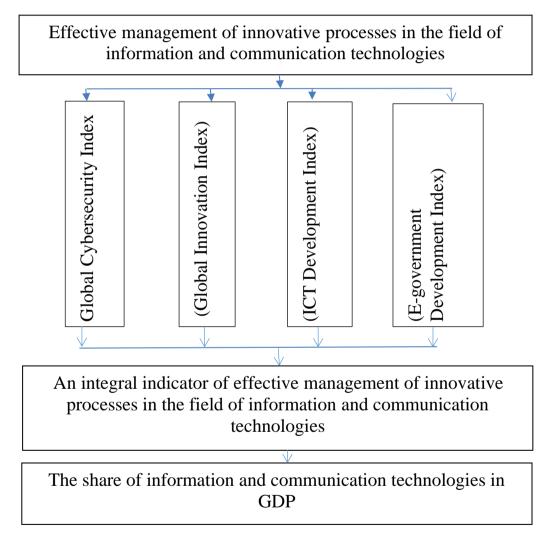


Figure 2. Formation of an integrated indicator of effective management of innovative processes in the field of ICT<sup>4</sup>

In the management of innovation processes in the field of ICT, the indicators in the structure of international indices are assessed by determining the integral indicator and comparing it with the share of the ICT sector in GDP. It should be noted that the country does not have a perfect index that reflects the management of innovation processes in the country, especially in the field of ICT, one of the reasons is that constantly

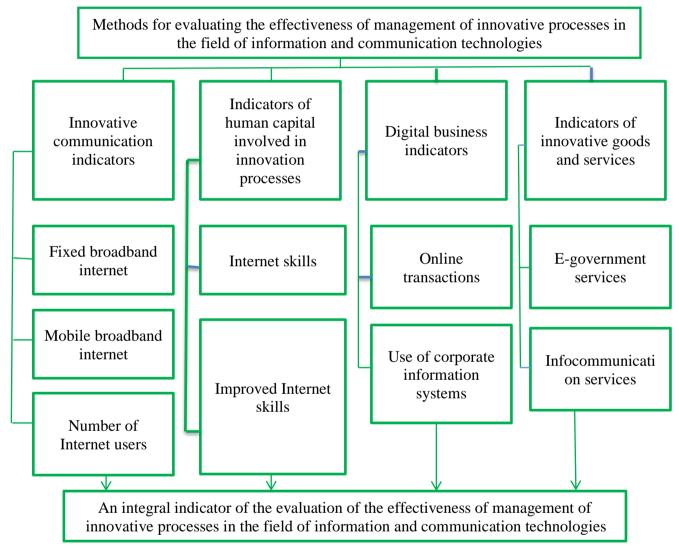
<sup>&</sup>lt;sup>4</sup>Developed by the authors

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introduced new technologies are evaluated by new criteria and reflected in different countries.

## Analysis and results:

The obtained data form the management of innovation processes in the field of ICT based on the indicators of the global index of cybersecurity, the level of readiness for e-government, the level of global innovation development and ICT development. It should be noted that each of these indices to some extent covers the innovative development of ICT in the country, and as a result, these ratings reflect the effectiveness of the management of innovation processes in the ICT sector of the country. By studying these indices, the author developed indicators to assess the effectiveness of innovation process management in the field of ICT and proposed an assessment methodology.



# Figure 3. Methods for assessing the effectiveness of management of innovative processes in the field of information and communication technologies in Uzbekistan<sup>5</sup>

Indicators for assessing the effectiveness of innovative processes in the field of ICT in Uzbekistan include indicators of innovative communication, indicators of human capital involved in innovation processes, indicators of digital business, indicators of innovative goods and services. Indicators and methodology for assessing the effectiveness of innovative process management in the field of information and communication technologies were developed by the author and researched in the second chapter of the dissertation.



<sup>5</sup>Developed by the authors

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We can know the management of innovation processes in our country by evaluating the results of innovative activities. In the previous section, we looked at evaluating innovation through global indexes and rankings. Innovative activity in the country is assessed by a number of indicators. In the field of ICT, the dynamics of the development of ICT infrastructure can be cited as a result of the management of innovative processes. This is due to the fact that through the regulation and introduction of innovative activities, many results can be achieved, such as increasing the speed of the Internet, attracting the wider use of Internet and mobile services, the development of digital television, the provision of electronic services.

#### Table 1. Development of ICT infrastructure in our country<sup>6</sup>

N₂	Indicators	2017	2018	2019	2020	2021
1	Mobile coverage	45	70	86	96%	98%
2	Broadband coverage of mobile communication	23	44	58	70%	72%
3	Number of mobile users	20.6	21.4	22.8	23.8 mln	24 mln
4	Number of Internet users	17	18	20	22 mln	23 mln
5	Number of mobile Internet users	11	14	17	19 mln	21 mln

As for the results of 2021, mobile coverage has reached 98%, while broadband coverage has reached 72%. The number of Internet users has also exceeded 23 million to date, despite a slowdown in growth in recent years.

As a result of the research, the current situation was analyzed in accordance with the methodology proposed by the author to assess the effectiveness of management of innovative processes in the field of information and communication technologies.

# Table 2. Current situation analysis on the methodology for assessing the effectiveness of management of innovative processes in the field of ICT<sup>7</sup>

T / r	Indicators	2017	2018	2019	2020	2021
1	Innovative communication indicators	6	6.5	8	10.5	11
2	Indicators of human capital involved in innovation processes	5.5	5.5	5.5	5.5	7.5
3	Digital business indicators	5	5	5	6	6
4	Indicators of innovative goods and services	5.5	5.5	5.5	6	7
5	Integral indicator	22	22.5	24	28	31.5

The table below provides an analysis of the current situation in the field of ICT in the field of innovation process management effectiveness assessment methodology. According to the methodology proposed by the author, the integral indicator for the current situation is 31.5.

In foreign countries, ICT indicators are reflected in many international rankings of the country and determine the level of development of the country. At the same time, the share of the ICT sector in the country's GDP reflects the level of development of the country. A comparative analysis of these indicators is given in the table below. (Table 3)

Table 3. Analysis of ICT	<b>Trankings in foreign countrie</b>	es and the share of ICT in GDP
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States	2017		2018		2019		2020		2021	
States	U <sub>yaim</sub>	X ro	U yaim	X ro	U <sub>yaim</sub>	X ro	U yaim	X ro	U <sub>yaim</sub>	X ro
Korea	11.8	3	12	3	12.3	4.3	12.5	4.6	12.7	5.3
United States	6.8	8	7.4	6.3	7.7	6.3	8.2	6	8.6	6.3

<sup>6</sup> Based on data from the Ministry of Information Technologies and Communications of the Republic of Uzbekistan <sup>7</sup> Analyzed by the authors



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United Kingdom	6.9	10.3	7.1	10.6	8.6	11.6	10.7	11.3	12.4	11
Sweden	7	6.6	8.6	7	8.8	4.3	9.1	4	9.2	5.5
Finland	7.9	12.6	8.3	12.3	8.7	11	8.9	11	9.1	15.3
Denmark	4.8	47.6	5.3	46.6	5.6	44.6	6.1	45.6	6.6	43.6
Germany	4.1	40.3	6.3	41	8.15	41	8.45	41	8.6	42.6
Russia	2.1	103.5	2.5	103	2.8	98	2.8	96.6	3	95.3
Kazakhstan	2	53	2.1	53.3	2.8	55	3.1	56.6	3.9	52.6
Uzbekistan	1,2	91.5	1.5	87.5	1.7	88	2.2	88	2.3	91.6

Note: here

It is its  $_{\mbox{\tiny share}}$  in GDP

X ro -Average place in international rankings

The analysis of the rating indicators of the ICT

sector in foreign countries and the share of the ICT

sector in GDP shows that the international The share of the ICT sector in the country's GDP is also high in the countries ranked high in the rankings.

The author analyzes the share of ICT in GDP in the country and international rankings. (Table 4).

Show small	GII	IDI	EGDI	GCI	Integral indicator	GDP billion	ICT GDP share%
2017	21,80	4.48	0.48	0.27	6,75	81,779	1,2
2018	22,49	4.90	0.56	0.27	7, 05	59,16	1.5
2019	23,12	4.90	0.62	0.46	7,27	50,393	1.7
2020	23,84	4.92	0.66	0.56	7, 49	57,921	2.2
2021	24.54	4.95	0.69	0.66	7.71	60,374	2.3

The authors conducted a series of analyzes to study the management of innovation processes of Uzbektelecom JSC as an object of research and the impact of investments in innovation on the net profit of the company. Net profit (u) depends on a number of factors that affect it, including innovation processes. Using correlation-regression analysis, we analyze the factors influencing innovation processes and, ultimately, the positive or negative impact of innovation processes on net profit.

 Table 5. Forecast indicators on the methodology for assessing the effectiveness of management of innovative processes in the field of ICT<sup>9</sup>

T / r	Name of indicators	2022	2023	2024	2025	2030
1	Innovative communication indicators	14.7	15.5	18.5	20	22
2	Indicators of human capital involved in innovation	7.5	8	9	15	23
	processes					
3	Digital business indicators	11	13	15	15	20
4	Indicators of innovative goods and services	7.5	9	14	16	22
5	Integral indicator	40.7	45.5	56.5	66	87

According to the forecast, the integrated indicator in 2030 will be 87 points, which is an increase of 2.5 times compared to the current situation.

As a result of managing the innovative activities of Uzbektelecom JSC, the authors have developed forecast indicators of net profit until 2030.

<sup>8</sup> Developed by the authors <sup>9</sup>Developed by the author





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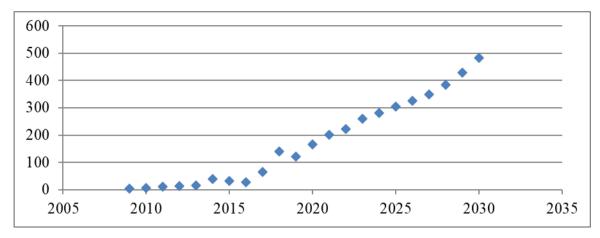


Figure 4. Forecast indicators of net profit of Uzbektelecom JSC until 2030<sup>10</sup>

Figure 4 shows the forecast of net profit of Uzbektelecom JSC until 2030. In 2030, net profit will increase 2.8 times compared to 2020.

