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## **PROBLEMS AND SOLUTIONS OF SCIENTIFIC AND INNOVATIVE RESEARCH**

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## **A Philosophical Analysis of Sufi Views in Yunus Emre's Worldview**

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**Annotatsiya:** *Mazkur maqolada Yunus Emrening tasavvufiy-falsafiy qarashlari, uning hayot yo'li va ijodida aks etgan ilohiy ishq, insonparvarlik hamda komil inson g'oyalari tahlil qilinadi. Shuningdek, uning she'rlari orqali yashirin ma'no qatlamlari va ruhiy kamolotga eltuvchi fikrlar yoritib beriladi.*

**Kalit so'zlar:** *tasavvuf, tasavvuf falsafasi, ilohiy ishq, komil inson, insonparvarlik, koinot va inson munosabati, ruhiy kamolot, turk tasavvuf adabiyoti, she'riyat, birlik va yagonalik*

**Аннотация:** *В данной статье анализируются суфийско-философские взгляды Юнуса Эмре, его жизненный путь, а также божественная любовь, гуманизм и идеи совершенного человека, отражённые в его творчестве. Кроме того, через его поэзию раскрываются скрытые смысловые слои и мысли, ведущие к духовному совершенству.*

**Ключевые слова:** *суфизм, философия суфизма, божественная любовь, совершенный человек, гуманизм, взаимоотношение человека и Вселенной, духовное совершенство, турецкая суфийская литература, поэзия, единство и целостность*

**Abstract:** *This article analyzes the Sufi-philosophical views of Yunus Emre, his life path, as well as the divine love, humanism, and the concept of the perfect human reflected in his works. Additionally, his poetry reveals hidden layers of meaning and ideas that guide toward spiritual perfection.*

**Keywords:** *Sufism, Sufi philosophy, divine love, perfect human, humanism, relationship between human and universe, spiritual perfection, Turkish Sufi literature, poetry, unity and oneness*

Tasavvuf islom ma'naviyatining eng muhim yo'nalishlaridan biri bo'lib, u insonning ichki poklanishi va Allohga yaqinlashishini asosiy maqsad qilib qo'yadi. Bu ta'limot dastlab arab va fors muhitida shakllangan bo'lsa-da, keyinchalik turkiy xalqlar orasida ham keng tarqaldi. Ayniqsa, Markaziy Osiyo va Turkiya hududlarida tasavvuf tez sur'atlarda rivojlandi. Turklar orasida islom dini qabul qilingach, tasavvufiy qarashlar xalqning ruhiy hayotiga chuqur kirib bordi. Bu jarayonda darveshlar, shayxlar va sufiylar muhim rol o'ynadilar. Ular xalq orasida yurib, diniy-axloqiy g'oyalarni sodda va tushunarli tarzda targ'ib qildilar. Tasavvuf turk xalqlarining adabiyoti, madaniyati va dunyoqarashiga kuchli ta'sir ko'rsatdi. Ayniqsa, tasavvufiy she'riyat orqali bu g'oyalar keng ommaga yetkazildi. Shu sababli turk adabiyotida tasavvufiy ruhdagi ko'plab shoirlar yetishib chiqdi. Ana shunday buyuk mutasavvif shoirlardan biri sifatida Yunus Emredir.

Yunus Emrening tarixiy shaxsiyati haqida aniq va qat'iy ma'lumotlar yetarli emasligi uning hayoti sirli va bahsli ekanini ko'rsatadi. Uning qachon va qayerda tavallud topgani, umrining qaysi hududlarda kechgani, hatto qabrining aniq joylashuvi masalalari hamon turli ilmiy qarashlar va taxminlarga sabab bo'lib kelmoqda. Shuningdek, uning madrasa ta'limi olgan yoki olmaganligi haqida ham manbalar o'rtasida yakdil fikr mavjud emas. Yunus Emre haqidagi ma'lumotlarning asosiy qismi manoqibnoma<sup>1</sup> janriga oid asarlarda uchraydigan rivoyatlarga, shuningdek, uning o'z she'riy merosida yashiringan ishoralar va ramziy ifodalarga tayanadi. Bu esa uning shaxsiyati tarixiy haqiqat bilan afsonaviy tasavvurlar qorishib ketgan murakkab siymo ekanini anglatadi. Shoirning hayoti haqida ma'lumot beruvchi muhim manbalardan biri sifatida "Velâyetnâme-i Hacı Bektaş Veli"<sup>2</sup> asari alohida ahamiyat kasb etadi. Bektoshiylik an'alariga ko'ra, Yunus Emre Sivrihisar hududiga qarashli Sarıköy qishlog'ida dunyoga kelgan. Ayrim tarixiy manbalarda esa uning XIII asrning ikkinchi yarmida yashab ijod qilgani ta'kidlanadi.

Yunus Emreni turk adabiyoti tarixida ilk bor ilmiy asosda o'rganib, uning ijodini adabiyot olamiga tanitgan olim Mehmet Fuad Köprülü hisoblanadi. Köprüluning "Türk Edebiyatında İlk Mutasavvıflar"<sup>3</sup> asarida Yunus Emrening tasavvufiy shaxsiyati va adabiy merosi keng yoritilgan.

Yunus Emre o'z davrining yetuk bilim egalari qatoridan joy olgan bo'lib, u madrasa ta'limi orqali islom ilmlari, tarix, adabiyot va tasavvuf asoslarini puxta egallagan. Arab va fors tillarini bilishi uning ilmiy saviyasining kengligini ko'rsatadi. Ammo uning

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<sup>1</sup> MANOQIB (arab. — fazilat) — buyuk kishilar, atoqli san'atkorlar, shuningdek, din namoyandalari haqida yozilgan xotira asari.

<sup>2</sup> Hoji Bektosh Veli (XIII asr) — Anadoluda yashagan ulug' mutasavvuf, faylasuf va Bektoshiya tariqati asoschisi.

<sup>3</sup> Mehmet Fuad Köprülü, *Türk Edebiyatında İlk Mutasavvıflar*, Ankara: Diyanet İşleri Başkanlığı Yayınları, 1991.

ijodiga nazar tashlar ekanmiz, undagi asosiy ruh faqat ilmiy bilimlar bilan cheklanib qolmaganini ko‘ramiz. Aksincha, uning she‘rlari qalb tubidan otilib chiqqan ilohiy ilhom, irfoniy idrok mahsuli sifatida namoyon bo‘ladi.

Yunus Emre uchun haqiqiy bilim kitoblardan o‘rganilgan ilm emas, balki qalb orqali his etilgan haqiqatdir. U tashqi bilimdan ko‘ra ichki ma‘rifatni ustun qo‘yadi, shu bois uning ijodida “g‘ilofdagi ilm”dan ko‘ra “ko‘ngil kitobi” muhimroq o‘rin egallaydi.

Bu fikr uning quyidagi misralarida badiiy ifodasini topadi:

Yunus der: faqirlikni ixtiyor qildim,  
O‘lim nafasi doim ensamda sezilar,  
Men ilmni sahifalardan emas, ko‘nglimdan o‘qidim,  
Shu bois qo‘limga qalam tutmadim.

Ushbu misralar orqali shoir o‘zining tasavvufiy yo‘lini ochiq ifodalaydi: u ilmni tashqi shaklda emas, balki qalb orqali anglash tarafdori. Bu yerda “qalam olmaslik” ramziy ma‘no kasb etib, rasmiy ilm yo‘lidan voz kechish emas, balki haqiqiy ma‘rifatning qalb orqali kashf etilishini anglatadi. Yunus Emre o‘z qarashlarida “ko‘ngil kitobi”dan o‘qishni ta‘kidlar ekan, bu orqali u oddiy ilm emas, balki irfon yo‘lini tanlaganini ifoda etadi. Uning nazarida haqiqiy bilish — bu kitob sahifalaridan emas, balki qalb tubidan anglashdir. Tasavvuf yo‘li shunday bir yo‘lki, unga aql bilan emas, balki sevgi, ishq, ixlos va to‘la sadoqat orqali yetib boriladi.

Yunus Emre fikricha, inson faqat o‘qigan bilimlari bilan chegaralanib qolsa, haqiqatni to‘liq anglay olmaydi va irfon yo‘lida ojiz qoladi, chunki o‘z bilimi bilan cheklanib qolgan inson uni mutlaq haqiqat deb qabul qiladi. Xuddi shuningdek, faqat falsafani haqiqat deb bilgan faylasuf yoki faqat aniq fanlar bilan cheklangan muhandis uchun ilohiy ishq yo‘lida eng katta to‘siq — o‘z bilimiga haddan tashqari bog‘lanib qolishdir. Tasavvuf ta‘limotiga ko‘ra esa, haqiqiy haqiqatga erishish uchun inson o‘z nafsidan voz kechib, to‘la taslimiyatga erishishi, doimiy zikr va ibodat bilan qalbini poklashi, hamda komil inson yo‘l-yo‘rig‘iga ergashishi lozim. Aynan mana shu yo‘l ilohiy haqiqatga eltuvchi eng qisqa va ishonchli yo‘l sifatida talqin etiladi. Agar inson bu yo‘lni inkor etsa yoki faqat tashqi bilim bilan kifoyalansa, u ruhiy kamolot yo‘lida oldinga siljiy olmaydi. Bunday holda, ilm uning uchun nur emas, balki to‘siqqa aylanadi, chunki poklanmagan, kibr-u havodan xoli bo‘lmagan qalbgga kirgan ilm insonni yuksaltirish o‘rniga, aksincha, uni ortga tortadi.

Shu bois Yunus Emre ta‘limotida ilm va irfon o‘rtasidagi muvozanat muhim o‘rin tutadi: ilm yo‘lni ko‘rsatsa, irfon insonni manzilga yetkazadi. Mutasavvif olim ilmni

aql bilan bog'lab o'zining "Nasihatlar risolasi"<sup>4</sup> asarida bir qancha falsafiy-tasavvufiy fikrlar bildiradi. Yunus Emre ta'limotiga ko'ra, aql — ilohiy haqiqatning qadimiy nuridan bir jilvadir. Aql ham uch darajaga bo'linadi: ulardan biri dunyoviy hayot tartibini anglatadigan ma'osh aqli,<sup>5</sup> ikkinchisi oxirat ahvolini idrok etishga xizmat qiladigan ma'od aqli,<sup>6</sup> uchinchisi esa eng oliy daraja bo'lib, Alloh ma'rifatini anglashga yetaklovchi kulliy aqlidir.<sup>7</sup>

Ilohiy hidoyat nuri bo'lgan imon ham uch bosqichda namoyon bo'ladi: biri ilm al-yaqin, ya'ni haqiqatni bilim orqali anglash; ikkinchisi ayn al-yaqin, ya'ni uni go'yo ko'z bilan ko'rgandek his etish; uchinchisi esa haqq al-yaqin, ya'ni haqiqatni bevosita yashab, ichdan idrok etishdir. Ilm al-yaqin darajasidagi imonning maskani aql bo'lsa, ayn al-yaqin ko'ngilda qaror topadi, haqq al-yaqin esa jon bilan bog'liq bo'lib, u inson bilan birga keladi va birga ketadi.

Jannat — ilohiy marhamat nurining, jahannam esa adolat tajallisining ifodasidir. Tabiat unsurlari ham shu ilohiy sifatlarning aksidir: tuproq — nurdan, suv — hayotdan, shamol — haybatdan, olov esa g'azabdan darak beradi. Tuproq va suv jannatga moyil bo'lsa, olov va shamol jahannam tomon intiladi.

Shuningdek, olov va shamol bilan bog'liq kuchlar insonni o'z mohiyatiga tortishga urinadi, har bir mavjudotni o'z asl manziliga qaytarishga harakat qiladi.

Umuman olganda, tasavvuf yo'lining asosiy maqsadi — insonni dunyo sevgisidan ozod qilib, qalb va ruhini poklash, uni ilohiy haqiqatga yaqinlashtirishdir. Tariqat yo'llovchilari o'z sa'y-harakatlari bilan insonni doimiy kamtarlikka, ichki uyg'unlik va ruhiy barqarorlikka yetaklaydi. Bu yo'l nafaqat ruhni huzurga keltiradi, balki nafsni aritib, qalbni tozalaydi.

Islomiy ta'limot ham dunyoning o'tkinchiligi va unga ortiqcha bog'lanmaslik kerakligini ta'kidlaydi. Shu sababli, Allohga mutlaq taslimiyat va ixlos bilan bog'lanish tavsiya etiladi. Tasavvuf ruhning anglanishi, qalbning tozalanishi va ichki poklik orqali ilohiy haqiqatlarni kashf etishga harakat qiladi. Shu bois, tasavvuf nafaqat nazariy bilimlarga, balki amaliy hayotga katta e'tibor beradi.

Yunus Emre o'z she'rlari orqali shuni ochib beradi:

“Gönül kitabından okur, ilmi değil irfanı seçer,  
Eline kalem almadı, akl ile yol tutar.”

<sup>4</sup> Nasihatler Kitabı (Risâletü'n Nushiyye) Eskişehir 2013.

<sup>5</sup> Ma'osh aqli (Aql al-ma'âsh)- tasavvufda aqlning eng quyi darajasi bo'lib, u insonning kundalik hayoti, tirikchilik va moddiy ehtiyojlarini tartibga solishga xizmat qiladi.

<sup>6</sup> Ma'od aqli (Aql al-ma'âd)- tasavvufda aqlning o'rta darajasi bo'lib, u insonni oxirat, ma'naviyat va abadiy hayot haqidagi haqiqatlarni anglashga yo'naltiradi.

<sup>7</sup> Kulliy aql (Aql al-kull)- tasavvufda aqlning eng oliy, mukammal darajasi bo'lib, insonni to'liq ilohiy haqiqat va Alloh marifatiga yetaklaydi. Bu daraja ma'naviy o'sishning oxirgi bosqichi hisoblanadi.

