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Agricultural sciences

WAYS TO IMPROVE AGRICULTURALLY RECLAIMED LANDS WITH HEAVY MECHANICAL COMPOSITION

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Abstract

Land resources are one of the main natural resources in ensuring the economic development and food security of each country. The agricultural and food production sectors occupy an important place in the economy of Azerbaijan, and the sustainable development of these sectors directly depends on the efficient use of land resources. The growing population, urbanization and industrialization increase the demand for land resources year after year. The limited availability of land resources and the weakening of their quality indicators are of serious concern in terms of food security. Therefore, the protection of land resources, increasing their fertility and returning especially difficult land areas to agricultural circulation are of strategic importance for the country.

Keywords: *salinization, chemical pollution, eroded soils, salty, silty, meliorant.*

In recent years, the increase in food demand in Azerbaijan requires the intensification of agricultural production. Along with population growth, the increase in domestic and export demand for agricultural products necessitates more efficient use of land. However, approximately 60% of the land fund in the republic consists of saline, swampy, saline-alkali and difficult-to-cultivate lands due to their physical and chemical properties. The role of such lands in agricultural production is limited, and their low productivity negatively affects food security. Therefore, the study of difficult-to-ameliorate lands, their improvement and involvement in agriculture is currently one of the most important issues for the country.

Factors negatively affecting the state of soil cover in Azerbaijan

Among them, the aging of irrigation systems, lack of proper agrotechnical measures, anthropogenic impacts, climate change and inefficient land management play an important role. As a result of these factors, the structural composition of soils is disrupted, the amount of humus decreases, and processes such as salinization intensify. Especially in the lands located in the Kura-Araz lowland and the Aran region, high salinity and the proximity of groundwater to the surface aggravate the reclamation situation. As a result, the productivity of agricultural crops on these lands decreases and additional reclamation measures are required for land restoration.

In the Republic of Azerbaijan, important measures are being taken at the state level to restore soil fertility and improve difficult-to-ameliorate lands. The "State Program on the Development of Land Reclamation and Water Management in the Republic of Azerbaijan" was adopted by decrees and orders of President Ilham Aliyev, within the framework of which irrigation systems were renovated, collector-drainage networks were restored, and land reclamation measures were expanded [1]. In addition, complex measures are being taken to prevent land degradation in order to increase the efficiency of agriculture, ensure food security, and protect ecological balance. Within the framework of this state policy, one of the priority directions is the modernization of land reclamation infrastructure and the introduction of a scientifically based land management system [2].

Measures taken to improve difficult-to-reclaim soils are aimed not only at increasing soil productivity, but also at restoring ecological balance. For this purpose, measures such as installing various drainage systems, carrying out washing measures on saline soils, applying organic and mineral fertilizers and reclamation facilities to restore the soil structure, as well as using chemical reclamation methods are of great importance. At the same time, the application of new scientific approaches in this direction, the use of modern reclamation technologies and the role of digital systems in land resource management are also very important [3;4;5].

In conclusion, it can be noted that the improvement of difficult-to-reclaim lands is of great importance not only for the development of the agricultural sector, but also for the overall socio-economic stability of the country and ensuring food security. Therefore, it is advisable to expand scientific

research on the restoration and efficient use of the land fund, apply modern technological solutions and continue land reclamation measures with state support. Deepening research in this area and preparing new scientific and practical proposals will ensure the sustainability of agricultural production and serve to protect land resources for future generations, and currently, conducting these works in the republic is of great relevance as a priority issue.

Purpose of the study. The aim of the project is to develop chemical ameliorants from industrial and agricultural waste and develop technologies for their application in agriculture in order to improve saline and saline-affected soils in the republic.

The object of the study. These are saline and salinized soils with a heavy mechanical composition that are difficult to ameliorate and are widely distributed throughout the republic.

Research methodology. The study was conducted based on methodologies known to date and widely applied in the republic.

Raw materials and materials used. During the preparation of chemical methods, bird droppings containing wood sawdust, 20% nitric acid, and lime were used.

Table 1
Chemical composition of bird droppings and manure containing wood sawdust, in %.

Name of raw material	Na ₂ O	MgO	Al ₂ O ₃	SiO ₂	SO ₃	K ₂ O	P ₂ O ₅	CaO	TiO ₂	MnO	Fe ₂ O ₃	CuO	SrO	ZnO	ZrO	MoO ₃	FDI
1	1.55	4.12	1.78	6.68	2.41	7.54	8.22	15.02	0.11	0.25	1.15	0.03	0.02	0.19	0.0041	0.0001	50.75
2	0.33	1.12	4.16	14.01	30.76	0.62	0.10	26.64	0.2932	0.0408	2.87	0.0083	0.0817	0.0098	0.0212	0.0060	18.87

The mineralogical composition of the raw materials used is given in Table 2.

Table 2
The mineral composition of bird droppings and manure containing wood sawdust in %

Name of raw material	CaSO ₄ 2H ₂ O	CaCO ₃	Feldspar	K ₃ PO ₄	SiO ₂	Fe ₂ O ₃	Organic matter.p	Other mixtures
1	5	24	4	21	5	2	38	1
2	60	9	10	-	10	2	8	3

Research methodology. X-ray spectral and X-ray diffractometric analyses of the raw materials used were carried out on "S8 Tiger", "Miniflex600" and "ICP MS 7700 e" devices.

Preparation of chemical ameliorant in laboratory conditions:

150 grams of bird droppings are placed in a 1 liter flask equipped with a stirrer. 300 ml of 20% phosphoric acid is added to it and the stirrer is turned on. After the mixture is stirred for 15 minutes, 150 grams of ketchup is added to the flask in portions and stirring is continued for another 15 minutes. The finished product is removed from the flask and dried in a thermostat at a temperature of 1050C.

In production conditions:

1 ton of bird droppings containing wood chips are fed to the mixer, 3 tons of 20% phosphoric acid are added to it and the mixer is started. Mixing is continued for about 15 minutes at a speed of 60 rpm. Finally, 1 ton of slag is added to the mixture in portions and mixing is continued for another 15 minutes. In the next stage, the product obtained in the mixer is transferred to the drying drum for drying, and from there to the packaging area via an elevator for mixing.

The mineralogical composition of the prepared chemical ameliorant is 42%-44% organic matter, 33% is feldspar, and 8% is CaCO₃, 8% feldspar, 6% SiO₂(a quartz), 1% Fe₂O₃, and 2% other mixtures.

The chemical composition of the chemical ameliorant is as follows: Na₂O – 0.54%, MgO – 1.0%, Al₂O₃ – 2.47%, SiO₂ – 8.74%, SO₄ – 15.62%, H₂O – 1.76%, P₂O₅ – 2.20%, CaO – 4.33%, TiO₂ – 0.16%, MnO – 0.06%, Fe₂O₃ – 1.56%, CuO – 0.0093%, SrO – 0.04%, ZnO – 2.33%, ZrO – 0.0107%, MoO₃ – 0.0023%, YTI – 48.97%.

The chemical ameliorant was tested under experimental conditions as follows:

To carry out the tests, a soil sample taken from the village of Gumlar in the Agdash region is dried at room temperature for several days, crushed and passed through a sieve with a mesh diameter of 1 mm. Finally, the soil sample is filled into containers with a height of 30 cm and a diameter of 5 cm, the lower part of which is closed with a stainless steel mesh and filter paper is placed on top. The height of the bag in the containers should be the same in all containers, within 25 cm. During the experiment, water is always kept at a height of 5 cm above the soil. Special bottles, containers or flasks are placed below the containers to collect the filtrate and, if necessary, conduct chemical analysis.

Trial experience After the soil sample in the containers is finished and has dried, the soil samples in them are emptied and subjected to chemical analysis [6;7;8].

The results obtained from the experimental experiment are given in Table 3.

As a result of chemical analyses of soil samples before and after washing, it was determined that washing with plain water In the variant, the salinity of the soil sample decreased from 1.79 grams to 1.09 grams per 100 grams of soil based on dry matter. At this time, the amount of chlorine atoms decreased from 0.083 grams to 0.002 grams, and the amount of sulfate atoms decreased from 1.200 grams to 0.755 grams. After washing, the calcium cation remaining in the soil was 0.150 grams per 100 grams of soil, the amount of magnesium was 0.103 grams, and the amount of sodium was 0.001 grams (Table 3).

20% sulfuric acid applied to the soil In the given variant of chemical ameliorant prepared on the basis of impregnated wood sawdust, the salinity level of the soil sample decreased from 1.79% to 0.76% based on dry matter.

After washing, the amount of chlorine anion remaining in the soil decreased from 0.083 grams to 0.003 grams per 100 grams of soil, and the amount of sulfate anion decreased from 1.200 grams to 0.495 grams. As for cations, the sodium cation in the soil was completely washed out as a result of washing, the amount of calcium cation decreased from 0.248 grams to 0.190 grams per 100 grams of soil, and the amount of magnesium cation decreased from 0.148 grams to 0.013 grams.

After washing with bird droppings and 20% phosphoric acid based ameliorant, the salinity of the soil sample is reduced by 1.08 grams per 100 grams of soil dry matter to 0.71 grams. In this washing variant, the chlorine ion After washing, the amount of calcium in the soil was 0.003 grams per 100 grams of soil, and the amount of sulfate anion was 0.481 grams. The amount of calcium cation decreased from 0.248 grams to 0.186 grams after washing, and the amount of magnesium cation decreased from 0.148 grams to 0.012 grams (Table 3).

Table 3

Study of changes in soil salinity after washing, in %

S/s	HCO ₃	Cl	SO ₄	Anions Total	Ca	Mg	No	Total salt	Dry residue
<i>Before washing</i>									
1	0.012 0.20	0.083 2.36	1,200 25.01	27.57	0.248 12.41	0.148 12.36	0.064 2.80	1,755	1.79
<i>Wash with plain water</i>									
2	0.016 0.26	0.002 0.06	0.755 15.73	16.05	0.150 7.48	0.103 8.54	0.001 0.03	1,027	1.09
<i>Wood sawdust impregnated with 20% H₂SO₄</i>									
3	0.013 0.22	0.003 0.06	0.495 10.31	10.62	0.190 9.51	0.103 1.11	- -	0.714	0.76
<i>Soil improver made from bird droppings and 20% phosphoric acid</i>									
4	0.013 0.22	0.003 0.08	0.481 10.01	10.31	0.186 9.32	0.012 0.99	- -	0.695	0.71

Result

1. Analysis of the data obtained from the conducted studies has determined that the prepared chemical ameliorant is fully suitable for the ecological improvement of saline soils widespread in the republic and soils subject to varying degrees of salinization.

2. It has been determined that by applying 10 tons of chemical ameliorants per hectare and washing with a water rate of 8 thousand m³/ha, it is possible to sharply reduce the salinity of the republic's lands that are saline and subjected to varying degrees of salinization, and reduce the amount of harmful salts in their composition to 8-9%.

3. The mineral acids in the ameliorant, when applied to the soil, cause the decomposition of calcium carbonate in the soil and the formation of lime. The lime formed in the soil displaces the sodium cation from the leached complex of the soil and replaces it with calcium cation. This eliminates the salinity of the soil.

4. Chemical ameliorants are economical and extremely important when prepared from waste.

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Economic sciences

PROBLEMS AND TRENDS IN THE FORMATION OF FOREIGN INVESTMENT REGULATION MECHANISMS IN AZERBAIJAN

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Abstract

The article focuses on identifying and analyzing the problems and trends in the formation of mechanisms for regulating foreign investments. The article examines the main elements of a favorable investment climate. The issues of ensuring effective legal regulation of foreign investments in the territory of the Republic of Azerbaijan by combining the norms of civil legislation, special investment legislation and international treaties are studied. Based on the results of this article, proposals are put forward regarding the attraction and regulation of foreign investments in the country's economy.

Keywords: *foreign investment, regulatory mechanism, investment environment, national economy, foreign investor, recipient, legislative framework, investment disputes*

The collapse of the Soviet Union led to the collapse of the system of economic relations that had been formed over the past 70 years within the framework of the last economic complex. The emergence of independent states with their own national economies in the post-Soviet space required the definition of a new strategy of economic development. The difficult economic situation determined the importance of foreign investment flows and the investment process for the national economies of the countries that gained independence.

Effective socio-economic development, the need for continuous reproduction of production, requires a constant flow of financial resources. The volume of investment growth, as well as its direction in certain areas, depends on the investment policy pursued by the state. The consistent flow of funds to production areas that ensure the production and design of high-tech and science-intensive projects not only leads to a qualitative increase in the level of production, but also helps to improve the quality of social benefits received by employees of the enterprise. In other words, the basis of the modern market economy of the independent countries that emerged in the post-Soviet space is relations related to investment in the production of material and moral wealth. Such a situation emphasized the importance of creating a favorable investment climate, which includes the creation of new foundations of the national economy through the liberalization of economic relations.

One of the main elements of a favorable investment climate is the presence of clear and transparent legislation in the country that meets the requirements of a developing market economy and creates the basis for its further development.

It is impossible to imagine a functioning market economy without existing laws. The exchange of goods is de facto the exchange of rights to commodity orders. For such an exchange to take place, rights must be fully defined and clearly strengthened. The legal basis for this determination is the existence of relevant normative and legal acts in the national law of the state regulating the legal status of a foreign investor and the methods of implementing investment activities. In the current modern era, many developing countries, following the example of developed countries, in the conditions of intensifying competitive struggle in world markets, began to liberalize the regulatory regimes of foreign investments, striving to attract foreign investments.

Effective legal regulation of foreign investments in the territory of the Republic of Azerbaijan is ensured by combining the norms of civil legislation, special investment legislation and international treaties.

The attraction and operation of foreign capital in our country is currently regulated by a wide range of legal and regulatory documents, and they can be conditionally divided into three categories:

1. International treaties and agreements. Among them:

a) Multilateral treaties. In this context, the Convention "On the Settlement of Disputes" (Washington, 1965) plays an important role in the formation of the general practice of resolving conflicts in investment activities with the participation of foreign economic entities.

As an example of the international legal practice of regulating the attraction of foreign investments, the Seoul Convention of 1995 "On the Establishment of a Multilateral Investment

Guarantee Agency" (MIGA) can be cited as an example, which reflects recommendations in the field of appropriate guarantees that recipient countries will provide to foreign investors.

In the further development of the international legal mechanism for regulating trade and economic cooperation in the field of investment, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPR) and the Agreement on Trade-Related Investment Measures (TRIMS), developed and agreed upon as a result of the Uruguay Round negotiations of the GATT/WTO in 1995, played an important role.

The TRIMS agreement was an attempt to extend the most favored treatment (which still remained a regulatory zone of individual countries) or at least the national treatment to the field of foreign direct investment. It was not possible to fully implement this attempt, as it was met with opposition from developing countries, which were afraid of the arbitrariness of a number of TNCs in the group of developing countries when making investments. Nevertheless, this problem remains relevant, and the search and identification of ways to harmonize and coordinate national interests, including the formation of favorable conditions for foreign investors, continues.

In order to create a favorable investment environment for non-residents, it is important to adopt the following rules by all WTO member countries: trademark, copyright and related rights, protection of confidential information, and patents. The TRIPS agreement, which provides for the adoption of uniform obligations on the subject of foreign direct investment, has been of no less importance. It is these institutions that require the protection of investments from negative use in the process of implementing FDI and their more precise regulation. One of the most important parts of this agreement is the obligation of the participating countries to form a national mechanism for the protection of intellectual property rights at the legislative level.

Finally, although it is not directly related to the investment sphere, it is worth mentioning the General Agreement on Trade in Services (GATS), since it also affects foreign investment processes by applying a single liberal regime and general principles to international trade in services. In the implementation of foreign direct investment, FDI always has a certain share in the services provided by foreign economic entities in the form of international leasing. For the purposes of the GATS agreements, all services are classified into 12 groups and 160 types, which has played a major role in the more precise organization and regulation of the sphere of international service provision.

b) Bilateral and multilateral agreements on mutual guarantees, protection and promotion of investments. The guarantees provided to foreign investors in our republic in order to protect foreign investments are regulated by the legislation existing in our country, as well as multilateral agreements ratified by the Republic of Azerbaijan. These agreements signed with foreign countries on the protection and promotion of the rights of foreign investors have the characteristics of additional protection of foreign investors. To date, up to 30 such intergovernmental agreements on the promotion and mutual protection of bilateral investments have been concluded with 39 countries of the world, and an intergovernmental commission has been established between the government of the Republic of Azerbaijan and the governments of 53 states. The Republic of Azerbaijan is a member of the International Center for Settlement of Investment Disputes. The Republic of Azerbaijan is one of the countries that have ratified the Convention "On the Settlement of Investment Disputes between States and Nationals of Other States", as well as the CIS member states' Agreement "On Cooperation in the Field of Investment" signed on December 24, 1993, and the International Convention "On the Protection of Investors' Rights" signed on March 28, 1997.

In addition, in order to increase and promote foreign investments attracted to the national economy, the Azerbaijani state also partners with international economic organizations and financial institutions such as the WTO, UN, European Union, CIS, GUAM, World Bank, International Finance Corporation, International Monetary Fund, OIC, Organization for Black Sea Economic Cooperation, European Bank for Reconstruction and Development, Asian Development Bank, Islamic Development Bank.

II. Normative acts that allow for the prevention of double taxation of income and property. Such agreements concluded by the Republic of Azerbaijan reduce or eliminate the period of double taxation by applying special tax rates to investors' income.

III. Laws and decrees of the President of the Republic of Azerbaijan, as well as instructions of a number of state administrative bodies. According to their characteristics, these documents are divided into two groups:

1. Basic laws related to the transition of the Republic of Azerbaijan from a planned economic system to a market economy;

2. Basic normative acts of a state-wide nature that determine the economic and political status of the state, the forms and principles of economic activity, the evolution and development of economic relations.

These documents are not "direct" documents of action in relation to foreign investments and, as a rule, do not contain such norms, but it is clear that the activity of foreign capital in Azerbaijan should be subject, first of all, to the rules.

The main legal documents regulating foreign investments in the Republic of Azerbaijan are:

- The Constitution of the Republic of Azerbaijan;
- State Law of the Republic of Azerbaijan No. 57 dated January 15, 1992 "On Protection of Foreign Investments";
- Law of the Republic of Azerbaijan No. 952 dated January 13, 1995 "On Investment Activity";
- Law of the Republic of Azerbaijan No. 905-IQ- dated July 11, 2000 "Tax Code of the Republic of Azerbaijan" which defines the concept of tax and types of taxes in the Republic of Azerbaijan, as well as the rules for resolving tax conflicts;
- Law of the Republic of Azerbaijan No. 31, 1991 "On Value Added Tax";
- Law of the Republic of Azerbaijan No. 717-IQD dated October 27, 1999 "On Income Tax from Individuals in the Republic of Azerbaijan" which defines the circle of income tax payers in the Republic of Azerbaijan Law of the Republic of Azerbaijan on the establishment of the State Duma;
- Law of the Republic of Azerbaijan No. 258-XII dated November 9, 1991 on taxes on profits and separate types of income of legal entities in the Republic of Azerbaijan;
- Civil Code of the Republic of Azerbaijan No. 386 dated August 25, 2000;
- Customs Code of the Republic of Azerbaijan No. 499 dated September 15, 2011;
- Law of the Republic of Azerbaijan No. 43 dated December 31, 1991 "On Excise Duties";
- Law of the Republic of Azerbaijan No. 266-IIIQ dated April 10, 2007 "On Non-State (Private) Security Activities";
- By Decree No. 148 dated June 26, 2018 on ensuring the activities of the Small and Medium Business Development Agency, the Small and Medium Business Development Agency of the Republic of Azerbaijan was established, which supports the development of micro, small and medium entrepreneurship in the country, participates in its regulation, protects the interests of micro, small and medium entrepreneurship entities and solves their problems, provides a number of services to entrepreneurs, and coordinates the services of state and private institutions in this field;
- The Law of the Republic of Azerbaijan No. 405 dated December 15, 1992 on Entrepreneurship defines the rights, duties and responsibilities of entrepreneurs and determines the mutual relations of entrepreneurs with state bodies and institutions established by relevant executive authorities;
- The Law of the Republic of Azerbaijan No. 48 dated April 12, 2004 "On State Registration of Legal Entities and the State Register" regulates the relations arising in the field of state registration of legal entities and individual entrepreneurs, and also determines the powers of the body carrying out state registration;
- Resolution of the Cabinet of Ministers of the Republic of Azerbaijan No. 226 dated April 23, 1992 "On Protection of the Internal Market of the Republic of Azerbaijan";
- Law of the Republic of Azerbaijan "On Protection of Consumer Rights" dated September 19, 1995;
- Law of the Republic of Azerbaijan "On Anti-Dumping, Compensation and Safeguard Measures" dated May 31, 2016;
- Law of the Republic of Azerbaijan "On Accreditation in the Field of Conformity Assessment" dated May 30, 2016;
- Law of the Republic of Azerbaijan "On Currency Regulation" dated October 21, 1994;
- Law of the Republic of Azerbaijan "On Food Safety" dated May 5, 2022;
- Law of the Republic of Azerbaijan "On Securities Market" dated October 11, 2007;
- Order of the President of the Republic of Azerbaijan dated August 27, 2018 No. "On additional measures to ensure the activities of the Commission established to increase the favorable business environment in the Republic of Azerbaijan and further improve the position of our country in international ratings";
- Decrees of the Government of the Republic of Azerbaijan and other regulations.

The most important step in protecting the rights of foreign investors in the Republic of Azerbaijan is the establishment of a national regime in this area. It is this regime that creates a guarantee for attracting and using foreign investments in the territory of the country.

However, the specific main provisions in the field of attracting and using foreign investments in the

Republic of Azerbaijan are determined by the Laws of the Republic of Azerbaijan "On Protection of Foreign Investments" dated January 15, 1992 and "On Investment Activities" dated January 13, 1995. Along with these laws, first of all, the Civil Code, Tax Code, Customs Code, Law on Currency Regulation and other legislative acts play an important role in the formation of a national regime in the field of ensuring the rights of foreign investors. Over the past 30 years, these laws have played an important role in attracting foreign investments to the country's economy.

The Law of the Republic of Azerbaijan "On Protection of Foreign Investments" by determining the legal and economic principles of foreign investment in the territory of the country, also insures the security of foreign investors from the effects arising from changes in the relevant legislation in the Republic of Azerbaijan and provides foreign investors with some guarantees in this regard. In connection with the requirements of globalization and the tightening of the competitive environment, the State Law of the Republic of Azerbaijan "On Protection of Foreign Investments" is constantly being improved. Therefore, this law has been repeatedly amended and supplemented over the past years.

Taking into account the above-mentioned, the changes in the conjuncture of the modern world economy and the national economic system of the Republic of Azerbaijan, the author in his research has reviewed the main law regulating the provision of foreign investors, "X requires clarification of some provisions of the State Laws on "Protection of Foreign Investments" and "Foreign Investment Activities" based on the following corrections:

1. The law excludes the difference in the regulation regimes of foreign and local investors in terms of investment activity and property rights. In the absence of any advantages for local investors, foreign investors are practically given a national treatment (in English - National Treatment). It is known that it is in the TRIMS agreement that measures that cannot be applied by countries in relation to foreign investors because they contradict the provisions of the national treatment are recorded.

For a foreign investor who studies the legislation of the country receiving investments (recipient), these provisions of the law are the basis for the investor to consider the investment environment of the recipient country as acceptable or unacceptable. In this regard, it should also be noted that this law may restrict the activities of enterprises with foreign capital in some regions of the Republic of Azerbaijan or prohibit their activities in those regions due to requirements arising from national security. Such a practice has been preserved in other countries of the post-Soviet space for a number of objective reasons.

2. Foreign investors are provided with a "stability guarantee", which means that if the regulatory and legal framework governing foreign investment changes, the investor himself can apply the laws in force at the time of the capital investment for 5 years, if he so wishes. It should be noted in particular that the "stability guarantee" does not apply to legislation in the field of taxation, since the law states that enterprises with foreign capital pay taxes and receive tax benefits in accordance with the existing laws of the Republic of Azerbaijan. In addition, the law covers only the rules governing foreign investments, but there are no notes on other areas of legislation, in particular on security. The author believes that the "stability guarantee" should be extended to the above two cases. The application of the principle of immutability of the law within the indicated 5 years is not enough, since this period may not be enough in many cases for the period of compensation of foreign capital. It is difficult to assess the elimination of such a situation. Thus, as we mentioned earlier, in countries with transitional economies, it is precisely the constant change of the regulatory and legal framework that acts as the main obstacle to the activities of foreign investors in the domestic market.

3. Foreign investments cannot be nationalized and confiscated. As mentioned, in the law in question, confiscation is allowed only in emergency cases, by court decision and with subsequent payment of compensation, in accordance with the legislation of the Republic of Azerbaijan. However, the law does not say anything about requisition, which makes it difficult to express such cases.

4. Foreign investors have the right to obtain compensation for their losses (material, moral), including lost profits as a result of their illegal activities, including from state authorities or high-ranking officials, in case they do not properly fulfill their duties in accordance with the legislation of the Republic of Azerbaijan. However, this law does not contain any statements about the promptness, efficiency and adequacy of payments. Such expressions are accepted in international practice and are productive in conflict situations and are unambiguously accepted (for example, this is characteristic of the laws of Romania and the Czech Republic on foreign investments).

5. Foreign investors and foreign employees are guaranteed the free movement of their income and profits and their export abroad after paying their taxes. However, in a number of countries there is a practice of exempting from tax the part of income related to reinvestment. These provisions are not taken into account in the analyzed law (the same applies to the tax on profits). It should be noted that in the

analyzed law and in the practice of the economic life of the Republic of Azerbaijan, the most liberal rules for the movement of profits and income of foreign investors and foreign employees operate in comparison with the countries of Central and Eastern Europe. In a number of countries hosting foreign investments, export or their transfer, as a rule, is subject to a special tax in the amount of 10-15% of the transferred amount. In a number of countries, when transferring profits expressed in the currency of those countries, the investor undertakes by law to receive them at a price higher than the current exchange rate.