#### **Conclusions and suggestions:**

It can be seen from the regression model that the net profit of Uzbektelecom JSC depends on the amount of investments in innovations. if innovations are not introduced into the company's operations, net profit will decrease.

"Information and communication technologies in Uzbekistan **The authors** proposed a model for the formation of a group of indicators that are sources of information in the provision of information at each stage of the management of innovation processes in the field of information and communication technologies and used to monitor the management of innovation processes.

In this model, the following indicators are used for monitoring:

1. Indicators of the stage of problem identification and formation of an innovative idea:

- Analysis of online applications and problem identification;

- study of competitors;

Analysis of the activities of foreign companies;
2. Indicators of the stage of development and preparation of technical documentation:

- Percentage of innovation process management concept planning;

- Percentage of development and organization of the management concept;

- Percentage of documentation to start the implementation of innovation processes;

3. Indicators of the management phase of the implementation of innovation processes:

- Choosing the form of management of innovation processes - the formation of a working group and the appointment of officials;

Control and regulation of innovation processes;Presentation of the results of innovative

processes in production; 4. Indicators of presentation of results of innovative processes:

- launch the demo version;

- conducting marketing research in test mode;

5. Technology transfer and commercialization indicators:

-determine the directions of public presentation; -attract investment in transfer and advertising costs.

Management of innovative processes of Uzbektelecom JSC determines the directions of their future efficiency:

1. Mastering new technologies. Leadership in transport networks, network ownership and information technology infrastructure.

2. Development of innovative products and services. Unified content management system: cloud technologies, distributed infrastructure services and other similar modern services.

3. Innovations in management. Increase competitiveness in the global market and reduce large costs.

4. Energy efficiency and ecology. Leadership and high social responsibility in cost management.

The stages of the roadmap for the management of innovation processes of Uzbektelecom JSC will be implemented in three stages.

Step 1. System formation. Implementation period is 2021-2023. During this period, the company will modernize the material and technical base, make changes in the organizational structure of the company, improve production and services, develop a system of employee incentives, develop and implement innovative processes and related information. measures will be developed.





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Step 2. The stage of achieving results. Implementation period is 2023-2025. This stage includes the effective use of existing opportunities, the training of personnel with the skills and competencies to work with competitive, modern equipment and technology, the integration of science and industry, as well as cooperation with foreign companies.

Step 3. The transition to a new era. Designed for 2025-2030.

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assessing the effectiveness of innovation process management in the field of ICT has been developed. This software product allows you to manage and monitor innovation processes. These indicators allow us to monitor the dynamics of changes in the results of innovation process management each year.

A software product of the methodology for

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Article





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# INTERPRETATION OF THE THEME OF NATURE IN THE WORKS OF MENGZIYO SAFAROV

Abstract: The article analyzes the theme of nature in the works of Mengziyo Safarov. It focuses on the artist's ability to depict nature and the meaning behind it. The author's style of painting and some peculiarities are discussed. Key words: naturalism, nature, animalistic literature, the problem of man and nature, plants, animals, society. Language: English

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#### Introduction

The depiction of nature was the leading pictorial principle of the literary movement of "naturalism" that emerged in nineteenth-century France, in which the depiction of objects as they were in nature became poetic. The word "natura" is also a French word with a lexical meaning of "nature". "Yoz Writers such as J. London, E. Seton Thompson, Ch. Aitmatov, Sh. But their creative intentions, their attempts to express nature, plants, and society as they are, create a naturalistic image in itself." After all, a work about a bird, an insect, a rodent, or an animal that roams freely in the bosom of nature will not be complete unless it is observed with patience, perseverance, love, and curiosity [1.145]. Their natural appearance, anatomical structure, instinctual behavior. psychological state do not accept artificial, textured images.

Even if the writer enters an element through his imagination, such an element of the image remains redundant. Therefore, a writer who writes about nature must first of all love nature and be a person of nature.

Libraries around the world are full of works on natural phenomena, animals, birds, insects, and rocks. They have been attracting students since time immemorial and are gaining new audiences. Scientific literature of this nature often addresses issues such as "anamalystic literature", "anamalystic works", "the problem of man and nature", "the relationship between man and nature", "nature, plants, society". As a result, it has become a literary term for the study of such works.

Literary critic Abdugafur Rasulov, while analyzing the problem of man and nature, derives from the Eastern philosophy of literature "plants, animals, communities." He considers natural phenomena, plants, and even inanimate objects to be the only dialectical phenomena. He explains the human problem as part of that unity. We agree with the scientist. Indeed, the so-called scientific problem of man and nature cannot be studied without acknowledging the compatibility of the four concepts mentioned by A. Rasulov (plant, animal, community, man - "boy"). Researcher Shahnoza Ashurova in her dissertation entitled "Features of the genre of anamalystics in English-Western literature and Uzbek literature (on the example of the work of E. Seton-Thompson and N. Norkobilov)" examines the issue in the "genre of anamalystics." The definition of this genre is based on the views of a number of world literary critics. "Human and animals are united by a long evolutionary process," he said. That is why man praises animals, applauds them, bows to them, and dedicates to them the best works he has created in sculpture, architecture, fine arts, and finally in fiction. So the depiction of animals in fiction, the relationship



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between humans and animals, the role of animals in human life is not a new phenomenon in world literature[2.15]."

#### **Analysis of Subject Matters**

The scientist's views do not require proof. In fact, humans have lived in harmony with nature and animals since ancient times. He expresses his impressions in words. Often, this way of reflecting the problems of nature and man serves to cultivate the worldview, morals, and perfection of people in society and individuals. There are some artists whose works are created through a creative look at man and the world, life and reality, the creatures of nature and selflessness, a genuine love of nature. Mengziyo Safarov was one of the artists who paid special attention to the theme of nature and man with his works and began to study the human psyche. In his works, nature is depicted as a sacred and eternal abode, a common home for humanity, and the feelings of its preservation and reverence are artistically analyzed through a variety of experiences. Man is considered an integral part of nature.

Although we often encounter the theme of nature in Mengziyo Safarov's work, there is a certain purposeful division in these works, and today we will analyze this conditional division.

The first is journalism, which focuses on the protection of the environment, nature conservation, and the rational use of its resources. We can include his essay on "Bobotag" and a number of journalistic articles in this direction. In these works, Mengziyo Safarov is portrayed as a traveling writer, a patriot and a selfless person. As you read these works, you will be amazed at the writer's meticulousness, extensive knowledge of nature, and strong passion.

The second direction is the image of nature, which is expressed in a passionate, fiery love. This category includes works such as "Flying Cranes", "Behind the Far Hills", "Ayrishoh" and others, as well as a number of such images of nature.

There are also works by Mengziyo Safarov, which have a strong ability to create images of nature and animals, which we will include in the third direction. Stories like "Scented Scentes," "Mother Sparrow," and "Quail" have a similar style.

There is another group of works by the author, in which the nature and attitude to it, the images of the work, the language of the protagonists have a special respect. Among them are Said aka in the story "Return of deer", a loving mother in the story "Bakhmal", a passionate old woman in the story "Dear scents".

#### **Research Methodology**

"Babotag", "Prophet's Island", "Masters", "Velvet", "Dear Scentes", "Return of Deer", "Ayrishoh" there is one thing that unites these works into one, and that is the respect and reverence for the mother earth, for man, for nature. All of this is ingrained in the psyche of the work and its protagonists. The image of the mother and the mother cow depicted in the artist's story "Velvet" is a bright proof of our opinion. The image of a bereaved person suffering from the pain of separation, the fig tree groaning in the sky, sighing sadly, and its proud head bowed in astonishment is astonishing. Velvet was sinking in front of the whole family every day. It didn't help that the mother was squirming around the cow and trying to force her to eat. One day, the eldest son, who had a family, said to his mother:

- "Here, let's kill the cow," he said, but at once he was frightened ."What do you say?" Did you say slaughter? "I don't want him to die." It's a waste. On top of that, the poor man has suffered a lot, and we are guilty of it. I'll have another one...

The mother remained silent for a long time, as if agreeing with her son. The wrinkles on his forehead thickened. Then all of a sudden, her whole body shook and she started crying. The eldest son stood up. That's why he didn't talk about slaughtering the cow again. The image of a mother who accepts a cow as the only hope of the family as a member of a real family will no doubt make the reader gasp. Perhaps the fact that the story is taken from life itself adds to the impact of the short story.

The dumb creature, who felt the mother's affection, was not indifferent to him either, for the mother was also very kind to the cow. Apparently, the cow also noticed this, and when her mother always called her "Velvet", she would come to her mother and shake her tail. The mother was not worried, but she never forgot her cow. But at the end of the play, the mother is afraid of any danger to her life. "While he was lying in the field, a tractor plowing him accidentally pushed him in the evening light. The cow was still alive when the boy ran to the barn with his mother. But he couldn't look at his head. The cow was always trying to raise her head in agony, snorting heavily. The mother took her limp head in her hands[5.169]. Bakhmal stuck out his tongue and licked the wrists of the unfortunate old woman. The mother pressed her face against the cow's. The boy saw tears in Bakhmal's eyes. Her mother, who had been through a difficult time, cried silently. Velvet died at the hands of the old woman.

It is at this point that we see the combination of animal and human images. As can be seen from the image, the writer concretizes the artistic image by showing its individual characteristics, gives the image vitality, vitality, naturalness, achieves emotion, affects the feelings of the reader, convinces him. In fact, time and environment bring up, shape and educate a person in a certain sense, so the environment has a significant impact on the formation of human character. In the words of the talented writer Shukur Kholmirzaev, there was a bitter reality at the heart of the idea that "literature is for man", "his heart, his sorrow, his destiny must be expressed[6.17]."



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It is appropriate to continue our opinion with the following thoughts of Bolta Yoriyev, Candidate of Philological Sciences, Associate Professor: The author's whole attention is focused on the freedom to see man in the embrace of nature, to celebrate the achievements of human labor and thought in these vast expanses, to sing the truth, only the truth." Indeed, one of the main ideological motives of these works is to highlight the contradictions in nature, society and human thought, and to glorify the victory of good in this eternal struggle between good and evil[3. 336].

#### Analysis and results

The strong winds, the bottomless desert, the barren wheat straws, the camel-like hills, which are as yellow as a camel, all have their own peculiarities. In a single essay, The Prophet's Island, the author depicts the plants and animals of the mountains through the eyes of both a naturalist and a creator. The reader who reads the picture will be amazed by this magical desert with its fauna and flora, an island that can fit a piece of land with reeds, impassable groves, forests, deserts and deserts. It is as if nature itself has gathered all the miraculous landscapes of the great riverbanks on this island. "The island is an ancient nature sanctuary," he said[4.110].