Bu misrada Yunus Emre qalb orqali ilohiy haqiqatni anglashning, ilmiy bilim va dunyoviy aqldan ustun ekanini bildiradi. Inson o‘z nefsini aritib, qalbni poklaydi va haqiqiy shaxsiyatini namoyon qiladi.

Tasavvufning falsafiy asoslari shuni ta’kidlaydiki, insonning o‘z “men”ini emas, balki haqiqiy shaxsiyatini namoyon qilishi muhimdir. Bu yo‘l — barcha istak va irodani birlashtirib, ruhni yuksaltirish, qalbni oliyjanoblik va kamtarlikka yetaklovchi yo‘ldir. Yo‘lchi bu yo‘lda dunyo sevgisi va qalbdagi to‘sqinliklarni olib tashlaydi. Keyin qayg‘u va xohishlarni boshqaruvchi nafsni pok va tinch nafsga yo‘naltiradi. Nihoyat, gina, hasad, yolg‘on va boshqa yomon xislatlardan tozalangan holda, inson haqiqiy haqiqatni idrok eta oladi. “Kibr va g‘urur qalb nurini so‘ndiradi, Haq yo‘lini ko‘ra olmasang, eldan begona bo‘lasan”,-deydi u.

Yunus Emre ijodi va tasavvufiy qarashlari asrlar davomida turk va turkiy xalqlar orasida chuqur taassurot qoldirgan. Uning she‘rlari sodda til va chuqur ma’no uyg‘unligi bilan ajralib turadi. Shunday bo‘lsa-da, uning tasavvufiy falsafasi, vahdat-i vüçüd g‘oyalari, ilohiy ishq va komil inson tushunchalari bugungi kunda ham ko‘plab tasavvuf ixlosmandlari uchun sirli va bahsli mavzu bo‘lib qolmoqda.

Yunus Emreni ilmiy tarzda o‘rganish va adabiy merosini tadqiq qilish ishlarini ilk boshlagan Fuad Köprülü bo‘lib, u Yunus Emrening xalq orasida tarqalgan she‘riyatini, uning soddaligi va ma’naviy ta’sirini yoritib, butun turk adabiyoti tarixida alohida o‘rinni ko‘rsatdi.

Bundan tashqari, Halil İnalçık Yunus Emre asarlarini tarixiy va ijtimoiy kontekst bilan bog‘lab o‘rganib, uning ijodidagi ma’naviy, tasavvufiy va jamiyatga oid jihatlarni tahlil qilgan. Halil İnalçıkning tadqiqotlari Yunus Emre she‘riyatini XII–XIV asrlar turk jamiyati va madaniyati bilan bog‘laydigan ilmiy zamin yaratdi.

## **XULOSA**

Bugungi kunda Yunus Emre she‘rlari va falsafiy qarashlari faqat tarixiy yoki adabiy ahamiyatga ega emas, balki inson ruhiyatini poklash, qalbni kamtarlik, mehr-muhabbat va ixlos bilan to‘ldirishda amaliy yo‘l-yo‘riq sifatida xizmat qilmoqda. Uning ijodi nafaqat turk xalqi, balki butun insoniyat uchun ruhiy kamolot va ma’naviy uyg‘unlik timsoli hisoblanadi.

Shu jihatdan, Yunus Emre merosi zamonlar osha sirli, bahsli bo‘lishiga qaramay, bugungi kunda ham insonni axloqiy va ma’naviy yo‘lga boshlovchi, qalb va ruhni yuksaltiruvchi manba sifatida qadrlanadi. Uning she‘riyatidagi sodda til va chuqur ma’no uyg‘unligi, insonparvarlik va Allohga ixlos tuyg‘usi, har davr o‘quvchisi va ixlosmandi uchun amaliy ilhom manbai bo‘lib qoladi.

**FOYDALANILGAN ADABIYOTLAR:**

1. Mehmet Fuad Köprülü, *Türk Edebiyatında İlk Mutasavvıflar*, Ankara: Diyanet İşleri Başkanlığı Yayınları, 1991.
2. Nasihatler Kitabı (Risâletü'n Nushiyye) Eskişehir 2013.
3. YÛNUS EMRE DÎVÂNI-Yrd. Doç. Dr. Mustafa Tatci

## **EFFECTIVENESS OF TEACHING ROBOTICS ELEMENTS THROUGH THE STEAM APPROACH IN TECHNOLOGICAL EDUCATION**

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**Annotatsiya:** *Mazkur maqolada texnologik ta'lim tizimida robototexnika elementlarini STEAM yondashuvi orqali o'qitish metodikasi va uning samaradorligi tadqiq qilingan. Lego Mindstorms, Arduino va Raspberry Pi kabi platformalar asosida qurilgan o'quv dasturlarining o'quvchilar texnik ko'nikmalariga ta'siri o'rganilgan.*

**Kalit so'zlar:** *robototexnika, STEAM ta'limi, Arduino, texnologik ta'lim, muhandislik tafakkuri, amaliy ko'nikmalar.*

**Abstract:** *This article investigates the methodology and effectiveness of teaching robotics elements through the STEAM approach in the technological education system. The impact of educational programs based on Lego Mindstorms, Arduino, and Raspberry Pi platforms on students' technical skills was studied. The results showed that STEAM-based robotics education has high efficiency in developing students' engineering thinking and practical skills.*

**Keywords:** *robotics, STEAM education, Arduino, technological education, engineering thinking, practical skills, Lego Mindstorms.*

### **INTRODUCTION**

In the era of the Fourth Industrial Revolution, robotics and artificial intelligence technologies are penetrating all areas of human life. This situation places a demand on the education system to train a new generation of specialists with broad skills in engineering, programming, and technological design.

The STEAM approach is recognized as the most effective way to integrate robotics into the school curriculum. Through robotics projects, students have the opportunity to simultaneously study physics, mathematics, programming, and design in a practical way.

The purpose of this study is to identify the impact of STEAM-based robotics lessons on students' technical and engineering skills and to develop an effective teaching methodology.

## **1. LITERATURE REVIEW**

Sullivan and Bers (2016) showed that STEAM education based on robotics can successfully form engineering thinking even in elementary school students. They proved that the basics of programming can be taught to preschool children using ScratchJr and Lego WeDo platforms.

Alimjanov (2021) showed in his study the positive impact of organizing robotics clubs in Uzbekistan schools on students' interest in technology. Arduino-based projects were found to generate particularly high motivation in grades 6–9.

In international practice, robotics is taught as an integral part of the STEAM program in Finland, South Korea, and Singapore. The high scores of these countries in international PISA and TIMSS tests confirm the effectiveness of this approach.

## **2. RESEARCH METHODOLOGY**

The study was conducted at practice schools of Andijan State Pedagogical Institute in 2023–2024. Participants: students in grades 7–9 (n=180), technology teachers (n=24), and industry specialists (n=10).

The experimental group (n=90) was taught using Arduino and Lego Mindstorms platforms based on STEAM. Each project integrated physics, mathematics, and programming. The control group (n=90) studied robotics using traditional theoretical methods.

## **3. RESULTS AND DISCUSSION**

Experiment results: the experimental group showed 44% higher performance than the control group in completing practical projects. The average grade of the experimental group in physics and mathematics increased by 3.2 points.

During robotics projects, students developed the following skills:

- Designing and assembling electronic circuits
- Writing simple programs in C++ and Python
- Working with sensors and actuators
- Communicating in a team and implementing projects together

87% of teachers emphasized the need for additional training to conduct STEAM-based robotics lessons.

#### **4. CONCLUSION AND RECOMMENDATIONS**

The research results confirm that STEAM-based robotics education effectively develops students' engineering thinking, practical skills, and interdisciplinary knowledge.

Recommendations: establishing robotics STEAM laboratories in regional schools; conducting specialized trainings for teachers on Arduino and Lego Mindstorms; establishing cooperation with local industrial enterprises; creating robotics textbooks in Uzbek.

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## **TYPES AND CHARACTERISTICS OF GUEST ACCOMMODATION FACILITIES**

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**Abstract.** This article examines the theoretical foundations of the development of hotels and family guest houses, their role in tourism infrastructure, and their economic significance. The study analyzes the advantages and disadvantages of hotel enterprises and family guest houses, service quality, management efficiency, and foreign experience. In addition, the importance of digital technologies, marketing strategies, and regional tourism opportunities in the development of the hospitality industry is substantiated. Based on the research findings, scientific and practical recommendations for the development of hotels and family guest houses were developed.

**Keywords:** Hotel industry, family guest house, tourism, hospitality, service quality, tourism infrastructure, digital technologies, marketing strategy, regional tourism, service activities.

**Introduction.** Today, the tourism and hospitality industry is one of the most important and rapidly developing sectors of the world economy. One of the main components of the tourism infrastructure is guest accommodation facilities, which serve as temporary accommodation, recreation and additional services for tourists. Guest accommodation facilities are one of the main factors determining the quality of tourism services and play an important role in ensuring the comfort and safety of tourists during their trip. With the development of the hospitality industry, the types of guest accommodation facilities are also expanding. In modern tourism, hotels, motels, hostels, apart-hotels, resort hotels, family guest houses, campsites and other accommodation facilities offer tourists services that meet various needs and financial capabilities. Each of these facilities differs from each other in terms of service provision, infrastructure, pricing policy and target customer segment.

As a result of reforms being implemented in the Republic of Uzbekistan to develop tourism and expand hospitality services, the number and types of accommodation facilities are increasing. Especially in historical cities and tourist areas, family guesthouses, boutique hotels and eco-tourism facilities are actively developing along with modern hotels. This, while expanding the choice of tourists, serves to improve the regional tourism infrastructure.

The specific characteristics of guest accommodation facilities are determined by their level of service, location, types of services, pricing and management system. For example, while hotels are distinguished by professional management and services based on international standards, family guesthouses provide a national atmosphere and an individual approach. Hostels, on the other hand, are convenient for young tourists and students with their affordable prices.

The relevance of this topic is explained by the need to scientifically study the types of guest accommodation facilities, determine their place in the tourism infrastructure and analyze the characteristics of service provision. Also, the issues of developing accommodation facilities that meet the requirements of modern tourism and improving the quality of service are of important scientific and practical importance.

**Literature review.** The issues of organizing guest accommodation facilities and hospitality services have been widely studied in the fields of tourism economics, hospitality management, and services marketing. Scientific studies by foreign and domestic scientists have analyzed the economic efficiency, service quality, and role of accommodation facilities in tourism development.

Philip Kotler, in his theory of services marketing, emphasizes that hospitality services should be organized in accordance with the needs of consumers. He substantiated that the success of accommodation facilities depends on the quality of service, convenience and marketing strategy.

John Swarbrooke and Susan Horner highlighted the importance of guest accommodation facilities in the tourism infrastructure and analyzed their impact on the development of regional tourism. In their opinion, the diversity of accommodation facilities is an important factor in increasing the flow of tourists and strengthening the competitiveness of tourist areas.

Russian scientists A.D. Chudnovsky and M.A. Zhukova studied the management system, service quality and marketing activities of hotels and other accommodation facilities in the development of the hospitality industry.

In the scientific works of local scientists, the issues of developing tourism infrastructure in Uzbekistan, modernization of the hotel industry and support for family guest houses have been widely studied.

**Research methodology.** This study used methodological approaches aimed at studying the types and specific characteristics of guest accommodation facilities. The theoretical basis of the study was scientific views on tourism economics, hospitality management and service marketing.

During the research, the role of accommodation facilities in the tourism infrastructure and their interrelationships were analyzed based on a systematic approach. Using analysis and synthesis methods, the characteristics of hotels, hostels, motels, family guest houses and other accommodation facilities were summarized.

Foreign and local experiences were analyzed using the comparative method. Using statistical analysis, the flow of tourists, the number of accommodation facilities and the volume of services were studied. The advantages and disadvantages of accommodation facilities were assessed using the SWOT analysis method.

**Analysis and results.** The analysis shows that the development of modern tourism is increasing the diversity of guest accommodation facilities. Hotels are distinguished by high quality of service, modern infrastructure and a professional management system. They occupy an important place in servicing mainly business tourists and international guests.

Family guesthouses are becoming popular among tourists due to their national atmosphere and individual approach. They are especially important in the development of rural tourism and ethnotourism.

Hostels are developing as a means of affordable accommodation for young tourists and students. Their main advantage is economic convenience, while their disadvantage is the limited range of services.

Motels are located along highways and are convenient for transit tourists. Resort hotels specialize in recreation and health services.

During the analysis, it was found that the quality of service, marketing activities, and the level of implementation of digital technologies in some accommodation facilities are insufficient. At the same time, changing tourist needs require the introduction of new types of services.

**Conclusions and suggestions.** As a result of the research, it was found that guest accommodation facilities are an important component of tourism infrastructure. Their diversity is important in meeting the various needs of tourists and developing the tourism services market.

Hotels, family guesthouses, hostels and other accommodation facilities differ from each other in their specific form of service provision and target audience. At the same time, they all serve to create comfortable living conditions for tourists. Based on this, it is appropriate to put forward the following proposals:

- Improving the quality of service based on international standards;
- Widely introducing digital booking systems;
- Upgrading the skills of hospitality workers;

Developing regional tourism infrastructure;

Supporting family guesthouses and eco-tourism facilities.

In conclusion, the development of guest accommodation facilities based on modern management principles will improve the quality of tourism services and strengthen the country's competitiveness in the tourism market.

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## **POETICS OF PSYCHOLOGICAL EXPERIENCES AND INTERNAL DRAMATISM IN THE EPIC "QIRONXON"**

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**Abstract:** This article analyzes the artistic craftsmanship employed in creating the characters of the epic "Qironxon," specifically focusing on the inner world of the personages, their spiritual suffering, and the poetics of internal dramatism. The study examines the connection between psychological experiences and the progression of events within the compositional structure of the epic, as well as the contradictions in character traits and their expression through monological speech. Furthermore, it highlights the traditional and unique methods used by folk bakhshis (bards) to depict the complex processes inherent in the human psyche.