6. According to the law, if the government of the Republic of Azerbaijan is a party to an investment conflict, then the conflict can only be considered in the Republic's court. In investment conflicts occurring on the territory of the Republic of Azerbaijan, the Republic of Azerbaijan. If the government of the Republic of Azerbaijan is not a party to these conflicts, they can be involved in the courts of the Republic of Azerbaijan and in mediation courts upon agreement of the parties. The Republic of Azerbaijan has ratified a number of bilateral treaties and agreements on assistance and changes that give the parties the right to appeal to an international court in such disputes and their decisions. According to the Constitution of the Republic of Azerbaijan, if ratified international treaties establish rules different from the existing laws of the country on the same subject, then the rules of the international treaty shall come into force. Therefore, it seems more practical to remove the specified provision from the law.

7. The law does not make a clear distinction between direct foreign investment and portfolio foreign investment. The law states that the specified privileges apply only to enterprises with foreign participants, the participation of foreign capital of which during the period of establishment is not less than 30%. However, in the multilateral or bilateral international treaties ratified by the Republic of Azerbaijan on taxation of foreign investments, no norms have been established regarding the limit on the use of privileges by a foreign investor.

8. Until the amendment to the law on September 13, 2000, property imported to replenish the authorized capital, including property intended for production purposes, was exempt from taxes. Such privileges were not provided for local manufacturers, which could create unequal competition conditions. In addition, there were no fixed time limits. According to the current law, property imported by a foreign investor to replenish the authorized capital, included in the list established by the Government of the Republic of Azerbaijan and intended for three years, is exempt from taxes.

9. One of the shortcomings of the analyzed law is that the section on the establishment and liquidation of enterprises with foreign participation is too short. The law contains references only to laws regulating these issues operating in the Republic of Azerbaijan. In the analogous laws of the republics of the former Soviet Union (including the Federal Law of the Russian Federation of July 9, 1999 "On Foreign Investments in the Russian Federation"), these issues are considered in some detail, since the primary problem that investors face in foreign countries is the problem of company registration.

10. The analyzed law contains a special clause on concession agreements, but there is no provision on the agreement on "production sharing". (In Russia, as you know, in 1995 a special federal law was adopted entitled "Production Sharing Agreements"). In addition, in some countries, the regulatory legislative framework contains references to special types of foreign investments, such as the conclusion of an agreement on long-term bilateral activities, the provision of targeted long-term loans, the transfer of "know-how" technologies, licensing and leasing agreements. One of the main shortcomings of the regulation of foreign investments is the lack of a state registration system for investments made, as well as a system of formalized control over the activities of investors in the territory of the Republic of Azerbaijan, regarding the fulfillment of their obligations. The latter applies, in particular, to investors attracted to invest in the industrial sector, the development of minerals, strategic facilities such as airports, railways, postal services, and communications. The lack of uniform forms of investment contracts concluded between the state and foreign investors in the Republic of Azerbaijan is also noteworthy. In practice, these contracts are almost completely identical in terms of their content and the existence of forms of investment contracts established by law, and their definition would bring sufficient clarity to the regulation of a group of issues, which would allow for better formulation of state policy in terms of attracting foreign investments and working with a specific investor. We note once again that, despite the shortcomings considered in this law, this law as a whole is quite progressive and corresponds to the main trends in improving legislation in the field of investment. Many international experts with experience in investment research (for example, the analysis of similar laws in Eastern European countries by the American Bar Association) also share this opinion. It should be noted that in a number of Central and Eastern European countries (for example, the Czech Republic, Hungary), instead of special laws on foreign investments, commercial codes (Commercial 'Codes') have come, and

accordingly, the activities of both foreign and local enterprises are regulated simultaneously and equally. Thus, one way or another, The idea of actually forming a global investment space, as defined in the TRIMS Agreement (TRIMS), is being implemented.

In addition to these laws, issues related to foreign direct investments and foreign investments in general are addressed in the Law "On Land", the Civil Legislation of the Republic of Azerbaijan, the Customs Code, the Law of the Republic of Azerbaijan "On Pledge", "On Real Estate", "On Banks and Banking Activities". "On Bankruptcy", "On Income". "On Customs Tariff", "On Property in the Republic of Azerbaijan", "On Taxation" and a number of other laws. Below are proposed changes to various laws of the Republic of Azerbaijan that could bring positive progress in the development of the process of foreign investment.

The application of the Republican Law "On Property in the Republic of Azerbaijan", which determines the legal status of the property of joint ventures, foreign states and international organizations, played an important role in solving the problems of attracting and effectively using foreign investments in our country. In accordance with the aforementioned law, foreign entities have acquired the right to participate in the establishment of joint-stock companies, to own property, industrial enterprises, buildings and structures. At the same time, guarantees are provided and the rights and interests of foreign owners are protected. In another important law of the Republic of Azerbaijan - the Republican Law "On Entrepreneurial Activity", foreign citizens and stateless persons are granted the right to freely engage in any type of entrepreneurial activity not prohibited by the legislation of the Republic of Azerbaijan. The adoption of the aforementioned laws of the Republic of Azerbaijan undoubtedly contributed to the influx of foreign investments into our country. With the entry into force of the Law of the Republic of Azerbaijan "On State Registration and State Register of Legal Entities", the duration of the registration process of enterprises in the Republic of Azerbaijan was reduced. The process, starting from the preparation of constituent documents, up to registration with the tax authority and obtaining the seal of the enterprise, took 6-10 working days. As world experience shows, especially the example of countries that actively implement investment attraction policies, foreign investors are primarily faced with the issue of enterprise registration. Investors are sensitive to the solution of these problems and have a negative attitude towards any bureaucratic actions related to the registration of their enterprises.

In many foreign countries, state services for enterprise registration, state agencies for state investment attraction, private legal and consulting services already provide the investor with documents (forms) of ready-made enterprises with the right to operate in a certain field and any organizational and legal form. In this case, the investor only needs to enter a few pieces of information (company name, number of founders and their details, authorized capital) and receive documents confirming the official registration of the enterprise.

According to the Constitution of the Republic of Azerbaijan, foreign individuals and legal entities do not have the right to own land in Azerbaijan and can use land only on the basis of its lease. Proceeding from the strategic interests of the country, the law on the acquisition of land ownership by foreigners will not be subject to changes in the near future. It should also be noted that the partial or full transfer of land to foreign persons into private ownership is completely restricted in most of the countries of Eastern and Central Europe.

According to the Law of the Republic of Azerbaijan "On the Register of Real Estate", the owner of the property has the right to sell the property without the consent of the lessee, unless it contradicts the terms of the lease agreement. At the same time, it is clear that the foreign investor wants to exercise more strict control over the property owner in this matter (during long-term lease), since over the years the clarity of the changes in the intentions of the property owner regarding his leased property is gradually increasing. In the absence of opportunities for a foreign investor to exercise the right of ownership of the land, it would be better to replace the specified parameter of the law with the right to reach an agreement between the lessor and the lessee on the issue of transfer of ownership. Despite the adoption of the Law of the Republic of Azerbaijan "On Bankruptcy and Insolvency" on June 13, 1997, the effect of its provisions cannot be called effective. The problem is that this law applies to a small number of companies in difficult situations, and the process of collecting debts and pledges is complicated by the imperfect implementation of court decisions. Therefore, we believe that the "lessee-lessee" It is necessary to simplify the scheme of relations by more precisely specifying the rights and obligations of the parties. In this regard, we consider the entry into force of the Law of the Republic of Azerbaijan "On Licenses and Permits" to be positive, since the conditions for licensing during the development of certain types of activities were not yet fully clear and were mainly regulated by legislative acts. Currently, it is precisely due to gaps in legislative and regulatory acts that foreign investors face a number of difficulties, such as

the inability to classify the goods they import into the country as raw materials. However, in accordance with the current legislation, all foreign enterprises have the right to import raw materials into the country without paying duties. The protocols on "Concession Agreements" and the "Production Sharing" Agreement clarify some concepts in this area. The difference between product sharing and concession is that enterprises that have undertaken the extraction of mineral raw materials in a given region settle with the receiving party a part of this raw material.

In the issue of updating the regulatory and legal framework, it is important to observe consistency in terms of the implementation of previously adopted laws. To resolve the above-mentioned issues, it is necessary to urgently work towards establishing an impartial and independent legal system. Foreign experience shows that in order to resolve investment disputes, it is important to establish and develop a legislative mechanism "On Mediation" in addition to an independent legal system. In this case, we are referring to the Law of the Republic of Azerbaijan "On Mediation", adopted in 2019, which establishes the rules for out-of-court settlement of disputes. The author evaluates this law as quite effective. According to this law, the parties may agree on a mediation organization or mediator who will consider the dispute by mutual agreement. In the absence of such agreement, the dispute shall be considered by a mediation organization located in the same city or district as the court, or in the absence of a mediation organization in that city or district (taking into account the third sentence of this article), in one of the cities or districts closest to the administrative territorial unit where the court is located. Currently, the main issue is to establish a number of impartial and effective mediation organizations based on the norms and rules of the law. It should be noted that as a result of a number of subsequent amendments and additions to the Law of the Republic of Azerbaijan "On the Execution of Court Decisions", adopted in 2001, the courts of first instance were separated from the economic courts. The latter should resolve disputes between economic entities of the Republic of Azerbaijan on the basis of a specialized approach.

Agreements signed by the Republic of Azerbaijan on the bilateral protection and promotion of foreign investments provide that the parties may apply to the International Center for Settlement of Investment Disputes (ICSID) of the World Bank for the purpose of resolving investment disputes, as well as to mediation courts operating under the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL). These agreements stipulate that the decision of the Mediation Court is binding on both parties.

Summing up, it should be noted that currently there is a great need to improve the established legal framework for investment regulation in the Republic of Azerbaijan, and the presence of such a situation is due to the due attention paid to these issues by those state bodies whose function is to determine the state's investment policy, as well as the formation of a regulatory and legal framework ensuring the appropriate regulation of foreign investments. The study shows that the further development of foreign investment regulation in the Republic of Azerbaijan is largely due to the strengthening of the role and importance of the relevant international mechanisms. This raises the importance of the need for the protection of investors' rights and the adaptation and parallel development of domestic institutions regulating investment activities.

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Jurisprudence

ENVIRONMENTAL RIGHTS AS A MATTER OF PUBLIC HEALTH AND SOCIAL JUSTICE

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Abstract

This paper analyzes the right to live in an unpolluted environment as a fundamental human right, treating it from a comparative perspective between Albania and Italy. In the context of global deterioration of environmental quality, climate change and increasing risks to public health, the legal protection of the environment has become one of the main challenges of modern states and an essential element of sustainable development.

*The study is based on the analysis of the constitutional, legal and institutional framework of both countries, assessing not only the formal recognition of the right to a healthy environment, but also the real mechanisms of implementation and their practical effectiveness. Albania is presented as a country where the right to a clean environment is constitutionally enshrined, but still faces significant gaps in implementation, institutional coordination and access to environmental justice. In contrast, Italy represents a more consolidated model, with a developed jurisprudential tradition, functional institutions and a legal framework fully harmonized with the *acquis communautaire* of the European Union, especially after the 2022 constitutional reform.*

The paper uses comparative legal and analytical methodologies, supported by empirical data and concrete case studies, to identify the main differences in institutional capacities, environmental monitoring, citizen participation and the role of the judiciary. The results show that the effectiveness of environmental protection does not depend only on the existence of legal norms, but on the integrated functioning of institutions, transparency, public participation and legal culture.

The study provides concrete recommendations for strengthening the Albanian environmental protection system, based on Italian best practices and European standards. His contribution lies in linking legal analysis with the social, health and institutional dimensions of environmental law, positioning this right as a key element of social justice and European integration.

Keywords: *Right to a healthy (unpolluted) environment,, Fundamental human rights, Albania, Italy, climate change, public health, environmental justice, comparative legal analysis*

Introduction

A clean environment has become one of the fundamental requirements of modern society and one of the most critical dimensions of sustainable development, especially in the era of rapid urbanization, industrialization and climate change. The right to live in a clean and ecologically balanced environment is no longer just a moral concept or a general aspiration of communities, but a legally sanctioned right, recognized as an integral part of fundamental human rights. In this sense, the environment has been transformed from a technical or sectoral issue, into a topic of a multidisciplinary nature, which includes law, economics, sociology, public health, public policies and natural sciences.

In Albania, the environmental protection issue has taken on special dimensions due to the challenges accumulated over the years: the long political and economic transition, uncontrolled urbanization, intensive use of natural resources, lack of sustainable waste management mechanisms, as well as insufficient implementation of the legal framework. As the country aims to integrate into the European Union, environmental protection has become an important criterion for meeting European standards, for strengthening governance and for increasing the quality of life of citizens. On the other hand, Italy represents a more consolidated legal and institutional system, with developed environmental management mechanisms, high monitoring standards, efficient administrative structures and a longer tradition of environmental jurisprudence. The Italian state, as part of the European Union, is subject to EU directives and regulations, which have created a clear legal and practical framework for environmental protection. The comparison between Albania and Italy thus offers a valuable perspective to analyze the gaps, challenges, institutional mechanisms and good practices that can serve as a roadmap for the necessary improvements in the Albanian context.

The increase in environmental pollution in Albania over the last decade has become an alarming issue. Air pollution in Tirana and other large cities is among the highest in the region, directly contributing to the increase in respiratory diseases, allergies and cardiovascular problems. In addition, pollution of surface and groundwater remains a continuing challenge, with only a small portion of wastewater being treated before discharge. Plastic waste, informal landfills and the lack of waste management infrastructure further aggravate the situation.

In rural areas, land degradation, intensive use of pesticides and agricultural chemicals, and unregulated construction have significantly reduced the ecological quality of the territory.

All these challenges show that the right to a healthy environment, despite constitutional recognition, is not yet a guaranteed reality in practice. Article 56 of the Albanian Constitution can be considered one of the most advanced provisions on environmental protection in the region, but the lack of effective implementation and control mechanisms limits the real impact of this norm. In Italy, meanwhile, the right to a healthy environment is supported by a consolidated judicial and administrative tradition, by clearer regulations and by stronger cooperation between state institutions and civil society. Italy is a good example of how legal regulation, institutional commitment and citizen pressure create a sustainable environmental system.

As reflected in Table 1, there are significant differences between Albania and Italy in the level of implementation, institutional capacities and effectiveness of mechanisms for the protection of the right to a healthy environment.

Table 1. Main dimensions of the right to a healthy environment in Albania and Italy

Dimension	Albania	Italy
Legal recognition	Constitutionally guaranteed (article 56), but with limited implementation	Constitutionally affirmed (2022 reform) and consolidated
Legal framework	Partially harmonized with the EU, but with gaps in implementation	Fully harmonized with the <i>acquis communautaire</i>
Institutional capacities	Fragmented and poorly coordinated	Consolidated and functional
Environmental monitoring	Insufficient and not systematic	Regular, transparent and standardized
Air, water and soil pollution	High levels, especially in urban areas	More controlled and monitored
Access to environmental justice	Limited and less effective	Guaranteed through judicial and administrative mechanisms
Civic awareness	Increasing, but still low	High and active
Social impact	Pronounced ecological inequality	Better protection of vulnerable groups

Source: Author's elaboration based on INSTAT, WHO, FAO, UNEP, World Bank, legislation national and EU.

The preliminary comparison of these dimensions highlights clear differences between the two countries in the level of implementation and effectiveness of the right to a healthy environment, justifying the need for an in-depth comparative legal and institutional analysis.

This context makes it necessary to study in depth the way these two countries treat the legal framework of environmental protection, analyzing not only the written norms, but also their implementation mechanisms and effectiveness. In this way, the comparison does not simply aim to highlight the differences, but to create a framework for reflection and concrete recommendations for strengthening the Albanian system of environmental justice.

The study also takes on added importance due to its social and societal dimension. A polluted environment does not only affect nature itself; it directly affects people's physical and mental health, social well-being, quality of life, the economy of families and society as a whole. The most vulnerable communities such as children, the elderly and low-income families are the ones most affected by pollution, creating a new form of social inequality: ecological inequality. For this reason, the study takes on an important ethical and social dimension, as it focuses not only on the law, but also on its real impact on citizens.

From a scientific perspective, the study contributes to the academic literature on environmental law, comparative law and public policy, bringing an in-depth analysis to a field where research in Albania is still scarce. It combines legal concepts with institutional, sociological and ecological analysis, creating an integrated approach. This makes the paper valuable for researchers, policymakers, public institutions and civil society organizations, which face environmental challenges every day.

In the era of climate change and global ecosystem degradation, the environment has become one of the areas where clear vision, political will and in-depth scientific capacity are required. Albania, as part

of the international community and aspiring for EU membership, is obliged to reform environmental policies and guarantee new living standards for its citizens. Comparison with a consolidated country like Italy helps it to better understand the gaps, opportunities, challenges and steps that need to be taken to achieve a fair and functional environmental system.

Precisely for this reason, this study takes on special importance, focusing on analyzing the legal and institutional mechanisms of the two countries, assessing the level of implementation, identifying problems and examining best practices that can be adapted to the Albanian reality. This paper aims to contribute both at the theoretical and academic level, as well as at the practical level, through recommendations for strengthening the legal and political approach to environmental protection in Albania.

Literature Review

The contemporary literature on environmental law treats the right to live in a clean and healthy environment as an essential component of the human rights system, closely linked to the protection of life, health and human dignity. Many authors argue that this right represents an important development of the so-called "third generation rights", which also include the right to development, peace and the common heritage of humanity (Boyd, 2012; Knox, 2022).

At the international level, a key moment in the consolidation of this right was the adoption of the United Nations General Assembly Resolution on the Right to a Clean, Healthy and Sustainable Environment, which recognizes this right as universal and indivisible from other fundamental human rights (United Nations, 2022). However, the literature emphasizes that formal recognition in international documents does not automatically guarantee effective implementation at the national level, especially in countries with limited institutional capacities or weak environmental justice systems (Knox, 2022).

*In the European context, environmental law has developed significantly through the *acquis communautaire*, based on fundamental principles such as the precautionary principle, the polluter pays principle, sustainable development and public participation. The Aarhus Convention on Access to Information, Participation in Decision-Making and Access to Justice in Environmental Matters is considered by the literature as a key instrument in the democratization of environmental governance and in strengthening the role of citizens and civil society (UNECE, 1998; Boyd, 2012).*

Comparative studies show that European Union member states have achieved different levels of effectiveness in implementing these principles. Italy is often cited in the literature as an example of the progressive evolution of environmental law, especially after the 2022 constitutional reform, which explicitly included the protection of the environment, biodiversity and ecosystems, giving this right a transboundary dimension and greater normative weight (Italia Clima, 2022). Italian jurisprudence has played an important role in the interpretation and application of these principles, transforming environmental protection into a real standard of judicial review. In contrast, the literature on Albania highlights a clear gap between the normative development and the practical implementation of the right to a healthy environment. Although the Albanian Constitution and sectoral legislation recognize this right and have taken steps towards harmonisation with EU legislation, studies show that implementation remains weak due to institutional fragmentation, lack of technical capacity and the limited role of the judiciary in environmental matters (Xibraku et al., 2024). Critical literature also highlights that citizens' access to environmental justice and effective participation in decision-making remain limited, making the right to a clean environment largely declarative.

An important line of academic research directly links environmental protection to public health and social justice. Studies argue that environmental pollution disproportionately affects vulnerable groups, creating new forms of ecological inequality and shifting the debate from the protection of nature to the protection of social and health rights (Boyd, 2012; Knox, 2022). This broadened approach supports the argument that the right to a healthy environment should be treated as a justifiable right and not just a political objective.

In summary, the existing literature suggests that the effectiveness of the right to a clean environment depends on the interaction between legal norms, institutions, jurisprudence and citizen participation. The comparison between a candidate country like Albania and an EU member state like Italy provides a valuable analytical ground for understanding how European standards can be translated into concrete and sustainable practices.

Methods

The study relies on a comparative legal and institutional methodology, combined with empirical analysis of environmental and institutional data.

In the first phase, a doctrinal and normative analysis of the constitutional and legal framework in Albania and Italy was carried out, including sectoral laws, by-laws and strategic documents. In the second phase, a functional comparative method was applied to assess the functioning of the institutions responsible for environmental protection and the control and monitoring mechanisms.

The study also relies on analysis of statistical data from national and international sources (INSTAT, WHO, EEA, ISPRA), as well as on concrete cases that illustrate the level of implementation of the right to a healthy environment in practice.

Results

The results show that there are significant differences between Albania and Italy in the effective guarantee of the right to an unpolluted environment. In Albania, although the right is constitutionally recognized, practical implementation remains weak due to limited institutional capacity, insufficient monitoring and limited access to environmental justice.

Levels of air, water and land pollution are significantly higher, especially in urban areas, reflecting a large gap between the legal norm and environmental reality. Civic engagement and the role of civil society are increasing, but still fail to compensate for institutional weaknesses.

In Italy, the results show a more consolidated system, where environmental protection is supported by functional institutions, systematic monitoring and active jurisprudence. The 2022 constitutional reform has strengthened the transboundary dimension of environmental protection and increased the accountability of public and private institutions.

Conclusion

The study confirms that the effectiveness of the right to a clean environment does not depend only on legal recognition, but on the quality of environmental governance, the functioning of institutions and access to justice. The Albania–Italy comparison shows that European integration is a key factor in strengthening environmental protection, but requires structural reforms and long-term investments.

The paper contributes to the academic debate by providing an integrated analysis between environmental law, human rights and EU integration, and proposes that for Albania, improving institutional implementation and strengthening the role of the judiciary are essential steps to transform the right to a healthy environment from a declarative norm into a real and justifiable right.

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Medical sciences

SARCOPENIA IN RHEUMATOID ARTHRITIS

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Abstract

Background: Sarcopenia is defined as an age-related disease characterized by decreasing muscle mass and strength or performance. Sarcopenia predisposes to increased mortality, particularly in the elderly, due to falls, fractures, and prolonged immobilization. Although the definition of sarcopenia was originally intended for the elderly, in recent years younger patients with autoimmune diseases such as Rheumatoid arthritis (RA) have been recognized with sarcopenia. Due to the chronic inflammation caused by RA, patients have reduced physical activity, immobility, stiffness, and joint destruction and all of that lead to the loss of muscle mass, muscle strength, disability and significantly lowering the patients' quality of life.

Objective: To evaluate the presence of sarcopenia in patients with rheumatoid arthritis (RA).

Method: We conducted a study including 100 patients with RA and 100 gender-matched healthy individuals. The study aims to investigate sarcopenia prevalence in patients with rheumatoid arthritis (RA) and to detect factors associated with low muscle mass and strength. Sarcopenia was assessed using performing tests such as handgrip strength, short physical performance battery and also by determining skeletal mass index using dual photon X-ray absorptiometry (DXA).

Results: The participants comprised of 65 females and 35 males. The frequency of sarcopenia was 40% in the RA group and 8% in the control group. The prevalence was significantly different between juvenile idiopathic arthritis (JIA), spondyloarthritis (SpA), and rheumatoid arthritis (RA) groups. Results of handgrip and gait speed tests were lower in the RA group than in the healthy control group ($P = .002$ and $P < .001$, respectively). Disease activity scores were higher in patients with sarcopenia than in patients without sarcopenia. A statistically significant association was found between handgrip test results and age, gender, and disease activity.

Conclusions: Patients with rheumatoid arthritis have not only bone tissue, but also skeletal muscle tissue disorders, resulting in a significant deterioration of functional capacity and quality of life. Longer disease duration and higher disease activity may provoke the development of sarcopenia due to chronic inflammation in patients with RA. Therefore, physicians should take into account the preservative and preventive methods against sarcopenia by encouraging patients about exercise along with controlling disease activity.

Keywords: sarcopenia, rheumatoid arthritis, handgrip strength, skeletal mass index, prevention

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CUTANEOUS MELANOMA: PRESENT CHALLENGES AND OPPORTUNITIES**Arman Khozhayev**

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Abstract

This scientific and analytical work presents modern global and regional data on incidence, mortality, lethality and five-year survival rate, as well as the prognosis of such a formidable disease as cutaneous melanoma. The publication is devoted to new views on this pathology, including an assessment of the role of innate immunity, determination of the genetic profile and gene expression profile, the pathogenesis of resistance and progression. The geographical features of the prevalence of this disease and modern trends are covered in detail. The epidemiological aspects of this pathology in our republic are shown in the context of the regions of the country.

Keywords: oncology, dermatology, cutaneous melanoma, skin tumor, risk factors, genetic profile, gene expression profile, immunological profile, resistance, epidemiology, incidence, mortality, five-year survival rate, prognosis.

As is known, one of the most aggressive forms of skin tumors is cutaneous melanoma, which, for a number of known reasons, is classified as a separate cluster of skin tumors. Cutaneous melanoma is a malignant neoplasm that arises from skin melanocytes. The incidence rate is rising, especially among the white population. Melanoma of the skin usually occurs due to exposure to ultraviolet radiation from natural sunlight and indoor tanning, although there are several subtypes that are not associated with exposure to ultraviolet radiation. Primary melanomas are often darkly pigmented but may be colorless, with diagnosis based on a combination of clinical and histopathological findings. Primary melanoma is treated with wide excision, the margins of which are determined by the thickness of the tumor. Further treatment depends on the stage of the disease (following histopathological examination and, if necessary, sentinel lymph node biopsy) and may include surgery, checkpoint immunotherapy, targeted therapy or radiotherapy. Systemic drug therapy is recommended as an adjunct to surgery in patients with resectable locoregional metastases and is the mainstay of treatment for advanced melanoma. Treatment of advanced melanoma is challenging, especially in patients with brain metastases. Multidisciplinary care is essential. Systemic drug therapies, particularly immune checkpoint inhibitors, have significantly improved survival in melanoma following a series of landmark approvals [1,2].

Melanoma develops as a result of malignant transformations of pigment-producing melanocytes. When located in the basal layer of the epidermis of the skin, melanoma is called cutaneous, which is more common. Australia and New Zealand are world leaders in this regard with an incidence rate of

54/100,000 and a mortality rate of 5.6/100,000 [3].