In addition, when the author expresses his views on nature, an integral part of this nature, he openly calls man selfish. That's the decent thing to do, and it should end there. The reason for this is that man is not only helpless in the face of the miracles he has created, but also in the face of nature. The dialectical unity of nature and man has come to the point of oblivion. But even then, people did not understand the reasons for this. It was only after nature began to take "revenge" on man that it began to feel more deeply that it was approaching environmental tragedies. As the literary critic Abdugafur Rasulov put it, "Nature has endured all the rages of man, and he has come to his senses." It didn't work. Nature, too, has rebelled against man.

The conflict between nature and man has made the Day of Judgment cash. Man hastened to destroy not only nature, but himself. Doomsday is apparent. " Over the years, Mengziyo Safarov has also described human suffering in the above-mentioned works through the natural world. In short, the works of Mengziyo Safarov reflect the attitude of nature to man, man's relationship to nature.

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		Issue		Article







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# **INTERPRETATION OF THE IMAGE OF THE MOTHER IN THE LITERATURE**

**Abstract**: This article gives an interpretation of the images of the mother in the prose of the independence period. The works are analyzed.

Key words: mother, story, mother, chinmarjan, hapamat, Badakhshan, village, art, folklore, feteshism, sheva. Language: English

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#### Introduction

As a result of scientific observations, it has been observed that a great deal of work has been done on the subject in research in the literature of the fraternal peoples and the peoples of Russia and the Orient. In literature, a new voice, a new spirit, a new style is unanimously applauded. Although the first example of a realistic work in the genre of short stories in Uzbek literature was created in the 30s of the XX century, its historical roots go back a long way. In particular, there are elements of storytelling in Rabguzi's "Qisas ul-anbiyo" and Navoi's "Tarihi anbiyo va hukamo". The creation of the first work in the genre of realistic short stories also fell on the edge of A. Kadyri. The story of "Obid Ketmon" is an artistic reflection of the policy of his time, that is, collective farming. After that, a series of short stories in Uzbek literature was created. Each literary generation has brought new tones, new styles to the perfection of this genre. By the 60s, the story genre became a leader in the works of such prose writers as O. Yakubov, P. Kadyrov, Sh. Kholmirzaev, O. Hoshimov, O. Umarbekov. In the stories created during this period, mainly the themes of youth, love, devotion became the main principle. By the 1970s, however, a new generation had entered our literature with a distinctive voice. The stories of such artists as T.Murod,

M.M.Do'st, E.Azam, H.Sultan are characterized by the infusion of traditional and modernist spirit. In the style of T.Murod, folk melody, folklore, satire in E.Azam and M.M.Dust, lyrical spirit in the works of H.Sultan are reflected in the genre of short stories.

#### **Analysis of Subject Matters**

It is well known that style is one of the most important features of fiction. The artistic skill of each artist is also determined by his individual style. That is, it is manifested through "his unique rich life experience, his own views on things, events, views, perceptions of beauty and ugliness, sympathy and antipathy, nature, taste and aspirations." According to the famous writer Chingiz Aitmatov, "there is no universal pattern in literature. Each time, the creator has to discover a new form of human relations, based on the existing reality and his own imagination, which reveals the depths of this real reality. According to the Russian writer Yu. Kazakov, [2. 88] the plot chosen for the work also determines its style. The style also depends on what the author is writing about and the situation at the time.

In the current literary process, the genre of short stories, with its polyphonic layers and a variety of topics, has become much faster than the literary generation of the 70s and 80s. The life stories of



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Ulugbek Hamdam, Isajon Sultan, Zulfiya Kurolbiy qizi, Lukman Burikhan, Nurullo Chori and other artists have found expression in their stories. Guljahon Mardonova was also active in the short story genre. One of the most important aspects of the writer's stories is that they are based on artistic documentary. The writer writes about events and happenings that he has seen and known. All chapters of the "Sun-Enam" series are autobiographical. See: "Nam ... Anorday's cheeks were modeled on a red satin shirt, her breasts were hapamat, chinmarjan, embracing dardagozna, her throat was covered with jiyaknusha buka, her jackets were fluttering, and four silver heels were glistening on her heels. On the couch in the shade of the slate in the yard, we were counting four stars, four girls who did not look like my mother, and four handsome boys. The work begins with these sentences. As you get to know the chapters, you will see a biographical spirit in the play. Typically, documentary, authenticity, and objectivity are predominant in a biographical play. At its center is man and his life. If the protagonist is familiar and contemporary, there is no difficulty for the author. Every detail about the protagonist is important to the author. For example, the letter, memory, diary, belongings, etc. of the protagonist. The author of a biographical work is required, first of all, to be careful. not to falsify information, to be impartial. Although Irving Stone's views are about a biographical story, he is fully consistent with all biographical works: "The author of a biographical story must be a biographer working on a collection of material about one person or a group of people. He must master the intricate techniques of classifying these materials, apply a unique style to each case, and discover a particular style of writing in order to distinguish this one from the hundreds of millions of different life events that people have experienced. " We know that in Utkir Hoshimov's story "World Affairs" the image of MOTHER is beautifully recognized. As the writer Said Ahmad said: ".... it is read like a poem. We read it and think of our mothers ... " [5. 119] It should be noted that the real stories of the series "Sun-Enam" are in line with the story of the teacher Hoshimov "World Affairs". If you read the real stories of the series "Sun-Mother", you will see that not only the sanctity of mothers, but also the divine power of nature is hidden in the nobles. Sometimes this is evident in the stories. The author gives the impression that he has studied the subject thoroughly in order for the reality he is writing to come true. ... Mothers said "okay" and gave their children a beshiktsyssyaka. The cradle was made by craftsmen from dried wood of apricot or willow. And they decorated it with different paints. The pot was made of earthenware, and the sumac was made of birch wood. Have you ever noticed? They hang the baby's fallen navel on the head of the cradle. Then the child will not cry looking for a part of his body. Mothers put a lot of things under the baby's pillow.

Mothers 'hopes lie in putting these things together. Let the stone be the head of the stone, let the bread be the whole food, let the onion be the damage, and let the knife be the weapon. Children sleep in it until they are one and a half years old. The bark of the squeaking cradle in our house is crushed with fragrant spruce leaves. According to my mother, my uncles once brought fragrant spruce leaves from the Langar Mountains. The smell of spruce hits the breath of the person who has just lifted the crib cover to see if the baby is asleep. My mother is a hard worker and a hard worker. I cooled the milk, cooked it in a cauldron over a fire, cooled it and put it in the pots. It is known that in the mythology of the Turkic peoples mulberry, birch, maple, walnut, fig trees are considered sacred. They are believed to have divine power. It is well known that the sanctification of trees is considered in science in connection with fetishism. The writer's skill lies in his ability to convey folklore traditions in a realistic way. In addition, in the works of Guljahon Mardonova in all genres, childhood memories, the place and time of her birth and upbringing also play an important role.

#### **Research Methodology**

At the same time, sometimes his childhood memories also served as a motive. In the chapter "Fragrant Bread Tafti", the author describes the memories associated with his MOTHER. The writer does not exaggerate the reality in the chapter. Although at the center of the story is his own MOTHER, he doesn't back down from reality. As far as his portrait of his mother is concerned, he shows it truthfully: The chapter "Fragrant bread taffeta" is based on the author's childhood memories. "Nobody saw my mother getting flour in a sieve at night, Carson kneading dough on a plate, no one knew,"[7. 246] the author begins. In fact, the main character in the chapter is the mother, and the essence of it seems to be connected with it. In the chapter "The paralyzed scarf under the stone" the incident with "ENA" also played a key role. Reality is given on the basis of childhood memories:

"Rural prose" plays an important role in the creative work. This spirit is observed in the first chapters of the Creator. This is especially evident in the chapters of the real story, which are included in the collection of the artist "Sun-mother". The main theme of the chapters included in this collection is rural life, the joys, sorrows, dreams and aspirations of the local people. The artist describes the life of the people of the villages of Kashkadarya, because the writer knows these places very well, he spent his childhood in these places. We know that the villagers are a little simple by nature, a bunch, lazy, but sincere. In the village, almost everyone knows each other, and human qualities such as kindness, modesty, and honor become stronger among the people. National characteristics, customs and traditions, the local



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environment are also more pronounced in the village. There was a wedding in Badakhshan in the cold. Absalom aka shook his son's hand. The lunches were opened at noon. The cauldron was surrounded by children. They know that wedding oysters are the first to be given to children in Badakhshan. One or two cups of soup were thrown into the mysterious travs held by the black children. As they lead their brothers, they sink to the place where they have to eat the steaming soup in the oven. Tearing off these runes, which are gushing with water, they finish their soup by dipping their paws five times in a row on the plate. That's it - the kids don't need anything else. They play in groups. The writer describes the rural color through impressive details. The rural landscape is clearly visible before our eyes. The author draws attention to even the smallest aspects in describing the landscape. If we pay attention to the above passage, we will see that the author convincingly describes the rural life and environment.

#### Analysis and results

Another characteristic of creative stories is the artistic expression of spiritual problems. They cover humanity, honesty, loyalty to one's faith, human dignity, the strength of honor, in general, the various human problems and relationships that exist in real life. These stories describe the lives and characters of people with different destinies. The creator is also demanding in terms of language. The language of the author's works is characterized by the absence of excessive details and lengthy comments. Sentences are concise and simple. The writer uses more Kashkadarya dialects. Words and phrases that are disappearing in his works and are preserved in the language of the older generation are widespread.

Did you know Jilboshi Kepti? Did you visit your father? Seeing your father, Did you know that old age? Did you know Jilboshi Kepti? Did you eat jilboshi cut? Jilboshi keskan jiyayatib, Did you have to?

In expressing his artistic intention, the writer effectively used the dialects and archaic words of the vernacular, in the means of proverbs, parables, legends, conventions, which are the masterpieces of folklore. [9. 368] "Ko'krak .Women's breasts are decorated with hapamat, gulband, lilac, their throats are throat1, their wrists are wrists2, their noses are letiba, and their fingers are decorated with silver rings, lined by each jeweler...." to cradle a baby. If not, I can't tell....." In general, the stories in the series "Sunshine" tell about the author's memories and experiences. It is reasonable to call these stories memory real stories. But the writer's goal is not to simply describe, describe events, memories, and experiences. Perhaps the example of MOTHER is to show that nature is full of mysteries, that nothing is created in vain, that our lives are miracles, coincidences.