**Keywords:** folk epic, "Qironxon," psychological experience, internal dramatism, poetics, characterization, psychologism, monologue, conflict, bakhshi craftsmanship, artistic representation.

In Uzbek heroic epics, particularly in works such as "Alpomish," the "Go'ro'g'li" cycle, and "Qironxon," the poetics of psychological experiences and internal dramatism constitute a central factor of the artistic foundation. Within the epic canvas, the hero emerges not merely as a physical force combating external enemies, but as an individual possessing a complex inner world, conflicting thoughts, and profound emotions. The depiction of psychological experiences in these epics often intensifies at the intersection of the hero's duty to their people and homeland versus their personal destiny—moments where internal dramatism reaches its climax.

For instance, the hero's reflections before embarking on a journey, the pain of separation, and their psychological state in the face of loyalty and betrayal—though within traditional epic frameworks—become deeply individualized through unique lyrical digressions and monological speech. The poetics of internal dramatism primarily manifests through the hero's "internal dialogue," motifs of dreams, and the parallel depiction of natural phenomena alongside the protagonist's mood.

Artistic tropes within these epic works—such as hyperbole, metaphor, and epithet—serve not just to describe outward appearances, but to express the "storms" raging within the hero's soul, the agonizing periods of waiting, and the triumph of victory.

The hero's spiritual suffering ensures a logical connection between the plot lines of the epic, enhancing the aesthetic impact on the listener or reader. Especially in scenes of separation and longing (hijron), the lyrical grief demonstrates the mastery of Uzbek epic schools in creating a "psychological portrait." Consequently, the analysis of psychological experiences in epics allows for a scientific grounding of the hero's nature, as well as the artistic-aesthetic development of folklore and the profound depth of the people's spiritual and moral values.

*Upon hearing these words from his young son, Odirboy stood in silence, unable to offer any reply. He was left as a knave and a liar. "Why do you remain silent, father?" the boy asked. Then Odirboy said: "Under the pretext of illness, I sold the apples; people have taken them," he said. Then the young child said: "Why did you not fulfill my word?" Then the father, overcome with shame, had no choice but to hand over the clothes. At that, the children's spirits rose; they put on the clothes and smiled inwardly, appearing as grand as a king's son and daughter. "Very well then, grandfather, this time I forgive your sin. You are an Uzbek; you do whatever comes to your heart. But if you do so a second time, I shall punish you. However, be careful," the boy said. But old Odirboy looked on and felt afraid, seeing the children's demeanor. "The children's conduct seems ominous," he thought. Thus, old Odirboy gave his donkey a rest and stayed a while. Sixteen days passed. Once again, Odirboy intended to go to Dormon. He said to his children: "I am going to Dormon. Now, whatever you say, I shall do as you asked," he said. Thus, the children picked the best of the apples and placed them in the pannier, adding pears as well, and filled the pannier. They completed the task thoroughly. Then the pannier was filled. Night fell. At night, the children went to sleep. After the children fell asleep, Odirboy—thinking it would be necessary when he reached Dormon—took a pud of apples outside the garden, carried them to a place a stone's throw away, and buried them. The night passed, morning dawned, and he performed the morning prayer (bomdod). At that moment, the young children awoke. Eagerly, they said: "If you go to Dormon, come back quickly," and they helped their grandfather load the pannier onto the donkey, securing it with ropes from the donkey's chest so it would not tilt. Then Odirboy, saying he would depart for Dormon, addressed the young children—the boy and the girl:*

This excerpt is one of the most important sections illuminating the poetics of psychological experiences and internal dramatism in the epic "Qironxon," in which the inner world of the characters is not merely described but revealed through their contradictory actions, silences, and unexpected relationships. At the beginning of the text, Odirboy's inability to respond to his son's reprimand demonstrates a profound

dramatism in his mental state, his psychological defeat before his own conscience, and his feeling of himself as a “knave” and a “liar.” While his lying—saying “I sold them due to illness”—is an attempt to escape inner fear and shame, the dramatism lies in the fact that although Odirboy feels guilty before the young children, because his soul is not yet fully purified, his secret burial of apples again signifies that the agonizing struggle between “old habits” and “newfound responsibility” still continues in his psyche. At the same time, the children’s forgiveness of Odirboy and their setting of the condition “if you do so a second time, I shall punish you” is an unexpected turn in the poetics of the epic, as the emergence of adult-like restraint and spiritual superiority in their psyche further intensifies the dramatism. While the children’s “inward smile” as they put on the clothes expresses the inner satisfaction of an individual who has restored their rights, Odirboy’s “fear” of them psychologically substantiates the exchange of roles—that moral authority has now shifted to the children. The strongest dramatic element in the text is Odirboy’s promising the children on one hand, and secretly hiding apples on the other; this situation expresses the suspension between life necessity and the spiritual ideal in the hero's inner world, and how much his worldly anxieties are intertwined with his performance of prayer. The children's eagerness at the end of the passage, saying “come back quickly,” and Odirboy's address, “I have endured great suffering for you,” reach the peak of psychological involvement, shifting the dramatism from personal interest toward a common goal and elevating the epic to the level of a philosophical work about the psychological complexities of human character.

This passage of the epic “Qironxon” is a vivid example of the poetics of internal dramatism, demonstrating the evolution of the epic heroes' psyche, the sense of responsibility, and the harmony of lyrical experiences. In the text, the inner world of the Odirboy character is elevated to the level of overt dramatism through his speech, wherein one can see that the previous sense of guilt is now intertwined with self-sacrifice and anxiety. Odirboy's confession, “When I have endured great suffering (gulped blood) for your sake,” signifies not merely physical hardship, but the spiritual suffering resulting from the moral purification occurring within his psyche and his boundless love for his children. Here, the internal dramatism manifests in the conflict between the hero's striving to wash away the mistakes of his past and the fear of responsibility in delivering the children's “trust” (omonat) to the king. Odirboy's repeatedly recurring question, “If he asks me to request something, what shall I request, my child?” creates a psychological tension (psychological parallelism) in the poetics of the epic, confirming that the “ego” within the hero's inner world has now completely

renounced personal interest and submitted to the happiness and will of the children. His admission, "My thoughts have become fragmented (kiralı-chiqalı)," openly shows the hero's complex mental state—the life experience of an elderly person and his current anxious state of suspension. The dramatism is also sensed in the psychological preparation for the expected meeting—coming face-to-face with King Alixon; Odirboy's consolation to the children, "sleep without fear or trembling," is actually an attempt to restrain his own internal restlessness. The lyrical digressions and the monologue in the form of an address in this part of the epic connect a chain of complex emotions such as human longing, loyalty to a promise, and fear of the future. Thus, the internal dramatism of the epic is not merely a narration of external events, but acquires scientific-artistic value as a spiritual rebirth in the hero's heart and the moral elevation of paternal duty.

The general analysis of the epic "Qironxon" shows that the artistic power of the work is manifested not only in its epic scope but also in the complex transformations within the characters' psyche and internal psychological dramatism. At the center of the spiritual experiences in the epic lies the "moral rebirth" of the Odirboy character: through struggling with his social guilt and his ego (nafs), he rises from simple human weakness to the level of high moral responsibility. The characters of the children define the ethical dimension of the epic; their spiritual union with nature and unseen forces in the desert environment, as well as the strict demands they manifest toward their father, prove that in the work, "spiritual superiority" is not dependent on a character's age or social status, but on their moral purity. In particular, the overcoming of alienation between the characters through love and repentance, and the concept of "trust" (omonat) prevailing over the ego, strengthens the humanistic pathos of the epic. The poetics of psychological experiences in the epic "Qironxon" is a high artistic reflection of man's self-realization, his sense of duty to family and homeland, and his internal struggles on the path of moral purification.

Analyses show that the epic "Qironxon" is not only an example of adventure or heroism but also an artistic reflection of the human psyche. The internal dramatism within it emerges through the characters' struggle with themselves and their mental states in the face of destiny's trials. The vitality and poignancy of the epic are manifested precisely in the skillful depiction of the characters' feelings, sufferings, and internal monologues. In conclusion, the poetics of internal dramatism in the epic is an important artistic tool that served to deepen the idea of the work and to fully reveal the character of the personages.

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## **O‘ZBEK TILIDA OT DERIVATSIYASINING LISONIY VA NUTQIY XUSUSIYATLARI**

Linguistic and Speech Characteristics of Noun Derivation in the Uzbek Language

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**Annotatsiya:** Ushbu maqolada o‘zbek tilshunosligining muhim yo‘nalishlaridan biri bo‘lgan ot derivatsiyasi (ot yasalishi) lisoniy imkoniyat va nutqiy voqelanish paradigmalari doirasida tahlil qilinadi. O‘zbek tilshunosligida ot so‘z yasalishi mavzusi nafaqat nazariy, balki amaliy muloqot uchun ham juda muhimdir. Ot yasovchi affikslarning semantik derivatsiyasi, konversiya hodisasi va nutqiy innovatsiyalar ilmiy asosda yoritiladi.

**Abstract:** This article analyzes noun derivation (word formation), one of the most significant directions in Uzbek linguistics, within the frameworks of linguistic potential and speech realization paradigms. In Uzbek linguistics, the subject of word formation is essential not only from a theoretical perspective but also for practical communication. The semantic derivation of noun-forming affixes, the phenomenon of conversion, and speech innovations are elucidated on a scientific basis.

**Kalit so‘zlar:** Ot so‘z turkumi, ot derivatsiyasi, affiksatsiya, kompozitsiya, konvensiya, semantik derivatsiya

**Keywords:** Noun category, noun derivation, affixation, composition, conversion, semantic derivation.

### **Kirish**

O‘zbek tili aglyutinativ tillar sirasiga kirishi sababli, unda derivatsiya (so‘z yasalishi) jarayoni nihoyatda rivojlangan. Ot turkumiga oid birliklarning yasalishi nafaqat tilning lug‘at boyligini oshiradi, balki til egalarining dunyoni anglash va nomlash (nominatsiya) ehtiyojlarini qondiradi. Ot derivatsiyasini lisoniy (til tizimidagi o‘rni) va nutqiy (muloqotdagi ko‘rinishi) jihatdan o‘rganish tilning dinamik tabiatini

tushunishga yordam beradi. Lisoniy sathda ot derivatsiyasi qat'iy qoidalar, qoliplar va modellar majmuasidan iborat.

### **Asosiy qism.**

Otlar ikki xil – affiksatsiya va kompozitsiya usuli bilan yasaladi. Shunga muvofiq, ot yasashning affiksial va kompozitsion qolipi mavjud. Bu qolip ham o'z o'rnida unumli, unumsiz; mahsuldor va kammahsul turga bo'linadi.

Affiksatsiya — bu so'zning o'zagi yoki asosiga so'z yasovchi qo'shimchalar (affikslar) qo'shish orqali yangi leksik birlik hosil qilishdir. Bu o'zbek tili kabi aglyutinativ tillar uchun eng unumli va keng tarqalgan usul hisoblanadi. Ot yasovchi qolipning aksariyati ko'p ma'noli.

-chi affiksi ot + chi = 1) asosdan anglashilgan narsa bilan bo'g'liq kasb, mutaxassislik bilan shug'ullanuvchi shaxs oti; 2) asosdan anglashilgan ish-harakat, hodisa bilan shug'ullanuvchi shaxs oti; 3) asosdan anglashilgan ish-harakat, faoliyatda qatnashuvchi shaxs oti; 4) ish - faoliyatda biror oqim, maslak va tarafdori, shularga mansub bo'lgan shaxs bildiruvchi ot; 5) asosdan anglashilgan hodisani, ish - harakatni bajarish odati kuchli bo'lgan shaxsni bildiruvchi ot qolipi hisoblanadi: sportchi, xabarchi, muzokarachi, respublikachi, kekchi singari.

- shunos affiksli **ot + -shunos = asosdan anglashilgan sohani o'rganuvchi mutaxassis** qolipi bir ma'noli bo'lib, u quyidagi hosilalarni bergan: adabiyotshunos, tilshunos, tarixshunos, o'lkashunos, musiqashunos.

- kor affiksli ikkita qolip mavjud:

**a) aniq ot + - kor + asosdan anglashilgan narsa, predmetni yetishtirish bilan shug'ullanuvchi shaxs oti:** paxtakor, lavlagikor, sholikor, g'allakor

**b) mavhum ot + - kor = asosdan anglashilgan ish-harakat bilan shug'ullanuvchi shaxs:** madadkor, gunohkor, tajovuzkor, tashabbuskor, ijodkor

"Shunday ot yasash qoliplari borki, ulardan bugungi kunda yangi so'z yasalmaydi. Hosilalarning barchasi lisoniy tabiatli. ot + -goh = asosan ish-harakat bajarilgan joy oti (sayilgoh, ayishgoh, manzilgoh). ot + -don = asosan anglashilgan narsa/predmet saqlanadigan predmetni ifodalovchi ot (qalamdon, tuzdon, kuldon). ot + -xona = asosan anglashilgan ish-harakatga mo'ljallangan joy oti (ishxona, qabulxona, choyxona, oshxona). ot + -obod = asosan anglashilgan narsa/predmet obod qilgan joy oti (Dehqonobod, Mehnatobod). ot + -noma = asosan anglashilgan narsa/predmetni ifodalovchi ot (ariznoma, taklifnoma, sayohatnoma)."

Substantivatsiya (Konversiya): Sifat, son yoki ravish kabi turkumlarning otlashishi lisoniy derivatsiyaning o'ziga xos shaklidir. Bunda so'z morfologik shaklini

o'zgartirmasdan, sintaktik vazifasi va leksik ma'nosi orqali ot turkumiga ko'chadi (masalan: yaxshi (sifat) – yaxshilar (ot)).