Diagnostic criteria include complaints about the presence of a skin tumor, discoloration and growth of a pigmented skin lesion, change in size, shape or color of a mole or other skin growth, enlargement of peripheral lymph nodes. Physical examination includes: palpation of all accessible groups of lymph nodes (cervical, axillary, inguinal, femoral, etc.); careful examination of the skin lesion detected by the patient, relatives or health care workers during a preventive examination, and the entire skin using a routine physical method with good lighting and a magnifying glass. In this case, it is necessary to use special tables of the "rules of malignancy", in particular the "ABCDE" table, which contains a list of the most indicative diagnostic evaluation features: A (asymmetry) - asymmetry, one side is not like the other; B (boundary, border irregularity) - uneven edge; C (color) - inclusion of red, brown, blue or white areas; D (diameter) - diameter over 6 mm; E (elevation) - elevation of the tumor above the surrounding skin. Instrumental studies include: determination of functional activity, general condition of the patient with assessment of quality of life according to Karnofsky; determination of the level of consciousness according to the Glasgow scale; dermatoscopy using a special, with graduation or a regular magnifying glass with backlight with magnification up to 10 times; fine-needle puncture (aspiration) biopsy (in the presence of enlarged or changed lymph nodes, it is performed to confirm the metastatic nature of their lesion); magnetic resonance imaging of the brain with contrast; comprehensive computed tomography; scintigraphy of the skeletal bones; biopsy of the sentinel lymph node; if necessary - positron emission computed tomography [4].

Special attention is paid to the tactics of management and treatment of melanoma in pregnant women. Wide excision of the primary tumor is recommended for histological verification of the disease. If the diagnosis of melanoma is confirmed, termination of pregnancy is recommended regardless of the stage of the disease. Pregnancy can be maintained with melanoma stages 0, I, Ia if the patient refuses to terminate the pregnancy, however, in these situations it is also necessary to warn the patient and close relatives about the high risk of progression and possible death for both the mother and the child. At stages II-IV of melanoma, termination of pregnancy is recommended at gestation periods of up to 28 weeks. At a period of more than 28 weeks, it is recommended to resolve the issue of early delivery of the patient. The reasons for termination are: 1) the impossibility of a complete and thorough additional examination of the patient due to the teratogenic effect on the fetus of instrumental research methods necessary to establish the correct stage (positron emission computed tomography, computed tomography, radiography, scintigraphy); 2) impossibility of drug therapy due to teratogenic effect on the fetus and the risk of complications from treatment during pregnancy (bleeding from the genital tract, spontaneous abortion, antenatal death of the fetus, disseminated intravascular coagulation syndrome in pregnant women); 3) impossibility of performing or high risk of performing extensive surgeries under anesthesia in pregnant women: lymph node dissection, removal of multiple metastases of the skin and soft tissues, bone resection, removal of brain metastases; 4) impossibility of performing radiation therapy due to teratogenic effect on the fetus; 5) high risk of disease progression during ongoing pregnancy due to a sharp change in the hormonal status of the patient. If termination of pregnancy is refused, it is necessary to conduct an explanatory conversation with the patient and immediate relatives about the reasons for termination of pregnancy and the high risk of progression, and a possible fatal outcome for both mother and child. Each case of melanoma in pregnant women must be discussed at an extended consultation with the participation of specialists from a specialized center for the treatment of melanoma, obstetricians and gynecologists, and specialists in radiation diagnostics, to decide on the further tactics of management, diagnosis, and treatment of the patient [4].

Trocchia M. et al. in their review [5] emphasize that from a classic point of view, the innate immunity is considered the first line of protection against viruses and toxins. Increasing evidence suggests a role for innate immunity in influencing the tumor microenvironment (TME) and the clinical prognosis of cancer patients by promoting or inhibiting tumor initiation and progression. Over the past 20 years, a number of studies revealed that innate immune cells are incredibly plastic and heterogeneous, with different phenotypes based on tumor types, stages, and therapies. Indeed, much evidence supports the idea that innate immunity, through the release of pro- and/or anti-inflammatory cytokines and tumor growth factors, plays a significant role in the pathogenesis, progression, and prognosis of cutaneous malignant melanoma. The identification of new therapeutic targets and the development of strategies aimed at handling the interactions between immune and tumor cells could have a significant effect on immunotherapy and clinical outcomes. Melanoma is a malignant tumor that results from the alteration of epidermal melanocytes due to the combination of: genetic factors, such as background, gender, and skin type; constitutional factors, i.e., age, number, and size of pigmented nevi; environmental factors, i.e.,

the overall lifetime exposure to solar light and sunburn frequency. Melanoma mostly affects the skin. However, it can also develop on different mucosal surfaces, meninges, and eyes (uvea, conjunctiva, and ciliary body). Cutaneous melanoma has a growing incidence throughout the world, and numerous studies suggest that its incidence has doubled in the last 10 years.

Currently, it is expected that 99,700 new cases of melanoma *in situ* would be diagnosed in the skin by 2024 [6].

The studies suggest that the differential frequency in the two sexes should be associated with age. Indeed, up to the age of 40, females have a higher incidence compared to males; by the age of 75, the incidence of melanoma among males is about three times higher than females. Regarding the diagnosis, the gold standard is represented by histopathology, with the support of immunohistochemistry. The main therapeutic approach for cutaneous melanoma is surgery. In recent years, targeted and immunotherapies have demonstrated effectiveness in treating advanced and high-risk resectable melanomas. Despite these significant advances, most patients develop resistance. Mutations and alterations in the TME could contribute to the lack of response. It is important to understand the processes by which melanomas develop resistance in order to develop personalized therapies that take into consideration each patient's unique genetic and immunological profile. The researchers point out that the innate immune system, composed of neutrophils, basophils, eosinophils, myeloid-derived suppressor cells, macrophages, dendritic cells, mast cells, and innate lymphoid cells, is the first line of defense. Growing evidence demonstrates the crucial role of innate immunity in tumor initiation and progression. Several studies support the idea that innate immunity, through the release of pro- and/or anti-inflammatory cytokines and tumor growth factors, plays a significant role in the pathogenesis, progression, and prognosis of cutaneous malignant melanoma. Cutaneous melanoma is the most common skin cancer, with an incidence that rapidly increased in recent decades. Melanoma is a highly immunogenic tumor, due to its high mutational burden. The metastatic form retains a high mortality. The advent of immunotherapy revolutionized the therapeutic approach to this tumor and significantly ameliorated the patients' clinical outcome [5].

According to the WHO classification of skin tumors published in 2018, melanomas were divided into those that are etiologically related to sun exposure and those that are not, determined by their mutational signature, anatomical location and epidemiology. Melanomas on sun-exposed skin were further divided by the histopathological grade of cumulative sun damage (CSD) of the surrounding skin into low and high CSD based on the degree of associated solar elastosis. Melanomas with low CSD include superficial spreading melanomas, and melanomas with high CSD include lentigo maligna and desmoplastic melanomas. The nonsolar category includes acral melanomas, some congenital nevus melanomas, blue nevus melanomas, Spitz melanomas, mucosal melanomas, and uveal melanomas. The general term "melanocytoma" is thought to cover "intermediate" tumors that have an increased (albeit low) likelihood of disease progression to melanoma [7].

Although many cases are preventable, cutaneous melanoma remains the most serious skin cancer worldwide. Understanding the scope and profile of the disease is vital to focusing and strengthening global prevention efforts. Arnold M. et al. [8] examined global patterns of cutaneous melanoma in 2020 and provided projected estimates of incidence and mortality by 2040. This population-based study used the GLOBOCAN 2020 database to provide a global epidemiological estimate of new cases and deaths from invasive melanoma.

Age-standardized incidence and mortality rates were calculated per 100,000 person-years by country, world region, and 4-level human development level. The estimated number of cases and deaths was calculated for 2040. In 2020, it is estimated that there were a total of 325,000 new cases of melanoma (174,000 men, 151,000 women) and 57,000 deaths (32,000 men, 25,000 women) worldwide. The highest incidence rates among men (42 per 100,000 person-years) and women (31 per 100,000 person-years) are observed in Australia/New Zealand, followed by Western Europe (19 per 100,000 person-years for both men and women), North America (18 per 100,000 person-years for men, 14 per 100,000 person-years for women), and Northern Europe (17 per 100,000 person-years for men, 18 per 100,000 person-years for women). Melanoma remained rare in most countries in Africa and Asia, with incidence rates typically less than 1 per 100,000 person-years. Mortality rates peaked at 5 per 100,000 person-years in New Zealand, and geographic variation was less pronounced than incidence. In most regions of the world, melanoma was more common among men than women. If 2020 rates continue, the burden of melanoma is estimated to increase to 510,000 new cases (an increase of approximately 50%) and 96,000 deaths (an increase of 68%) by 2040 [8].

As noted by Roufas C. et al. [9], skin melanoma is a highly immunogenic cancer. The intratumoral

immune cytolytic activity (CYT) reflects the ability of cytotoxic T and NK cells to eliminate cancer cells, and is associated with improved patient survival. Despite the enthusiastic clinical results seen in advanced-stage metastatic melanoma patients treated with immune checkpoint inhibitors, a subgroup of them will later relapse and develop acquired resistance. The authors questioned whether CYT associates with different genomic profiles and thus, patient outcome, in skin melanoma. They explored The Cancer Gene Atlas - Skin Cutaneous Melanoma (TCGA-SKCM) dataset and stratified patients to distinct subgroups of cytolytic activity. The tumor immune contexture, somatic mutations and recurrent copy number aberrations were calculated using *quanTIseq*, *MutSigCV* and *GISTIC2*. Chromothriptic events were explored using *CTLPScanner* and cancer neoepitopes were predicted with *antigen garnish*. Each tumor's immunophenoscore was calculated using *Immunophenogram*. Mutational signatures and kataegis were explored using *SigProfiler* and compared to the known single or doublet base substitution signatures from COSMIC. Metastatic skin melanomas had significantly higher CYT levels compared to primary tumors. The researchers assessed enrichment for immune-related gene sets within CYT-high tumors, whereas, CYT-low tumors were enriched for non-immune related gene sets. In addition, distinct mutational and neoantigen loads, primarily composed of C > T transitions, along with specific types of copy number aberrations, characterized each cytolytic subgroup. Our colleagues found a broader pattern of chromothripsis across CYT-low tumors, where chromosomal regions harboring chromothriptic events, contained a higher number of cancer genes. SBS7a/b, SBS5 and SBS1 were the most prevalent mutational signatures across both cytolytic subgroups, but SBS1 differed significantly between them. SBS7a/b was mutually exclusive with SBS5 and SBS1 in both CYT subgroups. CYT-high patients had markedly higher immunophenoscore, suggesting that they should display a clinical benefit upon treatment with immune checkpoint inhibition therapy, compared to CYT-low patients. Overall, data highlight the existence of distinct genomic features across cytolytic subgroups in skin melanoma, which might affect the patients' relapse rate or their acquisition of resistance to immune checkpoint inhibition therapies.

In their work, Georgoulas G., Zaravinos A. [10] note that skin melanoma cells are tightly interconnected with their TME, which influences their initiation, progression, and sensitivity/resistance to therapeutic interventions. An immune-active TME favors patient response to immune checkpoint inhibition (ICI), but not all patients respond to therapy. Here, our colleagues assessed differential gene expression in primary and metastatic tumors from the TCGA-SKCM dataset, compared to normal skin samples from the GTEx project and validated key findings across 4 independent GEO datasets, as well as using immunohistochemistry in independent patient cohorts. The researchers focused our attention on examining the expression of various immune receptors, immune-cell fractions, immune-related signatures and mutational signatures across cutaneous melanomas with diverse tumor mutation burdens (TMB). Globally, the expression of most immunoreceptors correlated with patient survival, but did not differ between TMB_{high} and TMB_{low} tumors. Melanomas were enriched in "naive T-cell", "effector memory T-cell", "exhausted T-cell", "resting Treg T-cell" and "Th1-like" signatures, irrespective of their BRAF, NF1 or RAS mutational status. Somatic mutations in IDO1 and HLA-DRA were frequent and could be involved in hindering patient response to ICI therapies. The authors finally analyzed transcriptome profiles of ICI-treated patients and associated their response with high levels of IFN γ , Merck18, CD274, CD8, and low levels of myeloid-derived suppressor cells (MDSCs), cancer-associated fibroblasts (CAFs) and M2 macrophages, irrespective of their TMB status. Overall, findings highlight the importance of pre-existing T-cell immunity in ICI therapeutic outcomes in skin melanoma and suggest that TMB_{low} patients could also benefit from such therapies.

Li J. et al. in their publication [11] indicate that there are limited studies on the association between angiogenesis-related genes (ARGs) and the predictive risk of melanoma, even though angiogenic factors, which are essential for tumor growth and metastasis, might be secreted by angiogenesis-related protein in SKCM. To forecast patient outcomes, this study attempts to develop a predictive risk signature linked to angiogenesis in cutaneous melanoma. In 650 patients with SKCM, the expression and mutation of ARGs were examined, and this information was related to the clinical prognosis. SKCM patients were split into two groups based on how well they performed on the ARG. The link between ARGs, risk genes, and immunological microenvironment was examined using a range of algorithmic analysis techniques. Based on these five risk genes, an angiogenesis risk signature was created. The authors developed a nomogram and examined the sensitivity of antineoplastic medications to help the proposed risk model's clinical applicability. The risk model developed by ARGs revealed that the prognosis for the two groups was significantly different. The predictive risk score was negatively connected with memory B cells, activated memory CD4 + T cells, M1 macrophages, and CD8 + T cells, and favorably correlated with dendritic cells, mast cells, and neutrophils. These findings offer fresh perspectives on prognostic

evaluation and imply that ARG modulation is implicated in SKCM. Potential medications for the treatment of individuals with various SKCM subtypes were predicted by drug sensitivity analysis.

Kashani-Sabet M. et al. [12] in their study note that therapy for advanced melanoma has transformed during the past decade, but early detection and prognostic assessment of cutaneous melanoma remain paramount goals. Best practices for screening and use of pigmented lesion evaluation tools and gene expression profile (GEP) testing in cutaneous melanoma remain to be defined. Case scenarios were interrogated using a modified Delphi consensus method. Melanoma panelists ($n = 60$) were invited to vote on hypothetical scenarios via an emailed survey ($n = 42$), which was followed by a consensus conference ($n = 51$) that reviewed the literature and the rationale for survey answers. Panelists participated in a follow-up survey for final recommendations on the scenarios ($n = 45$). The panelists reached consensus ($\geq 70\%$ agreement) in supporting a risk-stratified approach to melanoma screening in clinical settings and public screening events, screening personnel recommendations (self/partner, primary care provider, general dermatologist, and pigmented lesion expert), screening intervals, and acceptable appointment wait times. Participants also reached consensus that visual and dermoscopic examination are sufficient for evaluation and follow-up of melanocytic skin lesions deemed innocuous. The panelists reached consensus on interpreting reflectance confocal microscopy and some but not all results from epidermal tape stripping, but they did not reach consensus on use of certain pigmented lesion evaluation tools, such as electrical impedance spectroscopy. Regarding GEP scores, the panelists reached consensus that a low-risk prognostic GEP score should not outweigh concerning histologic features when selecting patients to undergo sentinel lymph node biopsy but did not reach consensus on imaging recommendations in the setting of a high-risk prognostic GEP score and low-risk histology and/or negative nodal status. In conclusion, the authors note that for this consensus statement, panelists reached consensus on aspects of a risk-stratified approach to melanoma screening and follow-up as well as use of visual examination and dermoscopy. These findings support a practical approach to diagnosing and evaluating cutaneous melanoma. Panelists did not reach consensus on a clearly defined role for GEP testing in clinical decision-making, citing the need for additional studies to establish the clinical use of existing GEP assays.

As noted by Dinnes J. et al. [13], melanoma has one of the fastest rising incidence rates of any cancer. It accounts for a small percentage of skin cancer cases but is responsible for the majority of skin cancer deaths. History-taking and visual inspection of a suspicious lesion by a clinician is usually the first in a series of 'tests' to diagnose skin cancer. Establishing the accuracy of visual inspection alone is critical to understating the potential contribution of additional tests to assist in the diagnosis of melanoma. The aim of the study was to determine the diagnostic accuracy of visual inspection for the detection of cutaneous invasive melanoma and atypical intraepidermal melanocytic variants in adults with limited prior testing and in those referred for further evaluation of a suspicious lesion. Studies were separated according to whether the diagnosis was recorded face-to-face (in-person) or based on remote (image-based) assessment. The authors undertook a comprehensive search of the following databases from inception up to August 2016: CENTRAL; CINAHL; CPCI; Zetoc; Science Citation Index; US National Institutes of Health Ongoing Trials Register; NIHR Clinical Research Network Portfolio Database; and the World Health Organization International Clinical Trials Registry Platform. Selection criteria included test accuracy studies of any design that evaluated visual inspection in adults with lesions suspicious for melanoma, compared with a reference standard of either histological confirmation or clinical follow-up. Our colleagues excluded studies reporting data for 'clinical diagnosis' where dermoscopy may or may not have been used. Two review authors independently extracted all data using a standardized data extraction and quality assessment form (based on QUADAS-2). The investigators contacted authors of included studies that lacked information related to the target condition or diagnostic threshold, and they estimated pooled sensitivities and specificities by algorithm and threshold using a bivariate hierarchical model. In doing so, they examined the influence of: face-to-face test interpretation; use of a specifically developed algorithm to assist in diagnosis; and observer expertise. Forty-nine publications were included, reporting on a total of 51 study cohorts with 34,351 lesions (including 2,499 cases), providing 134 data sets for visual inspection. Across almost all study quality domains, most study reports provided insufficient information to allow judgment of risk of bias, while three of the four domains rated concerns about the applicability of study results as "high". Selective recruitment of participants, lack of detail regarding the threshold for deciding a positive test result, and lack of detail on observer experience were particularly problematic. Attempts to analyse studies by degree of prior testing were hampered by a lack of relevant information and by the restricted inclusion of lesions selected for biopsy or excision.

Accuracy was generally much higher for in-person diagnosis compared to image-based evaluations

[(relative diagnostic odds ratio of 8.54, 95% confidence interval (CI) 2.89 to 25.3, $P < 0.001$)]. Meta-analysis of in-person evaluations that could be clearly placed on the clinical pathway showed a general trade-off between sensitivity and specificity, with the highest sensitivity (92.4%, 95% CI 26.2% to 99.8%) and lowest specificity (79.7%, 95% CI 73.7% to 84.7%) observed in participants with limited prior testing ($n = 3$ datasets). Summary sensitivities were lower for those referred for specialist assessment but with much higher specificities (e.g. sensitivity 76.7%, 95% CI 61.7% to 87.1%) and specificity 95.7%, 95% CI 89.7% to 98.3%) for lesions selected for excision, $n = 8$ datasets). These differences may be related to differences in the spectrum of included lesions, differences in the definition of a positive test result, or to variations in observer expertise. The researchers did not find clear evidence that accuracy is improved by the use of any algorithm to assist diagnosis in all settings. Attempts to examine the effect of observer expertise in melanoma diagnosis were hindered due to poor reporting. Based on the conducted research, the authors conclude that visual inspection is a fundamental component of the assessment of a suspicious skin lesion; however, the evidence suggests that melanomas will be missed if visual inspection is used on its own. The evidence to support its accuracy in the range of settings in which it is used is flawed and very poorly reported. Although published algorithms do not appear to improve accuracy, there is insufficient evidence to suggest that the 'no algorithm' approach should be preferred in all settings. Despite the volume of research evaluating visual inspection, further prospective evaluation of the potential added value of using established algorithms according to the prior testing or diagnostic difficulty of lesions may be warranted [13].

The same group of authors conducted a parallel study to the previous one on the use of dermatoscopy with and without visual inspection for the diagnosis of melanoma in adults [14]. As the researchers note although history-taking and visual inspection of a suspicious lesion by a clinician are usually the first in a series of 'tests' to diagnose skin cancer, dermoscopy has become an important tool to assist diagnosis by specialist clinicians and is increasingly used in primary care settings. Dermoscopy is a magnification technique using visible light that allows more detailed examination of the skin compared to examination by the naked eye alone. Establishing the additive value of dermoscopy over and above visual inspection alone across a range of observers and settings is critical to understanding its contribution for the diagnosis of melanoma and to future understanding of the potential role of the growing number of other high-resolution image analysis techniques. The aim of the work was to determine the diagnostic accuracy of dermoscopy alone, or when added to visual inspection of a skin lesion, for the detection of cutaneous invasive melanoma and atypical intraepidermal melanocytic variants in adults. The authors separated studies according to whether the diagnosis was recorded face-to-face (in-person), or based on remote (image-based), assessment.

Our colleagues included a total of 104 study publications reporting on 103 study cohorts with 42,788 lesions (including 5700 cases), providing 354 datasets for dermoscopy. The risk of bias was mainly low for the index test and reference standard domains and mainly high or unclear for participant selection and participant flow. Concerns regarding the applicability of study findings were largely scored as 'high' concern in three of four domains assessed. Selective participant recruitment, lack of reproducibility of diagnostic thresholds and lack of detail on observer expertise were particularly problematic. The accuracy of dermoscopy for the detection of invasive melanoma or atypical intraepidermal melanocytic variants was reported in 86 datasets; 26 for evaluations conducted in person (dermoscopy added to visual inspection), and 60 for image-based evaluations (diagnosis based on interpretation of dermoscopic images). Analyses of studies by prior testing revealed no obvious effect on accuracy; analyses were hampered by the lack of studies in primary care, lack of relevant information and the restricted inclusion of lesions selected for biopsy or excision. Accuracy was higher for in-person diagnosis compared to image-based evaluations (relative diagnostic odds ratio (RDOR) 4.6, 95% CI 2.4 to 9.0; $P < 0.001$). Authors compared accuracy for (a), in-person evaluations of dermoscopy (26 evaluations; 23,169 lesions and 1664 melanomas), versus visual inspection alone (13 evaluations; 6740 lesions and 459 melanomas), and for (b), image-based evaluations of dermoscopy (60 evaluations; 13,475 lesions and 2851 melanomas), versus image-based visual inspection (11 evaluations; 1740 lesions and 305 melanomas). For both comparisons, meta-analysis found dermoscopy to be more accurate than visual inspection alone, with RDORs of (a), 4.7 (95% CI 3.0 to 7.5; $P < 0.001$), and (b), 5.6 (95% CI 3.7 to 8.5; $P < 0.001$). For a), the predicted difference in sensitivity at a fixed specificity of 80% was 16% (95% CI 8% to 23%; 92% for dermoscopy + visual inspection versus 76% for visual inspection), and predicted difference in specificity at a fixed sensitivity of 80% was 20% (95% CI 7% to 33%; 95% for dermoscopy + visual inspection versus 75% for visual inspection). For b) the predicted differences in sensitivity was 34% (95% CI 24% to 46%; 81% for dermoscopy versus 47% for visual inspection), at a fixed specificity of 80%,

and predicted difference in specificity was 40% (95% CI 27% to 57%; 82% for dermoscopy versus 42% for visual inspection), at a fixed sensitivity of 80%. Using the median prevalence of disease in each set of studies ((a), 12% for in-person and (b), 24% for image-based), for a hypothetical population of 1000 lesions, an increase in sensitivity of (a), 16% (in-person), and (b), 34% (image-based), from using dermoscopy at a fixed specificity of 80% equates to a reduction in the number of melanomas missed of (a), 19 and (b), 81 with (a), 176 and (b), 152 false positive results. An increase in specificity of (a), 20% (in-person), and (b), 40% (image-based), at a fixed sensitivity of 80% equates to a reduction in the number of unnecessary excisions from using dermoscopy of (a), 176 and (b), 304 with (a), 24 and (b), 48 melanomas missed. The use of a named or published algorithm to assist dermoscopy interpretation (as opposed to no reported algorithm or reported use of pattern analysis), had no significant impact on accuracy either for in-person (RDOR 1.4, 95% CI 0.34 to 5.6; $P = 0.17$), or image-based (RDOR 1.4, 95% CI 0.60 to 3.3; $P = 0.22$), evaluations. This result was supported by subgroup analysis according to algorithm used. The researchers observed higher accuracy for observers reported as having high experience and for those classed as 'expert consultants' in comparison to those considered to have less experience in dermoscopy, particularly for image-based evaluations. Evidence for the effect of dermoscopy training on test accuracy was very limited but suggested associated improvements in sensitivity. In summary, the authors emphasize that despite the observed limitations in the evidence base, dermoscopy is a valuable tool to support the visual inspection of a suspicious skin lesion for the detection of melanoma and atypical intraepidermal melanocytic variants, particularly in referred populations and in the hands of experienced users. Data to support its use in primary care are limited, however, it may assist in triaging suspicious lesions for urgent referral when employed by suitably trained clinicians. Formal algorithms may be of most use for dermoscopy training purposes and for less expert observers, however reliable data comparing approaches using dermoscopy in person are lacking [14].

The above data clearly demonstrate that melanoma remains an important cancer control and public health problem worldwide.

Now, as for our country. The incidence of skin melanoma in the Kazakhstan in 2023 was 1.8 per 100 thousand population, which in absolute numbers was 352 people with a growth rate of 2.7% compared to the previous year (in 2022 - 1.7 per 100 thousand population and 336 people, respectively), taking 21st place in the ranking, as in the previous year. The proportion of cases with a diagnosis established for the first time in life, recorded by oncology organizations was 1.0%. At the same time, 144 men fell ill (proportion - 0.9%, 17th place in the ranking), women - 208 (proportion - 1.0%, 18th place in the ranking) [15].

The incidence of skin melanoma is higher than the national average in 7 regions of the country: East Kazakhstan - 5.6 (the highest rate); Pavlodar - 3.3; the city of Almaty - 3.1; Kostanay and Karaganda - 2.9; North Kazakhstan - 2.6 and West Kazakhstan - 2.2. Akmola region is on par with the national average. The rate is lower in the remaining 12 regions: Turkestan - 0.3 (the lowest rate); Ulytau - 0.5; Atyrau - 0.6; the city of Shymkent - 0.7; Kyzylorda and the city of Astana - 0.8; Zhetysu - 1.0; Aktobe - 1.1; Abay - 1.3; Almaty and Mangistau - 1.4 and Zhambyl regions - 1.6 per 100 thousand population.

In the structure of causes of death of persons of both sexes from this disease, it ranks 20th (in 2022 - 21st place), amounting, as a year earlier, to 0.7%, and in absolute numbers - 88 people (38 men and 50 women).