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Article





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# THE MAIN FEATURES OF THE KHOREZM LITERARY ENVIRONMENT OF THE XIX CENTURY AND THE RESEARCH ON THE WORKS OF ROJI KHOREZMI

**Abstract**: This article describes the peculiarities of the literary environment of Khiva in the second half of the XIX century and the role of Roji Khorezmi in it, which is learned through mukhammases written to his poems by contemporary poets.

**Key words**: XIX century Khiva literary environment; the peculiarities of the literary environment; Rojiy Khorezmi; the attitude of his contemporaries to his works; the tradition of writing mukhammas; Agahi and Raji; Ziyrak and Raji; Sharif and Raji; Kamil and Roji.

Language: English

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#### Introduction

Poets who are under the pseudonym Raji did not appear in neither pre-Navai period in tazkirahs nor in the next three centuries. However, two poets under the pseudonym Raji lived and worked in Azerbaijani and Persian literature at the end of the 17<sup>th</sup> century. Sixteen poets with this pseudonym have been identified, thirteen of whom are representatives of Uzbek literature.

Raji is an Arabic word and it has two meanings. They are:

1) To return- it is the original meaning of the word;

2) To hope - it is the figurative meaning of the word.

In this case, to return has in view of returning the presence of Allah while to hope indicates the hope of living without sins throughout one's life. Rija is the name of the one of the 9 statuses in tasawwuf. According to the order of Sufism stages, there is a nine-tiered set of maqams for the spiritual uplift of the Sufis. The seventh step is-Rija. And this step's main idea is a hope. This hope is for the heart that is in love with the Creator to reach its beloved at some time in the future one day. This hope is for the deliverance from danger. Moreover, it includes the longings and aspirations of the heart [1]. The Sufi moves forward with great confidence. He wishes that he will not face hazards that he does not have any fear of calamities anymore. He resolutely overcomes them and achieves his goal. He firmly believes that he is free from committing sins. Confidence gives him strength and courage. Thus, the word Raji expresses the meaning of trust, hope, happiness, determination, goal attainment and it closely connected a pure Sufi tone as a stepping-stone to mysticism. The meaning of this word that is used by poets as their pseudonym also expresses the meaning of hope in a figurative sense.

The literary environment of Khiva, a place of enlightenment for many talented artists, reached its peak in the second half of the 19<sup>th</sup> century. This upsurge in the creative process was an integral continuation and culmination of the comprehensive literary process initiated by Munis. Munis was one of the prominent poets of the progressive literary environment that lasted from the end of the 18<sup>th</sup> century to the middle of the first half of the 19<sup>th</sup> century. That is why he influenced fiercely on the literary environment of that period and it representatives. We can see this influence in the works



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of Ogahi, Raji, Kamil, Sufi and Bayoni and others [2]. The Khiva environment led a wide range of creative process in a broad direction for many poets. The diversity of literary life of that period, the combination of traditions and innovations are reflected in the works of poets and writers of that period. Many poets such as Ogahi, Kamil, Raji, Tabibi, Devoni, Ojiz, Munshi, Ziyrak, Feruz, Avaz followed Munis. Academician V.V.Bartold assessed the general picture of Khiva literary environment of that period as follows: "Khiva has a dominance in a literary and cultural progress in comparision with Bukhara that are two khanates, which survived until the Tsarist invasion and during the conquest"[3].

#### Analysis of Subject Matters

At that period, ghazal held a leading position in Khiva literary environment. However, mukhammas flourished at a high level. The genre of books started to get special attention in writing manuscript. The books of genres called "Bayozi g'azaliyot", "Bayozi muxammasot", "Bayozi musaddatsot" were compiled. Due to the socio-political events that took place in the life of the society during this period, there were dramatic changes in cultural and literary life. All socio-political and historical events were reflected in the literature of that period. In the works of progressive poets, the anxiety of the people, the events of social life, the injustices of the khans and governors were widely described. The critical spirit of literature also intensifies as well as the glorification of humanity. Abdurauf Fitrat in his study "a general view of the Uzbek literature after the 16<sup>th</sup> century" draws the number conclusions that these features are more consistent with the literary environment of Khiva in the 19<sup>th</sup> century:

1. Since the second half of 17<sup>th</sup> century, the literature of this period has been strongly influenced by Oghuz language, especially works of Fuzuli.

2. During this period, historical works got special attention.

3. In poetry, Yassavi poems reached to the palace [4].

Furthermore, we would like to mention that during this period literary environment of Khiva was characterized by the progress of tazkirahs and translation studies. The great works of special genres named "Majmua si shuaroyi payravi Feruzshox" that provides information about the works written in tazkirah types that is not found Uzbek literature and their authors and "Muxammasoti maimuat ush Feruzshoxiy" includes shuaroyi that only mukhammas were created [5]. On the other hand, translation studies developed unprecedentedly. Although Khorezm literature reflects main features of Uzbek literature as an integral part of it, it also has its own peculiarities. We can see this distinctive feature in the strong development of translation studies in it [6]. Without a doubt, these features are seen in the

works of Muhammad Yusuf Raji. He was inspired by the leadership of Muhammad Aminkhan, Sayyid Muhammadkhan and Muhammad Rahimkhan Feruz and he became known as a translator, calligrapher and fully-fledged poet in this literary environment. Muhammad Yusuf Raji Khorezmi lived in th 19th century under the reign of Khorezm khans such as Allakulikhan (1825-1843), Rahimkulikhan (1843-1845). Muhammad Aminkhan (1845-1855). Savvid Muhammadkhan (1856-1863) and Muhammad Rahimkhan Soni (1863-1910). He was in closecontact with the next three rulers. "The royal literature is not so miserable and gloomy that as we have been told. It is impossible to study it separated from the general, national literature. Royal literature and its representatives cannot be studied in one or two books or articles....let's learn literature of the palace with pure and righteous intention."[7] These words expressed by N,Jumakhuja dedicated to Feruz's works and it can apply to Raji Khorezmi also. Because he was one of the representatives of that literary environment.

Writing mukhammas to each other plays an important role in determining the poets' position in literary environment of the period. Because one recognizes the skill of another poet by writing takhmis to each other, by studying the traditions of his predecessors. Four of the 35 mukhammas of Raii Khorezmi are "ta'bi hud" (natural), and one of the rest is dedicated to his own ghazal. The others are connected to the ghazals of Navai, Fuzuli, Husseini, and some of his contemporary poets such as Kamil, Ogahi, Ziyrak, Amir, Haziq, Sharif. In turn his contemporary poets also wrote mukhammas to his ghazals. For instance, Ogahi's wrote takhmises to his ghazals, such as: "Kel, ey sarvi ravon, aylab xirom ohista-ohista", "La'li hayot afzosudur ruxsori jonon ustina", "Buki, sanchibdur boshig'a zeb uchun dildor gul", "Gulshand zohir etsang, ey gulzor qomat", "Jonfizola la'lig'a eltar ul pari ruxsora qand", "Aylamushmu ul sumanbar qaddig'a gulgun libos", "Soqiy, yetushdi iyd o'lubon ro'zadin farog". One of them ends as follows:

Kelubdur, to adamdin Ogahiy bu olami dung'a,

Bo'lubdur mubtalo dardu g'ami behaddi afzung'a,

Tarahhum aylabon ilging sunub sahboyi gulgunga,

Ketur, soqiy payopay jomi may Rojiyi mahzung'a,

G'ami daf'in qilur shurbi mudom ohista-ohista.

Komil Khorezmi wrote the mukhammases to Raji's ghazals such as: "Ul sanamkim, ko'zlarig'a shevadur jallodlig'", "Quyosh, quyosh quyoshoso jamolin ul dilbar", "Ey, gulzori jahon ichra qilib ayshi mudom". Ahmadjon Tabibiy's mukhammases dedicated to his ghazals that begin with these words: "Xusravo, dahr saboting bila ma'mur o'lsin", "Bukun ul dilrabo dildorlig' rasmin ayon aylab". And Xolis



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Impact Factor:	ISI (Dubai, UAE)	) = 1.582	<b>РИНЦ</b> (Russia) = <b>3</b> .	.939 P	PIF (India) =	= 1.940
	<b>GIF</b> (Australia)	= 0.564	<b>ESJI</b> (KZ) $= 8$	<b>.771 I</b>	BI (India) =	= 4.260
	JIF	= 1.500	<b>SJIF</b> (Morocco) = $7$ .	.184 (	<b>DAJI</b> (USA) =	= 0.350

wrote mukhammases to 4 of his ghazals, Munshiy wrote mukhammases to 3 of his ghazals, Ojiz and Devoni wrote mukhammases to 2 of his ghazals, Avaz and Ragib wrote mukhammases to 1 of his ghazals. His contemporary poet Munshi wrote a beautiful takhmis to his ghazal that begins with such words: "Gulshanda zohir etsang, guluzor gomat".

Munshiy kibi irodat qil, Rojiyo, istar ersang, Sidqing bila itoat qil, Rojiyo, istar ersang, Ko'ngling bila inobat qil, Rojiyo, istar ersang, Shahning duosin odat qil, Rojiyo, istar ersang, Topmoq iki jahonda davlat bila saodat [8].

The image of literary environment of that period was partially reflected in Raji Khorezmi's gasidahs:

Gulistonlar ichra fazli ilm yetib majma' tuzub, Har biri bir ilm fannida takallumron erur. She'r eli gulzor tab'i dog'i guldek ochilib,

Shah madhida hama g'arra qasoidxon erur [9].

The literary activities of poets connected with the environment of the palace. The flourishing of the royal literature gives an image of literary environment in the palace. Although the praise was the requirement of the genre in qasidas in that period, in some sense it had also the truth. The ghazal called "ustina" is found both Ogahi and Raji's works. Ogahi wrote the mukhammas to the Raji's ghazal:

Ehson sani qilg'usidur maqbuli tab'i xosu om,

Sandin oni ko'rgach bo'lur bandang jahon ahli tamom,

Emdiki fahm etting muni, ey xisravi oliy maqom,

Ehson et, ammo qilmag'il minnatdin elni talxkom,

Bo'lg'oymu bazl og'u solib bersa kishi non ustina [9].