Ot derivatsiyasining nutqiy xususiyatlari lisoniy imkoniyatlarning jonli muloqotda, matnda yoki nutq vaziyatida namoyon bo'lishidir. Agar lisoniy derivatsiya (til tizimi) qoliplar majmuasidan iborat bo'lsa, nutqiy derivatsiya bu qoliplarning amaldagi ijrosidir. Nutqiy sathda derivatsiya jarayoni lisoniy qoliplardan foydalangan holda, muayyan muloqot vaziyatiga moslashadi. Bu yerda okkazionalizm (shaxsiy-mualliflik so'zlari) va kontekstual ma'no ustuvorlik qiladi.

Okkazional otlar: Yozuvchi yoki so'zlovchi tomonidan faqat o'sha matn uchun yaratilgan, tilda hali umumiste'molga kirmagan yasama otlar. Bu nutqning ekspressivligini oshiradi. So'zlovchi tilda mavjud tayyor so'zdan emas, balki mavjud qolipdan foydalanib, faqat shu vaziyat uchun yangi so'z yasaydi. Biror kishi haddan tashqari ko'p choy ichsa, hazil tariqasida uni "choyxo'r" emas, "choypaz" yoki "choyparast" deb atash mumkin. Bu so'z lug'atlarda bo'lmasligi mumkin, lekin nutq vaziyatida tushunarli bo'ladi.

### **Xulosa**

O'zbek tilida ot derivatsiyasi lisoniy jihatdan boy va tizimli grammatik bazaga ega. Nutqiy jarayonda esa bu baza muloqot ehtiyojidan kelib chiqib transformatsiyaga uchraydi. Til va nutq o'rtasidagi bu dialektik aloqa ot yasash jarayonini doimiy harakatdagi mexanizmga aylantiradi. Kelajakda ot derivatsiyasining kognitiv va pragmatik jihatlarini o'rganish o'zbek tilshunosligi uchun yangi istiqbollarni ochadi.

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## **USE OF INNOVATIVE METHODS IN TEACHING THE TOPIC OF FUNCTIONS**

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**Annotation.** This article highlights the pedagogical importance of using innovative methods in teaching the topic of functions. The article analyzes methods for effective teaching of the topic of functions using modern interactive methods, digital technologies and creative approaches. It also shows the role of innovative methods in developing students' logical thinking, analyzing graphs and solving practical problems.

**Keywords:** Function, innovative method, mathematics education, interactive technology, graphics, creative approach, GeoGebra, problem-based learning, digital platform, functional connection.

Mathematics education is one of the important factors of social development. Especially in general secondary schools, effective teaching of mathematical knowledge plays an important role in developing students' logical thinking, analytical thinking, and problem-solving skills. The topic of functions, which is one of the main sections of mathematics, plays a fundamental role in forming students' algebraic knowledge. With the help of the concept of function, the connections between different quantities are expressed, and this topic creates a solid foundation for mastering further mathematical knowledge. Therefore, effective teaching of the topic of functions is considered one of the urgent issues of modern pedagogy[2].

In today's era of globalization and the development of digital technologies, there is an increasing need to use innovative methods along with traditional teaching methods. Innovative methods allow increasing students' interest in the lesson, encouraging them to think independently, and connecting theoretical knowledge with practice. In particular, interactive methods, information and communication technologies, multimedia tools, project-based learning and STEAM approaches provide high efficiency in explaining the topic of functions. With the help of such methods, students understand complex mathematical concepts more easily and master the topic more deeply.

The use of graphic images is of particular importance in teaching the topic of functions. Because through the function graph, students have the opportunity to visually observe the relationship between variables. Dynamic depiction of function graphs using

modern electronic programs and interactive platforms expands the imagination of students. In particular, programs such as GeoGebra and Desmos allow students to independently analyze the properties of functions. This helps to understand the content of mathematical concepts more deeply[3].

Also, the use of innovative methods increases student activity in the educational process. Group work, analysis of problem situations, interactive methods such as “Brainstorming”, “Cluster”, “Insert” develop students' free thinking. As a result, they learn to solve problems on the topic of functions using a creative approach. This develops not only mathematical literacy, but also communicative competencies.

Teaching the topic of functions using innovative methods is an important factor in increasing educational efficiency. Modern pedagogical technologies serve to organize the learning process of students in an interesting and effective way. Therefore, the widespread use of innovative methods in mathematics lessons remains one of the priority tasks of today's education system.

The concept of a function is one of the main categories of mathematics, which represents the relationship between two variables. Students learn to mathematically model various physical, economic and technical processes using functions.

The role of innovative methods

Innovative methods increase student activity in the lesson and help to master the topic more deeply. Brainstorming, cluster, INSERT, problem-based learning and project-based approaches are effective in teaching the topic of functions.

GeoGebra and Desmos programs allow you to dynamically depict function graphs. For example, by changing the graph of the function  $y = x^2$ , you can practically explain how the parabola is formed.

Example:

In the function  $y = x^2$ , if  $x = 2$ , then  $y = 4$ .

In the function  $y = x^2 + 3$ , the graph shifts up by 3 units.

Problem-based learning encourages students to think independently. For example, students are given the task of graphically representing temperature changes in everyday life. This method helps to understand the importance of functions in real life[1].

Using group work and interactive methods in teaching the topic of functions gives effective results. Students analyze graphs in small groups, compare functions, and present results.

Practical examples

Example 1: The initial price for a taxi service is 5,000 soums and 2,000 soums are added for each kilometer.

Function:  $y = 2000x + 5000$ .

Example 2: If  $y = 3x - 1$  for a linear function, then  $y = 11$  for  $x = 4$ .

Example 3: If  $y = x^2 - 4x + 3$  for a quadratic function, the graph will be in the form of a parabola.

In conclusion, teaching the topic of Functions based on innovative methods develops students' mathematical thinking. With the help of digital technologies and interactive methods, the effectiveness of lessons increases, students understand the topic more deeply and can connect it with practice.

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## **THE EFFECTIVENESS OF VISUAL AND GRAPHIC TOOLS IN TEACHING GEOMETRY**

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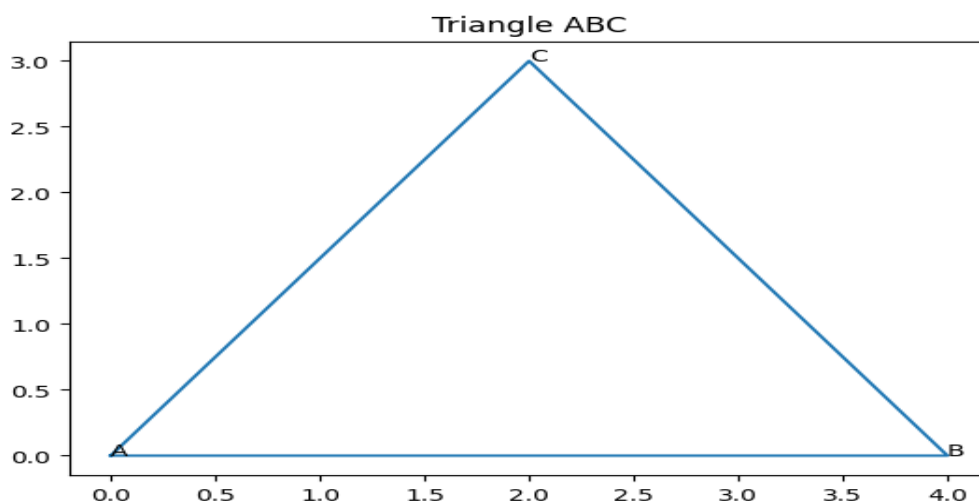
**Abstract.** This article discusses the effectiveness of visual and graphic tools in teaching geometry. Visual methods improve students' understanding, logical thinking, and interest in mathematics. The study highlights the role of diagrams, graphs, and digital technologies in developing spatial imagination and problem-solving skills.

**Keywords:** Geometry, visual learning, graphic tools, mathematics education, spatial thinking, geometric figures, digital technologies, problem-solving.

Geometry is one of the most important branches of mathematics because it develops logical reasoning, analytical thinking, and spatial imagination. However, many students experience difficulties in understanding abstract geometric concepts when they are explained only theoretically. For this reason, visual and graphic tools play a significant role in geometry education. Diagrams, graphs, models, and digital technologies help learners understand geometric relationships more effectively and make the learning process more engaging[2].

Visual learning methods are especially important in modern education because students learn better when they can see and interact with information. Geometry contains many abstract concepts such as angles, symmetry, transformations, and three-dimensional objects. Without visual representation, these topics may seem difficult and confusing. Therefore, teachers use pictures, geometric constructions, multimedia presentations, and interactive software to explain mathematical ideas.

### **Illustration 1: Triangle Geometry**



Visual tools help students observe geometric relationships directly. For example, when learners study triangles, they can easily understand the properties of angles and sides through diagrams. A teacher may draw a triangle on the board and explain that the sum of its interior angles is equal to 180 degrees.

Formula:

$$A + B + C = 180^\circ$$

This visual demonstration allows students to connect theory with observation. Instead of memorizing formulas mechanically, learners understand the reasoning behind them. Visual tools also improve students' memory and concentration. Research shows that people remember visual information more effectively than text alone. In geometry lessons, colorful diagrams and graphical illustrations increase student motivation and participation.

Graphic tools such as coordinate planes, charts, and graphs help students analyze mathematical relationships. Coordinate geometry combines algebra and geometry, enabling students to solve problems visually.

For example, the graph of the quadratic function:

$$y = x^2$$

helps students understand symmetry and the shape of a parabola. By observing the graph, learners can identify the vertex and axis of symmetry.

Modern educational technologies have transformed geometry instruction. Interactive applications such as GeoGebra and Desmos allow students to explore geometric concepts dynamically. Learners can move points, rotate figures, and observe how geometric properties change[1].

For example, students can investigate the relationship between the radius and circumference of a circle using the formula:

$$C = 2\pi r$$

When students adjust the radius in interactive software, they immediately observe changes in circumference. Such experiences make learning more practical and meaningful.

Example 1: Triangle Construction

Students use rulers and compasses to construct triangles. This activity develops precision, logical reasoning, and understanding of geometric properties.

Example 2: Symmetry Exploration

Learners fold paper shapes to identify lines of symmetry. This simple visual activity improves spatial thinking and creativity.

Example 3: Coordinate Geometry

Students plot points on a coordinate plane and connect them to form geometric figures.

This method combines visual representation with algebraic reasoning.

Visual and graphic tools offer several advantages in geometry teaching:

1. They simplify abstract concepts
2. They improve logical and spatial thinking.
3. They increase student engagement.
4. They encourage active participation.
5. They support collaborative learning[4].

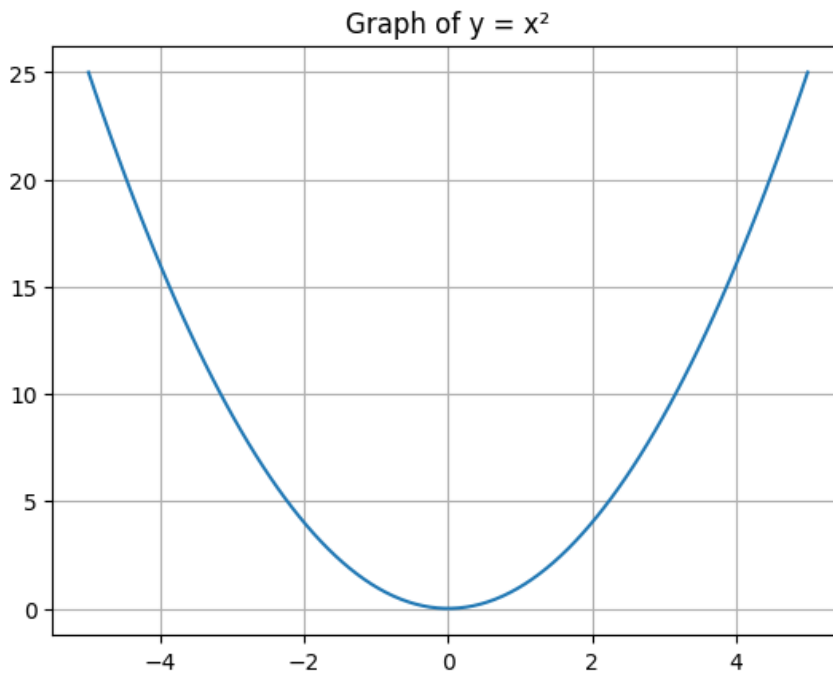
Despite their benefits, visual tools also present challenges. Some schools may lack technological resources such as computers and projectors. In addition, teachers need proper training to use digital technologies effectively. Another challenge is balancing visual learning with theoretical understanding. Students should not rely only on images; they must also develop reasoning and proof skills.

Teachers play a central role in integrating visual and graphic tools into geometry lessons. Effective teachers select appropriate methods according to students' age and learning styles. They encourage exploration, ask questions, and create interactive learning environments.

For example, during lessons about circles, teachers may use real-life objects such as wheels or coins to demonstrate geometric concepts. This approach connects mathematics with everyday experiences.

Visual and graphic tools significantly improve the effectiveness of geometry education. They make abstract concepts understandable, increase student motivation, and develop logical thinking skills. Modern technologies further enhance learning opportunities by providing interactive and dynamic experiences. Therefore, teachers should actively use diagrams, graphs, models, and digital applications in geometry lessons to create meaningful and engaging educational experiences.

Illustration 2: Graph of a Quadratic Function



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## **Kreativ fikrlashni rivojlantirishda san'at va madaniyatning roli**

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### **Annotatsiya:**

Ushbu ilmiy maqolada kreativ fikrlashni rivojlantirishda san'at va madaniyatning tutgan o'rnini tahlil qilinadi. San'atning turli yo'nalishlari — musiqa, tasviriy san'at, adabiyot va teatrning inson tafakkuri hamda ijodiy salohiyatiga ta'siri yoritib berilgan. Shuningdek, milliy va umuminsoniy madaniy qadriyatlarning shaxsning erkin va innovatsion fikrlashini shakllantirishdagi ahamiyati ochib beriladi. Maqolada ta'lim jarayonida san'at va madaniyat elementlaridan foydalanish orqali o'quvchilarning kreativ qobiliyatlarini rivojlantirishning samarali usullari ilmiy asosda tahlil qilingan.