The regions with the mortality rate from skin melanoma above the national average (0.4 per 100 thousand population) include: East Kazakhstan - 1.2 (maximum level); Abay - 1.0; Almaty, Karaganda and North Kazakhstan - 0.8; Zhetysu - 0.7; Akmola - 0.6; Mangistau and the city of Almaty - 0.5. Kostanay region is on par with the national average. The lowest rates are noted: in Kyzylorda and Ulytau - 0.0; Aktobe, Turkestan and the city of Astana - 0.1; the city of Shymkent - 0.2; Atyrau, Zhambyl, Pavlodar and West Kazakhstan regions - 0.3 per 100 thousand population [15].

At the same time, the one-year mortality rate was 10.1% (in 2022 - 7.6%). The ratio between one-year mortality and neglect (stage IV) also increased compared to the previous year and was 1.4 (in 2022 - 1.1). Let us remind you that the farthest from 1 is the worst ratio between the indicators of one-year mortality and neglect. This nosological form of malignant neoplasms, despite belonging to the most aggressive types of malignant tumors, showed one of the lowest ratios of one-year mortality and neglect of cancer (stage IV), taking 17th place in this indicator along with lung cancer, with an average national indicator of 1.5. During larger-scale preventive examinations of the population, significantly more patients with malignant neoplasms were actively identified than in 2022. This is 25,193 patients against 23,623 patients identified in 2022, +6.6%. This is due to the further abatement of the epidemiological situation with coronavirus and the increased availability of preventive care for the population. The

proportion of patients identified during medical examinations increased from 62.0% to 62.4% of the total number of patients identified during the year.

It should also be noted that during preventive examinations in 2023, skin melanoma can be attributed to one of the most actively detected tumors among all cancer localizations - 72.7% (74.3% - in 2022).

Also, despite the fact that skin melanoma belongs to visually accessible localizations in 2023, the proportion of this form of malignant tumors detected in the early stages (0, I-II stages) of the disease slightly decreased from 88.4 to 87.6% [15].

The regions where the proportion of patients with stages I-II skin melanoma is above the national average (84.9%) include the following regions: Ulytau and Astana city - 100.0%; Zhambyl - 94.7%; Almaty city - 92.5%; Mangistau - 90.9%; Almaty - 90.5%; Shymkent city - 88.9% and Abay - 87.5%. The lowest rates of early diagnosis were recorded in Aktoobe region - 70.0% (the lowest level); Zhetysu region and Turkestan region - 71.4%; Atyrau region - 75.0; East Kazakhstan region and North Kazakhstan region - 76.9%; Akmola region - 78.6%; West Kazakhstan region - 80.0%; Karaganda region - 81.8%; Kyzylorda region and Kostanay region - 83.3%; Pavlodar region - 84.0%.

As for morphological verification of diagnosis, the national average was 94.8%. Moreover, 100% verification of this formidable disease was noted in all regions except three - these are Kyzylorda region (only 16.7%), the city of Almaty (83.6%) and Akmola region (85.7%).

The proportion of stage IV skin melanoma among all nosological forms of malignant neoplasms was 6.4%, occupying the 19th rank place for this indicator.

The proportion of stage IV was higher than the national average in 10 regions of the country: North Kazakhstan - 15.4% (maximum level); Zhetysu - 14.3%; West Kazakhstan - 13.3%; Abay - 12.5%; Karaganda - 12.1%; Aktoobe - 10.0%; Mangistau - 9.1%; Kostanay - 8.3%; East Kazakhstan - 7.7% and Akmola - 7.1%.

The share of stage IV was lower than the national average in the remaining 10 regions of the country, of which no terminal stage of the disease was detected in 7 regions (Atyrau, Zhambyl, Kyzylorda, Turkestan, Ulytau, as well as the cities of Astana and Shymkent); the city of Almaty - 3.0%; Pavlodar - 4.0% and Almaty - 4.8% [15].

One cannot ignore such an important clinical aspect as the coverage of patients with a first-time diagnosis of skin melanoma in the Republic of Kazakhstan with special treatment. At the end of 2023, the absolute number of people who completed specialized treatment was 201 people, continuing treatment - 115 patients. The following results were obtained in percentage terms by methods and types of treatment. 70.6% of patients received surgical treatment only, 14.9% received complex treatment, 3.0% received combined treatment, 3.0% received drug treatment only, and 2.0% received radiation treatment only.

Now, regarding the survival rate of patients. Statistical data on patients diagnosed with malignant neoplasms, who have been under observation for 5 years or more, and continue to be observed in 2023, showed that the number of patients under observation by oncological organizations of Kazakhstan for over five years continued to grow and at the end of 2023 amounted to 117,616 people, with an increase of 6.2% (2022 - 110,790 people, + 6.6%) (form No. 7). The proportion of this category of patients or five-year survival rate for malignant neoplasms with an upward trend is 55.4% (55.3% in 2022).

As for skin melanoma, 2,758 people, or 13.9 per 100 thousand of the population, were under observation at the end of 2023. At the end of 2022, there were 2,689 patients and 13.8 per 100 thousand population, respectively.

At the same time, the mortality rate of the observed contingents was 3.2% in 2023 and 3.4% in 2022.

The five-year survival rate of patients with skin melanoma was 60.8% in 2023 and 60.5% in 2022 [15].

Summarizing the above data, we can conclude that, being the "Queen of tumors" and referring to visually accessible localizations, skin melanoma continues to be a serious problem of modern clinical oncology, since, despite the efforts taken, the prognosis regarding the growth in the coming years of incidence and mortality from this type of malignant tumors is disappointing. All this requires both oncologists and, first of all, primary health care providers to increase the level of cancer alertness, inform the population about early symptoms that may indicate this pathology or the onset of proliferative changes and carry out other high-tech preventive and diagnostic measures.

Knowledge of the mechanisms of development and progression of skin melanoma, modern methods of diagnosis and prognosis of the course of this aggressive disease allow us to hope for effective

results in the prevention and treatment of this pathology.

An epidemiological assessment of the situation with skin melanoma in our country shows that there are sometimes significant differences between regions not only in incidence rates, but also in the parameters of early diagnosis and mortality from this pathology. At the same time, it should be noted that skin melanoma can be classified as one of the most actively detected tumors among all cancer localizations during preventive examinations with a significant increase compared to the previous year.

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Pedagogical sciences

THE POETIC IMAGE OF MAN, TIME, AND NATURE IN KAZAKH ZHYRAU POETRY

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Abstract

This study provides a comprehensive analysis of the poetic conceptualization of man, time, and nature within the Kazakh Zhyrau bardic tradition spanning the 15th to 18th centuries. Positioned at the intersection of cognitive linguistics, literary anthropology, and ethnolinguistics, the research aims to reconstruct the integral poetic model of the world inherent to the nomadic worldview. The central hypothesis posits that the triad "Man – Time (Zaman) – Nature" functions not as a set of separate themes but as a coherent, interdependent cognitive system that structures the artistic universe of Zhyrau poetry.

The methodological framework is inherently anthropocentric and cognitivist. It involves conceptual analysis to deconstruct the semantic fields and symbolic load of the core concepts. The research employs close reading of poetic texts to identify and systematize linguistic means—such as metaphor, epithet, simile, and symbolic imagery—that materialize these concepts. Furthermore, the study utilizes the method of conceptual triangulation to reveal the dynamic interrelations within the triad, showing how each element defines and is defined by the others within the historical and cultural context of the Kazakh steppe civilization.

The investigation reveals that the concept of "Man" (Adam, Er) in Zhyrau poetry is fundamentally social and ethical, embodying a hierarchy of spiritual and moral qualities (e.g., Batyr – hero, Biy – judge, Khan). The individual is primarily a reflection of his societal role and era. The concept of "Time" (Zaman) transcends mere chronology; it is perceived as a philosophical category of historical destiny, a collective space shaped by human actions, societal shifts, and moral choices. The Zhyrau portray Zaman as an active force that tests and reveals human virtues.

The concept of "Nature" is the key symbolic domain. It is never merely descriptive but serves as a vast metaphorical system to express human interiority, social states, and temporal changes. Through rich sensory imagery (visual, auditory, tactile) and symbols drawn from the nomadic milieu (e.g., falcon, swan, mountain, steppe), nature becomes a mirror for the human soul, a measure of time's passage, and a symbol of ethnic unity and the native land (Tugan Zher). The research identifies that binary oppositions (native/alien, good/evil, batyr/slave) are crucial artistic tools for constructing this poetic world model.

In conclusion, the study establishes that the triad "Man – Time – Nature" forms the foundational cognitive-poetic matrix of the Kazakh Zhyrau tradition. This matrix presents a holistic worldview where human existence is meaningful only in its deep interconnection with historical destiny and the natural cosmos. The Zhyrau's language acts as a repository of national consciousness, encoding this worldview through stable conceptual relationships and artistic devices. The findings contribute significantly to understanding the Kazakh nomadic mentality, enriching the fields of cognitive poetics, conceptual history, and the study of Central Asian oral literary heritage.

Keywords: *Kazakh Zhyrau poetry, cognitive poetics, conceptual triad, nomadic worldview, anthropocentrism, linguistic worldview, literary anthropology, symbolic imagery.*

Introduction

The poetry of the Kazakh zhyrau (bards) of the 15th–18th centuries represents a seminal artistic and philosophical phenomenon, serving as a crucial mirror of the national worldview. This bardic tradition encapsulates the spiritual essence, social dynamics, and profound relationship with the environment characteristic of the nomadic civilization of the Kazakh steppes. The zhyrau were not merely poets but chroniclers, philosophers, and social commentators who artistically mediated the connections between the individual, the collective, and the cosmos.

At the heart of their poetic discourse lies an intricate interplay of three fundamental concepts: Man, Time (Zaman), and Nature. This research posits that these concepts do not exist in isolation but constitute an integral, triadic system—a cognitive-poetic model that structures the Zhyrau's perception and representation of the world. This triad (Man–Time–Nature) defines the philosophical, ethical, and existential foundations of their artistic universe. While each concept can be analytically distinguished, their true meaning and artistic power emerge from their interrelation and unity. Language, as the

primary tool of the zhyrau, accumulates and reflects this systemic worldview. Therefore, examining these core concepts from linguo-cultural and cognitive perspectives allows for a deeper understanding of the specific mechanisms through which the Zhyrau constructed and conveyed their poetic image of the world.

The relevance of this study is anchored in the contemporary anthropocentric paradigm of linguistics and cultural studies, which prioritizes the analysis of language as a reflection of human consciousness and cultural codes. Investigating these concepts provides access to the deep layers of the Kazakh national psyche, its historical memory, and its unique spiritual code, offering insights that transcend purely literary analysis.

The main goal of this research is to define the poetic image and conceptual structure of Man, Time, and Nature in Kazakh Zhyrau poetry and to describe their systemic interrelation as a foundational model of the national worldview. To achieve this goal, the study pursues the following objectives: 1) to determine the semantic structure and key features of each concept within the poetic texts; 2) to reveal the principles of their interaction and mutual definition within the triadic system; 3) to analyze the linguistic and stylistic means (metaphor, epithet, symbol, opposition) employed for their artistic realization; and 4) to explicate the cognitive and cultural content of this triad, defining its place in the broader Kazakh worldview.

1. Conceptual Foundations: Man and Time in the Zhyrau's Worldview

The poetic image of the world in Zhyrau poetry originates from a holistic perception where man, society, and time are inseparable. This perspective aligns with the traditional Kazakh worldview, which is often described through associative triads. As scholar G. Sagidoldy notes, parallels like "man = society = nature" form the basis of the Zhyrau's cognitive framework, enabling the artistic depiction of existential interdependence. Similarly, academician A. Kaidar emphasizes the necessity of analyzing the macro-system "nature – man – society" to grasp the fullness of the national poetic imagery.

The concept of "Zaman" (Time) is particularly profound. It is a collective image encompassing historical space, social destiny, and the era's moral climate. Zaman is not a neutral backdrop but an active force that unites collective historical movement with individual fate. Each era possesses its own distinct spiritual essence and values, which the Zhyrau sought to capture and critique. Research by S. Sapargaliyeva underscores this anthropocentric nature of time: "Each era is distinguished by certain historical phenomena, and the structure of time is built by people. Consequently, it is people who give qualitative content and social character to an era" [3, p. 64]. This establishes a fundamental unity between the concepts of "Man" and "Time": man is the mirror and agent of his time, while time is a dimension that gains meaning and character through human action and moral standing. The Zhyrau's vocabulary for human roles—"khan," "batyr" (hero), "biy" (wise judge), "qul" (slave)—directly reflects the social hierarchy and ethical valuations of a given Zaman.

2. Nature as a Poetic and Cognitive System

In Zhyrau poetry, the concept of Nature is one of the most stable and multifaceted images, serving as the primary symbolic extension of human existence. Nature is not an external scenery but an inseparable part of the human cosmos, and conversely, man is perceived as an integral fragment of nature. This deep interconnection is realized through a rich arsenal of poetic devices, with metaphor, simile, and epithet being the most prominent.

The key feature of the Zhyrau's depiction of nature is its profound spiritualization and anthropomorphism. Nature reveals a sympathetic, human-like aspect; it reflects character, mood, and social conditions. Through nature, human virtues and vices, the spirit of the era, and societal changes are depicted. For instance, in the works of Bukhar, Aktamberdy, and Shalkiiz, a person's inner state is conveyed through the color, sound, and movement of natural elements, which act as symbolic descriptors.

The artistic representation of nature relies heavily on sensory experience and imagery drawn from practical, nomadic life:

- **Sensory Imagery:** Visual ("aq shortan" – white pike, "kök teñiz" – blue sea), auditory ("qular shulady" – the swans rustle), tactile ("jaǵy tükti jylqy" – an animal with furry cheeks), and even taste/smell ("qara su bal tatydy" – black water tastes like honey).

- **Object-Practical Imagery:** Descriptions of landscapes, pastures, and waters are intrinsically linked to livelihood and survival, showing nature as the basis of life and labor (e.g., in the poetry of Dospambet).

Thus, nature functions as a cognitive interface. It is a mirror of human life and society, and a symbolic repository for ethical and spiritual values—love for the native land (Tugan Zher), national unity,

courage, and patriotism. Specific natural objects become stable symbols: the falcon (*sūñqar*) for courage, the swan (*aqqu*) for beauty and purity, the black cloud (*qara bült*) for impending doom or fate.

3. The Triadic System: Man – Time – Nature as a World Model

The conceptual triad "Man – Time – Nature" emerges in Zhyrau poetry as a holistic artistic model of the world. The three components exist in dynamic interrelation, each defining and enriching the others to create a complete poetic universe.

- **Man** is the acting individual, the ethical center, and the mirror of society.
- **Time (Zaman)** is the dimension of historical and social movement, the testing ground for human action.
- **Nature** is the eternal witness, the symbolic language, and the harmonizing element that connects the temporal and the social to the eternal and cosmic.

This system manifests through both harmonious unions and sharp oppositions. Binary antitheses such as "native – alien," "good – evil," "batyr – slave," "Kazakh – Kalmyk" are primary artistic tools for revealing the essence of the world and asserting values. For example, Bukhar-zhyrau's line, "Er jigittin qadirin aǵayın bilmes, jat biler" (The worth of a batyr is recognized not by his kin, but by a stranger), employs the "native/alien" opposition to explore social recognition and merit.

The connection between Man and Time is articulated through themes of destiny, heroism, justice, and the people's fate. The image of Nature provides this socio-temporal structure with harmony, rhythm, and a scale of measurement. Nature becomes a metaphor for life's continuity and a barometer of temporal and moral change. As G. Sagidoldy observes, even the names of tribes and lands in the poetry transcend mere nomination to become "conceptual symbols of unity and harmony," illustrating how the Zhyrau depicted the social and moral order through a poetic language deeply rooted in the natural world.

Conclusion

The poetry of the Kazakh Zhyrau of the 15th–18th centuries stands as a profound linguistic and artistic testament to the nation's worldview. This research has demonstrated that the poetic image of the world in this tradition is constructed upon the interdependent triad of the concepts of Man, Time (Zaman), and Nature.

1) The concept of **Man** is the ethical and social core, defined through a network of roles and virtues that reflect the hierarchical and value-driven structure of steppe society.

2) The concept of **Time (Zaman)** is a philosophical category representing historical destiny and the qualitative moral character of an era, shaped by and shaping human collective action.

3) The concept of **Nature** serves as the essential symbolic and cognitive system, a poetic lexicon through which human interiority, social states, and temporal processes are expressed, measured, and harmonized.

Together, this triad forms a complete cognitive-poetic model. Linguistically, it is realized through a masterful use of metaphor, symbolic imagery, epithets, and binary oppositions. The Zhyrau relied on associative parallels between the human, social, and natural worlds to create an artistic universe that is both a reflection of their historical moment and a timeless expression of nomadic existential philosophy.

Thus, Zhyrau poetry is not merely a literary heritage but a vital source for understanding the cognitive foundations, cultural identity, and linguistic picture of the world of the Kazakh people. The findings of this study contribute to the fields of cognitive linguistics, ethno poetics, and the study of Central Asian intellectual history.

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Philological sciences

FORMALITY, INDIRECTNESS, AND SYNTAX-PRAGMATICS INTERFACE IN AZERBAIJANI AND BRITISH ENGLISH DIRECTIVES

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Abstract

This study investigates the interplay of formality, indirectness, and the syntax-pragmatics interface in directives in Azerbaijani and British English. Directives—speech acts that aim to get the addressee to perform a specific action—exhibit cross-linguistic variation in terms of politeness strategies, syntactic structures, and contextual interpretation. Using corpus-based analysis of spoken and written data, this paper explores how cultural norms, syntactic patterns, and pragmatic strategies shape directive realization. The findings contribute to applied linguistics, pragmatics, ESP (English for Specific Purposes), and intercultural communication studies, providing insights for teaching and translation practices.

Keywords: *directives, formality, indirectness, syntax-pragmatics interface, Azerbaijani, British English*

1. Introduction

*Directives, defined as speech acts that attempt to influence the behavior of the addressee (Searle, 1969), are central in both casual and formal communication. They are performed in countless everyday situations, from classroom interactions to professional emails and social media requests. Directives can vary in **formality**, **directness**, and **syntactic complexity**, reflecting both linguistic norms and socio-cultural expectations (Brown & Levinson, 1987).*

Azerbaijani, a Turkic language with rich morphosyntactic markers, and British English, a Germanic language with relatively fixed word order and modal-based politeness strategies, provide a compelling cross-linguistic comparison. Azerbaijani speakers often rely on verb morphology, suffixes, and context to signal politeness, while British English speakers tend to use modal verbs, hedges, and formulaic expressions.

This study seeks to answer three main research questions:

- 1. How do Azerbaijani and British English differ in terms of direct and indirect directive strategies?*
- 2. How do syntactic structures interact with pragmatic considerations to convey politeness and formality?*
- 3. How do socio-cultural norms influence the syntax-pragmatics interface in directives?*

*Understanding these differences has practical implications for **ESP instruction, intercultural communication, and translation studies.***

2. Literature Review

2.1 Speech Acts and Directives

*Searle (1969) categorized speech acts into **assertives, directives, commissives, expressives, and declarations.** Directives are intended to cause the hearer to perform an action. Blum-Kulka (1987) classified directives into:*

***Imperatives** (direct commands): "Close the door."*

***Interrogatives** (indirect requests): "Could you close the door?"*

***Performatives** (explicit performative verbs): "I request that you close the door."*

*Brown and Levinson (1987) emphasized **politeness strategies**, which mitigate face-threatening acts. **Direct strategies** are often used with close social distance or lower power differences, while **indirect strategies** are favored in formal or hierarchical contexts.*

2.2 Syntax-Pragmatics Interface

*The syntax-pragmatics interface explores how **grammatical choices interact with pragmatic meaning** (Givón, 1985). In directives, syntactic features such as word order, verb mood, auxiliaries, and modal verbs influence perceived politeness and formality.*

*English: Modal auxiliaries (**could, would, might**) and hedges (**please, if you don't mind**) increase indirectness.*

Azerbaijani: Optative, subjunctive, and evidential moods, along with politeness suffixes (*-əsən*, *-sin*), signal deference or social distance.

This interface is crucial in ESP contexts where directive clarity and politeness must be balanced.

2.3 Cross-Cultural Pragmatics

Cultural norms shape directive realization. House (1996) notes that **collectivist cultures**, like Azerbaijani, often favor indirect forms to maintain social harmony, whereas **individualist cultures**, like British English-speaking societies, prefer clarity with polite lexical markers.

Trosborg (1995) highlighted that understanding these cross-cultural differences is essential in language teaching, translation, and international professional communication.

3. Methodology

This study adopts a **comparative corpus-based approach**.

3.1 Data Sources

Azerbaijani:

Spoken: Classroom interactions, daily conversations from the **National Corpus of Azerbaijani**.

Written: Formal emails, student-teacher correspondences, workplace memos.

British English:

Spoken and written: Extracts from the **British National Corpus (BNC)**.

3.2 Sample

500 directives per language, balanced across formal/informal and spoken/written registers.

Directive types classified according to Blum-Kulka (1987): imperative, interrogative, performative.

3.3 Analytical Procedure

1. Identify syntactic structures and mood/verb forms.

2. Categorize each directive by directness (direct vs indirect).

3. Examine pragmatic markers: hedges, politeness suffixes, modal verbs.

4. Quantitative comparison of frequency and distribution of directive types.

4. Analysis

4.1 Direct vs Indirect Directives

Azerbaijani: Indirectness is often expressed via:

Polite verb forms: *xahiş edirəm ki...* (I request that...)

Suffixes indicating politeness: *-əsən*, *-sin*

Conditional structures: *Zəhmət olmasa qapını bağlayardınız* (If it is not too much trouble, could you close the door?)

British English: Indirectness expressed through:

Modal auxiliaries: could, would, might

Hedging expressions: please, if you don't mind, would you be so kind as...

Example Comparison Table:

Context	Azerbaijani	British English
Asking to sit	<i>Xahiş edirəm, oturun.</i>	Please, have a seat.
Closing door	<i>Qapını bağlaya bilərsiniz?</i>	Could you close the door?
Submitting work	<i>Tapşırığı təqdim etməyiniz xahiş olunur.</i>	I would appreciate it if you could submit the assignment.

4.2 Formality and Syntax

Formality affects **sentence length, mood, and lexical choice**:

Azerbaijani: Optative and subjunctive moods, as well as polite verbal suffixes, are markers of formal directives.

Example: *Gəlməyiniz xahiş olunur* (Your attendance is requested).

British English: Longer, multi-clause sentences, modal verbs, and hedges increase politeness.

Example: I would be grateful if you could review the report by tomorrow, please.

4.3 Pragmatic Implications

Directives are not purely linguistic; they are **socially and culturally embedded**:

Azerbaijani: Context and hierarchical relations often determine the level of directness. Indirect forms are common even among peers in formal settings.

British English: Hedging, modal verbs, and lexical politeness maintain face, even in informal contexts.

5. Discussion

The comparison reveals several key insights:

1. **Linguistic Realization:** Azerbaijani relies heavily on morphological cues, while British English relies on lexical and syntactic markers.

2. **Cultural Considerations:** Collectivist tendencies in Azerbaijani culture encourage indirectness

and deference, whereas British culture favors explicit politeness.

3. *Syntax-Pragmatics Interface*: Both languages show interaction between form and function, but the mechanisms differ:

Morphology in Azerbaijani

Modal and lexical devices in English

Implications for ESP and Translation:

ESP instructors must teach learners how to use **appropriate directives** in professional and academic contexts.

Translators need to consider both formality and cultural expectations, not just literal meaning.

6. Conclusion

This study demonstrates that **Azerbaijani and British English directives** differ in syntactic, pragmatic, and cultural realization. Azerbaijani uses morphology and contextual cues to express politeness and indirectness, while British English uses modal verbs, hedges, and formulaic expressions. Understanding these differences is essential for **applied linguistics, ESP teaching, intercultural communication, and translation**.

Future research directions:

Investigate directives in digital communication platforms.

Explore differences in other Turkic and Germanic languages for typological insights.

Study learner perception of cross-cultural directive politeness in ESL/EFL contexts.

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GENDERED PRAGMATICS IN SPEECH ACTS ACROSS CONTEXTS

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Abstract

This study examines the pragmatic language strategies used by male and female speakers in their daily speech actions (making requests, rejecting and offering suggestions) in the context of gender. In the mixed method research, the reactions of 40 Azerbaijani participants (20 females, 20 males) to different social situations were analyzed through three separate questionnaires. Data analysis revealed that women tend to use more evasive, soft and sentimentally inclined out-pourings, yet men prefer to use direct and simple sentence structure. When social prestige and strength are separate, women make more discrete and strategic language choices, whereas men discuss in a more open and obvious manner. These gender-related differences are persistent even when the participants talk about their own preferred styles of communication. This study adds to the knowledge in the field of communicative differences because it exposes the impact of gender on the use of the language. The study emphasizes in particular the decisive role of sociocultural dynamics in shaping communication styles of gender. The results point out that gender plays a heavy role in the use of language within both biological and sociocultural contexts. Moreover, the results provide highly practical recommendations in the areas of language instruction and gender sensitive education policy. The outcomes of the study offer some useful contributions to language pedagogy, instruction in communication and gender-sensitive education policies.

Keywords: *gendered pragmatics, speech acts, politeness strategies, social hierarchy, pragmatic competence, power dynamics*

INTRODUCTION

Language is a significant indicator of social identity in the sense that it reveals the identities and social roles of people as well as their cultural affiliations besides the communication aspect. On the contrary, pragmatic language use is a study of the way people use language in context in both verbal and written communication; and how they seem to like the use of courtesy tactics, indirection, implication, and propositions. In recent years, studies on the relationship of language with gender have been increasing; it is suggested that the way male and female speakers use language is shaped not only by biological but also by social and cultural factors. In that respect, research on gender-based pragmatic variations could bring significant contributions both linguistically and sociologically. Depending on gender expectations, people can utilize various language versions and this can be different because of a given culture or a given environment.

The social organization of the people has a system that has a direct influence on the application of language by the people. In this context, gender is one of the important socio-cultural variables that affect the ways of using language. It has been suggested in various studies that there are differences between women and men in terms of communicative preferences, courtesy strategies, level of directionality, forms of address and therefore pragmatic language use. However, it is still debatable to what extent these differences are universal, in which social contexts they occur and depending on what variables they are shaped. In addition, many studies either focus only on the linguistic characteristics of female or male speakers or deal superficially with pragmatic usage. Such circumstances are indicative of vague complete and contextualized analyses on the issue of language use and its gendered reactions.