Giving charity helps you to be accepted by both aristocrats and the public. O noble king! understand that the whole world will be amazed when they see your generosity.

Qasd etsa jallodi ajal gar har kishining jonig'a,

Boqmas oning yuz hiylau ming rev ila dostonig'a,

Gar ismi a'zamni o'qub kirsa Ali qalqonig'a,

Hoyil bo'la olmoq emas mumkin ajal paykonig'a,

Dovud qilg'on javshanin kiysa Sulaymon ustina No one can escape from the death. No matter

how many tricks one uses, he faces the death anyway. Even if he wears Ali's shield and recites prayers, neither David's armored armor, which Solomon wears, nothing can be obstacle. Death is inevitable.

Yo'qtur sabot ushbu jahon idboru iqbolig'akim, Oldanmag'il oqil esang asbobu amvolig'akim, Berma raoyo xaylini, zulm ahli changolig'akim, Ey shah, inoyat birla boq, aftodalar holig'akim, Po'lmish, olorning san kibi ko'h kimsa sulton

Bo'lmish, olarning san kibi ko'b kimsa sulton ustina

#### **Research Methodology**

Both happiness and unhappiness of this world are temporary. If you are wise, do not be addicted to this deceptive world. O king, Do not leave your nation in the clutches of the oppressors. Because every functionalist considers himself a sultan who rules over the people. Bless and be merciful to this poor nation!

Nazm ichradur kashf Ogahiy tab'ig'a sirri g'aybkim,

Yo'qtur bu so'z tahqiqida, albatta, shakku raybkim,

Bilgach oni rashk ilgidin yuz chok aylab jaybkim,

Bo'lsa parishon xotiri Rojiyning ermas aybkim,

Jam' o'lg'usi har dam oning anduhi davron ustina.

"g'aybkim," "raybkim," Words such as "iavbkim." "avbkim" in Mukhammas are SO intertwined that means this mukhammas was written by single author. There is no doubt in my mind that the reason for Ogahi's talent in poetry is that he discovered divine secrets. Raji would have been green with with envy when he know it. He would start to be overwhelmed with grief. Since such a great poet as Ogahi wrote mukhammases the poet's 8 ghazal, it is possible to draw a definite conclusion about the position of Roji in his time. Kamil Khorezmi wrote mukhammas to one of the specific ghazals, which begins with "Quyosh, quyosh quyoshoso jamolin ul dilbar". His last paragraph is as follows:

Yonib, yonib, yonibon Komil ushbu so'zlardin, Ko'zung, ko'zung, ko'zungni yum bu mast ko'zlardin,

Tama', tama', tama' uz ul lola rang yuzlardin,

Uyol, uyol, uyol, ey Rojiy ushbu so'zlardin,

Magar, magar, magar etmishsan o'zga yova hunar [10].

Feruz listed the names of poets of his time from the XII century - the time of Anvar and Khagan in one of his ghazals, and also mentioned the name of Raji:

Ogahiyu Komilu Feruz, Xolis, Chokariy,

Rojiyu Mirzoyu Akmal, Munisu Xokiy, G'ulom [11].

The poet Ilyas Mulla Muhammad Sufi, who lived during this period, also mentioned the name of Raji in one of his ghazals:

Nuktai la'lingdin o'lmishlar tavahhum kunjida

Ogahiyu Komilu Rojiy, Bayoniy mustadom. [12]

As a prominent poet of his time, Roji Khorezmi was mentioned in three tazkirahs. The first one is Laffasi's "Khiva poets", the second is also this author's "Biography of Khiva poets and writers", and the third is Pulatjon Qayyumov's "Qayyumiy's tazkirahs". "The biography of Khiva poets and writers" contains information about 51 poets, Roji is in the fourth in it and Laffasi says about him:

Rojiykim, maxsumzoda erur, Aning tab'i she'ri ozoda erur.



Xirad ichra topib izzat-e'tibor,

Kitobatlig' bilan doim barqaror.

Qilib ancha kitobat tarjima,

**Impact Factor:** 

Musamman qilib fikriga hama

Raji, who is the son of Muhammad Yusuf maxsum Hujamberdi. In his youth he studied at one of the Khiva madrassas and due to his diligence he became well-educated. Because of his sleek and stunning appearance, he made a lot of women blinded by love. He wrote poems under the pseudonym Raji. While his works seemed to be about love from the outside, they were actually based on lots of knowledge. Scientists found hundreds of meanings in each line of his poems. Many of his poems were aimed at praising Allah and blessing the Prophet, as well as criticizing the Khiva khans by making fun of them of that time [13]. Poets and writers, never lived in bliss. In particular, Muhammad Yusuf Raji is no exception. In the tazkirah, this situation is described as follows: "He completed his studies during the reign under Muhammad Amin Khan and translated "tarix ravzat us-safo" from Persian into Turkish in a beautiful language by order of Amin Khan. Even after the reign under Amin Khan, in the reign of Said Muhammad and Muhammad Rahim Khan Feruz, he translated works from Persian and Arabic into Uzbek according to their order, but received no incentive for his work. He spent his entire life as a calligrapher. That is why Raji's life was spent in despair and grief, and he suffered from it. This was also reflected in his works. His manuscript was so beautiful that anyone who saw his handwriting would be amazed. Even people considered it an honor to learn calligraphy from him. Until the end of his life, he suffered from the Khiva khans and went to the land of the hereafter forever. [13]

Laffasi was also poet and he wrote the following verses in honor of Raji:

Rojiykim, ustodi xattotdur,

Ko'ribon falakdin ancha zulm Farhoddur.

Aning ash'oridur shirin maqol,

Ki yo'qtur monandi ajab bemisol.

Ki Rojiyning asaridin bir g'azal,

Aning yozg'um varaq uzra bebadal

And he cited two of his ghazals as examples. In "Qayyumi's tazkirahs", the author of the tazkira writes that Raji was from Khorezm and was the son of a judge, so he was praised as a mahdum. He also mentioned was orphaned early by his father and studied in a madrasa in financial need. The author also gives an important fact about Raji: "when we talk about Raji, It should be noted that once by the order of Feruz, Raji wrote a poem that insulted Kamil, his contemporary poet. He did it to satisfy Feruzkhan. Feruzkhan gathered everyone, called Kamil also and made Raji to read the poem. So he is not worthy of forgiveness". [14] Polatjon Qayyumi pays special attention to the fact that Laffasi did not want to note about Raji's personality. This is also one of the positive qualities of the tazkirah writers. Because the most basic and primary requirements of literary criticism is to give a fair assessment of the poet as he is. Ogahi, Kamil, Raji... they were very close friends, partners, like-minded, they were sympathizers. Raji said that:

So'z kamolidin Rojiy ogoh ersa tong yo'qkim, Bor anisu damsozi Ogahiy bila Komil [15] Kamil. in turn. wrote this verse:

"Komil, netong, gar ogah esa so'z kamolidin, Doim anisi Rojiy ila Ogahiy erur"[16] Or :

"Buki Komil so'zini Rojiy etar istehson,

Onda ne nav'kim asror edi bilmish bildim''[16]

Kamil used to think that only Raji could understand his plight. But How did these two friends become enemies? There were subjective reasons for this.

Their closeness and friendship was reflected in their works also. Feruz handed Kamil a translation of a work of Persian literature. However, Kamil could not finish this work on time. Then Muhammad Yusuf Raji helped Kamil and he completed the translation of the work. But then for some misunderstandings it seemed that as if Raji had translated the translation. M. Yunusov, who studied Kamil's works, explains this situation as follows: "Kamil consulted several times with Roji about the translation process. When the work was ready, it was presented to the khan. However, Roji claims that he translated the work, not Kamil. The khan gave Raji a room as a reward for his service" [17] for some reason Yunusov did not indicate the source of ths information. In any case, it is impossible to agree with this opinion. Kamil concludes the following verses about this event:

Turki oni Rojiy qilmamish erdi,

Lekin andak anga ko'mak berdi.

Chu bir ustod etar bir ishni bunyod

Berur anga ko'mak, necha ustod

This verse shows that he considered Roji not only a friend but also a teacher to himself. At that time, Matmurad Devonbegi's conspired and the relationship between Muhammad Yusuf Raji and Kamil were completely broken. It is known that Kamil became a mirzaboshi in 1865 and his position was growing. Feruz was fascinated by his wise advices. Later, he also became a devonbeg (position that is in charge of finance in khanate) instead of Matmurad devonbeg. About the position of Matmurad Devonbegi, academician V.V. Barthold said: "In Khiva at that time, such a glass house with Europeanstyle furniture, equipped with European-style furniture like Matmurad Devonbegi had, did not yet exist in the capital of the khanate."[18] Orientalist scholar F.I. Lobasevich has said about Matmurad's personality : "Among the people around the khan, the priority was taken by the devonbegi Matmurod. Extremely zealous, cunning, but greedy and ruthless, this man was, in fact, in charge of controlling the



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	JIF	= 1.500	<b>SJIF</b> (Morocco)	= 7.184	OAJI (USA)	= 0.350

khanate. The public, hated him, but at the same time, feared him. Matmurad was a tyrant, and an evil man. He took a lot of taxes from the people for the sake of the khanate and the war [19]. Matmurod devonbegi had an influence on the khan in discrediting Kamil. Khan made Raji to write the poem that insulted Kamil and read it aloud in the presence of Kamil and the crowd. Kamil describes his reaction to this incident as follows:

Shahdin, Rojiy so'zidin ogah o'lg'onlar degay, Zam qiloli yana uch misra bu abyot ustina.

Komil ustiga qilur g'amlar hujum ul nav'kim,

Lashkari Sayyid Muhammadshoh Qo'ng'irot ustina [20].