### **Kalit so'zlar:**

Kreativ fikrlash, san'at, madaniyat, ijodkorlik, estetik tarbiya, innovatsion yondashuv, tasavvur, badiiy tafakkur, ta'lim jarayoni, madaniy qadriyatlar, ijodiy faoliyat, pedagogik texnologiyalar.

### **Kirish**

Bugungi globallashuv va tezkor texnologik taraqqiyot davrida insonning ijodiy salohiyati, ya'ni kreativ fikrlashi jamiyat rivojlanishining muhim omillaridan biriga aylanmoqda. Kreativ fikrlash nafaqat yangi g'oyalarni yaratish, balki mavjud muammolarga noodatij va samarali yechim topish qobiliyati sifatida ham e'tirof etiladi. Shu nuqtayi nazardan, ta'lim tizimida va shaxs rivojlanishida kreativ fikrlashni shakllantirish masalasi dolzarb ahamiyat kasb etadi. San'at va madaniyat esa inson tafakkurini boyituvchi, estetik didini shakllantiruvchi hamda ijodiy tasavvurini kengaytiruvchi eng muhim vositalardan biri hisoblanadi. Musiqa, tasviriy san'at, adabiyot, teatr va boshqa madaniy yo'nalishlar insonning emotsional va intellektual rivojlanishiga bevosita ta'sir ko'rsatib, uning ijodiy fikrlash jarayonini faollashtiradi. Ayniqsa, san'at bilan muntazam shug'ullanish yoki madaniy muhitda bo'lish shaxsning noodatij fikrlash, tahlil qilish va yangilik yaratish qobiliyatini rivojlantiradi. Shu sababli, ushbu ilmiy maqolada san'at va madaniyatning kreativ fikrlashni

rivojlantirishdagi o‘rni, ularning shaxs intellektual va ijodiy salohiyatiga ta’siri hamda ta’lim jarayonida bu omillardan samarali foydalanish imkoniyatlari tahlil qilinadi.

### **Asosiy qism**

Kreativ fikrlash insonning muammolarga yangicha yondashish, noan’anaviy yechimlar topish va mavjud bilimlarni yangi shaklda qo‘llay olish qobiliyatidir. Ushbu jarayon faqatgina tabiiy iste’dodga emas, balki tashqi muhit, tarbiya va madaniy-ijodiy faoliyatga ham chambarchas bog‘liqdir. Ayniqsa, san’at va madaniyat insonning fikrlash doirasini kengaytirishda, tasavvur va fantaziyasini rivojlantirishda muhim rol o‘ynaydi.

San’at inson ongiga bevosita emotsional ta’sir ko‘rsatadi. Musiqa, tasviriy san’at, adabiyot va teatr kabi yo‘nalishlar orqali inson turli his-tuyg‘ularni boshdan kechiradi va ularni tahlil qilishga o‘rganadi. Bu esa miyada yangi neyron bog‘lanishlar shakllanishiga yordam beradi, natijada ijodiy fikrlash jarayoni faollashadi. Masalan, musiqani tinglash yoki rasm chizish jarayonida inson tasavvuri kengayadi va u oddiy narsalarga ham boshqacha nigoh bilan qaray boshlaydi. Madaniyat esa shaxsning dunyoqarashi va tafakkurini shakllantiruvchi asosiy omillardan biridir. Turli xalqlarning madaniy merosi bilan tanishish insonni bir yoqlama fikrlashdan xalos qiladi va ko‘p qirrali yondashuvni rivojlantiradi. Madaniy muhitda o‘sib-ulg‘aygan shaxs odatda ochiq fikrli, yangilikka intiluvchan va muammolarni turli tomondan tahlil qila oladigan bo‘ladi. Ta’lim jarayonida san’at va madaniyat elementlaridan foydalanish kreativ fikrlashni rivojlantirishda juda samarali usul hisoblanadi. Interfaol darslar, ijodiy topshiriqlar, teatr sahnalari yoki badiiy loyihalar o‘quvchilarning faolligini oshiradi va ularni mustaqil fikrlashga undaydi. Shuningdek, guruh bo‘lib ishlash jarayonida ham o‘quvchilarda hamkorlik, muloqot va birgalikda yechim topish ko‘nikmalari rivojlanadi.

Bundan tashqari, zamonaviy pedagogik yondashuvlar san’atni faqat estetik vosita sifatida emas, balki ta’limning ajralmas qismi sifatida ko‘rib chiqmoqda. Kreativ laboratoriyalar, san’at terapiyasi va loyiha asosidagi ta’lim kabi usullar o‘quvchilarning ijodiy salohiyatini ochishga xizmat qilmoqda. Umuman olganda, san’at va madaniyat insonning ichki dunyosini boyitadi, uning tasavvurini kengaytiradi va yangi g‘oyalar yaratish qobiliyatini kuchaytiradi. Shu bois, kreativ fikrlashni rivojlantirishda ushbu ikki omilning o‘rni beqiyos hisoblanadi.

### **Innovatsion yondashuv**

Kreativ fikrlashni rivojlantirish jarayonida innovatsion yondashuvlar san'at va madaniyatni ta'lim tizimiga samarali integratsiya qilishning zamonaviy usullaridan biri hisoblanadi. Bugungi kunda an'anaviy o'qitish usullari bilan bir qatorda raqamli texnologiyalar, interfaol platformalar va ijodiy laboratoriyalar orqali o'quvchilarning ijodiy salohiyatini ochishga alohida e'tibor qaratilmoqda. Innovatsion yondashuvning asosiy yo'nalishlaridan biri — raqamli san'at va multimedia vositalaridan foydalanishdir. Grafik dizayn dasturlari, animatsiya, virtual muzeylar va onlayn galereyalar o'quvchilarga san'atni faqat tomosha qilish emas, balki uni yaratish imkonini ham beradi. Bu esa ularning tasavvurini kengaytirib, ijodiy fikrlash jarayonini yanada faollashtiradi. Shuningdek, loyiha asosida o'qitish (project-based learning) ham muhim innovatsion yondashuvlardan biridir. Ushbu usulda o'quvchilar real hayotga yaqin ijodiy loyihalar ustida ishlaydi, masalan, madaniy merosni o'rganish, san'at ko'rgazmasi tashkil etish yoki ijodiy kontent yaratish. Bunday faoliyat ularni mustaqil fikrlashga, muammolarni tahlil qilishga va jamoada ishlashga o'rgatadi. San'at va madaniyatni o'qitishda gamifikatsiya (o'yinlashtirish) elementlaridan foydalanish ham samarali natija beradi. O'yin elementlari orqali berilgan topshiriqlar o'quvchilarning qiziqishini oshiradi va ularni faol ishtirok etishga undaydi. Bu esa bilimni o'zlashtirish jarayonini yanada qiziqarli va samarali qiladi. Bundan tashqari, sun'iy intellekt va virtual reallik texnologiyalarining ta'lim jarayoniga kirib kelishi ham innovatsion yondashuvning yangi bosqichini belgilab bermoqda. Virtual muzey sayohatlari, interaktiv san'at darslari va AI asosida yaratilgan ijodiy platformalar o'quvchilarning san'atga bo'lgan qiziqishini oshiradi hamda ularning kreativ fikrlashini rivojlantiradi. Xulosa qilib aytganda, innovatsion yondashuvlar san'at va madaniyatni ta'lim jarayoniga chuqur integratsiya qilish orqali kreativ fikrlashni rivojlantirishda muhim rol o'ynaydi. Bu esa zamonaviy, mustaqil fikrlaydigan va ijodkor shaxslarni tarbiyalashga xizmat qiladi.

### **Badiiy tafakkur**

Badiiy tafakkur — bu insonning voqelikni obrazlar, tasavvurlar va emotsional ifodalar orqali anglash va ifoda etish qobiliyatidir. U oddiy mantiqiy fikrlashdan farqli ravishda, hissiyot, estetik idrok va ijodiy tasavvur bilan chambarchas bog'liq bo'lib, shaxsning kreativ salohiyatini shakllantirishda muhim o'rin tutadi. Badiiy tafakkur orqali inson dunyoni nafaqat tushunadi, balki uni o'zicha qayta yaratadi va yangicha talqin qiladi. San'at badiiy tafakkurning eng asosiy manbalaridan biri hisoblanadi. Tasviriy san'at,

adabiyot, musiqa va teatr kabi yoʻnalishlar inson ongida obrazli fikrlashni rivojlantiradi. Masalan, adabiy asarlarni oʻqish jarayonida oʻquvchi qahramonlar obrazini tasavvur qiladi, ularning his-tuygʻularini his etadi va voqealarni ichki dunyosi orqali qayta ishlaydi. Bu jarayon miyada ijodiy fikrlashni faollashtirib, yangi gʻoyalar shakllanishiga yordam beradi. Badiiy tafakkur shaxsning estetik didini ham rivojlantiradi. Inson goʻzallikni his qilishni oʻrganar ekan, u atrofdagi voqea-hodisalarga yanada chuqurroq va nozikroq yondasha boshlaydi. Bu esa uning ijodiy qaror qabul qilish qobiliyatini kuchaytiradi hamda noodatiy yechimlar topishga undaydi. Taʼlim jarayonida badiiy tafakkurni rivojlantirish muhim pedagogik vazifalardan biri hisoblanadi. Rasm chizish, ijodiy yozuvlar, sahna koʻrinishlari va musiqa bilan bogʻliq mashgʻulotlar oʻquvchilarning tasavvurini kengaytiradi va ularni erkin fikrlashga oʻrgatadi. Shu bilan birga, guruhli ijodiy ishlar ham muloqot, hamkorlik va fikr almashish koʻnikmalarini rivojlantiradi. Xulosa qilib aytganda, badiiy tafakkur insonning ijodiy rivojlanishida muhim asos boʻlib xizmat qiladi. U sanʼat va madaniyat orqali shakllanib, shaxsning kreativ fikrlash darajasini yangi bosqichga olib chiqadi.

### **Xulosa**

Xulosa qilib aytganda, kreativ fikrlashni rivojlantirishda sanʼat va madaniyatning oʻrni beqiyosdir. Ular insonning badiiy tafakkurini shakllantirib, tasavvur doirasini kengaytiradi hamda yangicha gʻoyalar yaratish qobiliyatini rivojlantiradi. Sanʼatning emotsional va estetik taʼsiri, madaniyatning esa dunyoqarashni boyituvchi jihatlari shaxsning ijodiy salohiyatini faollashtiradi. Zamonaviy taʼlim jarayonida sanʼat va madaniyat elementlaridan foydalanish oʻquvchilarning mustaqil fikrlash, muammolarni noodatiy yoʻl bilan hal qilish va innovatsion yondashuvlarni shakllantirishiga xizmat qiladi. Ayniqsa, interfaol metodlar, loyiha asosidagi taʼlim va raqamli texnologiyalar bu jarayonni yanada samarali qiladi. Umuman olganda, sanʼat va madaniyatni taʼlim va tarbiya jarayoniga keng joriy etish kreativ fikrlashni rivojlantirishning muhim omillaridan biri boʻlib, bu kelajakda ijodkor, tashabbuskor va raqobatbardosh shaxslarni shakllantirishga zamin yaratadi.

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## **FUNCTION AND ITS PROPERTIES**

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**Abstract.** This article discusses the concept of a function, its basic properties, graphs, types, and applications in mathematical and practical problems.

**Keywords:** Function, argument, graph, domain, range, monotonicity, continuity, maximum.

A function is one of the most fundamental concepts in mathematics and plays a central role in algebra, geometry, calculus, statistics, economics, engineering, and computer science. The concept of a function allows mathematicians and scientists to describe relationships between variables in a systematic and logical way. In everyday life, functions are used to explain natural phenomena such as population growth, speed, temperature change, and financial calculations. A function establishes a connection between two sets in which every input value corresponds to exactly one output value. This relationship creates a predictable structure that helps people analyze patterns and solve practical problems.

The study of functions began centuries ago, but it became more formalized during the development of modern mathematics in the seventeenth and eighteenth centuries. Today, functions are represented through equations, graphs, tables, and verbal descriptions. The understanding of functions is essential for students because advanced mathematical topics such as derivatives, integrals, differential equations, and probability depend heavily on functional relationships.

A function can be defined as a rule or relationship that assigns each element from one set, called the domain, to exactly one element in another set, called the codomain. If  $x$  represents the input value and  $y$  represents the output value, then the notation  $y = f(x)$  is commonly used. Here,  $f$  denotes the function itself,  $x$  is the independent variable, and  $y$  is the dependent variable because its value depends on  $x$ .

For example, consider the function  $f(x) = 2x + 3$ . If  $x = 1$ , then  $f(1) = 2(1) + 3 = 5$ . If  $x = 4$ , then  $f(4) = 2(4) + 3 = 11$ . This demonstrates how every input produces a unique output[2].

Functions may be represented in several ways:

1. Algebraic representation
2. Graphical representation

3. Numerical tables

4. Verbal descriptions

Each method provides useful information about the relationship between variables.

The domain of a function refers to all possible input values for which the function is defined. The range refers to all possible output values produced by the function. Determining the domain and range is one of the most important steps in analyzing functions.

For instance, in the function  $f(x) = 1/x$ , the value  $x = 0$  cannot be included in the domain because division by zero is undefined. Therefore, the domain consists of all real numbers except zero[1].

Similarly, for the function  $f(x) = x^2$ , the range is all nonnegative real numbers because squaring any real number cannot produce a negative result.

Functions can be classified into several categories according to their structure and behavior.

A linear function has the general form  $f(x) = mx + b$ , where  $m$  represents the slope and  $b$  represents the  $y$ -intercept. Linear functions produce straight-line graphs. They are widely used in economics, physics, and business to model constant rates of change.