However, pragmatic competence has paramount importance in an individual's success in communication and maintaining social relationships. Thus, pragmatic disparities between the genders are not just linguistic interests but it is significant in thus entailing the disciplines of gender studies as well as education. The major problem of this research is to reveal to what extent the pragmatic language usage patterns of male and female speakers differ, in which elements these differences are concentrated and how they are related to social factors.

This research aims to find out how gender affects someone's choice of words by comparing how men and women use language. The study aims to analyze gender-based differences, especially through pragmatic elements such as indirection, politeness strategies, making suggestions, criticism, rejection

and innuendo. However, it is assumed that these differences do not consist only of linguistic preferences; they are shaped according to the social roles of individuals, cultural norms and social expectations.

The study will look into how men and women use language differently in some situations and the possible explanations for these differences. This will be in order to create a deeper and more situational comprehension of the dependence between genders and language. It is foreseen that the observations that will be made will contribute to the literature of linguistics and will serve as a guide to language teaching, communication education and education policies in view of gender sensitivity. The research will rely on a comparative study of the pragmatics of language use by male and female speakers, investigate the rationale behind them and add to the existing body of research using empirical evidence.

Research Questions

What pragmatic strategies do male and female speakers employ when performing everyday speech acts such as requests, refusals and making suggestions?

To what extent does gender impact the choice of courtesy and the degree of indirectness strategies among speakers in interpersonal communication?

How do male and female speakers regulate their pragmatic language use across different social contexts, such as social distance and varying levels of social power?

LITERATURE REVIEW

Pragmatic language use is an expression that describes how people respond well and amicably when engaging in a talk in a social setting. West and Zimmerman demonstrate the fact that gender is not only a biological contrast but an identity that is performed when people engage in daily social interaction (1). In this context, the effect of gender on linguistic preferences has been evaluated especially through everyday speech acts such as asking, refusing and making suggestions (2,3). Studies show that the strategies used by men and women when performing these actions differ greatly. The influence of gender, especially on the selection of politeness and indirectness strategies, is one of the main factors that guide interpersonal communication (4). The influence of gender on the selection of politeness and indirectness strategies is one of the main factors that guide interpersonal communication (4).

Request action is a complicated language practice, which is determined by social superiority, power equilibrium and social intimacy. As asserted in the Polite Theory of Brown and Levinson, people direct strategic individualistic expressions to avoid loss of faces in social relations (4). In this context, women tend to prefer a more indirect approach. For example, "Would you help me if possible?" It has been found that structures such as these are used more often by women (5). Men, on the other hand, communicate their requests with shorter and more direct structures (6). This situation shows that women adopt strategies focused on establishing and maintaining relationships in communication, while men adopt strategies focused on transferring information and getting results (7).

Since refusing something usually clashes with the other person's desires, it is often a hard action to perform in communication. In the studies conducted by Beebe et al., it was seen that women offer more justification during rejection, apologize and use compensatory expressions to protect the other party's face (8). Women tend to use phrases like "I want to, but unfortunately, I just cannot" very often. Men, on the other hand, usually use short, non-explanatory and direct strategies (9). This indicates that the differences in communication sides on gender are not only structural but also functional.

The act of suggestion also contains strategic differences related to gender. Holmes states that women present their proposals in less bossy and more cooperative ways, while men usually express the proposal with structures close to command sentences (2). Taking this example, women tend to use indirect expressions like "Maybe we can think of doing it this way", whereas men go for direct ones like "We should do it this way" (10). This situation supports that women care more about face protection strategies than men.

This influence depends not only on someone's gender but also on the kind of environment in which they find themselves. It has been found that women are more likely to say things in a supportive and indirect way when communicating with people who are lower than them in status, particularly in institutional contexts including the workplace whereas men use more direct and commanding expressions (11). In the work environment, gender-dependent ways of speaking are closely related to the structure and distribution of duties; Holmes notes that women are more likely to prefer cooperation-based and soft strategies (12). In other words, differences in choosing a strategy are more noticeable among people when gender is combined with social power and status.

Social distance and power relations play an important role in the pragmatic strategy preferences of individuals. Holtgraves explained that people generally communicate indirect messages when they are

farther from the other person (13). This is more so in women due to the fact that women are more likely to develop language strategies that are more considerate and susceptible to the happenings of the society (14). Such adaptability indicates that women are very pragmatically conscious. In contrast, men are more comfortable with directness, especially in high social power contexts, which is associated with their need to entrench power (15).

Cameron suggests that there are times when gender-based differences in language are blown out of proportion and in other cases, social habits and the likes of people are the main causes (16). Men are also able to use a high level of directionality and politeness strategy in some social contexts, for example, in formal meetings or teacher-student interactions (11). That is, gender alone is not decisive; context, balance of power, status and cultural norms also play an important role in the choice of strategy.

It is observed that these differences also persist in digital communication. Herring stated that women use more positive emotional expressions, emojis and indirect expressions in online environments, while men send information-oriented, short and direct messages (17). The works of Darics suggest that women include more helpful and cooperative expressions when communicating online (18). Haugh emphasizes that tactlessness is also part of pragmatic strategy and can be used purposefully in some social situations (19).

As a result, although gender is an important variable in the pragmatic language strategies of individuals, this effect should be evaluated together with contextual factors. While women use more directionality, politeness and face protection strategies, men tend to use more direct and task-oriented strategies. On the other hand, these patterns depend on various things such as society, power, and culture. Therefore, when studying the use of gender-based pragmatic language, it is necessary to adopt a multidimensional approach.

METHODOLOGY

Research Design

This research is based on the mixed-method research approach. It was aimed to conduct a deeper content analysis not only with numerical data but also with the participants' tendencies in strategic language use.

Three separate speech actions (asking, refusing and making suggestions) were determined as the focal point in the research. These three actions are among the linguistic actions that are most frequently used in daily life and are decisive in the regulation of social relations. For this reason, it is aimed to reveal the pragmatic preferences of individuals through the use of these actions and the differences that arise depending on social roles. Separate questionnaire forms specially designed for each speech performance have been created, thus providing the possibility of detailed analysis at both the operative and contextual levels.

Participants

The study included 40 participants (20 males vs 20 females) aged between 20 to 40. Purposive sampling method was used by selecting the participants and gender was accorded attention during equal distribution of the participants. The respondents were the residents of Baku and Sumgayit who were two important cities of Azerbaijan. The majority of the respondents are university students or people who graduated with a university degree and also have varied social classes. Employed and unemployed people, those with and without degrees in higher education were present in the group as well. This has brought about a wider evaluation of various strategies in the use of the language.

The participants were involved in the research on a voluntary basis and the identity data of the participants in the study carried out under all the ethical principles were stored in a confidential way and personal privacy was guarded. In the course of the research, confidentiality and anonymity were obtained. All of the participants were evaluated as individuals with sufficient language awareness and social awareness to share their thoughts about how speech acts are used in different social contexts.

Data Collection

The data was obtained with the help of three research questionnaires. The questionnaires are the scenario-driven questions which address a particular speech act (refusal, request, suggestion) and assess the performance of the participants in performing a certain speech act. In every survey, respondents were shown various social contexts (such as the closeness or distance between the person and the addressee, the status of the addressee, and his hierarchy) and they were then instructed to make relevant linguistic choices regarding these situations.

The participants were given questionnaires online through the Google Forms service and the period of collecting the data amounted to two weeks. Since every one of the participants was to respond to the three questionnaires it was enabled to compare the preferences of the linguistic happenings in one and

the very same person under various circumstances. The questions are prepared only in a closed-ended way, thus increasing reliability both in terms of standardization and numerical analysis. Pragmatic strategies in the current literature in the formation of questions (e.g. It is based on the courtesy theory of Brown and Levinson, strategies of indirection).

Data Analysis

The collected data were analyzed in both quantitative and qualitative aspects in accordance with the mixed method approach. Quantitative data were evaluated using descriptive analysis technique; distributions in strategy preferences were revealed through frequency, percentage ratios and cross-comparisons. Line graph, bar and pie charts are used to make these data visual representations, and the trend is shown at the aggregate level. As an illustration, trends like the tendency of women to employ a stronger rate of directionality strategy at making suggestions or the stronger phenomena of direct expressions in social power relations emerged in such analyses.

In the qualitative analysis process, the thematic analysis method was used. By carefully reading the participants' responses, repetitive expressions, preferred word structures and strategic language uses were determined. Along with predetermined themes (for example: politeness strategies, levels of indirection, and social power sensitivity), new themes derived from the data were also evaluated. In this process, the researcher tried to minimize his biases through self-evaluation (reflection) and paid maximum attention to preserving the originality of the obtained data.

Methodological justification behind the implementation of three questionnaires to a single cohort

The reason is that pragmatic language use is multi-layered:

- The 1st questionnaire focuses on the act of speech (specific speech acts — who, when and how it performs),
- Questionnaire 2 examines social and courtesy factors and gender influence, and measures at a general level the change in the level of politeness and indirectness according to gender and social status.
- The last questionnaire, on the other hand, checks how social attitudes and positions of power change the language. It examines how men and women dynamically regulate their pragmatic behaviour, that is, the way they speak, in different positions of social power (for example, when talking to a leader or a friend).

	QUESTIONNAIRE 1	QUESTIONNAIRE 2	QUESTIONNAIRE 3
Main focus	Execution of speech acts (request, refusal, suggestion)	Selection of courtesy and indirect strategies by gender and social context	Regulation of pragmatic language based on social context and hierarchy of power
Factor	Execution of speech acts	Social status, intimacy	Social power, age difference, type of relationship
Aim	Comparison of how men and women perform specific acts of speech	Influence of Gender and social status on the level of politeness and indirectness	How men and women change the style of speech in different social relationships (boss, friend, stranger, etc.)
Context	Everyday speech acts: request, refusal, proposal	Different social status and degrees of intimacy	Levels of power and social hierarchy (with a leader, with a friend, with someone unfamiliar)
Approach	Behavioral measurement at the level of a concrete act of speech	Choice of common courtesy and indirect strategies	Regulation of speech style based on social position and attitude (language variability, choice of strategy)
Expected Outcome	Showing that men and women perform speech acts differently	Differences in the level of politeness due to Gender and social context	Gender-dependent regulation of speech style according to social situations

Table 1. Comparative Components of the Questionnaire Design

RESULTS

Findings

Questionnaire 1

The purpose of this questionnaire is to determine the nature of pragmatic strategies used in everyday communication based on gender. The 40 people surveyed – 20 women and 20 men- chose from a variety of forms of expression in everyday communicative situations and also demonstrated the thinking patterns behind these choices. As a result of the analysis, it was observed that different strategies were chosen between female and male participants on different pragmatic acts. Such variations cannot be observed only in the variants of language use, but also in the factors behind the speech acts like politeness, social distance, emotional caution and role expectation.

The survey clearly observed that female participants in everyday speech acts such as requests, refusals, offers or requests for information tend to choose more indirect and polite expressions. For

example, in a question about the desire to look at the phone, the overwhelming majority of women say, "If there are no problems..." They have chosen the expression as conditional and based on the permission of the other party. This language strategy is a reflection on the language of women's social interaction and the need to consider the other side. This may suggest that, based on the theory of politeness of Brown and Levinson (1987), women have a greater preference for the strategy of negative politeness (non-interference with the freedom of the other party) [4]. On the contrary, men chose more direct statements in the same question, expressing the issue in a more specific way with forms such as "Give me your phone" or "I want to look". This suggests that men are more open to directness (direct language form) strategies, and have a tendency to quickly achieve a communicative goal.

Although the use of polite expressions is chosen by both female and male participants, the form and function of this courtesy are different. For women, politeness is more often manifested by apologies, softening and attaching conditions, for example: "Sorry, is it possible for you to explain this part again?" or "If you don't use it, can I take this chair?" in their statements, both the consent of the other party and social harmony are preserved. Men, on the other hand, use politeness more within the framework of functional and social adequacy, that is, a polite form is used if the expression serves the purpose. For example, you could say, "Please, can you explain it again?" the phrase is both polite and appropriate. Among men, however, these types of strategies are used with less variation, that is, the degree of tact is more stable and purposeful.

In situations of rejection (rejection), women prefer more indirect and explanatory statements, with emotional caution and a tendency not to offend the other person. The structures like, I would be glad to assist but it is impossible this time are intended to keep the rejection and the relationship both. Such statements indicate that women try to maintain relational goals in communication and try to express their opinions without violating social harmony. In contrast, men prefer to use concrete and definite types of refusal like I cannot pay, I am not coming. This also shows that their language strategies are content-oriented and less attitude-protective. The main thing here is to transmit information and express the idea clearly. However, this does not mean that they ignore social attitudes – it's just that the attitude towards language is different.

In acts of proposal, women are more likely to seek partnership, "What if we both do it together?" or "If it suits you..." they have chosen forms that seek to ensure social compatibility with expressions such as ". This approach suggests that women are sensitive to the thinking and emotional state of the other person, and prone to the mutual formation of decisions. Men, on the other hand, are more proactive and specific during the proposal, such as: "We are preparing together" or "I will do it." Although these statements take into account the position of the other party, the main emphasis is on planning and decision-making. Thus, male participants exhibit a more dominant model of initiative.

The different answers also reveal that participants tackle social status and the equilibrium of power. For example, in the question of how they asked the teacher to explain the document, most women used more formal and cautious statements. This implies that they consider the hierarchy that exists in the society, and observe a disparity in the status in their respective language. Men, on the other hand, showed less formality in addressing the teacher, but still balanced the act of language with polite additions such as "Please". This example shows that women are more likely to reflect the difference in power to the language, while men manage this difference in a more neutral form.

The final questions of the survey were intended to find out the views of the participants, which summarized their way of approaching the language. Also, significant differences between women and men have been brought out. Among the female participants, the option of asking indirectly and politely prevails. This shows that women strategize speech acts in accordance with social adaptation. They consider the circumstance, feelings and probable response in stating their desires. Men, on the other hand, prefer a more direct way of speaking and a short, open way of expressing themselves. At the same time, there are many among men who participate in the idea that "it changes depending on the context." This demonstrates that they can adapt pragmatically and not only in a single fashion.

During the refusal, women emphasize the priority of "not offending the other person", while men attach more importance to the principle of "being open and honest." Even during the proposal, women prefer to get the consent of the other person, while men choose to express their opinions openly. These findings show that gender makes a difference in everyday speech acts not only in terms of grammatical or lexical differences, but also in terms of purpose, attitude, social distance, and level of caution. In the linguistic behaviour of women, a tendency to create harmony, maintain attitude and emotional elegance is more pronounced, and in men efficiency, open communication and initiative are displayed.

The participants made a choice among the statements given about various communication

situations and explained their thoughts about these preferences. According to the survey, it has been revealed that men and women have large differences in linguistic and pragmatic strategies. Firstly, when the preferences for directness and directness were examined, 90% of the female participants chose indirect expressions in situations such as requests, requests and requests for information. "If you don't mind, can I look at your phone? While phrases such as" are common among women, 80% of men preferred short and Decipherable sentences such as "Give me the phone" or "I want to look", which are direct phrases. This information indicates that women are more interested in negative politeness strategies, whereas men are more interested in positive politeness or direct communication strategies.

In the context of the use of courtesy expressions, 85% of women have tried to achieve socio-emotional balance by adding apologies, requests or conditions to their expressions. For example, "I'm sorry, can you explain it again?" examples such as have often been preferred. 65% of men used kind expressions only when it was necessary, and the remaining 35% rarely preferred the elements of kindness. Also, the patterns of politeness used by men are less diverse, remaining more in basic forms such as "Please".

Indirect and explanatory strategies have been selected by 95 per cent of women in the rejection situations. Such as in the example of, I would like to help but I cannot do that at the moment, a negative answer was provided and the motive of safeguarding the relationship was served. Conversely, three-quarters of male subjects favoured brief and direct expressions like I cannot come, I cannot pay only a quarter of them felt compelled to seek emotional cushioning or nationalization.

In the case of submitting proposals, 80% of women used expressions aimed at mutual compliance and approval: suggestions such as "We can do it together if you want" both involve the other party and exhibit a collaborative form of communication. 70% of the male participants chose direct planning or guiding expressions. The use of constructions such as "We'll do it tomorrow" or "I'll take care of it" shows that men show a more determined and initiative-taking attitude.

Differences have also been observed in scenarios based on social distance and power balance. 90% of the female participants used formal and distant patterns in their statements directed at authority figures such as teachers, "Teacher if you are available, could you explain this document?" 60% of men preferred simpler, but still respectful expressions like "Can you please explain this part?".

In the strategic language approach questions, 85% of women stated that they shaped their expressions according to the situation, the other party's feelings and social relationships. 65% of men stated that they prefer to speak directly and openly, but 35% said that they can show flexibility according to the context.

In general, female participants pay more attention to maintaining social harmony, the feelings of the other party and relational integrity in communication. Men, however, like more functional, goal-oriented and direct communication. These data indicate that gender plays a major role in influencing language use at not only syntactic but also socio-pragmatic levels.

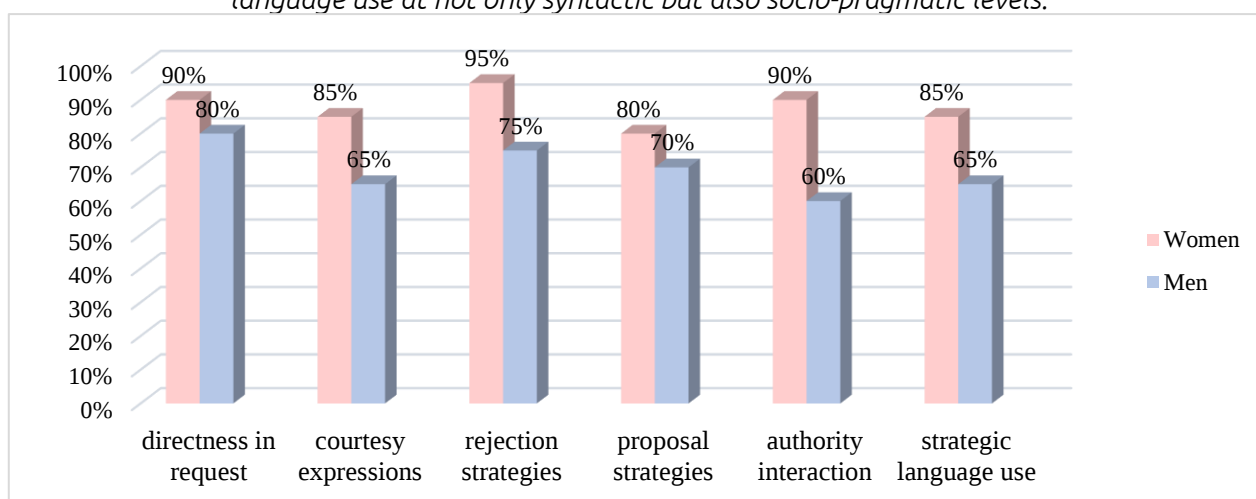


Figure 1. Distribution of Gender-Based Pragmatic Preferences in Speech Act Performance Questionnaire 2

The findings of the survey showed that the choice of politeness and indirect negotiation strategies is closely related to the person's gender, social status, level of relationship with the other person, and contextual factors. The respondents' responses revealed that certain styles of communication are formed according to gender, but these differences are not always constant, showing variability according to the

context.

Overall, female participants are more likely to opt for indirect, cautious and polite strategies, while men are more likely to resort to explicit and direct forms of expression. The difference is however not equally acute in every situation. Especially as the degree of relationship and social distance decreases, the role of open communication between both women and men increases. And this suggests that mutual emotional closeness can lower the level of indirectness.

For example, in answers about how to react to a personal question from a stranger, the need to gently put a distance between the participants, and respectfully draw boundaries to the other person is manifested. Among the expressions used here, mitigating means such as "I'm sorry", "I'm not very comfortable", and "I don't want to talk" are dominant. This is in order to be polite as well as to avoid social confrontation. Such strategies are especially preferred by women and individuals who are more sensitive to social rules.

On the other hand, reactions to unfair criticism of the leader reveal the influence of both the difference in status and gender. Since direct objection in dealing with the boss can create an open conflict, many respondents choose more indirect ways, such as "respectfully expressing their opinion" or "comment later." This situation was more common, especially in female participants. Here, inherent in sex, the instinct of self-preservation and non-violation of social harmony is clearly visible.

In a relationship with a close friend, the answers showed that the closeness of the relationship sometimes prevents indirect. Expressing dissatisfaction openly and speaking by explaining it have been chosen as the main strategies. This implies that intimate relationships need more honesty and emotional openness. However, some respondents, especially women, chose to express their dissatisfaction with silence so as not to create emotional tension. This circumstance indicates that indirectness is not born only from fear or powerlessness, but is sometimes formed by taking into account the feelings of the other person.

In situations that take place in a public context, such as hearing a compliment from someone you don't know on the street, people, especially women, often choose a strategy of moving away without conflict. Answers like "smile and walk away" or "I'm in a hurry" serve both to avoid danger and not to enter into a tough confrontation with the other person. It can be seen as an expression of the instinct of self-preservation in the public space, but also of social roles linked to gender.

In more real-life scenarios, involving a situation where one needs social finesse, like when one is offering assistance, but needs to be turned down nicely, most of the respondents selected the polite refusal tactics. Such answers as "Thanks a lot, I do not need it" or "I can manage it myself, thanks" contain not only information, but also the attitude as well. Such strategies seek to strike a balance between not offending the other person and maintaining their own independence. In turn, these answers confirm the thesis that language is not merely an informational device, but also the social device that governs relationships.

In the situation with someone older on the bus, many of the respondents saw giving space as an ethical responsibility but chose different strategies when it came to how to present this initiative. While some prefer to offer space directly, others have expressed the idea of taking the initiative in indirect ways, for example through eye contact. This shows that being direct or not in social relationships is not only a matter of personal style but also about subtleties such as not embarrassing the other person.

One of the general ideas about gender is in the direction that women speak more politely and indirectly than men. The respondents' ways of thinking in this direction are reflected in their answers in many cases. Women are more likely to use softening phrases, indirect inquiries, words expressing respect, etc. they express opinions using tools. This also shows how both social roles and behavioural models instilled in women from childhood infect language.

The choice of strategy when talking to someone of high social status also gave interesting results. Many of the respondents noted that they did not find it appropriate to speak directly in these cases, stating that it is more appropriate to speak "measured", "cautious" and "indirect". This is one of the examples that shows how language adapts to social hierarchy, with communication being highly dependent on equal power relationships.

Finally, in the last question about the style of speech, it was interesting how the respondents characterized themselves. Majorities consider themselves as neither a person who is very explicit, nor very indirect, but talk in a moderate and courteous way. And this suggests that the main quality that modern society seeks in language is not sharpness or excessive prudence, but balance and coherence.

The data obtained from the participants revealed that gender, social status, context and the nature of the interpersonal relationship play a decisive role in the pragmatic strategies used by individuals.

The influence of gender is obvious: 78% of female respondents indicated that they prefer strategies involving directness, softening and gentleness in communication. Comparatively, 45 per cent of men preferred to use the same indirect statements, whereas, 55 per cent of men declared to use more explicit and direct statements. This contrast makes it clear that females are more concerned with social expectations and sensitivity to other people.

In response to personal questions from an unfamiliar person, 85% of women preferred indirect or evasive expressions, for example, "I'm uncomfortable, but thank you," both drew boundaries with strategies such as trying to stay away from conflict. In men, this rate remained at 65%. 70% of women also clearly stated that they use emollient expressions in such situations in order to "protect the social face".

The level of such strategies as respectfully expressing an opinion (52%) or speaking later (43%) instead of a direct objection was 75 per cent among women and 60 per cent among men in a hierarchical setting, e.g. when responding to unfair criticism by a manager. A higher adjustment behaviour towards the status has been observed especially among women. This situation shows that the tendency of women to avoid social conflicts is more pronounced.

It has been observed that directness increases in communication with close friends. While 62% of all respondents said that they openly expressed their displeasure, 35% of women still resorted to indirect or silent strategies. This reveals that even female participants try to maintain emotional balance even in intimate relationships, and indirection is not always a sign of weakness.

In the face of compliments from an unfamiliar person in the public sphere, 80% of women stated that they use conflict avoidance strategies and associated this situation with "security" and "gender roles". In these examples, "smiling and walking away" (57%) or "I'm in a hurry" (38%) were the most preferred answers. It is estimated that about 40 per cent of male citizens have taken the same action.

In situations that require social tact, such as gently rejecting an offer of help, 82% of participants used emollient expressions instead of outright rejection. 90% of women and 75% of men expressed that they gave answers such as "Thank you, there is no need" that both protect personal space and do not hurt the other party.

As for the behaviour of giving a seat to an elderly person on the bus, 88% of the participants said that they consider it an "ethical responsibility". However, the strategies differed: 60% went directly to the way of "offering a place", while 28% preferred indirect ways, such as eye contact. The current paper points out that leanings towards directness or directionality in social nuance are situational and not inherited by a person.

Finally, when the participants were asked how they described their communication style, 67% stated that they adopted "neither very explicit nor very indirect", that is, measured and kind language. This shows that the main function of language in modern society is not only to transmit information but also to regulate social relations.