Those who had read this poem said that it would be better to add extra three lines to the poem. Kamil said that the grief and sorrows of his life were like the invasion of Said Muhammad Khan's march on Kungrad. But Raji did not say anything about their relationship that was broken. According to the Ayyomi, Matmurad Devonbegi forced him not to write about it [21]. Although he did not explicitly state this happenings, the following sarcastic, satirical words in the following ghazal probably refer to his radical ghazal "Muxolif" (the opposition):

Davron sitamu, charx jafo elga qiladur zulm, Men bediliga bo'lgali dildor muxolif. Ul yor manga bo'lsa muvofiq, ne g'amim bor, Yuz kin ila gar bo'lsalar ag'yor muxolif. Bir yori muvofiq, sanga Haq aylasa ro'zi Bo'lma anga har hol ila zinhor muxolif

Why is it impossible to attribute the words spoken in these verses to Kamil or to say about his friend?. In any case, it remained a mystery. But it is not only about whom the ghazal was attributed, but also about the political conspiracy of the palace reactionary circles against the current of democratic mood in order to firmly end the friendship and ideological cooperation between Roji and Kamil. However, Kamil and Raji were sincere friends and partners with each other with their worldviews. So it was not possible for Kamil and Raji to quarrel for any reason as above [21]. As a result of this incident, Raji lost both his reputation and his friend, and after that, in our opinion, left the palace. It is not surprising that this wish, expressed in a ghazal in the spirit of "hasbi hol"(ghazals that were about the authors' state) was dedicated to Kamil:

Ne xush ayyom edi ul kunlarkim, Olar ila tuzubon sozi vifoq. Yurur erduk qilibon ayshi nishot, Orada yo'q edi osori nifoq. Yana ul do'stlarim orazidin, Ko'zlarimni yorug' etgay Xalloq. Tuzdi ahbob «Hijoz» ohangin, Ey mug'anniy, manga yo'q hojati «Iroq» Rojiyi zor hazindur, soqiy, Boshing uchun ayama ondin ayoq And the following ghazal was also created in the spirit of the following "hasbi hol"(ghazals that were about the authors' state) and gives an image of life of the poet. We quote this ghazal fully:

Ey mug'anniy, qildilar, ahbob ohangi «Hijoz», Emdi san ham bir nafas qilg'il «Hijoz» ohangi soz.

Bo'lmadi ro'zi manga ul xayl ila hamrohlig', Bog'labon baxt ila iqbolim yo'lin hirs ayla oz. Vah ne xush kun erdikim, ahbob ila hamdam bo'lub.

Har nafas yuz ayshi rohat bor erdim sarfaroz. Har kudurat yetsa ko'nglumg'a zamon osebidin, Raf' o'lub qilmoq bila bir-birga hardam kashfi

Yona ko'z ochmoq olar diydorig'a bo'lg'ay nasib,

Aylabon lutfi inoyat kirdikori korsoz.

Rojiyi bekasg'a hardam yorlig' ohangi soz, Ey mug'anniy, qildilar, ahbob ohangi «Hijoz»

(p-21)

roz.

Matmurad Devonbegi's conspiracy continued. When he returned from the exile in Siberia, he repeated his previous action. He forced a poet named Ibrahim Sultan to write an insulting poem dedicated to Kamil, making him read it in the palace and regaining his career as a devonbegi (position that is in charge of finance in khanate).

The literary environment of Khorezm of the XIX century has its own scientific, social, literary and historical potential in the history of Uzbek literature. Ayyomi writes about the pressures in palace literature, noting that it hinders original and independent writing because its subject matter is narrow and limited: "Representatives of the progressive poetry led by Ogahi, Kamil, Roji, Bayoniy, Avazlar, although standing within the palace, had a creative writing that was radically different from the work of the poets of the palace"[21]

As a calligrapher, translator, poet Muhammad Yusuf Raji got popularity in his time. As mentioned above, poets such as Ogahi, Kamil, Tabibi, Ojiz, Khalis, Devoni, Munshi, Rogib, Avaz recognized his talented poetry by writing mukhammas to many of his ghazals. He had his own place and position in the literary environment of the time, and Khorezm rulers and contemporary poets could not remain indifferent to his personality and ability.

After the independence of Uzbekistan, the attitude to our cultural heritage of the past has changed dramatically. Attention has been paid to the history, spirituality, religion and literature, values of our people, and it has become possible to convey it to the people in its original form. In this regard, if we look at a number of sources on the literary environment of Khiva in the second half of the XIX century, which is an integral part of Uzbek literature, it becomes clear that Muhammad Yusuf Roji Khorezmi has a worthy place among the works whose work is partially



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mentioned or completely ignored. It is noteworthy that this poet, whose literary activity was not studied for ideological reasons during the Soviet era and whose legacy was unknown to many, is the owner of the *Devon* (the array of ghazals that are listed according to the Arabic alphabet in Orient literature)

The study our historical heritage as it is has become the most important task of today. This places great responsibilities on researchers as well. There is no doubt that our literary heritage has a great scientific and practical significance in the creation of today's national ideology, its inculcation in the minds of our people and on this basis in the formation of the younger generation as a perfect person. Our first president I.A. Karimov rightly noted this at the time: "The national, universal ideas led by our great ancestors are the unifying force of the people, the nation, force for development." [22]. This literary heritage of our ancestors are the dreams of our people with a long history, a history of confidence and struggle for the future.

The literary environment of Khiva in the second half of the XIX century is also an integral part of the cultural heritage of our people. One of the talented representatives of this literary environment is Muhammad Yusuf Raji Khorezmi. The talent of Muhammad Yusuf Raji Khorezmi, known as a poet, calligrapher and translator, was recognized in his time. He was inspired by the immortal literary traditions of Eastern literature. His lyricism, imbued with lofty human ideas, is worth exploring, with examples of creativity enriched with a philosophical spirit that calls people to enlightenment, morality, and virtues. He translated part IV and V of Mirkhand's work "Ravzat us-safo" and the work of Sayyid Subhanquli Muhammad Bahodirkhan who was one of the Ashtarkhani rulers (1091-1680-1114-1702) "Lubbi lavoyig ul-gamar fi-l-ikhtiyorat (Instructions for choosing a convenient time of the month for the movement of people) into Uzbek.

He also did calligraphy. This means that the extensive literary heritage of Muhammad Yusuf Raji has every right to be studied and analyzed. According to the above evidence, a large-scale special study and research of Roji's work in today's period of independence serves to fill the gaps in the pages of our literature, to form a holistic and holistic imagination. It is a requirement of the time to study his work on the basis of the national idea and new thinking in connection with the work of his contemporaries and perfectly convey it to our people. In Uzbek literature, a lot of work has been done on the study of Khorezm literature of the XIX century. In particular, although researches have been done on the study of the heritage of Ogahi, Feruz, Kamil, Tabibi, Avaz, Niyazi, Rogib, Raqim, the study of the works of a number of poets is just beginning. In this regard, the work of Muhammad Yusuf Raji Khorezmi is one of the artists whose work is being studied. The first information about Raji was

given by his contemporaries Ogahi and Kamil. They praised Raji's work and acknowledged his talented poetry. His contemporaries, such as Ogahi, Kamil, Ziyrak, Rogib, Tabibi, Avaz, Ojiz, Munshi, Devoni, Kholis, expressed their attitude to his ghazals. It is noteworthy that Ogahi himself has 8, Kamil 3, Tabibi 2. Khalis 4. Munshi 3. and Rogib and Avaz mukhammases to his ghazals. Primary information about the poet is contained in the tazkira "Tazkirai Qayyumi" by Pulatjon Qayyumi, in the tazkira "Biographies of Khiva poets and writers" by Hasanmurad Laffasi and in the tazkira "Khiva poets" [23]. In these sources, mainly general information about the poet is given and some examples from his lyrics are given. Later, the literary critic J. Sharipov drew attention to Raji's translation work [24]. Researcher of the Academy of Sciences of the Republic of Uzbekistan A. Muradov draws attention to Roji's calligraphy and gives examples of some of his poems[25]. Literary critic V.Muminova considers Roji as one of the poets such as Muqimiy, Zavqiy, Furqat, Kamil, Avaz Otar, Nodim [26] Abdurauf Fitrat a scholar who made a great contribution to the Uzbek literary criticism of the 20th century, mentions that Raji has the same position with Lutfi, Navoi, Husseini, Amir, Kamil Khorezmi, who contributed to the genre of musammat in Uzbek literature [27] Also. in the 5th volume of the textbook "O'zbek adabiyoti" (Uzbek literature) as an appendix to the four volumes, in the monographs of Ayyomi "O't chaqnagan satrlar" (Fiery lines), "Xorazm shoirlar" (Khorezm poets), N. Kobulov, I. Haqqul, V. Muminova "Avaz va uning adabiy muhiti" (Avaz and his literary environment), G. In the candidate's dissertations on "Feruz davrining adabiy muhiti" (Literary environment of Feruz period) and M.Madgaziev "Rojiy Marg'iloniy va uning adabiy mahorati" (Roji Margilani and his poetic skill), Achil's textbook K.Hoshimov, Safo "O'zbek pedagogikasi antologiyasi" (Anthology of Uzbek pedagogy), V.Abdullaev "O'zbek adabiyioti tarixi" (History of Uzbek literature), B.Kasimov and in others' textbooks "Milliy uyg'onish davrida o'zbek adabiyoti" (Uzbek literature of the period of national renaissance), Muhammad Rahimkhan Feruz in the lyrical devon "Elga shohu ishqqa kul" (The king of the nation and a slave to love), in the anthology "Asrlar nidosi" (the sorrow of centuries), Davlatyor Rahim, Shixnazar Matrasul "Feruz.Shoh va shoir qismati" (Feruz.The Fate of the ruler and the Poet) in the historical and artistic films, "S. Dolimov in the article "Alisher Navoiy va XIX asr Xorazm adabiyoti" (Alisher Navoi and Khorezm literature of the XIX century), in the works of M. Yunusov and N. Kabulov the name of Roji is mentioned and his ghazals are given as examples. A brief aspect of his life is given [28].

Analysis and results



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The poet Sufi, who lived and worked in Khiva from 1860 to 1916, listed the names of many poets in a poem and says he was inspired by them. In his poems, the poet mentions who wrote to create the image of a real beloved, as well as the names of the period in which he lived and, in general, the Khorezm poets of the XIX century. Since it was very difficult to create a real portrait of beloved, people like Khisrav, Jami, Navoi, Haqqani described her body, while Anvari, Saadi, Kiromi focused on her face. her eyes were paid attention by Volim, Ravnaq, Munis, and Ogahi, Raji, Bayani created another piece of her portrait. The point is that he was influenced by these poets in creating her portrait [29].