Quadratic functions are represented by the form  $f(x) = ax^2 + bx + c$ , where  $a$  is not equal to zero. Their graphs are parabolas. Quadratic functions are important in projectile motion, optimization problems, and engineering calculations.

Polynomial functions contain terms with variables raised to whole-number powers. Examples include cubic and quartic functions. Polynomial functions are continuous and smooth, making them useful in modeling natural phenomena.

A rational function is expressed as the ratio of two polynomials. An example is  $f(x) = (x + 1)/(x - 2)$ . Rational functions often contain asymptotes and discontinuities.

Exponential functions involve variables in the exponent, such as  $f(x) = 2^x$ . These functions model rapid growth or decay and are applied in population studies, radioactive decay, and compound interest.

Logarithmic functions are inverses of exponential functions. They are used in chemistry, information theory, and acoustics.

Trigonometric functions such as sine, cosine, and tangent describe periodic behavior. These functions are fundamental in physics, engineering, and astronomy.

Functions possess various properties that help mathematicians analyze their behavior[2].

An injective function, also known as a one-to-one function, maps distinct input values to distinct output values. In such functions, no two different domain elements share the same range value.

A surjective function, or onto function, covers every element of the codomain. This means every possible output value has at least one corresponding input value.

A bijective function is both injective and surjective. Such functions establish a perfect correspondence between the domain and codomain. Bijective functions are especially important because they possess inverse functions.

An even function satisfies the condition  $f(-x) = f(x)$ . The graph of an even function is symmetric about the y-axis. An example is  $f(x) = x^2$ .

An odd function satisfies the condition  $f(-x) = -f(x)$ . The graph of an odd function is symmetric about the origin. An example is  $f(x) = x^3$ .

A function is increasing if larger input values produce larger output values. A function is decreasing if larger input values produce smaller outputs. Monotonicity is important in optimization and calculus.

A bounded function has output values confined within a certain interval. If there exists a number  $M$  such that  $|f(x)| \leq M$  for all  $x$  in the domain, the function is bounded.

A periodic function repeats its values after a fixed interval called the period. Trigonometric functions are common examples of periodic functions.

Continuity is a major concept in mathematical analysis. A function is continuous if small changes in input produce small changes in output. Graphically, a continuous function can be drawn without lifting the pen from the paper.

A function  $f(x)$  is continuous at a point  $x = a$  if:

1.  $f(a)$  exists
2. The limit of  $f(x)$  as  $x$  approaches  $a$  exists
3. The limit equals  $f(a)$

Discontinuous functions may contain jumps, holes, or vertical asymptotes. Continuity is essential in physics and engineering because real-world processes often change smoothly.

Differentiability describes whether a function has a derivative at a point. The derivative measures the rate of change of the function. If a function is differentiable, it must also be continuous, although continuity alone does not guarantee differentiability.

For example, the function  $f(x) = |x|$  is continuous at  $x = 0$  but not differentiable there because the graph has a sharp corner.

Differentiation is widely used in mechanics, economics, and optimization problems.

An inverse function reverses the effect of the original function. If  $f(x)$  maps  $x$  to  $y$ , then the inverse function maps  $y$  back to  $x$ . Only bijective functions possess inverse functions.

For example, if  $f(x) = 2x + 3$ , then its inverse is:  
 $f^{-1}(x) = (x - 3)/2$

Inverse functions are important in solving equations and modeling reversible processes.

A composite function combines two functions into a single operation. If  $f(x)$  and  $g(x)$  are functions, then the composite function is written as:  
 $(f \circ g)(x) = f(g(x))$

Composite functions are commonly used in computer science and mathematical modeling[3].

Graphs provide a visual understanding of functional behavior. By studying graphs, one can identify intercepts, maxima, minima, symmetry, intervals of increase or decrease, and asymptotic behavior.

The x-intercept occurs where the graph crosses the x-axis, while the y-intercept occurs where the graph crosses the y-axis. Graphs also help identify whether functions are continuous or periodic.

The concept of a function is one of the cornerstones of mathematics and scientific reasoning. Functions provide a systematic way to describe relationships between variables and to analyze patterns in both theoretical and practical situations. Their properties, including continuity, monotonicity, boundedness, periodicity, and differentiability, allow mathematicians to understand how quantities change and interact.

Different types of functions serve different purposes, ranging from simple linear models to advanced exponential and trigonometric systems. The applications of functions extend far beyond mathematics into physics, economics, biology, engineering, and computer science. Because of their universal importance, the study of functions remains an essential part of education and scientific development.

Understanding functions enables students and researchers to solve problems more effectively and to interpret the world through mathematical relationships. As technology and science continue to evolve, functions will remain a fundamental tool for innovation and discovery.

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**PUBLIC POLICY AND MEDIATION IN ALTERNATIVE DISPUTE  
RESOLUTION**

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**NIZOLARNI MUQOBIL HAL ETISHDA OMMAVIY TARTIB VA  
MEDIATSIYA NISBATI**

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**Abstract:** This article examines the relationship between two key institutions within the alternative dispute resolution (ADR) framework: public policy and mediation. Drawing upon the legislation of the Republic of Uzbekistan and international practice, the author analyzes the role of public policy considerations in the recognition, enforcement, and implementation of mediated settlement agreements. The study also explores the connection between state policies on mediation and the principles of public policy in foreign jurisdictions. Particular attention is given to the extent to which public policy serves as a safeguard in mediation while preserving the flexibility and effectiveness of consensual dispute resolution mechanisms.

**Annotatsiya:** Ushbu maqolada nizolarni muqobil hal etish (ADR) tizimidagi eng muhim institutlar — ommaviy tartib (public policy) va mediatsiya jarayonining o'zaro nisbati tahlil qilinadi. Muallif O'zbekiston Respublikasining qonunchiligi hamda xalqaro tajribaga tayangan holda, mediativ kelishuvlarni ijro etishda ommaviy tartib mezonlarining rolini ochib berishga harakat qiladi. Shuningdek, xorijiy davlatlarda mediatsiya sohasidagi davlat siyosatining ommaviy tartib prinsiplari bilan bog'liqligi tadqiq etiladi.

**Keywords:** mediation, public policy, arbitration, mediated settlement agreement, writ of execution, recognition, enforcement.

**Kalit so'zlar:** mediatsiya, ommaviy tartib, arbitraj, mediativ kelishuv, ijro varaqasi, tan olish, ijro etish

Zamonaviy huquqiy tizimlarning rivojlanishi jarayonida nizolarni sudgacha yoki suddan tashqari hal etish mexanizmlari tobora keng qo'llanilmoqda. Nizolarni muqobil hal etish (Alternative Dispute Resolution — ADR) tizimi doirasida mediatsiya instituti alohida o'rin tutib, u taraflar o'rtasidagi kelishmovchiliklarni tezkor, tejamkor va ixtiyoriy asosda bartaraf etish imkonini beradi [1]. Biroq mediatsiya jarayoni va uning natijalari davlat tomonidan belgilangan ommaviy tartib (public policy) doirasida amalga oshirilishi lozim.

Sh.M. Masadikov ta'kidlaganidek, mediatsiya — nizolarni xolis, manfaatdor bo'lmagan uchinchi bir tomon, ya'ni muayyan kelishuvga erishishga yordam beradigan mediator ishtirokida hal etishning muqobil shakllaridan biridir; mediatsiya uslublari asosan muzokaralarni hamkorlik yo'liga burib yuborish va o'zaro manfaatli natijaga yo'naltirishga tayanadi [2]. Uning fikricha, mediator taraflar bir-birining nuqtai nazari hamda qarashlarini tushunishiga ko'maklashadi, muammoning samarali yechimini izlaydi.

Ommaviy tartib tushunchasi huquq nazariyasida ko'p qirrali hodisa sifatida talqin etiladi. U jamiyatning asosiy huquqiy, axloqiy va ijtimoiy qadriyatlarini ifodalaydigan, davlat tomonidan himoya qilinadigan normalar majmuini anglatadi [3]. Mediativ kelishuvlarni ijro etish yoki tan olish masalasida ommaviy tartib mezonini hal qiluvchi ahamiyat kasb etadi: kelishuv mazmuni yoki jarayon ommaviy tartibga zid bo'lsa, u ijro etilmaydi.

O'zbekiston Respublikasida mediatsiya instituti 2018-yilda qabul qilingan "Mediatsiya to'g'risida"gi Qonun bilan rasmiy mustahkamlandi [4]. Ushbu qonun mediatsiya jarayonini tartibga solish, mediativ kelishuvlarning huquqiy kuchini belgilash hamda ommaviy tartib mezonlariga muvofiqligini ta'minlash nuqtai nazaridan muhim ahamiyat kasb etadi. Shu bilan birga, qonunchilik amaliyotida ommaviy tartib va mediatsiya o'rtasidagi nisbat masalasi hali to'liq yechimini topgani yo'q.

Xalqaro miqyosda ommaviy tartib mediatsiyada ikki turli kontekstda namoyon bo'ladi: birinchi — mediatsiya sohasidagi davlat siyosati (public policy on mediation) sifatida, ikkinchisi — mediativ kelishuvni ijro etishda himoya klapani (public policy exception) sifatida [5]. Bellman va Podzibaning ta'biricha, ommaviy tartib mediatsiyasi (public policy mediation) hukumat, manfaatdor tomonlar va jamoatchilik o'rtasida kengashli muzokaralar uchun muhim maydon yaratadi [6].

Ushbu maqolaning maqsadi — O'zbekiston qonunchiligi va xalqaro tajriba asosida mediatsiya jarayonida ommaviy tartib mezonlarining rolini tahlil qilish, ularning o'zaro nisbatini aniqlash hamda amaliy muammolarni bartaraf etish bo'yicha tavsiyalar ishlab chiqishdan iborat.

Ommaviy tartib — bu davlatning huquqiy tizimi negizida yotuvchi, jamiyat manfaatlarini, axloqiy me'yorlarni va konstitutsiyaviy qadriyatlarni himoya qiluvchi prinsiplar majmui. Boshqacha, xalqaro xususiy huquqda ommaviy tartib "himoya klapani" (safety valve) vazifasini bajarib, xorijiy huquq normalarining yoki xalqaro kelishuvlarning milliy huquqqa zid qismlarini qo'llamaslik uchun asos bo'lib xizmat qiladi [9].

Huquq adabiyotida ommaviy tartibning ikki aspekti ajratiladi:

1. **Ichki ommaviy tartib (domestic public policy)** — mamlakat ichidagi munosabatlarni tartibga soluvchi imperativ normalar;
2. **Xalqaro ommaviy tartib (international public policy)** — xorijiy qarorlar yoki kelishuvlarni tan olish va ijro etishda qo'llaniladigan, yanada tor va aniq mezonlar.

O'zbekiston Respublikasining Fuqarolik kodeksi 1167-moddasi xorijiy huquq normalarini qo'llashda ommaviy tartib istisnosini nazarda tutadi: agar xorijiy huquq normasi O'zbekiston Respublikasi huquq tartibotining asoslariga (ommaviy tartibiga) zid bo'lsa, u qo'llanilmaydi [10].

Masadikov ta'kidlaganidek, O'zbekistonda nizolarni muqobil hal etish usullarini rivojlantirish istiqbollari belgilashda ommaviy tartib mezonlari huquqiy asoslarni mustahkamlashda muhim rol o'ynaydi [11].

O'zbekiston Respublikasining "Mediatsiya to'g'risida"gi 2018-yil 3-iyuldagi Qonunining 3-moddasi mediatsiya prinsiplarini belgilaydi: ixtiyoriylik, tenglik, mustaqillik, maxfiylik, xolislik va halollik [12]. Biroq ushbu prinsiplardan biri ham bevosita ommaviy tartib bilan bog'liqligini ko'rsatmaydi.

Qonunning 29-moddasi (mediativ kelishuvni ijro etish) mediativ kelishuv uni tuzgan taraflar uchun majburiy kuchga ega ekanligini, ixtiyoriy ravishda bajarilmagan taqdirda esa taraflar mediativ kelishuvni majburiy ijroga qaratishni so'rab sudga murojaat etishga haqli ekanligini belgilaydi [13].

O'zbekiston Respublikasi Iqtisodiy protsessual kodeksining 232-13-moddasiga ko'ra, mediativ kelishuvni majburiy ijro etish uchun ijro varaqasi berish quyidagi hollarda rad etiladi: mediativ kelishuv qonunchilikka zid bo'lsa; mediativ kelishuvning ijrosi talab etilayotgan shartlari o'zgartirilgan yoki bekor qilingan bo'lsa; mediativ kelishuvda

belgilangan majburiyatlar to'liq bajarilgan bo'lsa [14]. Ushbu normada "qonunchilikka ziddlik" mezonini bevosita ommaviy tartib kafolati vazifasini bajaradi.

IPK ning 232-8-moddasiga ko'ra, arbitrajning hal qiluv qarori O'zbekiston Respublikasining ommaviy tartibiga ziddligi aniqlansa, mazkur qaror bekor qilinishi lozim [15]. Xuddi shuningdek, IPK ning 256-moddasi chet el arbitrajining hal qiluv qarorini tan olish va ijroga qaratishni rad qilish asoslari sifatida ommaviy tartibga ziddlik yoki tahdidni ko'rsatib o'tadi [16]. Bu normalar mediatsiya va arbitraj qarorlarini ijro etishda ommaviy tartib mezonining O'zbekiston huquqiy tizimidagi universal xarakter kasb etishini ko'rsatadi.

2019-yilda imzolangan BMT Xalqaro tijorat mediatsiyasidan kelib chiqadigan kelishuvlarni ijro etish to'g'risidagi konvensiya (Singapur mediatsiya konvensiyasi) mediativ kelishuvlarni xalqaro ijro etish tizimini joriy etdi. Konvensiyaning 5(2)(b)-moddasi kelishuvni ijro etishning ommaviy tartibga zid bo'lishi holatini ijro etishdan bosh tortish asosi sifatida belgilaydi [17].