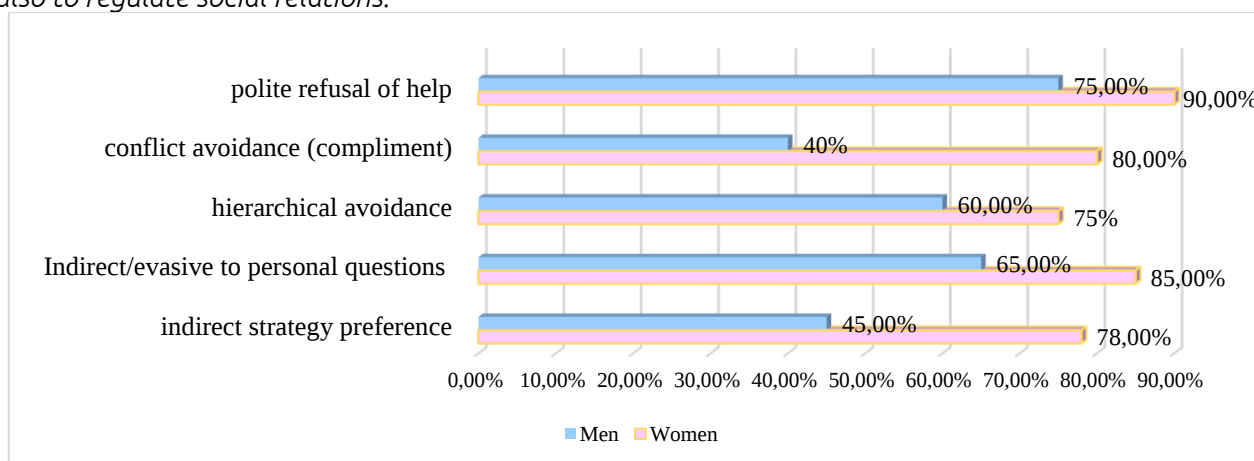


Figure 2. Comparative Distribution of Politeness Strategies by Gender Across Social Contexts
Questionnaire 3

The data obtained on the basis of the survey made it possible to comprehensively analyze the influence of gender on pragmatic language use within the framework of social contexts and hierarchy of power. It has been found that conversational strategies are not only determined by individual language choice and personal communication style; rather, these strategies are closely related to deeper social and psychological factors – including gender, status difference, relationship intimacy level, social roles,

and expectations.

Preliminary results of the survey show that female and male participants prefer different pragmatic strategies in different social situations. These differences are reflected both in the forms of expression used by them in speech and in their position in relationships. Especially in contexts where there is a difference in power and status, it is observed that women prefer a more cautious, indirect and polite style. This is due to the influence of their position in social relations and culturally formed feminine constructs on language.

During a disagreement with the leader, most participating women prefer to present their opinions in a more balanced, softened and polite form instead of expressing them directly. This can be explained both by the need to prevent conflict and by the use of cautious language, which manifests itself in the framework of respect for the difference in status. In the same social context, male participants show greater determination and a penchant for open communication. This approach is a manifestation of the fact that, on the one hand, society reaps a dominant role for men, clearly expressing their own opinions, and on the other, the need to demonstrate their own power.

Similar situations are also observed in friendly relations. Women prefer to react more cautiously, after putting their emotional state in order, rather than immediately openly expressing misunderstandings that have arisen in intimate relationships. This suggests that they have chosen a model of behaviour aimed at maintaining the continuity of relationships and emotional stability. On the other hand, most men prefer to express their dissatisfaction in a more direct way. This suggests that they have a stronger model of behaviour to quickly get to the root of the problem and "focus on solving" issues.

In cases where there is a difference in social status – for example, when negotiating with older and influential persons – women prefer more cautious, indirect and indirect approaches. Here, both social expectations and cultural values dictate that women be more submissive and humble. In such cases, the male participants, on the other hand, maintain a certain prudence, although they sometimes prefer to speak openly, depending on the situation. However, the general trend shows that men are more determined in expressing their opinions than women.

It is necessary to add that the differences can also be observed in an academic or professional setting. For example, in cases of unfair criticism by an academic supervisor, most women prefer to either respond indirectly or remain silent altogether. This is an approach aimed at not entering into conflict and maintaining relationships. Whereas men, would in such situations calmly and assertively express themselves. This difference also suggests that women are more sensitive to the hierarchy of power and choose strategies aimed at protecting themselves in socially dangerous situations.

Even during the presence of a dominant figure in the social circle, women often prefer either to remain silent or indirectly express their position. This situation is due to the fact that they do not want to violate social harmony, but also try to act cautiously, being aware of the balance of power. Men, on the other hand, in such cases show a greater tendency to clearly define their boundaries and demonstrate their position. From this, we can conclude that women are more likely to choose language strategies "aimed at maintaining relationships", and men - "aimed at maintaining a position."

Among the more curious findings of the survey pertains to the perception of the participants about language behaviour in the sexualities. The overwhelming majority of participants believe that women prefer a more cautious and indirect manner of speaking in relation to men in communicating with persons of high social status. This shows that gender stereotypes that have formed in society and have infected internal psychological structures are still active. Surprisingly, both males and females agree with this opinion. This situation evidences the fact that public expectations influence our conduct as well as the conduct that we attribute to other people.

Finally, while the participants characterized their style of speech, the majority of women described it as polite, balanced, and cautious. Men, on the other hand, presented themselves more as open, categorical and direct-speaking individuals. These differences coincide in parallel with the answers presented in the previous questions, indicating that, according to gender, speech strategies are formed not only by external factors but also by internal perceptions.

In conclusion, the survey conducted showed that the gender factor is one of the main social determinants that shape pragmatist language behaviours. However, this determinant is not a determinant on its own; other accompanying factors – the difference in status, the emotional load of the context, the degree of attitude and public expectations-are also the main mechanisms for determining how language should be used. For this reason, an analysis of these complex relationships between gender, status, culture and language with more interdisciplinary approaches is necessary in future research.

On the basis of survey data, it is also possible to make a thorough study of the role of gender

influences in using pragmatic language in the context of social context and hierarchy of power. The analysis of the data obtained proves that the difference in pragmatic strategies favoured by both male and female participants when faced with various social situations is considerable. These differences have been clearly observed both in the forms of expressions they use and in their attitudes in relationships.

It has been revealed at a statistically significant level that women prefer to use more indirect, cautious and kind language, especially in situations where there is a power and status difference. According to the survey results, 78% of women prefer to use such indirect and soft expressions, while this rate was found to be 45% for men. Conversely, 55 per cent of the male participants are more apt to use more explicit and pronounced phrases. This situation coincides with the more dominant and outspoken role assigned to men in society.

In the disagreements with the leader, the majority of women expressed their opinions in more balanced and softened expressions in order not to create conflict. 72% of women preferred indirect discourses rather than direct opposition in these situations, while 60% of men expressed their thoughts with clear and clear expressions. The impacts of social status differences and expectations of gendered roles in culture are reflected in such differences in language strategy.

In friendship and intimate relationships, 65% of women regulate their emotional state and react more controllably, while 70% of men prefer to give more direct and open reactions in order to quickly resolve disputes that arise. This is the motive behind women to sustain continuity of relationships and emotional stability.

80% of women showed a more cautious and indirect approach, especially in interviews with older or influential people, where the difference in social status was prominent, while 55% of men used clear and confident expressions from time to time. When it comes to unfair criticism at work or school 75 per cent of the women would be willing to give a backhanded response or to keep their mouths shut and not to speak when confronted with unfair criticism, whereas 65 per cent of the men have made a clear and firm declaration on the matter.

The perceptions of the survey participants regarding language behaviour according to genders are also striking. About 85% of both women and men stated that women speak more cautiously and indirectly when communicating with people of high social status. This points out that gender stereotypes, which are established in society, affect both individuals' own behaviour and the behaviour they attribute to others.

Finally, the majority of women (78%) described their speaking style as gentle, balanced and cautious, while 70% of men expressed themselves as clear, categorical and direct-speaking individuals. These self-assessments are consistent with each other and with the results that were received after using other sections of the survey and demonstrate that the pragmatic approach is determined not only by some external factors in the social context but also by personal perceptions and psychological formations.

Generally, the findings of the survey process indicate that social context and power relations have a close relationship with pragmatic language use. It has been statistically supported that women prefer strategies aimed at maintaining relationships, maintaining emotional balance and ensuring social harmony more, while men use more obvious forms of communication aimed at maintaining their positions and openly defending their views. It has been concluded that these differences are not only the result of individual language preferences but also, in a broader sense, the result of gender roles and cultural structures.

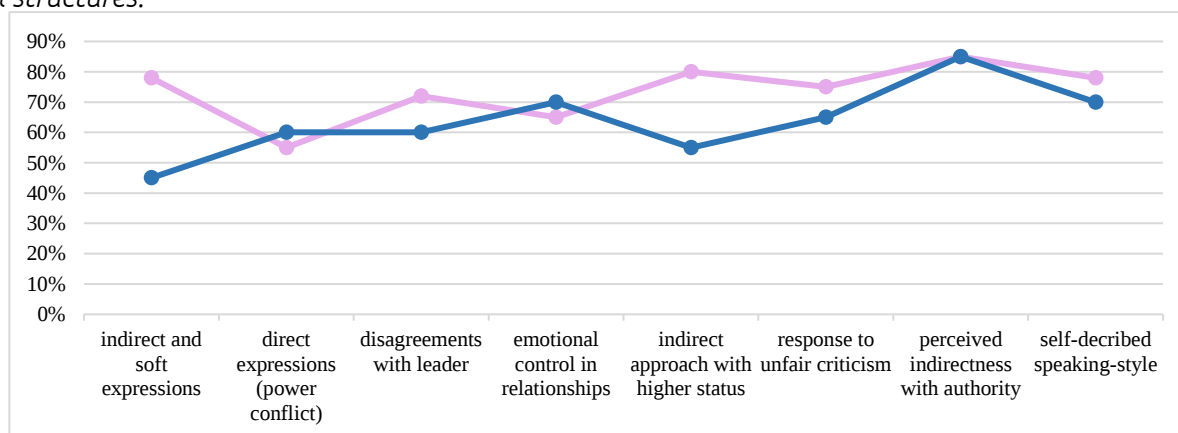


Figure 3. Gender Differences in Strategic Language Use in Power-Distance Interactions

DISCUSSION

The data obtained in this research reveal that gender is a decisive variable in everyday language use. Differences between male and female participants were observed not only at the level of words or structures used, but also in the way they evaluated the social context, showed sensitivity to the feelings of the other party, and chose communication strategies. The findings obtained show that language is used by individuals not only for the transfer of information but also to regulate social relationships, avoid conflicts and maintain emotional balance.

Analysis of the three basic speech actions (making a request, refusing, and making a suggestion) revealed that women adopt more cautious, indirect and politeness-based strategies in such actions. For example, a large proportion of female respondents indicated that structures containing condition and permission statements were preferred when making a request: "If I don't bother, can I take a look?" statements such as "can be read as an indication of respect for the other side's borders. This also coincides with Brown and Levinson's concept of "negative kindness". Male participants, on the other hand, used direct, short and goal-oriented expressions in the same situation, which indicates that they prefer a more "positive politeness" or open communication style.

A significant gender difference is also noticeable in red situations. While women generally adopted rejection methods that minimize emotional harm, take care not to offend the other side and justify it, men preferred more direct, clear and short rejection strategies. This situation leads to the interpretation that women attach more importance to the continuity of social relationships, while men give priority to situational clarity and functionality.

In making suggestions, women used cooperation-based language structures that emphasize mutual consent and the idea of acting together; men used more guiding, initiative-taking and planning expressions while women used cooperation-based language structures that emphasize mutual consent and the idea of acting together. This finding shows that women are more inclined to social cohesion, while men are more inclined to leadership and direction-setting.

The research design included the aspect of differences in social status and power relations in the study of language use. Especially in communication with authority figures (for example, teachers, and administrators), women preferred more cautious, distant and formal expressions, while men chose simpler but still respectful language structures. This shows that women are more sensitive to status differences and shape their language strategies in line with social expectations.

Indeed, in the third survey of the research, it was found that the vast majority of women prefer indirect, softened and conflict-avoiding language patterns in scenarios where the social balance of power is felt. This situation is directly related not only to individual preferences but also to the "harmonious, kind, down-to-earth" role models that are culturally attributed to women. Men, on the other hand, chose strategies that were clearer, more direct and, if necessary, expressed themselves clearly in such situations. This coincides with the "strong, clear, leader" role that society attributes to men.

The way the participants described themselves also shows the reflection of gender-based perceptions on language use. Most of the women described their communication style as "gentle, balanced, careful"; while men described themselves more as "open, direct, clear-speaking" individuals. These self-evaluations show that not only external factors but also individuals' internal perceptions are effective in determining language strategies.

In the current research, stereotypically female and male trends in the domains of language preferences were determined, and it was revealed that both women and men are predisposed to utilize open, direct communicative styles when they communicate with close friends or interact in the environment in which there is a high level of emotional involvement. However, even in such cases, women mostly choose expressions that observe emotional balance and do not completely abandon the level of immediacy. Based on empirical evidence, there are grounds to support the argument that indirection is a strategic mechanism of adapting and not a liability.

Overall, the results of the research clearly show that gender is not only a biological but also a socio-cultural variable in language use. While women used strategies based on more social cohesion, relational continuity and kindness, men adopted more functional, direct and result-oriented strategies. The occurrence of differences in conversational management (as rendered in terms of idiosyncratic communicative practices, as well as by sociological roles, power dynamics, and cultural scripts within which the talk is conceived) may be credited to several contributing factors, which are both underlying and contributory.

Challenges and Limitations

Some of the limitations that the current study has, as well as the challenges that were faced in the

implementation process, should be expressly mentioned. Firstly, the fact that the number of participants is limited to 40 people limits the generalizability of the data obtained. Although the gender distribution was kept equal, the inclusion of broader and socio-culturally diverse groups could have increased the validity of the results.

Another limiting element is that the data collection tool consists only of closed-ended survey questions. This situation did not allow the participants to explain their reasons for choosing a strategy in more depth. The fact that the survey was administered via the Internet also presented a cogent factor that complicates the premeditated and thoughtful conducting of the survey items on the part of the respondents.

Analyzing the interaction of multi-layered variables such as power relations, social context and gender is a complex process. Although the current study has produced valuable information about the phenomenon in question, it did not necessarily identify the intricacies of meaning. These limitations could be compensated by the use of qualitative techniques involving another study which may include interviews and observation techniques.

Recommendations

Although this research reveals the effects of gender on pragmatic language use, some suggestions may be offered for future studies in order to obtain more comprehensive and in-depth results. The expansion of the sample by the inclusion of individuals with more diverse backgrounds in terms of the socio-cultural context would enable the researchers the chance of increasing reliability as well as generalizability of empirical evidence. Comparative studies to be conducted in different age groups, educational levels and cultural contexts offer the opportunity to evaluate gender-based language use with its more universal dimensions.

In addition, qualitative data collection techniques (interviews, focus group interviews, etc.) its use can reveal in more detail the reasons why participants choose language strategies. This method will provide a better understanding of emotional, social and cultural factors in particular.

Finally, considering that language is not only an individual structure but also a social structure, conducting research supported by interdisciplinary approaches (sociology, psychology, cultural studies) will contribute to achieving more holistic results.

CONCLUSION

The current paper looks into pragmatically viable language techniques used by men and women in ordinary conversation with the objective to clarify how these techniques differ along a sociolinguistic point. Comprehensive and multidimensional data on the use of language in the context of gender, social distance and power relations were obtained through three questionnaires conducted during the research process.

The first research question is "What pragmatic strategies do female and male speakers use in situations such as asking, refusing, and offering suggestions, which are daily speech actions? the answers given to the question " indicate important differences based on gender. Female participants preferred indirect, gentle and softened expressions more in such speech actions; conditional constructions when asking ("If it is convenient, can you help?"), strategies that minimize explanatory and emotional harm when rejecting ("I would like to help, but it's not possible right now"), and patterns that emphasize cooperation when offering suggestions have been observed. In contrast, male participants preferred more direct, short and result-oriented statements. This shows that women attach more importance to maintaining relationships, social harmony and emotional sensitivity, while men focus on the functionality of the message and achieving the goal.

The second research question, "To what extent is gender effective in the selection of politeness and directionality strategies in interpersonal communication?" the question has also been answered clearly within the framework of the findings of the research. It was found that 78 % of female respondents find it appealing to use indirect and soft styles as compared to 55 % of male respondents who gave preference to the use of open and direct type of expression. While women try to maintain a social face with strategies such as apologizing, asking permission, and adding conditions, men use expressions of politeness with less variety and only when it is functional. As it is shown in the discussion, gender being a social variable that is not separable from social roles has a systematic impact on communicative strategies applied by individuals. It has been found that women prefer more cautious and indirect expressions, especially when communicating with strangers or speaking against authority figures, while men give more direct reactions.

The third research question, "How do male and female speakers regulate their pragmatic language use according to social contexts (such as social distance and power relations)?" important findings have

also been obtained in relation to the question. Female participants preferred more formal, distant and soft expressions, especially in contexts where there was a high-status difference –for example, when communicating with a teacher or administrators– thus aiming to both avoid conflict and maintain social harmony. Male respondents proved to have a stronger ability to engage in direct, Authoritative discourse, punctuated, as it most often was, with statements expressive of authority and precision, although they showed the skills of shifting language use to the situational exigencies, especially when taken into a conversation in an academic setting. In addition, it has been observed that even women in relationships with emotional intensity, such as close friendships, mostly do not give up their indirect strategies, while men adopt open and direct communication.

In general, this study shows that gender is not only a biological factor but also a socio-cultural factor and plays an important role on language strategies. While women develop strategies that focus more on maintaining relationships, ensuring social harmony and taking care of the feelings of the other party, men prefer strategies that prioritize directness, openness and functionality. The variations in the informal language use are never absolute and invariant: it is conditional on the society, subordinate and superior positions, and the extent of closeness in the relationships of the interactants.

The findings of this research make an important contribution to the development of gender-based education policies not only in linguistic but also in sociological and educational fields. This study, which shows that language is not only a means of communication but also a field in which social roles are reproduced, is of a nature that will form the basis for future interdisciplinary research.

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Conflict of interest

The author has no competing interests pertinent to the context of this article to declare.

Authors' contributions

The author's contributions to the research article are as follows: study framework, data collection, conception, methodology, draft manuscript preparation, data analysis and results.

Ethics approval

No ethical clearance certificate is applicable for present study. The authors of submitted paper did not receive support from any organization.

Data availability

The datasets generated during the current study are available from the corresponding author on reasonable request.

Abbreviation

No abbreviations were used.

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LIFE AND CREATIVITY OF MASTER ASHIG HUSEYN SARACHLI

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Abstract

The article examines the Borchali ashiq school, one of the most famous schools of Azerbaijani ashiq art in the 20th century. Information is provided about one of the greatest representatives of that school, the outstanding master of saz-words, Honored Cultural Worker of the Republic of Georgia Ashig Huseyn Sarachli (1916-1987), and his meaningful life path and rich creativity are studied. It is shown that the ancient Borchaly region, one of the most beautiful corners of the Caucasus, has historically been famous for its saz and word masters. It is no coincidence that the "Borchaly" saz melody, played on a koshma, was composed several centuries ago and has survived to this day as a memorization of languages. Our saz-word world, which has been growing since the past centuries to the present day, has dominated every inch and corner of Borchaly, has spread its feet and wandered from village to village, and continues to do so. As a result of this, our saz, rooted in Dede Gorgud, and our winged words, warmed by the breath of the "voice of the mouth" Ashiq Khindi Mammad, the "building-free" Poet Nabi, Huseyn Alkhasaga, Poet Agacan, Ashiq Gorani, Ashiq Novruz Tahleli, Hasan Majruh, Muhaqqar, Ashiq Musa Garachöplü, Ashiq Teymur, the "khan of love" Sadig, the "heart-adorning, tongue-twirling" Gushchu Ibrahim..., the great double wing of our Ozan world - the "king of the sazin" Dede Amrah and Ustad Ashiq Huseyn Sarachli, have been enlivened by the voices, and the "eagle-winged" Ashiq Kamandar has conquered high peaks with his saz.

The article notes that Ustad Ashiq Huseyn Sarachli had six children and fourteen disciples. He did not separate any of his disciples from his own children. Among them, Ahmad Sadakhli, Mahammad Sadakhli, Nuraddin Gasimli, Sadi Ulashli, Ashiq Murad and others were especially respected and selected among the people.

Ashiq Huseyn Sarachli was indispensable in the art of Azerbaijani ashiq not only for his beautiful playing and singing of saz, composing poems and songs, but also for creating new saz melodies and epics, as well as for performing those melodies and telling epics. He created the epics "Gizil Dastan", "Kerem Burjoglu", "Baghdad dubeyti", "Gurbeti-Kerem" and other saz melodies. The chapters "Bringing Zarnishan

Khanum to Chanlibela" and "Bolu Bey and Koch Koroglu" of the epic "Koroglu" were first written down in the narration of Ashiq Huseyn Sarachli.

Ashug Huseyn Sarachli writes about the past and present, the joy and sorrow, the pain and suffering, the historical heroism of our native Borchal, our patriotic and hospitable compatriots living here with great poetic mastery, as if he paints the mysterious beauties of our Borchal with a painter's brush.

As in classical ashug poetry, the motifs of love and affection are strong in Ashug Huseyn Sarachli. Understanding that life without love is empty and meaningless, the artist always called on his listeners to endure all kinds of suffering and pain in the path of love and affection. In his mukhamma "You Didn't Come", as well as in his songs such as "Yena", "Gelarem", "You Didn't Come", etc., the feelings of love that always elevate a person are clearly visible.

Ashiq Huseyn Sarachli was a sociable, steadfast, and reliable friend throughout his life. He did not call just anyone a friend. He considered friendship very sacred, so he called on people to be wise and prudent when choosing and finding a friend.

The late artist Ashiq Huseyn Sarachli, who drew all his inspiration from the people and was immersed in the spirit of the customs and traditions of the people, also comes to life in the eyes of the people as a folklorist ashiq. In the spirit of the garaylis he wrote ("My Old Man", "Dede Shamkir", "Bulag", "Ele geder", etc.), folk creativity is beautifully felt. In the garaylis titled "Dağlarda", which he wrote in a simple and playful language, the people's migration from mountain to valley, the mood of the summer pastures, and the folk assemblies are beautifully depicted.

The four karavellis ("The Balding Kosa", "A Camel, a Fox, and a Goat", "Can the Tahne Be Tinned?" and "Sagaltmaq the Elephant"), which were cooked in "Ustad Kurasi", are as interesting, funny and thought-provoking as their sayings.

Huseyn Sarachly has always shown great interest in the genre of epics, which is widespread in ashug creativity. He knew well that telling epics is a more successful way to appeal to the artistic taste of the people at wedding and engagement parties, to talk about their historical heroes and great past. Therefore, Huseyn Sarachly had deeply assimilated our ancient heroic and love epics - "Asli and Kerem", "Koroglu", "Yusif and Zuleykha", "Gachag Nabi", etc., and had become their skilled performer. Ashiq Huseyn Sarachly was a unique artist in telling epics and conducting gatherings. He was such a powerful artist that he never told the epics he knew as they were. He always tried to sweeten the language of the epic, and sometimes even made beautiful additions to it when appropriate. In short, Ashiq Huseyn Sarachli was, in the true sense of the word, a creative ashiq, a talented poet and a master craftsman.

Аннотация

В статье рассматривается школа ашика Борчали, одна из самых известных школ азербайджанского искусства ашика в XX веке. Представлена информация об одном из величайших представителей этой школы, выдающемся мастере игры на сазе, заслуженном деятеле культуры Республики Грузия Ашиге Хусейне Сарачли (1916-1987), а также изучены его значимый жизненный путь и богатое творчество. Доказано, что древний Борчалы, один из самых красивых уголков Кавказа, исторически славился своими мастерами саза и слова. Неслучайно мелодия «Борчалинского» саза, исполняемая на кошке, была сочинена несколько веков назад и сохранилась до наших дней как средство запоминания языков. Наш мир саза и слова, развивавшийся с прошлых веков до наших дней, охватил каждый уголок Борчал, распространился из села в село и продолжает это делать. В результате этого наш саз, укорененный в Деде Горгуде, и наши крылатые слова, согретыые дыханием «голоса уст» Ашика Хинди Мамеда, «свободного от строительства» Поэта Наби, Гусейна Алхасагана, Поэта Агачи, Ашика Горани, Ашика Новруза Тахлели, Хасана Маджруха, Мухаккара, Ашика Мусы Гарачоплю, Ашик Теймур, «хан любви» Садыг, «сердцеукрашающий, вертящий язык» Гушчу Ибрагим..., великие двукрылые музыканты нашего мира Озана - «король сазина» Деде Амра и Устад Ашик Хусейн Сарачли - были вдохновлены этими голосами, а «орлинокрылый» Ашик Камандар покорил высокие вершины своим сазом.

В статье отмечается, что у Устада Ашика Хусейна Сарачлы было шестеро детей и четырнадцать учеников. Он не отделял своих учеников от своих детей. Среди них особо уважаемыми и избранными среди народа были Ахмад Садахли, Махаммад Садахли, Нураддин Гасимли, Сади Улашли, Ашик Мурад и др.

Ашик Хусейн Сарачлы был незаменим в искусстве азербайджанского ашика не только благодаря прекрасной игре и пению на сазе, сочинению стихов и песен, но и благодаря созданию новых мелодий и эпосов для саза, а также исполнению этих мелодий и рассказыванию эпосов. Он

создал эпосы «Гизиль Дастан», «Керем Бурджоглу», «Багдат Дубейти», «Гурбети-Керем» и другие мелодии для саза. Главы «Прибытие Зарнишан Ханум в Чанлибелу» и «Болу-бей и Коч Короглу» эпической поэмы «Короглу» были впервые записаны в повествовании Ашика Хусейна Сарачли.

Ашик Хусейн Сарачли пишет о прошлом и настоящем, о радости и горестях, о боли и страданиях, об историческом героизме нашего родного Борчала, о наших патриотичных и гостеприимных соотечественниках, живущих здесь, с большим поэтическим мастерством, словно рисуя таинственные красоты нашего Борчала кистью художника.

Как и в классической поэзии ашугов, мотивы любви и привязанности сильны в творчестве Ашика Хусейна Сарачли. Понимая, что жизнь без любви пуста и бессмысленна, художник всегда призывал своих слушателей переносить всевозможные страдания и боль на пути любви и привязанности. В его мукхамме "Ты не пришла", а также в таких песнях, как "Йена", "Геларем", "Ты не пришла" и др., отчетливо видны чувства любви, которые всегда возвышают человека.

Ашик Хусейн Сарачли на протяжении всей своей жизни был общительным, верным и надежным другом. Он не называл другом кого попало. Он считал дружбу священной, поэтому призывал людей быть мудрыми и осмотрительными при выборе и поиске друга.

Покойный художник Ашик Хусейн Сарачли, черпавший вдохновение от народа и погруженный в дух обычаев и традиций народа, также предстает перед людьми как фольклорист-ашик. В духе написанных им гарайли («Мой старик», «Деде Шамкир», «Булаг», «Эле гедер» и др.) прекрасно ощущается народное творчество. В гарайли под названием «Дагларда», написанном простым и игривым языком, прекрасно изображены переселение людей из гор в долины, настраивание летних пастбищ и народные собрания.