It should be noted that the works of Ayyomi and V.Muminova are noteworthy, while others are valuable as the first steps in the study and popularization of the life and literary heritage of Raji Khorezmi, but all of them contain little information or some notes. None of this work aims to explore in detail all aspects of the poet's writing heritage. In particular, there is no research on his work "Iltijonomai Rojiy" in the series of prayers, his poems dedicated to the Khorezm rulers and his sacred, mustazad (a 14-line-poem in Arabic literature). That is why we considered it our main goal to study the writing heritage of Muhammad Yusuf Raji Khorezmi in a truly monographic way. In the monograph, the life, work, ideological direction, style and art of Roji's heritage are extensively researched. For the first time, Raji's literary heritage of 3,500 verses was transformed into the current alphabet through the study of manuscripts and various writings and his selected works were published in 500 copies at the Alisher Navoi National Library publishing House under the title "Jamoling gulshani bulbuliman". Roji's continuation of the traditions of bilingual-poetry in Uzbek literature was highlighted by the poet's Persian-Tajik mukhammases. As a result of the study of the artistic aspects of his lyrics, it was revealed that Raji was a masterly and mature artist, and special emphasis was placed on him as a poet who has a place in our classical literature. As a result of his contribution to various genres of classical literature, our conclusions help to better understand the work of a specific representative of our classical literature and to fully imagine the literature of that period. In addition, we would like to emphasize that we have collected information from various commentaries, archival materials and scientific research about 16 poets who wrote under the pseudonym Raji.

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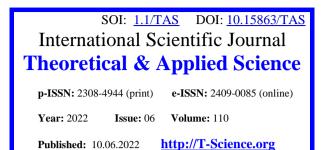
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Article





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# A LOOK AT THE HISTORY OF THE DEVELOPMENT AND STUDY OF IRONY

*Abstract*: The aim of the article is to examine irony from a philological point of view and to study it in terms of art, language, culture, philosophy, cognition and phenomena.

*Key words*: linguistic and poetic approach, phenomenon, form, meaning, task, Socrates irony, romantic irony, postmodernist irony, pragmatics.

#### Language: English

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#### Introduction

Irony is actually an event or method based on a contradictory relationship of form and content. As the speaker observes the being, the obvious attitude of himself and others towards him requires that the expression of the observed object be constructed in a special, indirect, contradictory way. Although what is being observed seems to be different, and what is being said is consistent with what is being said without any circular ways, the speaker is pointing out on a non-linguistic or pragmatic basis that thought and expression are incompatible. This, on the other hand, is associated with a desire to "strive" to take something funny seriously, creating a dubious arrogance and skepticism. It is necessary to distinguish the stages of development and study of irony. Their close relationship with each other requires looking at each one individually and interconnected.

The following important stages in its development can be seen by ironologists:

- 1. The irony of Socrates.
- 2. Romantic irony.
- 3. Postmodernist irony.

Although he himself did not use the term, nor did he clearly express his vital and philosophical attitude towards it, the term Socrates irony is popular among the scientific community. The essence of this term is understood on the basis of the contradiction between what is seen, what is seen, and what is original. This has been noted in many sources as follows. The irony is manifested, first, in Socrates 'false praise and applause of his interlocutors [1.59].

#### Analysis of Subject Matters

Second, the irony is also manifested in the fact that Socrates insulted himself and beat his own lust in front of others. However, none of his interlocutors had the prestige and honor of Socrates. In fact, even selfdeprecation is inconsistent with its original purpose, and there is a contradiction between reality and expression. Third, the irony of Socrates is that pretending to be ignorant is in fact the result of striving for true knowledge and wisdom. After all, as Socrates himself points out, he knows he knows nothing, and others don't even know it. He taught his interlocutors to understand the truth on the basis of irony, trying to get them to be able to critically evaluate their own behavior in such a way that one could understand one's own mistakes. Irony did not become a goal for him, but appeared as a means of educating people in the spirit of moral values. After all, a critical attitude to one's actions, to express it in an ironic way, serves to make one account for oneself



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on the basis of one's daily life, experience and knowledge, to "measure" one's morality on the basis of high moral standards, to turn one's heart into a fortress of truth. The irony of Socrates is that it served that purpose. The irony of Socrates became a means of changing objective reality, and the scholar gave impetus to the development of this tradition. This tradition developed and by a certain period took the form of romantic irony.

Romantic irony is associated with the process of formation and intensification of romantic tendencies in creativity and thinking. The current of romanticism that emerged in Germany in the 1790s manifested itself as utilitarianism [the doctrine that the basis of morality is profit, the idealistic philosophical current] and the desire to eliminate and reconcile interpersonal differences, the desire for boundless freedom, perfection and renewal, the pathos of personal and civic independence.

First of all, romantic irony was considered in detail and in detail by the German philosopher Friedrich Schlegel (1772-1829) on the basis of Plato's dialogues, Fixte's ideas. He sees irony as a phenomenon of "fragmentary philosophical thought" and "critical attitude to being" as "non-systematic philosophical observation", an ironic attitude to being, a hidden possibility that suppresses the conflict of interests, a phenomenon that prevails and denies conflict. F. Schlegel argues that the value of irony as a philosophical phenomenon is that it reflects in itself the nature of logical contradiction. Interestingly, ironic thought is contrasted with cognitive thought. It takes into account that there is no contradiction in rational thought. Therefore, it is necessary to correctly understand the thesis that there is no irony where perception prevails.

Here are some of F. Schlegel's thoughts. According to him, the spirit of irony, intelligence is a "chemical spirit", that is, this spirit develops on the basis of internal contradictions. The contradiction between attitude, intention, and expression is the doyen of an ironic spirit. In his view, the ironic attitude is not only a phenomenon viewed in terms of internal contradictions, but also a generalization, universalization, unification and unification of onesidedness. Also, the dialectic of sharpness and irony is that certainty (contradiction) and contradiction simply cannot be put side by side. The opposing parties are connected on the basis of a sharp contradiction, which in this connection refers to a deeply hidden truth, and this truth arises from this struggle of contradictions. The irony is that it manifests itself as a powerful synthesis tool, combining contradictions. It is difficult to find a means or figure in language that ironically rounds out conflicting sides, while at the same time reflecting their struggle. Contradiction is the formation of a cognitive structure that is the product of subjective cognition on the basis of contradiction. It is not mentioned in the teachings of F. Schlegel that

this condition was observed both as an epistemological act and as a cognitive phenomenon. The ironic spirit is always characterized by restlessness. Constant dynamism is perceived in harmony with turmoil, and in fact it is. Of course, this unrest should not be understood as chaos, as F. Schlegel perceived. Because chaos is the opposite of generalization, synthesis, universalization. "The development of the theory of irony by the Romantics as a fundamental, characterizing principle of the subject's position in the world served for the liberation movement of the ideas of the French Revolution, the endless celebration of the victory of the free human spirit. As the carrier of the universal new culture, the multifaceted, cohesive whole, the obvious existence for the whole being, is the free individual. Thus, the ironic subject was understood by Shlegel as a free creator of the self and being, a highly liberated person. But the celebration of the liberation of the human soul reflects only one aspect of the ironic attitude to existence. On the other hand, irony as a phenomenon of human spiritual life reflects the uniqueness of his position in the social environment of the eighteenth century. " [3. 71.]

#### **Research Methodology**

Thus, it can be said that the combination of contradictions, the exaggeration of the synthesizing property of romantically understood, interpreted and developed irony remained as simple attempts of romantic ideology, did not give the intended result. In general, the sense of understanding it as a "nonserious" dialectic, a free, imaginary game of the subject, remained.

The postmodernist form of irony is due to the fact that in the last decade of the last century and the first decade of the new century, the cultural environment acquired a peculiar character, its intensive and contradictory development. "Irony is becoming an attribute and a general trend of modern thinking." It should be noted that irony as an old phenomenon is gaining a completely new essence, youth. It completely renews its functional value and sphere from its past form. After all, the new age (in scientific terms, the period of postmodernism) is based on different principles. It is sad to say that individualism and selfishness are "enriched" with new features, that the part takes precedence over the whole, that the principle of "die for yourself" becomes the motto of the postmodernist way of life, that life is playful and that trying to take it seriously is futile. are descriptive properties. "A post-industrial society with a culture of humor is based on the practice of ironic thinking. In order to enter into and participate in modern social relations, an individual is required to take a cinematic position. Ultimately, the power of irony is directed to one degree or another to criticize existing social determinations in one form or another,



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so that the essence of irony is revealed on the basis of social criteria. "[12.105.]

The moral foundations of society act as a hotbed of irony. Of course, the transition from quantitative to qualitative changes goes beyond the norm. Social morality, the moral and ethical criteria and attitudes of society ensure that irony serves for development. Makes a civil claim to irony. Moral values cannot be indifferent to the fact that irony "plays" with the dignity of the individual. As moral values are formed on territorial, ethnic, national spiritual, mental, religious, geographical and natural bases, it is necessary to differentiate between universal and national-mental aspects of irony. The complexity of the national way of thinking also determines the attitude to irony. This, of course, is closely related not to the different levels of national intelligence, but to the different validity. Therefore, it is impossible to agree that the irony of people's cultural traditions, ideals and beliefs, national pride is useless. But the postmodernist approach to irony does not accept such views. No matter how negative the attitude towards him, he is deeply immersed in social life, trying to express himself as a phenomenon of full-fledged cultural communication. After all, the media is convinced that it does not always lead to negative consequences that are perceived only by critics. Of course, it is not always undeniable that the foundations of a system based on monopoly ideology are at the heart of critics of irony. "Irony requires a break from schematism and dogmatism by taking a different approach. It is a metaposition that is different from a dialogue in an equal position that interacts with each other and again, it is observable and does not affect the observer. Dialogicity is a feature of notarial consciousness, in which different points of view collide, and their communication takes place. Dialogue is forbidden in totalitarianism. Man has to choose one of two ways: either he has to conform to his ideas, to put his infinite essence into established patterns, or he has to break this vacuum, and as a result he manifests himself in irony. The problem is solved when a person deviates from the dominant point of view and begins to treat him unkindly. There is a certain amount of deviation from reality, on the basis of which totalitarianism is in crisis. This can be seen, for example, in the fact that during the Soviet era, under the Stalinist regime, ideology was taken seriously with all its being. By the time of Khrushchev, the consciousness of the people began to shrink from the existing existence, and it became possible. The incompatibility of real life and ideals has shaped an ironic attitude towards the existing system in the public mind. At this time, various anecdotes began to be created, "informal" poets and singers began to appear. It was this cinematic growth that overthrew the Soviet regime. Irony and humor are also actively used in modern political conflicts.