Singapur konvensiyasi ommaviy tartib istisnosini tor talqin qilishni taqozo etadi: faqat fundamental huquqiy tamoyillar buzilganda qo'llanilishi mumkin. Bu yondashuv xalqaro tijorat mediatsiyasini rag'batlantirish maqsadiga xizmat qiladi [18].

UNCITRALning 2018-yilgi Xalqaro tijorat mediatsiyasi bo'yicha andoza qonuni ham ommaviy tartib mezonini mediativ kelishuvlarni ijro etishda himoya mexanizmi sifatida belgilaydi [19].

Germaniyada mediatsiya to'g'risidagi 2012-yilgi Qonun mediativ kelishuv notarial tartibda tasdiqlanganidan so'ng bevosita ijro etilishi mumkinligini nazarda tutadi. Biroq kelishuv yaxshi axloq normalariga yoki imperativ qonun normalariga zid bo'lsa, u bekor qilinishi mumkin [20].

Laws va Foresterning tadqiqotiga ko'ra, ommaviy tartib mediatsiyasi (public policy mediation) — manfaatdor tomonlar, hukumat vakillari va jamoatchilik o'rtasida kengashli muzokaralar orqali ijtimoiy masalalarning yechimini topishga yo'naltirilgan, o'ziga xos metodologiyaga ega jarayon bo'lib, u an'anaviy suddan tashqari mediatsiyadan o'z maqsad va ishtirokchilar tarkibi jihatidan farqlanadi [21].

Amaliyotda ommaviy tartibga zid mediativ kelishuvlar odatda quyidagi hollarda namoyon bo'ladi:

1. Uchinchi shaxslar huquqlarini buzuvchi kelishuvlar — ikki tomon o'z kelishuvi bilan uchinchi shaxsning manfaatlariga zarar yetkazgan hollarda. O'zbekiston "Mediatsiya to'g'risida"gi Qonunning 3-moddasi mediatsiyani jamoat manfaatlariga va mediatsiyada ishtirok etmayotgan uchinchi

shaxslarning huquq hamda qonuniy manfaatlariga daxl qiladigan nizolarga nisbatan qo'llab bo'lmasligini belgilaydi; [22]

2. Imperativ normalarni chetlab o'tuvchi kelishuvlar — mehnat huquqi, iste'molchilar huquqi yoki raqobat huquqiga oid imperativ normalar buzilganda;

3. Firibgarlik yoki majburlash yo'li bilan tuzilgan kelishuvlar — bir tomon ikkinchisini aldash yoki bosim o'tkazish orqali kelishuvga majburlagan hollarda;

4. Jamoat tartibiga tahdid soluvchi kelishuvlar — jinoyat huquqi doirasidagi masalalar bo'yicha tuzilgan kelishuvlar.

O'zbekiston qonunchiligida ommaviy tartib mezonining mediativ kelishuv ijrosiga tatbiq etilishida bir qator muammolar mavjud:

**Birinchidan**, ommaviy tartib tushunchasining qonunchilikdagi aniq ta'rifi yo'qligi uni ko'p ma'noli talqin etish imkonini beradi. IPK ning 232-8-moddasi va 256-moddasi ommaviy tartibni atash uchun alohida norma sifatida ishlatilsa-da, bu tushunchaning mazmuni ochib berilmagan [23]. Masadikov ham mediatsiyani huquqiy tartibga solish muammolarini tahlil qilib, qonunchilik bo'shliqlari mavjudligini ko'rsatib o'tgan [24].

**Ikkinchidan**, IPK ning 232-13-moddasida mediativ kelishuvni "qonunchilikka zid" deb topish va shu asosda ijro varaqasi berishni rad etish mexanizmi belgilangan, biroq sud amaliyotida bu mezonni qo'llashning aniq tartibi yo'q [25].

**Uchinchidan**, O'zbekiston Singapur mediatsiya konventsiyasiga hali qo'shilmaganligi sababli xalqaro tijorat mediatsiyasi natijalarini O'zbekistonda ijro etish muammolari mavjud. Bu muammo O'zbekiston Respublikasi Prezidentining 2020-yil 17-iyundagi PQ-4754-sonli "Nizolarni muqobil hal etishning mexanizmlarini yanada takomillashtirish chora-tadbirlari to'g'risida"gi qarorida ham qisman tan olingan [26].

Muammolarni bartaraf etish maqsadida quyidagi takliflar ilgari suriladi:

#### **Qonunchilik sohasida:**

- "Mediatsiya to'g'risida"gi Qonunga va IPK ga ommaviy tartib tushunchasini aniqlashtiruvchi hamda mediativ kelishuvni ommaviy tartibga zidligi asosida bekor qilish tartibini belgilovchi normalar kiritish;
- O'zbekiston Respublikasining Singapur mediatsiya konventsiyasiga qo'shilishini tezlashtirish;
- Mediativ kelishuvlarning imperativ qonun normalariga muvofiqligini tekshirish mexanizmini joriy etish.

#### **Sud amaliyotida:**

- Ommaviy tartib mezonining mediativ kelishuv ijrosiga tatbiq etilishiga doir tushuntirish beruvchi Oliy sud plenumi qarorini qabul qilish;

- Sud amaliyotida ommaviy tartibni tor talqin qilish — faqat fundamental huquqiy tamoyillar buzilganda qo'llash.

Ushbu tadqiqot shuni ko'rsatdiki, mediatsiya va ommaviy tartib o'rtasidagi munosabat nizolarni muqobil hal etish tizimining barqarorligini ta'minlashda markaziy o'rin tutadi. Mediatsiya taraflarning ixtiyoriy kelishuviga asoslangan bo'lsa-da, bu kelishuv davlat tomonidan himoya qilinadigan fundamental huquqiy tamoyillar — ommaviy tartib doirasida qolishi shart.

Xalqaro tajriba shuni ko'rsatdiki, ommaviy tartib mezonini mediatsiyaga nisbatan qo'llashda muvozanatli yondashuv zarur: bir tomondan, mediatsiyaning rivojlanishiga to'sqinlik qilmaslik, ikkinchi tomondan, jamiyat va uchinchi shaxslar manfaatlarini himoya qilish. Singapur mediatsiya konvensiyasining 5(2)(b)-moddasi ana shunday muvozanat tamoyilini xalqaro darajada mustahkamlab bergan [27].

O'zbekiston Respublikasi uchun ustuvor vazifalar quyidagilardan iborat: qonunchilikda ommaviy tartib mezonini aniqlashtirish, sud amaliyotini birlashtirish, Singapur mediatsiya konvensiyasiga qo'shilish va mediatorlar malakasini oshirish. Ushbu chora-tadbirlar O'zbekistonda mediatsiya institutini yanada rivojlantirish va uni xalqaro standartlarga yaqinlashtirish imkonini beradi.

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## **ZIZIPHUS JUJUBA MILL. BİTKİSİNİN BİYOLOJİK ÖZELLİKLERİ VE YETİŞTİRME AGROTEKNOLOJİSİ**

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**Özet.** Bu makalede *Ziziphus jujuba* Mill. (hünnap) bitkisinin botanik sınıflandırması, morfolojik ve biyolojik özellikleri ile yetiştirme teknolojisi ele alınmıştır. Bitkinin taksonomik konumu, dış yapısı, büyüme ve gelişme özellikleri analiz edilmiştir. Ayrıca hünnap üretimi yöntemleri, ekim zamanı, toprak ve iklim gereksinimleri, bakım işlemleri ve verimliliği artırma faktörleri hakkında bilgiler verilmiştir. Yapılan analizler sonucunda hünnabın kuraklığa dayanıklı, ekonomik ve tıbbi öneme sahip, gelecek vaat eden bir meyve bitkisi olduğu tespit edilmiştir.

**Anahtar Kelimeler:** *Ziziphus jujuba* Mill., botanik sınıflandırma, morfolojik özellikler, yetiştirme teknolojisi, çoğaltma, agroteknoloji, meyve bitkisi, verimlilik.

**Konunun Önemi.** Özbekistan Cumhuriyeti Cumhurbaşkanı'nın 10 Nisan 2020 tarihli "Doğada Kendiliğinden Yetişen Tıbbi Bitkilerin Korunması, Kültüre Alınarak Yetiştirilmesi, İşlenmesi ve Mevcut Kaynaklardan Akılcı Şekilde Yararlanılmasına Yönelik Tedbirler Hakkında" PQ-4670 sayılı kararı kabul edilmiştir. Cumhurbaşkanımız tarafından 20 Mayıs 2022 tarihinde "Tıbbi Bitki Hammadde Üretim Potansiyelinden Etkin Yararlanılması, İşleme Faaliyetlerinin Desteklenmesi Yoluyla Katma Değer Zincirinin Oluşturulması Tedbirleri Hakkında" bir kararname ile "Tıbbi Bitkilerin Kültüre Alınarak Yetiştirilmesi, İşlenmesi ve Tedavi Süreçlerinde Bunlardan Yaygın Şekilde Yararlanılmasının Organize Edilmesi Tedbirleri Hakkında" bir karar imzalanmıştır.

Günümüzde tıbbi bitkilere olan talep her geçen gün artmaktadır. Bu tıbbi bitkilerden biri de *Ziziphus jujuba* Mill. bitkisidir. Günümüzde kuraklığa dayanıklı, ekolojik uyum yeteneği yüksek, besleyici ve tıbbi değeri fazla olan bitki türlerinin incelenmesi ve bunların geniş ölçekte yetiştirilmesi en güncel konulardan biri haline gelmiştir. Bu açıdan bakıldığında *Ziziphus jujuba* Mill. bitkisi büyük bir bilimsel ve pratik öneme sahiptir. Söz konusu bitki, dünyanın birçok ülkesinde yetiştirilmekte olup meyveleri gıda, eczacılık ve halk hekimliğinde yaygın olarak kullanılmaktadır. Araştırma sonuçlarına göre hünnap meyveleri; vitaminler, antioksidanlar, flavonoidler ve diğer

biyolojik aktif maddelerin kaynağı olup insan sağlığının korunmasında önemli bir rol oynamaktadır. İklim değişikliği ve su kaynaklarının giderek azalması koşullarında, kuraklığa dayanıklı meyve ağaçlarının introduksiyonu (yeni bölgelere uyumlaştırılması) ve bunların yetiştirme teknolojilerinin geliştirilmesi ihtiyacı daha da artmaktadır. *Ziziphus jujuba* Mill. güçlü kök sistemi, tuzlu ve verimsiz topraklara adaptasyon yeteneği ve yüksek verimliliği ile öne çıkmaktadır. Bu nedenle kurak (arid) ve yarı kurak (yarı arid) bölgelerde gelecek vaat eden bir meyve ürünü olarak kabul edilmektedir. Özbekistan'ın toprak ve iklim koşullarında *Ziziphus jujuba* Mill.'ın biyolojik özelliklerinin incelenmesi, çeşitlerinin çoğaltılması, agroteknik yöntemlerin geliştirilmesi ve verimliliğinin artırılmasına yönelik bilimsel araştırmaların genişletilmesi büyük önem taşımaktadır. Bu nedenle *Ziziphus jujuba* Mill. bitkisinin botanik sınıflandırması, morfolojik özellikleri ve yetiştirme teknolojisinin araştırılması, günümüzün en güncel bilimsel ve pratik meselelerinden biridir.

***Ziziphus jujuba* Mill.**, Rhamnaceae (Cehri giller) ailesine ait, boyu 10 metreye kadar ulaşabilen bir ağaçtır. Genç dalları tüylerle kaplı, yaşlı dalları ise pürüzsüzdür. Yaprakları saplı, yumurtamsı, yukarıya doğru uzamış eliptik, yanları hafifçe asimetric, üç damarlı, kenarları dişli-tırtıklı, üst yüzeyi pürüzsüz, alt yüzeyindeki damarlar ise tüylü ve pürüzsüzdür; yaprak sapları tüylü olup 3-10 mm uzunluğundadır. Çiçekleri 3-4 mm çapındadır. Çiçek sapları 3-4 mm uzunluğa sahiptir. Brakteoller (çiçek yan yaprakçıkları) zarımsı ve küçüktür. Çanak yaprakları yumurtamsı, uç kısımları sivrilmiş ve 2 mm uzunluğundadır. Taç yaprakları çanak yapraklarından daha kısa olup tabana doğru daralır. Meyvesi çekirdekli (drupa) olup küresel veya eliptik şekilli, kızılımsı-turuncu renklidir. Temmuz-Eylül aylarında çiçek açar ve meyve verir.



**1. Şekil. Ziziphus jujuba Mill. bitkisinin meyvesi ve meyveden çıkarılmış tohumları**

**Ziziphus jujuba Mill.**'in ana vatanı Çin'dir. Bilim insanlarının verilerine göre bu bitki, Çin'deki Sarı Nehir (Huang He) havzasının orta ve aşağı kısımlarında ortaya çıkmış olup orada 4000–7000 yıldır kültüre alınarak yetiştirilmektedir. Bu nedenle hünnap, sıklıkla “Çin hurması” olarak da adlandırılır. Bilimsel literatürde hünnabın Orta Asya topraklarına çok eski dönemlerde İpek Yolu vasıtasıyla girdiği, daha sonra XX. yüzyılda Özbekistan'ın bilimsel deneme araştırma istasyonları ile botanik bahçelerinde geniş çapta introduksiyonu (uyumlaştırılması) yapılarak incelendiği kaydedilmektedir. Günümüzde Taşkent, Semerkant, Surhanderya, Fergana Vadisi ve Karakalpakistan bölgelerinde de yetişmektedir.