Четыре каравелли («Лысеющий Коса», «Верблюд, лиса и коза», «Можно ли консервировать тан?» и «Сагальтмак, слон»), созданные в «Устаде Кураси», столь же интересны, забавны и заставляют задуматься, как и сами поговорки.

Хусейн Сарачлы всегда проявлял большой интерес к жанру эпосов, широко распространенному в ашугском творчестве. Он хорошо знал, что рассказывание эпосов - более успешный способ обратиться к художественному вкусу людей на свадебных и помолвочных торжествах, рассказать об их исторических героях и великом прошлом. Поэтому Хусейн Сарачлы глубоко усвоил наши древние героические и любовные эпосы - «Асли и Керем», «Короглу», «Юсиф и Зулейха», «Гачаг Наби» и др., и стал их искусным исполнителем. Ашик Хусейн Сарачлы был уникальным артистом в рассказывании эпосов и проведении собраний. Он был настолько талантливым художником, что никогда не рассказывал известные ему эпосы такими, какими они были на самом деле. Он всегда старался приукрасить язык эпоса, а иногда даже добавлял к нему прекрасные детали, когда это было уместно.

Короче говоря, Ашик Хусейн Сарачли был, в истинном смысле этого слова, творческим ашиком, талантливым поэтом и мастером своего дела.

Xülasə

Məqalədə XX əsr Azərbaycan Aşıq sənətinin ən məşhur məktəblərindən olan Borçalı aşıq məktəbi araşdırılır. Həmin məktəbin ən böyük nümayəndələrindən olan, görkəmli saz-söz ustası, Gürcüstan Respublikasının Əməkdar mədəniyyət işçisi Aşıq Hüseyn Saraçlı (1916-1987) haqqında məlumat verilir, onun mənalı həyat yolu və zəngin yaradıcılığı tədqiq olunur. Göstərilir ki, Qafqazın ən gözəl guşələrindən biri olan qədim Borçalı mahalı tarixən saz və söz ustaları ilə məşhur olmuşdur. Heç də təsadüfi deyil ki, hələ neçə əsrlər öncə qoşma üstündə çalınan "Borçalı" saz havası bəstələnmiş və dillər əzbəri olaraq bu günədək gəlib çatmışdır. Ötən yüzilliklərdən bəri çağdaş günümüzədək boylanan sazlı-sözlü dünyamız Borçalının hər qarışına, hər küncünə hakim kəsilmiş, ayaq açıb el-el, oba-oba dolanmış və dolanmaqdadır. Elə bunun nəticəsidir ki, Dədə Qorqudla köklənmiş sazımız, qanadlanan sözümüz ötən əsrin birinci yarısında "avazın loğmanı" Aşıq Xındı Məmmədin, "binadan bac verməyən" Şair Nəbinin, Hüseyn Alxasağanın, Şair Ağacanın, Aşıq Goraninin, Aşıq Novruz Təhləlinin, Həsən Məcrhun, Mühəqqərin, Aşıq Musa Qaraçöplünün, Aşıq Teymurun, "aşıqlığın xanı" Sadığın, "könüllər bəzəyən, dillər dolaşan" Quşçu İbrahimin... nəfəsilə isinmiş, Ozan dünyamızın azman qoşa qanadı - "sazın şahı" Dədə Əmrəhin və Ustad Aşıq Hüseyn Saraçlının səsilə rəvnəqlənmiş, "qartal qanadlı" Aşıq Kamandarın sazi ilə yüksək zirvələri fəth etmişdir.

Məqalədə qeyd olunur ki, Ustad Aşıq Hüseyn Saraçlının altı övladı, on dörd şəyirdi olmuşdur. Şəyirdlərinin heç birini doğma övladlarından ayırmamışdı. Onlardan Əhməd Sadaxlı, Məhəmməd Sadaxlı, Nürəddin Qasımlı, Sədi Ulaşlı, Aşıq Murad və b. el içində xüsusilə sayılıb seçilmişlər.

Aşıq Hüseyn Saraçlı təkcə gözəl saz çalib-oxuması, şeirlər, nəğmələr qoşması ilə deyil, həm də yeni saz havaları və dastanlar yaratmaqda, eləcə də, həmin havaları ifa etməkdə və dastan danışmaqda da

Azərbaycan aşiq sənətində əvəzsiz idi. O, «Qızıl dastan», «Kərəm Burcoğlu» dastanlarını, «Bağdat du-beyti», «Qürbəti-Kərəm» və s. saz havalarını yaradıb. «Koroğlu» dastanının «Zərnişan xanımın Çənlibelə gətirilməsi» və «Bolu bəy və qoç Koroğlu» qolları ilk dəfə məhz Aşiq Hüseyn Saraçlı söyləməsində qələmə alınıb.

Aşiq Hüseyn Saraçlı doğma Borçalımızın dünənini və bu gününü, sevincini və kədərini, acrı və acılarını, burada yaşayan yurddaşlarımızın, vətənpərvər və qonaqpərvər soydaşlarımızın tarixi qəhrəmanlıqlarını böyük bir poetik ustalıqla qələmə alır, sanki bir rəsam fırçası ilə Borçalımızın əsrarəngiz gözəlliklərinin rəsmini çəkir.

Klassik aşiq poeziyasında olduğu kimi, Aşiq Hüseyn Saraçlıda da sevgi, məhəbbət motivləri güclüdür. Məhəbbətsiz həyatın boş və mənasız olduğunu başa düşən sənətkar həmişə öz dinləyicilərini sevgi, məhəbbət yolunda hər cür əzab-əziyyətə qatlaşmağa çağırırdı. Onun «Gəlmədin» müxəmməsində, eləcə də, «Yenə», «Gələm», «Gəlmədin» və s. kimi qoşmalarında daim insanı ucaldan məhəbbət duyğuları aydın görünür. Aşiq Hüseyn Saraçlı ömrü boyu sağlam ünsiyyətli, dayanatlı, etibarlı dost harayında idi. O, hər yetənə dost deməzdi. Dostluğu çox müqəddəs saydığından dostu seçərkən, onu taparkən insanları ağıllı və tədbirli olmağa çağırırdı.

Bütün ilhamını xalqdan alan, el-obanın adət-ənənəsi ruhuna qonan mərhum sənətkar Aşiq Hüseyn Saraçlı adamın gözündə bir folklorçu aşiq kimi də canlanır. Onun yazdığı gəraylıların («Qocalığım», «Dədə Şəmkir», «Bulaq», «Elə gedər» və s.) ruhunda xalq yaradıcılığı gözəl duyulur. Sadə və oynaq dildə yazdığı «Dağlarda» adlı gəraylısında xalqın dağ-aran köçü, yaylaq ovqatı, el məclisləri çox gözəl göstərilir.

«Ustad kürəsi»ndə bişmiş Aşiq Hüseyn Saraçlının kitabında özünə yer tapmış dörd qaravəlli də («Keçəlnən kosa», «Dəvə, tülkü, bir də keçi», «Təhnə də qalaylanarmı?» və «Fil sağaltmaq»), deyişmələri kimi, bir-birindən maraqlı, gülməli və düşündürücüdür.

Hüseyn Saraçlı aşiq yaradıcılığında geniş yayılmış dastan janrına da həmişə böyük maraq göstərmişdir. O, yaxşı bilirdi ki, toy nişan məclislərində, ağır el yığnaqlarında xalqın bədii zövqünü oxşamaq, onun tarixi qəhrəmanlarından, ulu keçmişindən söhbət açmaq üçün dastan söyləmək daha uğurlu yoldur. Buna görə də, Hüseyn Saraçlı qədimdən bəri olan qəhrəmanlıq və məhəbbət dastanlarımızı - «Əsli və Kərəm», «Koroğlu», «Yusif və Züleyxa», «Qaçaq Nəbi» və s.-ni dərinlənən mənimsəmiş, onların mahir ifaçısına çevrilmişdi. Dastan danışmaqda, məclis aparmaqda Aşiq Hüseyn Saraçlı bənzərsiz sənətkar idi. O, elə güclü sənətkar idi ki, bildiyi dastanları heç vaxt olduğu kimi danışmazdı. Həmişə dastanın dilini şirinləşdirməyə çalışır, hətta yeri gələndə bəzən ona gözəl əlavələr də edirdi. Bir sözlə, Aşiq Hüseyn Saraçlı, sözün əsil mənasında, yaradıcı aşiq, istedadlı şair və ustad-sənətkar idi.

Keywords: Azerbaijani ashik art, Borchali ashik school, Master Ashiq Huseyn Sarachli, masterwork, epic, deyishme, karavelli, goshma, garayli, tajnis, mukhammes

Ключевые слова: азербайджанское искусство ашика, школа ашика Борчали, мастер Ашик Хусейн Сарачли, шедевр, эпос, дейишме, каравелли, гошма, гарайли, таджнис, мухаммес

Açar sözlər: Azərbaycan aşiq sənəti, Borçalı aşiq məktəbi, Ustad Aşiq Hüseyn Saraçlı, ustadnamə, dastan, deyişmə, qaravəlli, qoşma, gəraylı, təcnis, müxəmməs

Giriş

Bu gün böyük çətinliklərə mərdliklə sinə gərərək, yarım milyondan çox halal-hümmət və işgüzar soydaşımızın sabaha sonsuz inam və böyük ümid bəsləyərək şərəf və ləyaqətlə ömür sürdüyü, qədim saz-söz yurdu Borçalı mahalında neçə-neçə ustad aşıqlar, nəğməkar şairlər, istedadlı nasirlər, ədəbiyyatşünas alimlər, zəhmətkeş tədqiqatçılar, prinsipial tənqidçilər, qələmləri qılınıcdan da kəsərli olan publisistlər, zəhmətkeş və həqiqətsevər jurnalistlər, dostluq carçıları olan bədii tərcümə ustaları və b. yaşayıb-yaradır, çağdaş ədəbiyyatımızın Borçalı qolunu layiqincə təmsil edir, Borçalı ədəbi mühitini gündən-günə zənginləşdirir, inkişaf etdirirlər. Onların bədii yaradıcılığı artıq nəinki Borçalıda, Gürcüstanda, həmçinin, onun hüdudlarını belə aşaraq, Azərbaycanda, hətta, son vaxtlar Türkiyədə, İranda, eləcə də, digər Şərq və Orta Asiya ölkələrində də oxucuların hörmət və rəğbətini qazanmışdır. Bu da təsadüfi deyildir. Axı "ot kökü üstə bitər", - deyib ata-babalarımız... (Borçalı, Müşfiq. Çağdaş Borçalı ədəbi məktəbi. Bakı, "Azərbaycan" nəşriyyatı, 1994, 224 səh., səh. 5)

Qafqazın ən gözəl guşələrindən olan qədim Borçalı mahalı tarixən saz və söz ustaları ilə məşhur olmuşdur. Heç də təsadüfi deyil ki, hələ neçə əsrlər öncə qoşma üstündə çalınan "Borçalı" saz havası bəstələnmiş və dillər əzbəri olaraq bu günədək gəlib çatmışdır. Elə bu gün də sinəsi el yaradıcılığı xəzinəsi ilə, qəlbi dürlü-dürlü sözlərlə dolu olan, qonaqpərvərliyi, mehribanlıq, istiqanlılığı ilə insan qəlbini

xoş hisslərlə dolduran el ağsaqqalları, müdrik qocalar, "Biri varmış, biri yoxmuş...", - deyə qışın uzun gecələrində körpələri, yeniyetmələri, cavanları ətrafına toplayıb şirin-şirin nağıl söyləyən, həzin bir səslə bayatı oxuyan ağbırçək nənələr, tanıqlı söz sərrafları Borçalıda olduqca çoxdur. Dağ vüqarı, su saflığı, çiçək incəliyi olan bu insanların dilində neçə-neçə beşikbaşı laylalar, qatı açılmamış bayatılar, oxşamalar, tapmacalar, atalar sözləri və məsəllər, inamlar, inanclar, etiqadlar, yanıltmaclar, sayaçı sözlər, bir-birindən maraqlı nağıllar, bir-birindən şirin lətifələr, gülməcələr, yumorlar, unudulmuş el havaları, bir-birindən qədim xalq dastanları, həqiqət timsallı əfsanələr, bənzəri olmayan rəvayətlər, əlqərəz, saysız-hesabsız folklor nümunələri vardır... (Borçalı, Müşfiq. Toqqu nənə. "Gürcüstan" qəzeti, 29 mart, 1990)

Ədəbiyyatşünas alim, professor, şair-tərcüməçi Əflatun Saraçlının qeyd etdiyi kimi, "Türkiyədən Aşıq Şenlik, Göyçədən Aşıq Ələsgər kimi ustadların Borçalıya gəlişi, yerli aşıqlarla yığamat aparmaları da məhz bu mühitin öncüllüyü ilə bağlı idi". ("Ədəbiyyat qəzeti", 1992, N:7, s.7)

Ötən yüzilliklərdən bəri çağdaş günümüzədək boylanın sazlı-sözlü dünyamız Borçalının hər qarışına, hər küncünə hakim kəsilmiş, ayaq açıb el-el, oba-oba dolanmış və dolanmaqdadır. Elə bunun nəticəsidir ki, Dədə Qorqudla köklənmiş sazımız, qanadlanan sözüümüz ötən əsrin birinci yarısında "avazın loğmanı" Aşıq Xındı Məmmədin, "binadan bac verməyən" Şair Nəbinin, Hüseyn Alxasağanın, Şair Ağacanının, Aşıq Goraninin, Aşıq Novruz Təhləlinin, Həsən Məcrühun, Mühəqqərin, Aşıq Musa Qaraçöplünün, Aşıq Teymurun, "aşıqlığın xanı" Sadığın, "könüllər bəzəyən, dillər dolaşan" Quşçu İbrahimin... nəfəsilə isinmiş, Ozan dünyamızın azman qoşa qanadı - "sazın şahı" Dədə Əmrəhin və Ustad Aşıq Hüseyn Saraçlının səsilə rəvnəqlənmiş, "qartal qanadlı" Aşıq Kamandarın sazı ilə yüksək zirvələri fəth etmişdir.

XX əsrin ikinci yarısında isə bu ənənəni Aşıq Əlixan Qarayazlı, Aşıq Əhməd Sadaxlı, Aşıq Məhəmməd Sadaxlı, Aşıq Göyçə, Aşıq Mustafa, Aşıq Sona, Aşıq Aslan Kosalı, Aşıq Sədi, Aşıq Nurəddin Qasımlı, Aşıq Qırıxlı Hüseyn, Aşıq Vəkil, Aşıq Gülabı, Aşıq Ziyəddin və b. davam etdirmişlər.

Son illərdə isə Ozan dünyamız öz axarını Səadət Butanın, Aşıq Məsimin, Aşıq Muradın, Aşıq Tərmeyxanın, Aşıq Raminin, Aşıq Səməndərin, Aşıq Tellinin, Aşıq Nargilənin, Aşıq Aidə Gülzarın, Aşıq Fərhad Əzizin, Aşıq Ataxanın, Aşıq Aşıq Əşrəfin, Aşıq Leyli Darvazlının və onlarca başqa sənətkarların təmsalında tapmış, gül açıb güllənmişdir. Fərəhli haldır ki, onlar təkcə saz çalmaq məharətləri ilə deyil, eləcə də, söz qoşan yaradıcı aşıq-şairlər kimi şöhrət tapmışlar.

Bunu ustad aşıqlarımızın müxtəlif mətbuat orqanlarında, ədəbi məcmuə və toplularda dərc olunmuş əsərləri bir daha əyani şəkildə sübut edir. Həmin əsərlərlə, yəni Borçalı aşıqlarının yaradıcılığı ilə tanış olmaq üçün "Çəsmə" (Tbilisi, 1980), "Dan ulduzu" (Tbilisi, 1987, 1989, 1990), "Ağır elli Borçalı" (Bakı, 1990, Ərzurum 1997), "Dağlar dərdə düşsə..." (Marneuli, 1992), «Aşıq Pəri məclisi-20» (Bakı, 2004), «Ədəbi Gürcüstan» (Tbilisi, 2007), «Azərbaycan ədəbiyyatı antologiyası - Borçalı» (Bakı, 2008) ədəbi məcmuələrini, həmçinin, 1991-ci ildə Bakıda işıqüzü görmüş "Aşıq Pəri məclisi. Aşıqlar. El şairləri." Kitabının "Aşıqlar" bölməsini (1991), eləcə də, Musa Nəbioğlunun 2010-cu ildə Bakıda nəfis şəkildə işıqüzü görmüş "Ozan-Aşıq Dünyası. (Haqqa qovuşan aşıqlarımız)" foto-albomunu və s. vərəqləmək kifayətdir.

Folklorşünas alim Vəqif Vəliyev yazır: "Müharibədən sonra aşıqlığa başlayan, gözəl və təsirli qoşmaları ilə nəzər-diqqəti cəlb edən aşıqlardan Aşıq Əmrəh, Aşıq Hüseyn Saraçlı, Aşıq Kamandar və b. təkcə klassik aşıq sənətini yaşatmaqla kifayətlənmir, eyni zamanda öz zəhmətləri ilə misilsiz qəhrəmanlıqlar göstərən əmək adamlarını tərənnüm edirlər". (Vəliyev, V. Azərbaycan folkloru. Bakı, 1985, səh. 179)

Müxtəlif rayonlardan müsabiqə yolu ilə seçilərək 150-dən çox sənətkarın dəvət olunduğu və 1961-ci il aprel ayının 27-də açılmış Azərbaycan aşıqlarının 3-cü tayından söhbət açan professor Paşa Əfəndiyevin "Azərbaycan şifahi xalq ədəbiyyatı" kitabında isə oxuyuruq: "Son illərdə aşıq sənətinin məqsədyönlü inkişafı, yeni-yeni istedadların meydana gəlməsi qurultayın səmərəli fəaliyyəti kimi qeyd edilməlidir. Hazırda aşıqlardan Əmrəh Gülməmmədovun, Kamandar Əfəndiyevin, Hüseyn Saraçlının və başqalarının adları hörmətlə çəkilir. Onlar bu qədim sənətin ənənələrini yaşadır və inkişaf etdirirlər". (Bakı, «Maarif», 1981, səh. 360).

1984-cü il martın 19-da Bakıda açılmış Azərbaycan aşıqlarının 4-cü Qurultayında da Azərbaycanın müxtəlif bölgələrindən, həmçinin Dəmirqapı Dərbənddən və qədim Göyçədən gəlmiş aşıqlarla yanaşı, Borçalıdan gəlmiş saz-söz ustaları da yaxından iştirak etmişlər. Aşıq Kamandar qurultayda məruzə ilə çıxış edərək aşıq sənətinin xəlqiliyindən, onun ideya-estetik mahiyyətindən, Aşıqlar Birliyinin gələcək vəzifələrindən və s. problem məsələlərdən danışmışdır. Qurultayda həmçinin aşıq məclisinin xalq arasında yayılması və sevilməsində Aşıq Əmrəhin, Aşıq Hüseyn Saraçlının, Aşıq Kamandarın və başqalarının böyük və misilsiz xidmətlərindən söhbət açılmışdır. (Vəliyev, V. Azərbaycan folkloru, Bakı, 1985, səh. 231.)

2002-ci il noyabrın 15-də Gürcüstan azərbaycanlılarının "Yeni yol" Birləşmiş İttifaqının təşəbbüsü ilə Tbilisi şəhərində Gürcüstan azərbaycanlılarının Mədəniyyət, İncəsənət və Aşıqlar Birliyinin təsis konfransı keçirilmişdir. Bunu özünün miqyası və sanbalı etibarı ilə Gürcüstan aşıqlarının II qurultayı da adlandırmaq olar. Çünki ilk dəfə 75 il bundan qabaq Lüksemburq şəhərində (indiki Bolnisi şəhəri) keçirilmiş Borçalı aşıqlarının birinci qurultayından sonra bu, Gürcüstan azərbaycanlıları sənət ustalarının ilk sanballı toplanışı idi. Tədbirdə Gürcüstanın azərbaycanlılar yaşayan bütün bölgələrindən aşıqlar, şairlər, mədəniyyət işçiləri, qonaqlar iştirak edirdilər.

Məclisi giriş sözü ilə Gürcüstan azərbaycanlılarının "Yeni yol" Birləşmiş İttifaqının sədri Kamal Muradxanlı açmışdır. O, tarixi tolantının iştirakçılarını, hörmətli qonaqları salamladıqdan sonra bu mühüm hadisənin əhəmiyyətindən danışmış, hər bir xalqın ictimai və mənəvi həyatında musiqinin, şeirin əhəmiyyətini və rolunu xüsusi vurğulamışdır. Gürcüstanda yaşayan və fəaliyyət göstərən azərbaycanlı aşıqlara xüsusi qayğı ilə yanaşıldığını, onların vaxtaşırı ali dövlət mükafatlarına layiq görüldüklərini faktlarla yada salan natiq onu da xüsusi qeyd etmişdir ki, bugünkü tədbirin də belə yüksək səviyyədə keçirilməsinə şərait və imkan yaradan iki dost ölkənin prezidentləri - Eduard Şevardnadzenin və Heydər Əliyevin apardığı müdrik siyasətə borcluyuq.

Sonra söz Gürcüstan azərbaycanlılarının Mədəniyyət, İncəsənət və Aşıqlar Birliyinin sədri Dərviş Osman Əhmədovluna verilmişdir. O, hesabat dövrü ərzində Birliyin idarə heyətinin gördüyü işlər və keçirdiyi tədbirlər barədə geniş məruzə etmişdir.

Məruzə ətrafında müzakirələrdə Azərbaycan Respublikasının Gürcüstandakı fəvqəladə və səlahiyyətli səfiri Hacan Hacıyev, Türkiyə Cumhuriyyətinin Gürcüstandakı böyük elçisi Fatma Dəclə Kopuz, Gürcüstan mədəniyyət nazirinin müavini Svetlana Ketsba, Bakıdan gəlmiş qonaqlardan - tanınmış folklorşünas alim Elxan Məmmədli və digər qonaqlar, aşıqlar, şairlər, folklor tədqiqatçıları çıxış etmiş, idarə heyətinin gördüyü işlərin zənginliyini və əhəmiyyətini vurğulamışlar. Konfransa göndərilmiş təbrik teleqramları oxunmuşdur.

Tədbir aşıqların, şairlərin, sənət adamlarının eksprompt-çıxışları ilə başa çatmışdır.

2005-ci ildə Bakıdakı "Şərq-Qərb" Nəşriyyatı tərəfindən 2 cildlik "Azərbaycan aşıq şerindən seçmələr" adlı kitab nəfis şəkildə çap olunaraq oxucuların ixtiyarına verilmişdir. Orta əsr və XIX yüzilliyin tanınmış el sənətkarlarından başlayaraq ta çağdaş dövrümüzün - bu günümüzün ustad aşıqlarına qədər böyük bir dövrü əhatə edən bu kitabda ozanlarımızın seçmə əsərləri, daha doğrusu dövrün, zamanın keşməkeşlərindən keçərək misilsiz poetik irsə çevrilmiş, xalqın mənəvi aləminin, bədii təfəkkürünün, estetik zövqünün zənginləşməsində müstəsna rol oynamış lirik incilər toplanmışdır. Böyük fəxrə qeyd etməliyik ki, həmin kitabda Aşıq Ələsgər, Aşıq Rəcəb, Aşıq Qurban, Aşıq Mehdi, Padarlı Abdulla, Molla Cuma, Zodlu Usta Abdulla, Çoban Əfqan, Bozalqanlı Aşıq Hüseyn, Aşıq Səməd, Xəyyat Mirzə, Göyçəli Aşıq Musa, Aşıq Şəmşir, Aşıq Hüseyn Cavan də başqaları ilə yanaşı Ulu Borçalımızın Ustad aşıqlarından olan Xındı Məmməd, Aşıq Hüseyn Saraçlı, Aşıq Kamandar və başqaları kimi neçə-neçə ustadlarımızın, el aşığının, el şairinin gəraylıları, qoşmaları, təcniləri, divaniləri, müxəmməsləri, bayatları daxil edilmişdir.

Bu yerdə sevimli Xalq şairimiz Zəlimxan Yaqubun aşağıdakı sözləri yada düşür: "İlk dəfə qulaqlarım səs eşidən gündən anamın laylasına sazın zümzüməsi qarışıb. Mən, demək olar ki, Aşıq Şenliyin, Aşıq Sadıqın, Şair Nəbinin, Şair Ağacanın, Əmrəhin, Hüseyn Saraçlının, Aşıq Kamandarın sazı-sözü ilə dünyaya göz açmışam". (Yaqub, Zəlimxan. Biz bir eşqin butasıyıq. Bakı, "Yazıçı", 1989, səh.5)

Bu və digər kitabları vərəqlədikcə bir daha görürük ki, doğrudan da, xalq arasından çıxmış, xalqdan öyrənmiş, şifahi ədəbiyyatımızın zəngin irsindən bəhrələnmiş, keçmiş adət və ənənələrə sadıq qalıb, onun yaxşı cəhətlərini yaşadan, el-obanın toy-düyünündə şənlik məclisləri açan mahir saz və söz ustalarından Aşıq Əmrəh, Hüseyn Saraçlı, Aşıq Kamandar və b. şifahi və yazılı folklorumuzu yaradan, öz şeir və qoşmaları ilə onu daha da zənginləşdirən sənətkarlardandır.

Biz də bu məqaləmizdə bir daha Borçalı aşıq məktəbini araşdırmış, XX əsr Azərbaycan Aşıq sənətinin ən böyük və ən məşhur nümayəndələrindən olan, görkəmli saz-söz ustası, Gürcüstan Respublikasının Əməkdar mədəniyyət işçisi Aşıq Hüseyn Saraçlının (1916-1987) zəngin həyat və yaradıcılığını tədqiqat cəlb etmişik.