It should be noted that although irony has a somewhat positive role in freeing oneself from ideology, it still has a negative basis. Dialogue should be viewed positively in this sense. In this, man waits for an answer, ready to recreate himself. Dialogue is dominated by the willpower, which is determined by the person himself. "

Speaking of postmodernist irony, A.S. Panarin's Iskushenie globalizmom reads: "One of the most notable paradoxes of postmodernism is that its mondialistic elite, the' citizen of the world ', has a closed sectarian psychology cut off from normal society with normal outlook, behavior and common sense. . Postmodern sectarians consider themselves free experimenters who have not been squeezed out by the "reconstructionists" of the world in a cultural and moral environment. They are "subconscious" in a moral environment who enjoy being free from ordinary human morality. " [4.28.]

Postmodernists see their role in preventive work in the health of society. Postmodernists demonstrate their vigilance on the basis of ironic means in eradicating outdated and long-lived ideological flaws.

The anthropological revolution of modernity has led people to see with great precision. The relentless pursuit of miles, the squeezing of time to the maximum, the striving with all one's might to see abundant results in a short time, and the attainment of this had become the quality of the modern citizen. In the postmodernist, however, this was reflected. Enjoying the power of the moment, getting rid of the box of "finalism" that directs our efforts at every step towards ambitious goals, preferring "playful existence" instead of various projects are the essence of the postmodernist lifestyle. The ironic attitude to the present state, which seemed to be obsolete in existence, became the very essence of this way of life, and it took on the status of an ironic way of life. The lack of design, the spirit of lack of prospects, the focus on recreational activities without spending energy on pointless projects have taken on the character of civilized irony. Based on the above, it should be noted that the ironic attitude today is not only a means of combating social evils, but also a carrier and developer of social evils. The fact that the global evils that are leading to the decline of mankind are being developed by certain groups and its scope is expanding on the basis of the law of diffusion, that these evils are considered a positive civilizational phenomenon, is itself an ironic civilization that accompanies secular civilization.

Observing irony in a cultural environment, one can be sure that it is developing in accordance with the needs of society, that the socio-political and cultural environment of the time imposes certain tasks on it, and that thinning human and international relations are paving the way for a new irony. However, the formation and development of sources of information in a comedic and humorous spirit show that irony is



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becoming a widespread medium. In particular, the process of deocialization, deideologization, authorization, which dominates the political discourse in the media, is shaping new socio-cultural trends inherent in modern cultural consciousness in the current postmodernism. This makes it necessary to study the individual aspects of the formation. operation and mechanisms of action of this extraordinary weapon in the humanities. In particular, the need to ensure the practical effectiveness of language, to turn it into a creative force, puts on the agenda the need to study this "atom" in a neurolinguistic aspect. Indeed, the need to direct the magical power of language to the effect of a culture of communication demonstrates the urgency of an indepth study of the phenomenal potential of irony. In world linguistics, "at the end of the last century, the rapid development of the market economy, the popularity of modern information technologies, increasing the economic efficiency of scientific research have become more urgent, and linguistics has focused on practical tasks - the study of speech efficiency. As a result, new branches of science have been formed under the names of sociolinguistics, ethnosociolinguistics, lingvopragmatics, pragmalinguistics, pragmatics, psycholinguistics. Linguistics of the new epoch, which combines these directions, approaches speech as one of the main types of human activity - exchange of ideas and influence on others, creation, and prioritizes the study of its conciseness, efficiency and effectiveness, logic. In particular, today in world linguistics, methods have been developed to determine the value of speech as an activity and its implicatures, portable and tag meanings, information that is not explicitly expressed, but whose purpose is the expression of the speaker, and it quickly became popular.

The formation of Uzbek applied linguistics and its development in accordance with the requirements of the time requires special attention to the linguistic mechanisms that are effective in accordance with practical goals. The study of the concept of irony as a whole phenomenon, which is of great importance among them, is one of the urgent tasks to establish ironology.

In accordance with the practical development of irony, the scope of its study can be observed and evaluated in two directions:

a) the study of irony in world science;

b) study of irony in Uzbek science.

As mentioned, various aspects of irony have been the object of study in many linguistics and other disciplines. It should be noted that the study of irony is especially serious in such disciplines as linguistics, literature, sociology, cultural studies, philosophy.

From the philological point of view, the research of irony as an artistic and aesthetic category should be noted Yu.B.Borev, V.M.Pivoev, I.Pasi, A.F.Losev, V.O.Pigulevskaya, B.G.Lukyanova. The aesthetic aspect of irony in Western science has been specially studied in the research of B.Almann, M.D.Blakvella, D.O.Navan.

An examination of the aesthetic value of irony can also be observed in cases where it is often combined with its artistic aspect. This is especially evident in the research conducted by N.Ya. Berkovsky, L.I. Boldina, A.A. Shcherbina, J.E. Fomicheva, E.S. Afanasyev, G.N. Pospelov, V.Ya. Propp. discarded. T. Kane, D. Sale, D. Tedeschi, G. Clark, R. Gerrig, P. Rockwell, performed in the sociolinguistic aspect, M.A. Bagdasaryan, V.V. Ovsyannikov, N., performed in the sociolinguistic aspect. Salikhova's research should also be noted.

With the formation of new paradigms of linguistics, interest in the practical aspects of irony is growing. In particular, the study of irony in relation to the situation and context of speech is becoming more widespread. In this sense, G.L. Prokofiev, V.E. Jarov, T.A. Shishkin, D. Amant, A. Beredonner, R. L. Brown, D. S. Kaeifer, J. Austin, R., who expanded the scope of pragmalinguistic research.

Tanaka's work deserves special attention. The works of S.I. Pokhodni and G.G. Tremasova, performed in a purely linguistic aspect, are devoted to the linguistic and speech features of irony, their means of expression. A separate comment will be needed on the most characteristic of them, avoiding the total number of studies on irony. In general, research on the expressive means of irony, the properties of text formation, pragmatic and cognitive capabilities is significant.

In the dissertation of B.A. Gomleshko for the degree of Candidate of Science, the means of expression of irony used in the literary texts of John Golsworthy are analyzed and summarized on the basis of the text of the novel "Saga o Forsytach". The researcher analyzes the status and place of irony in traditional and modern scientific research, its properties as an integral part of the categories of comic and emotional-Baha'i criticism. It deals with the issues of its categorical independence, its components, the contextual situation that realizes the ironic meaning, the classification and description of the linguistic expressions of irony. In general, it provides valuable information about the general and specific aspects of individuality of irony. [6. 83 ]

Although the research seems to be devoted to the study of the means of expressing irony, it focuses on the use of speech. For example, the first chapter of the work is devoted to the pragmatic features of irony in the literary text of John Golsworthy's novel Saga O Forsyth. The remaining two chapters deal with the lexical-level manifestations of irony, the contextual conditioning of ironic meaning, the concept of ironic context, as well as the classification of means of expressing irony and the description on that basis. Another important study on the issue of means of expression of irony is the candidate's dissertation on



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"Writing means of expression of irony in the material of Norwegian publicist texts." The work consists of three chapters, which deal with the study of the phenomenon of irony in various disciplines (linguistics, philology, literature, aesthetics, philosophy, semiotics, psychology, etc.), the features of the phenomenon in journalistic texts and linguistic means of expression of irony.

#### Analysis and results

The occurrence of irony in journalistic texts shows that it has a more propagandistic nature and is dedicated to performing such a function. For example, in a study called ... "Irony and political discourse", its journalistic nature has become the subject of research. Materials published or transmitted in modern media were selected as research material. An important aspect of the study is that irony is seen as one of the "key words" of modern culture. It is therefore considered not only as a philological problem but also as a culturological concept. Lexical-phraseological means of expressing irony are analyzed in a special paragraph. Indeed, lexical-phraseological level units occupy a central place among the means of expressing irony. In the work, the organization of the text, more precisely, the question of the nature of irony in the context of the intertext problem, is analyzed in a specially devoted chapter. Among the means of expressing irony in political discourse, nonlinear means are the focus of the researcher. In particular, humorous photographs and drawings, cartoons representing irony are also analyzed.

Another study of irony in journalistic discourse belongs to .... The source of the research is irony, and modality, one of the main qualities of irony, is chosen as the subject of research. Modality is seen as the "lifestyle" of irony, and it is argued that there can be no irony without modality. The main focus is also on the place and role of linguistic means in the formation of ironic content in the text, and a special chapter analyzes the textual means that play a key role in the emergence of ironic modality. The researcher .... dealt with the cognitive-historical conditioning of irony and its expression in English fiction. The problem of the cognitive structure of irony, its national mental orientation and the problems of the national linguistic landscape of the world are considered in detail and used in English literary texts.

One of the important achievements of the research is the conceptual approach to irony. At the same time, the cognitive qualities of the concept of "irony" and its core, center, edge types differ. Irony is taken as a multifaceted concept, its segments, philosophical – aesthetic, methodological (contextual, intonational), literary features are analyzed. As a cognitive category, the cognitive model of irony (frame in irony, script) is restored.

Of course, the cognitive structure is linked to national thinking, and national thinking cannot exist or be analyzed in isolation from issues such as national consciousness, national culture, national way of life. The cognitive model of irony is therefore explored as part of the linguistic picture of being in relation to the English national mentality. The issue of the occurrence of irony in artistic discourse is analyzed on the example of the works of Oscar Wilde, William Somerset Maugham, Julian Barnes.

The ability to unexpectedly change the formal communication direction of formal, semantic, and communicative contradictory essences in irony demonstrates the effectiveness of examining them on the basis of a synergetic methodology.

Based on the analysis, it can be said that the recognition and study of irony as a special scientific phenomenon in world science is closely related to the process of globalization that is taking place at the end of the last century and the beginning of the new century. Observations show that only in the last stages of the classical [Socrates], Romanticism, Modernism and Postmodernism did the scientific study of irony begin, and, figuratively speaking, the assault on the "fortress" of irony began. Various disciplines have made it their object of study. In particular, in linguistics, it has sometimes become a source of study of intermediate fields in the connection of pure linguistics, mainly linguistics, with other disciplines. The study of its communicative-pragmatic, cognitive, textual possibilities has been widely studied.

The current state of Uzbek linguistics, that is, its transition to the study of the substantive possibilities of language, makes the study of irony a special task.

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