**2. Şekil. Karakalpakistan Cumhuriyeti Nukus şehri caddelerinde büyüyen Ziziphus jujuba Mill. bitkisi**

*Ziziphus jujuba* Mill., kuraklığa, sıcağa ve tuzluluğa dayanıklı meyve ve tıbbi öneme sahip bir bitkidir. Bu nedenle Özbekistan'ın çöl ve yarı çöl bölgelerinde, özellikle de Karakalpakistan Cumhuriyeti'nde gelecek vaat eden mahsullerden biri olarak kabul edilmektedir. *Ziziphus jujuba* Mill., ışık seven bir bitki olup tam güneş alan alanlarda iyi gelişim gösterir. Sıcak ve kurak iklim koşullarında yüksek verim sağlar. Kumlu, tınlı ve hafif tuzlu topraklarda da büyüebilir. Toprağın iyi drene edilmiş olması önemlidir. Karakalpakistan'ın kurak ve rüzgarlı bölgelerine adaptasyon yeteneği yüksektir. Sonbaharda toprak 30–35 cm derinlikte sürülür. Hektar başına 20–30 ton

yanmış çiftlik gübresi uygulanır. İlkbaharda toprak tesviye edilerek ekime hazırlanır ve tuzlu alanlarda tuz yıkama sulamalarının yapılması önerilir.

*Ziziphus jujuba* Mill. bitkisi aşağıdaki yöntemlerle çoğaltılabilir:

- Tohumla,
- Kök sürgünleri (dip sürgünleri) yoluyla,
- Aşılama yöntemiyle çoğaltılır.

Uygulamada, iri ve kaliteli ürün elde etmek amacıyla fidanların aşılansarak yetiştirilmesi daha uygun kabul edilmektedir.

*Ziziphus jujuba* Mill. bitkisi sonbaharda (Ekim–Kasım) veya ilkbaharda (Mart ayında) dikilebilir. Dikim çukurları 50×50×50 cm veya 60×60×60 cm boyutlarında hazırlanır. Ağaçlar arasında 4–5 m, sıralar arasında ise 5–6 m mesafe bırakılır. Bahçe tesisinde 5×5 m dikim normu yaygın olarak kullanılır. İlk 2–3 yıl boyunca bitkinin düzenli olarak sulanması gerekir. Vejetasyon döneminde 7–10 kez sulama yapılması önerilir. Meyve tutumu döneminde nem yetersiz olursa verim düşer. Yetişkin ağaçlar kuraklığa karşı oldukça dayanıklıdır. Bitki dikili 1 hektar alana azot (N) – 80–120 kg, fosfor (P<sub>2</sub>O<sub>5</sub>) – 60–90 kg, potasyum (K<sub>2</sub>O) – 40–60 kg uygulanır. Fosfor ve potasyum sonbaharda, azot ise ilkbaharda ve vejetasyon dönemi boyunca bölünerek verilir. Organik gübreler 2–3 yılda bir kez uygulanır. Vejetasyon süresince bitki sıra araları gevşetilir. Yabancı otlar düzenli olarak temizlenir, kuruyan ve hastalıklı dallar budanır; ağaca kase (çanak) veya seyreltilmiş katmanlı şekil verilir. Rüzgarlı bölgelerde rüzgar kıran ağaçların dikilmesi faydalıdır. *Ziziphus jujuba* Mill., diğer pek çok meyve ağacına kıyasla hastalık ve zararlılara karşı oldukça dirençlidir. Bitkinin meyveleri Ağustos sonu – Ekim aylarında olgunlaşır. Çeşidine ve yaşına bağlı olarak bir ağaçtan 20–50 kg'a kadar ürün alınabilir. Meyveler taze olarak veya kurutulularak tüketilir.

Bitki tohumdan da yetiştirilebilir, ancak tohumdan yetiştirilen fideler ana bitkinin tüm çeşit özelliklerini koruyamayabilir. Bu nedenle, tohumdan yetiştirilen fidanlar çoğunlukla anaç (anaçlık) olarak kullanılır. Bitki tohumdan yetiştirilmek istendiğinde, tam olgunlaşmış ve sağlıklı meyvelerden tohumlar ayrılır. Tohumlar meyve kalıntılarından temizlenip kurutulur; ardından tohum kabuğunun sert olması nedeniyle çimlenmeyi hızlandırmak amacıyla katlama (stratifikasyon) ve çizme/aşındırma (skarifikasyon) yöntemleri uygulanarak ekime hazır hale getirilir. Tohum ekiminden önce toprak gevşetilir ve verimli duruma getirilir. Toprak hazırlandıktan sonra tohumlar 3–5 sm derinliğe, sıra arası 60–70 sm ve tohum arası 10–15 sm olacak şekilde ekilebilir. Ekimden sonra tohumlar hafifçe sulanır, toprak nemi düzenli olarak korunur, yabancı otlar zamanında temizlenir ve sıra araları çapa ile gevşetilir. Fidler ilk yıl 20–40 sm, ikinci yıl ise 50–100 sm'ye kadar büyüyebilir. Sert kabuğu çatlatılmış veya ön

işlem görmüş bitki tohumları genellikle 20–40 gün içinde çimlenebilir. İşlem görmemiş tohumların çimlenme oranı daha düşük olup bazılarının çimlenmesi bir sonraki yıla da sarkabilir. Karakalpakistan'ın kurak ikliminde tohumların Mart ayının ikinci yarısı ile Nisan ayının başlarında ekilmesi uygundur. Fidelerin ilk gelişim döneminde düzenli sulama büyük önem taşır. İlerleyen dönemlerde hünnap kuraklığa karşı iyi bir uyum sağlar. Ziziphus jujuba Mill. bitkisi Karakalpakistan bölgesinde de yetiştirilerek plantasyonlar kurulabilir. Özellikle Karakalpakistan'ın Muynak ve Aral Gölü (Aralboyu) bölgelerinde hünnap plantasyonlarının oluşturulması gelecek vaat etmektedir. Ancak Karakalpakistan genelinde tuzlu topraklar bulunduğundan, bitki yetiştiriciliğinde tuzluluğa dayanıklı fidanların kullanılması, damla sulama sisteminin uygulamaya konulması, organik ve mikrobiyolojik preparatların tercih edilmesi ile rüzgar erozyonuna karşı koruyucu önlemlerin alınması tavsiye edilir.

**Sonuç olarak ifade edecek olursak,** Ziziphus jujuba Mill. bitkisi; yüksek besin değeri, kuraklığa ve olumsuz ekolojik koşullara karşı dayanıklılığı ile öne çıkan, değerli bir meyve ve tıbbi bitkidir. Bitkinin biyolojik ve agro-biyolojik özellikleri, Özbekistan ve özellikle Karakalpakistan Cumhuriyeti'nin toprak-iklim koşullarında başarılı bir şekilde yetiştirilmesine imkan tanımaktadır. Literatür analizi; hünnapın düşük verimli ve kısmen tuzlu topraklarda bile iyi büyüyüp geliştiğini ve yüksek kaliteli ürün verdiğini göstermektedir. Bitkiyi tohumla ve vejetatif yöntemlerle çoğaltmak mümkün olup, agroteknik işlemlerin zamanında ve kaliteli bir şekilde uygulanması verimliliği artırmada büyük önem taşımaktadır. Ayrıca hünnap meyvelerinin gıda, eczacılık ve halk hekimliğindeki önemi, bu ürünün geniş ölçekte tarıma kazandırılması gerektiğini ortaya koymaktadır. Gelecekte, hünnapın yerel koşullara uyumlu çeşitlerinin geliştirilmesi ve yetiştirme teknolojilerinin mükemmelleştirilmesi üzerine bilimsel araştırmaların sürdürülmesi uygun görülmektedir.

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## **ГЕНЕЗИС ТЕОРИЙ И ПРИНЦИПОВ НАЛОГООБЛОЖЕНИЯ В СИСТЕМЕ ГОСУДАРСТВЕННОГО РЕГУЛИРОВАНИЯ ИМУЩЕСТВЕННЫХ ОТНОШЕНИЙ**

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***Аннотация:** В данном тезисе исследуется генезис теорий и принципов налогообложения в системе государственного регулирования имущественных отношений. Рассмотрены экономико-правовая сущность категории «имущество», особенности ее трактовки в гражданском и налоговом законодательстве, а также теоретические основы исчисления и администрирования имущественных налогов. Обоснована необходимость уточнения категории налогооблагаемого имущества, развития кадастрового учета, совершенствования межведомственного информационного обмена и систематизации финансово-технических и экономических принципов имущественного налогообложения.*

***Ключевые слова:** имущественные отношения, имущественные налоги, принципы налогообложения, имущество, налоговая база, кадастровый учет, налоговое администрирование, государственное регулирование.*

***Abstract:** This thesis examines the genesis of taxation theories and principles within the system of state regulation of property relations. It analyzes the economic and legal essence of the concept of property, its interpretation in civil and tax legislation, as well as the theoretical foundations of calculating and administering property taxes. The study substantiates the need to clarify the category of taxable property, develop cadastral registration, improve interdepartmental information exchange and systematize the financial-technical and economic principles of property taxation.*

***Keywords:** property relations, property taxes, taxation principles, property, tax base, cadastral registration, tax administration, state regulation.*

Исследование сущности экономических и налоговых категорий, объясняющих природу имущественных налогов, основано на генезисе классических экономических теорий, рассмотренных по трудам А.Смита, Д.Рикардо, Дж.Милля, Дж.Кейнса, а также на актах и документах, законодательно регулирующих отношения собственности и правовую характеристику имущества. С развитием Налогового кодекса Республики Узбекистан

налоговеды обосновали природу *налоговых правоотношений* как производной категории от гражданско-правовых отношений. Однако, анализ правовых норм, на которых основаны современные имущественные отношения, показал, что Гражданский кодекс Республики Узбекистан не полно раскрывает понятие "имущество". В соответствии с кодексом к имуществу отнесены объекты гражданских прав, в том числе вещи, включая деньги и ценные бумаги, иное имущество, в том числе имущественные права; работы и услуги; информация; результаты интеллектуальной деятельности, в том числе исключительные права на них (интеллектуальная собственность); нематериальные блага. Поскольку, статус имущества требует принадлежности его правообладателю, Гражданский кодекс Республики Узбекистан оперирует понятием "объект гражданского права", а не "объект имущества". Между тем, налоговое законодательство оперирует понятием "объект налогообложения", под которым понимается имущество. Включение в перечень объектов гражданских прав "иного имущества, в том числе имущественных прав", приводит к выводу, что имущественные права включены законодателем в состав иного имущества. Такая позиция критически осмыслена в работе, даны предложения по уточнению отдельных норм гражданского и налогового законодательства.

Общеизвестно, что разные отрасли науки имеют свое отношение к категории "имущество". Поскольку материальной основой и материально-технической базой любой экономической деятельности является имущество, то это понятие в равной степени изучается экономической наукой. В частном праве термин "имущество" имеет вполне конкретное содержание. В отечественной цивилистике категория "имущество" является фундаментальным понятием, отражает универсальную характеристику основной массы общественных отношений, составляющих предмет гражданского права.

Таким образом, "имущество" можно характеризовать как собирательную категорию, охватывающую различные имущественные блага, объединенные следующими родовыми признаками:

*первый признак* - экономическое содержание и имущественно-стоимостной характер. Экономическое содержание или экономическая ценность объектов имущества заключается в самом благо, которое выступает носителем этой ценности. Имущественно-стоимостной характер означает пригодность таких объектов к возмездному обмену, поэтому они имеют стоимость, могут быть оценены в деньгах, обладают определенной ценностью;

*второй признак* - передаваемость или способность отделяться от обладателя объекта и функционировать в обороте;

*третий признак* - предметная целостность и предметная завершенность. Предметная целостность обусловлена тем, что данное благо не совпадает с иными объектами, представляет собой самостоятельную ценность. Предметная завершенность выражается в том, что появление блага не требует соотносить его с процессом создания или исполнения данного блага.

Первый признак отражает содержательную характеристику имущества, второй - динамическую характеристику, а третий - статическую характеристику, причем последняя обеспечивает принадлежность имущества ограниченному кругу лиц.

Немаловажным направлением изучения экономическо-правовых аспектов имущества, на наш взгляд, выступает систематизация определения имущества, рассмотрение содержательного смысла этого понятия для целей налогообложения сквозь различные области права. Это позволит уточнить содержание категории *налогооблагаемое имущество* и его специфические характеристики.

Специфика развития имущественного налогообложения в современной налоговой системе, на наш взгляд, связана:

- во-первых, с необходимостью его классификации для целей налогообложения, на основании чего возможно повышение качества межведомственного обмена сведениями, используемыми для исчисления имущественных налогов;
- во-вторых, с необходимостью совершенствования методологии администрирования имущественных налогов и повышением качества работы налоговых органов с налогоплательщиками;
- в-третьих, с государственным регулированием отношений собственности для уточнения объемов и степени консолидации имущества в составе активов крупных корпораций и холдингов, в капитале которых участвует государство;
- в-четвертых, с проведением анализа действующего инструментария оценки объектов имущества, числящегося на балансах налогоплательщиков и государства;
- в-пятых, с развитием системы кадастрового учета объектов для разработки системы массовой оценки недвижимости и использование ее налогоплательщиками.

Принципы имущественного налогообложения берут свое начало от общих принципов налогообложения, научное обоснование которым дали в свое

время А.Смит, А.Вагнер, Э.Селигман, А.А.Соколов, В.Н.Твердохлебов и другие.

Обоснование принципов важно рассмотреть в рамках разных направлений налоговой политики государства в период становления и развития налоговой системы. Ключевыми позициями, определяющими направления развития принципов, являются вопросы: возможного извлечения доли национального дохода; распределения этой доли между разными группами налогоплательщиков; управления налогообложением, а также идея единого налога.

Систему основополагающих принципов, на наш взгляд, необходимо дополнить двумя группами принципов: группой финансово-технических принципов, к которой можно отнести принципы достаточности, гибкости, рациональности имущественного налогообложения; и группой экономических принципов, к которой можно отнести принципы рыночной (справедливой) оценки, обособленного формирования экономической информации, уточняющей содержание налоговых баз имущественных налогов, в информационной системе налогоплательщика и в информационной системе налоговых органов.



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