Tədqiqat

Aşıq Hüseyn Saraçlı 1916-cı ildə qədim Borçalı mahalının Bolulus bölgəsində, indiki Gürcüstanın indiki Bolnisi rayonundakı Saraçlı kəndində tanınmış el ağsaqqalı Qurban ağanın ocağında dünyaya göz açmışdır. O, hələ kiçik yaşlarından saz-söz sənətinə meyl göstərmiş, əvvəlcə Saraçlı Aşıq İsmayılın şagirdi olmuş, sonra isə Borçalının azman sənətkarlarından olan Aşıq Quşçu İbrahimin, Saraçlı şair Hüseynin və Faxralı şair Nəbinin kamilləşmiş, Şair Ağacandan, Qul Allahquludan, Aşıq Bayramdan və Borçalının başqa şair və aşıqlarından mükəmməl dərs almışdır. Elə o vaxtdan da el-el, oymaq-oymaq gəzmış, Borçalıda,

Göyçə mahalında, Dəmirqapı Dərbənddə, Bakıda, Naxçıvanda, Şirvanda, Muğanda, Qarabağda, Azərbaycanın daha bir sıra rayonlarında, Qırğızistanda, Özbəkistanda, Türkmənistanda ağır məclislər yola salmışdır. Özünün hələ sağlığında kimi, hər dəfə də məclis əhli ilə üz-üzə gələndə mənən cavanlaşıb. Necə deyirlər, yorğunluğu bir növ rahatlıq olub. Həmişə də 11 telli sazını sinəsinə sıxıb, «Aşıq el anasıdır, gərək həmişə elin içində olsun», - söyləyib. İstedadlı alim-jurnalist bacımız Şərəf xanım Cəlilli demiş, Aşıq Hüseyn on dörd şeyirdi ilə sazı sinəsinə sıxanda qışın qarında-boranında Qaraqayada gül bülbülü, bülbül gülü çağırırdı...

Ustad Aşıq Hüseyn Saraçlının altı övladı, on dörd şeyirdi olmuşdur. Allah ona üç oğul (İsfəndiyar, Abbas, Əli), üç qız (Şəhriyar, Zərnigar, Mehriban) övladı vermişdi. Amma Ustad Aşıq Hüseyn Saraçlı şeyirlərinin heç birini doğma övladlarından ayırmamışdı. Onlardan Əhməd Sadaxlı, Məhəmməd Sadaxlı, Nürəddin Qasımlı, Sədi Ulaşlı, Aşıq Murad və b. el içində xüsusilə sayılıb seçilmişlər.

Aşıq Hüseyn Saraçlı, sözün əsl mənasında, yaradıcı aşıq-sənətkar idi. O, təkcə gözəl saz çalib-oxuması və nəğmələr, şeirlər qoşması ilə deyil, həm də yeni saz havaları və dastanlar yaratmaqda, eləcə də həmin havaları ifa etməkdə və dastan danışmaqda da Azərbaycan aşıq sənətində əvəzsiz idi. Aşıq Hüseyn Saraçlı «Qızıl dastan», «Kərəm Burcoğlu» dastanlarını, «Bağdat dubeyti», «Qürbəti-Kərəm» və s. saz havalarını yaradıb. «Koroğlu» dastanının «Zərnişan xanımın Çənlibelə gətirilməsi» və «Bolu bəy və qoç Koroğlu» qolları ilk dəfə məhz Aşıq Hüseyn Saraçlı söyləməsində qələmə alınıb.

Görkəmli Xalq şairimiz, tanınmış professor Bəxtiyar Vahabzadə yazır: «Bir neçə dəfə Aşıq Hüseyn Saraçlının söylədiyi dastanları dinləmişəm. Xüsusən Aşıq Ələsgərin Gəncə səfərini ustad aşıq elə bədii və obrazlı danışır ki, vəziyyət teatr tamaşası kimi gözümüzün qarşısında canlanır. Elə bil gözəl bir operaya baxırsan. Bu operanın rejissoru da o özüdür, dirijoru da, ifaçısı da, müşayiət edəni də. Eyni zamanda o, həm libretto müəllifidir, həm də bəstəkar... Məsələnin əsl tərəfi aşığın danışdığındakı deyim tərzindəki təbiilik və səmimilik, şirinlik və gözəllikdir. Onun dilindəki «Bizi borana qırdırma», «A çıxan keçsin», «Ağzı qırqovullu gəlmisən», «Yel vurub yengələr oynayır», «Ağzımı boza vermə» kimi xalq deyimləri təbii olduğu qədər obrazlı, obrazlı olduğu üçün də dəqiqdir, təsirlidir».

Bu «Gəlimli-gedimli dünya, son ucu ölümlü dünya»-ya qədəm qoyan gündən şifahi xalq ədəbiyyatımızın söz xəzinəsinə öz töhfəsini bəxş edən Aşıq Hüseyn Saraçlı yüzlərlə şeir, qoşma, təcnis, gəraylı, müxəmməs, dodaqdəyməz, qılfbənd və onlarla dastanın müəllifidir. Onun ilkin tədqiqatçılarından olan Süleyman Əfəndi (Süleyman Süleymanov) sənətkarın 60 illik yubiley təntənələrində ona «Gürcüstanın Əməkdar mədəniyyət işçisi» fəxri adı verildə, nəinki onun haqqında bədii-sənədli kino-filmə ssenari yazıb Gürcüstan televiziyasının mavi ekranında aşığa şöhrət qazandırmış, həmçinin ustad aşığın hələ sağlığında külliyyatını toplayıb ədəbiyyatşünas-alim, şair Əflatun Saraçlının redaktorluğu ilə «Yazıçı» nəşriyyatına təqdim etmişdir. Şeirlərindən nümunələr «Çəsmə» (1980), «Dan ulduzu» (1987, 1989, 1990), «Ağır elli Borçalı» (Bakı, 1990; Ərzurum, 1996), «Aşıq Pəri məclisi. Aşıqlar. El şairləri» (Bakı, «Yazıçı», 1991) ədəbi məcmuələrində, «Azərbaycan» jurnalında və bir sıra dövrü mətbuat orqanlarında, xüsusilə də «Gürcüstan» (əvvəllər «Sovet Gürcüstanı») və «Bolnisi» (əvvəllər «Qələbə bayrağı») qəzetlərində işıq üzü görmüş, «Mən», «Sazım», «Xalqımızın», «Olmaz-olmaz», «Gözəldir» və s. kimi şeirləri neçə-neçə illərdən bəri dillər əzbəri olan ustad sənətkarımız Aşıq Hüseyn Saraçlının ilk kitabı - «Şeirlər, söyləmələr» nəhayət ki, yalnız ölümündən beş il sonra, 1992-ci ildə Bakıda «Yazıçı» nəşriyyatı tərəfindən oxucuların ixtiyarına verilmişdir.

Redaktorun «Ön söz»də qeyd etdiyi kimi, bu kitab ustadın yaradıcılığını tam əhatə etməsə də, mərhum sənətkarın sənət xəzinəsindən insanlara yadigar qalmış bir çələngdir. Qocaman el sənətkarının qoşma, gəraylı, divani, müxəmməs və deyişmələriylə yanaşı, onun el-oba məclislərində, şənliklərdə, radio və televiziya verilişlərində söylədiyi qaravəllilərin, maraqlı əhvalatların və folklorumuzun incilərindən sayılan dastanların da daxil edildiyi həmin çələng ustadın «Addanıram mən» şeiri ilə açılır:

Əlimə alanda sədəfli sazı,
Elə bil səfərə atdanıram mən.
Gah Koroğlu kimi çəkərəm nəmə,
Gah da Kərəm kimi oddanıram mən.

Arzular ürəkdə qol-qanad atır,
Nəğməli sinəmdə yüz dastan yatır.
Elə ki sevənlər muraza çatır,
Sevinçə bürünüb şaddanıram mən.

*Əzəldən bir şirin dilə vuruldum,
Sazımda səslənən telə vuruldum.
Bu doğma obaya, elə vuruldum,
Hüseyn Saraçlı addanıram mən.*

Kitabdan da göründüyü kimi, ustad sənətkar təkcə klassik aşiq poeziyasının ifaçısı deyildi, o, həm də bir çox gözəl, oynaq, axıcı, təsirli qoşmalar, gəraylılar, müxəmməslər müəllifi idi. O, bu Zirvəyə heç də asanlıqla nail olmadığını, bu Zirvəyə qalxan yolların, xüsusilə də sənət və zəhmət yollarının çətin, mürəkkəb və müxtəlifliyini öz şeirlərində dönə-dönə vurğulayır:

*Aman lələ, tanıyıram yolları,
Bu yol mənə ərən yolu, ər yolu.
Biri xeyrə, biri şərə çağırar,
Allah yolu, iblis yolu, şər yolu.*

*Nəyə lazım sandıq dolu xəzinə?
Qızıl üstə qızıl ilan gəzinə.
Mən düşmüşəm həqiqətin izinə,
Gərək deyil sərvət yolu, zər yolu.*

*Hər bir kəsin əməli var, işi var,
İştahı var, tamahı var, dişi var,
Aşıqlərə meydan verən kişi var,
O göstərər bəndəsinə hər yolu.*

*Saraçlıyam, yaralarım bitişər,
Can bağında şux bülbüllər ötüşər.
Bir gün gedib Yaradana yetişər,
Sənət yolu, zəhmət yolu, tər yolu.*

Aşiq Hüseyn Saraçlı daha sonra isə özünü oxucuya belə təqdim edir:

*Məni ulu dərğahına çağıranda ol Xuda,
Dedi, gərək qonağını dilləndirə, oxuda,
Ağam gəldi, mətləb aldım, mətləb verdim yuxuda,
Məhəbbətin dəftəriyəm, sevginin kitabıyam.*

*Doğma elim Borçalıdı, Saraçlı kəndim mənim,
İtməz huşum, çaşmaz aqlım, pozulmaz zəndim mənim,
Telli sazı uçmaz qalam, dağılmaz bəndim mənim,
Özüm ulu, yaşım qədim, min ilin hesabıyam.*

Bu, eləcə də «Dünyada», «Görmüşəm», «Gərək», «Sayır» və s. şeirləri Aşiq Hüseyn Saraçlının sözün əsil mənasında layiqli sənətkar - saz-söz ustası olmasını sübut edir. Şair-aşığın xalq ruhlu bu qoşmalarında, gəraylılarında, müxəmməslərində saza, sözə hörmət, el-obaya, insanlara məhəbbət, yurd sevgisi, vətənpərvərlik və dostluq duyğuları həvəslə tərənnüm olunur.

Aşiq Hüseyn Saraçlı doğma Borçalımızın dünənini və bu gününü, sevincini və kədərini, acrı və acılarını, burada yaşayan yurddaşlarımızın, vətənpərvər və qonaqpərvər soydaşlarımızın tarixi qəhrəmanlıqlarını böyük bir poetik ustalıqla qələmə alır, sanki bir rəsam fırçası ilə Borçalımızın əsrarəngiz gözəlliklərinin rəsmiini çəkir:

*Qan-qan deməz, can-can deyər, dostu verər canını,
Dodağımda çiçək açıb, dilimdədi Borçalı.
Min illərdi ürəyimdə yaşadıram saz kimi,
Barmağımda, mizrabımda, telimdədi Borçalı.*

*Tarix yazan mürəkkəbdə, dastan yazan qələmdə,
Sevinci az, kədəri çox, daşdığı ələmdə,
Bu yollarda mən Kərəməmə, o da mənim Lələmdə,
Ocağımda, atəşimdə, külümdədi Borçalı.*

*Gör nə qədər odu sönmüş odumdan od apardı,
Dəyişdirdi adımızı, adımdan ad apardı,
Mən səpdim, mən becərdim, mən biçdim, yad apardı,
Başı üstə zalımlar var, zülümdədi Borçalı.*

*Ağrılarda, azarlarda canı sökülüb gedir,
Zamanından tez qocalır, qəddi bükülüb gedir,
Ovcumuzda tutammırıq, qumtək tökülüb gedir,
Ürək edib deyəmmirəm, əlimdədi Borçalı.*

*Quranın ayəsi kimi müqəddəsdi, müqəddəs,
Hər gün Borçalı deyir içərimdən gələn səs,
Aşıq Hüseyn Saraçlıya həmi candı, həm nəfəs,
Dua kimi axşam-səhər, dilimdədi Borçalı.*

Klassik aşiq poeziyasında olduğu kimi, aşiq Hüseyn Saraçlıda da sevgi, məhəbbət motivləri güclüdür. Məhəbbətsiz həyatın boş və mənasız olduğunu başa düşən sənətkar həmişə öz dinləyicilərini sevgi, məhəbbət yolunda hər cür əzab-əziyyətə qatlaşmağa çağırırdı. Onun «Gəlmədin» müxəmməsində, eləcə də «Yenə», «Gələm», «Gəlmədin» və s. kimi qoşmalarında daim insanı ucaldan məhəbbət duyğuları aydın görünür.

*Məhəbbət dərdinə dərman diləsə,
Məcnun tək dağları gəzərəm yenə -
- deyən ustad sənətkar oda düşüb atəşlərdə yansa belə, bu haqq yolundan əl çəkməyəcəyini söyləyirdi. O, məhəbbətə, gözəlliyə Məcnun tək vurulduğunu «Gələm» rədifli qoşmasında belə bildirirdi:*

*...Doymamışam məhəbbətdən, gözəldən,
Gözəlliğin aşıqiyəm əzəldən.
Payız vaxtı üşüyəndə xəzəldən,
İsinməyə ocağına gələm.*

*Saraçlıyam, talasan da canımı,
Atəşlərə qalasan da canımı,
Cəllad olub sən alsan da canımı,
Cənnət deyib qucağına gələm.*

Ustad aşığın «Görmüşəm» şeirində isə oxuyuruq:

*Yoxdur əzəldən ömrün vəfası,
Çox boşalıb, çox da dolan görmüşəm.
Əlvən bənövşəli, lələli, çöllü,
Xəzəl olub birdən solan görmüşəm.*

Aşıq Hüseyn Saraçlının «Olmaz-olmaz» sərlövhəli şeiri neçə illərdir ki, Borçalı gənclərinin tərbiyyəsinə əhəmiyyətli dərəcədə böyük təsir göstərir:

*Halal tut mayanı həmişə, oğul,
Haramlıqla dövlət-mal ola bilməz.
Əyri gözlə baxsan özgə şanına,
Boş qalar pətəyin, bal olmaz-olmaz.*

Mərifətlə giriş tutduğun işə,
Söz gərək ağızdan çıxmamış bişə.
Bağında gül-çiçək bitər həmişə,
Tikan yarpağından gül olmaz-olmaz.

İbrət götür Saraçlının sözündən,
Müxənnətlər düşər elin gözündən.
Pəhləvan olsan da, demə özündən,
Hər güləşən Rüstəm-Zal olmaz-olmaz.

Sevimli Xalq şairimiz, tanınmış ictimai xadim, Azərbaycan Aşıqlar Birliyinin sabiq sədri mərhum Zəlimxan Yaqub ölməz sənətkarı «Ulu ozan» adlandırmış, «Həyatıma xoş gəldin, Ozanlar ozanı! Dədələr sirdaşı, lələlər yoldaşı, igidlər qardaşı!» - söyləmiş, onun haqqında «Hüseyn Saraçlı dastanı» (Bakı, «Pedaqogika», 2007) adlı olduqca sanballı və dəyərli bir kitab yazmış və nəfis şəkildə nəşr etdirmişdir. Həmin kitabda oxuyuruq:

«Qadir Allah elə bil ki, Aşıq Hüseyn Saraçlını bu dünyaya hazır aşiq libasında gətirmişdi. Uca boyu, düz qəddi, incə beli, enli kürəyi, şəvə, qara eşmə bıqları, səliqəli, gümüşü saçları, çopura çalan qara sifəti, açıq alnı, qonur gözləri, incə yerişi, ağayana duruşu, turşməzə, baldan şirin danışığı, buxara papağı, sala-ma, gümüş kəməri, par-par parıldayan qara, xrom çəkməsi, Trabzon tütünündən dolu tənəki qutusu - hamısı bir yerdə ona xüsusi yaraşlıq və gözəllik verirdi. Özü demişkən, ilahinin əlinin boş, meylinin xoş vaxtına düşüb kişilərin gözəli kimi onu qüdrət qələminnən çəkmişdi. Allahın əziz bəndəsiydi. Tanrı onu xoş gündə, xoş saatda dünyaya gətirmişdi... Ona görə də ozanların, ustadların getdiyi yolun yolçusuna çevriləndə Allaha doğru əl açdı, sözünü dedi. Allah da ondan bir sənətkar kimi heç nəyi əsirgəmədi.»

Tanınmış tədqiqatçı Kərəm Nəbiyevin «Borçalı» jurnalının 1994-cü il birinci sayında dərc etdirdiyi «Onun haqqında az-çox bildiklərimdən» sərlövhəli məqaləsində qeyd etdiyi kimi, Hüseyn Saraçlı sənətində bir sufilik yönümü də var. Axı, hələ XIII əsrdə yaşamış sufi şair Mövlənə Cəlaləddin Rumi, onun yolçularından Yunis İmrə, Nəsimi insanların ruhunu, əməlini hər cür çətinliklərdən təmizləməyin və onların haqqa, ilahiyyə yaxınlaşmasının bir yolunu da musiqidə və onun təranələri altında qəzəl və qəsidələrin oxunmasında görürdü. Təsədüfi deyildir ki, XVI-XVIII yüzillərdə sufilərin mövləviyyə qolundan faydalanan bir çox sənətkar aşıqlar incidilsələr də, sufi aşiq kimi tanınmış, böyük ad-san qazanmışdılar. Aşıq Hüseyn Saraçlı da məhz belə yolun yolçularından idi. O, «Dünyada» qoşmasında deyir:

Yemək dostu bil ki, nanı itirər,
Şöhrət dostu başa qaxınc gətirər.
Ürək dostu mətləbini bitirər,
Dar günündə verər canı dünyada.

Aşıq Hüseyn Saraçlı ömrü boyu sağlam ünsiyyətli, dəyanətli, etibarlı dost harayında idi. O, hər yetənə dost deməzdi. Dostluğu çox müqəddəs saydığından dostu seçərkən, onu taparkən insanları ağıllı və tədbirli olmağa çağırırdı:

Ürək dostu tək-tək olar dünyada,
Yaxşı dostu seçən hanı dünyada.
Yaxşı dostun ürəyimdə yeri var,
Bekar dostun nə çox sanı dünyada.

Yazıçı Əzim İsmayilli yazır: «...Dostluq və yoldaşlıqda sədaqətli, sənətdə isə təvazökar olan Aşıq Hüseyn Saraçlı heç vaxt, heç kəslə kin saxlamaz, həmişə qarşısındakı adama və ya sənətkara üstünlük verməyə çalışardı. Şahidi olduğum bir hadisəni xatırlamaq yerinə düşərdi. «Çeşmə» ədəbi məcmuəsinin «El sənətkarları» bölməsində Aşıq Hüseyn Saraçlı birinci, Aşıq Əmrah Gülməmmədov isə ikinci verilmişdir. Aşıq Hüseyn təkid etdi ki, gərək Aşıq Əmrah birinci veriləydi, mən ikinci. Ustad Əmrah cavab verdi ki, əgər saz-söz olsaydı, əlbəttə, mən öndə getməliydim. İndi ki, söhbət söz-sazdan gedir, sənin sözünə-kəlamına kim nə deyə bilər? Bax, beləcə Borçalının iki sənət dühası bir-birinin könlünü alıb, mənəm də xətrimə dəymədilər. Aşığın hazırcavablığına, sözü yerində sərrast deməsinə, ən qarışıqlı məclisi bir kəlmə ilə ələ almasına, yalnız Borçalının deyil, Azərbaycan və dünya aşiq sənəti bilicilərinin söz xəzinəsini

sinə dəftər etməsinə kimin şübhəsi ola bilərdi...»

Bütün ilhamını xalqdan alan, el-obanın adət-ənənəsi ruhuna qonan mərhum sənətkar Aşıq Hüseyn Saraçlı adamın gözündə bir folklorçu aşiq kimi də canlanır. Onun yazdığı gəraylıların («Qocalığım», «Dədə Şəmşir», «Bulaq», «Elə gedər» və s.) ruhunda xalq yaradıcılığı gözəl duyulur. Sadə və oynaq dildə yazdığı «Dağlarda» adlı gəraylısında xalqın dağ-aran köçü, yaylaq ovqatı, el məclisləri çox gözəl göstərilir:

*Köç eyləyər yenə aran,
Haray qopar bu dağlarda.
Neçə məclis, neçə külfət
Çadırlanar bu dağlarda.*

*Kəklilər ötər yazınan,
Bülbül ötər avazınan,
Saraçlı da öz sazıynan
Qanadlanar bu dağlarda.*

Ustad sənətkarın kitabında özünə yer tapmış divanilərdən «Çəkər» xüsusilə maraqlıdır:

*Adam var ki, insan kimi
Yaşamağa can çəkər,
Əyri yoldan üzü dönməz,
Doğru yolda qan çəkər.*

*Adam var ki, heç açılmaz
Başı dava-şavadan.
Desələr ki, nanəcibsən,
And üçün Quran çəkər...*

Hüseyn Saraçlının yaradıcılığında aşiq poeziyasının çox maraqlı və geniş yayılmış qollarından olan deyişmə də diqqəti cəlb edir. Onun Aşıq Şəmşirlə, türk aşığı, ladiqarstanlı İslamla, istanbullu Qul Mehdi ilə, həmyerliləri Əflatun Saraçlı və Nizami Saraçlı ilə, kəlbəcərli Dəmirçi Abbasla deyişmələri aşığın bir ustad kimi bacarığını, istedadını, dünyagörüşünü və biliyini tamam-kamal aşkar edir.

Əvvəlcə Aşıq Hüseyn Saraçlının Aşıq Şəmşirlə deyişməsinə diqqət yetirək:

*Aşıq Hüseyn Saraçlı:
Havalandı dəli könlüm,
Kəlbəcərdə, Dədə Şəmşir!
Qocalırsan, necə dözüüm,
Belə dərdə, Dədə Şəmşir!*

*Aşıq Şəmşir:
Yeriniz var göz üstündə,
Kəlbəcərdə, ay Saraçlı!
Arxamızda zirvələr var,
Düşmə dərdə, ay Saraçlı!*

*Aşıq Hüseyn Saraçlı:
İnsanlığda mehirlisən,
Aşıqlıqda sehirlisən,
Səməd Vurğun möhürlüsən,
Huşda, sərdə, Dədə Şəmşir!*

*Aşıq Şəmşir:
Şər işlərdə izimiz yox,
Yerə düşən sözümüz yox,*

*Sənətkarlıq, gözümüz yox,
Pulda, zərdə, ay Saraçlı!*

*Aşıq Hüseyn Saraçlı:
Bu dünyada möhlət azdı,
Xudam özü belə yazdı,
Umudumuz telli sazdı,
Belə yerdə, Dədə Şəmşir!*

*Aşıq Şəmşir:
Eşqi qəlbimin təpəri,
Borçalıdan ver xəbəri,
Qoy ucalsın «Süsənbəri»,
Pərdə-pərdə, ay Saraçlı!*

*Aşıq Hüseyn Saraçlı:
Borçalı bir ağır eldi,
Saz qanımda daşan seldi,
Oylaqları Çənlibeldi,
Mərddi mərde, Dədə Şəmşir!*

Aşıq Hüseyn Saraçlı deyişmələrində qıfılənd, bağlama, ustadnamə, dodaqdəyməz, hərəzorba kimi çeşidli şeir növlərini ustalıqla işləmiş və deyişmə zamanı üstünlüyünü heç vaxt əldən verməmişdir. Həmin deyişmələrdən başqa birinə nəzər yetirək.

*Aşıq İslamın:
Cəbrin zindanında zira dəst olan,
Çarxın çəpərindən keçməyən bilməz.
Yetən olmaz od mövlanın sirrinə,
Fanidən baqiyyə keçməyən bilməz.*

-sözlərinə görün Aşıq Hüseyn Saraçlı necə cavab verib:

*Kim deyər şirindi, kim deyər acı,
Eşqin badəsini içməyən bilməz.
Kim deyər asandı, kim deyər çətin,
Ustad küresində bişməyən bilməz.*

Ustad Aşıq Hüseyn Saraçlının doğma eloğlusu, tanınmış şair Nizami Saraçlı ilə 1985-ci ildə qələmə alınmış deyişməsi də olduqca maraqlıdır:

*Şair Nizami Saraçlı:
Yetmişində qırğı kimi ötən dost,
Fikir vermə bu dünyada yaşa sən.
Bel bükülməz, diz titrəməz, əl əsməz,
Bundan belə yetmiş il də yaşasan.*

*Aşıq Hüseyn Saraçlı:
Bağban gülər bağçasıyla, bağıyla,
Borclu olma ömürə sən, yaşa sən.
Zülmü boğdum çarığımın bağıyla,
Dərdim yoxdur yetmiş il də yaşasam.*

*Şair Nizami Saraçlı:
Ötən günə çox deyibsən qar, a qar,
Dağ başında mehman olub qara qar.*

*Baxtımıza qoy yağmasın qara qar,
|Bu sinində dözməzsən yaşa sən.*

*Aşıq Hüseyn Saraçlı:
Mən itirdim tər yanağı, tər gülü,
Qoy sulasın yanağın da tər, gülü.
Üzdə solar, içdə açar tər gülü,
Bənzəyir quruya mən, yaşa sən.*

*Şair Nizami Saraçlı:
Sən itirdin, mən də tapdım, yarıyıq...
İkimiz də Saraçlının yarıyıq.
Nəyin vardı yarı payla, yarı yığ,
Eh, mənə də qocaldacaq yaş asan...*

*Aşıq Hüseyn Saraçlı:
Saraçlıyam, könlün mənə imrəndi,
İmrən bala, imrən quzum, imrən di.
Məndə bu saz, səndə qələm imrandil,
Mən qocaldım, bunnan belə yaşa sən.*

Bəli, «Ustad kürəsi»ndə bişmiş Aşıq Hüseyn Saraçlının kitabında özünə yer tapmış dörd qaravəlli də («Keçəlnən kosa», «Dəvə, tülkü, bir də keçi», «Təhnə də qalaylanarmı?» və «Fil sağaltmaq»), deyişmələri kimi, bir-birindən maraqlı, gülməli və düşündürücüdür.

Kitabı vərəqlədikcə bir daha aydın olur ki, yuxarıda artıq qeyd etdiyimiz kimi, Hüseyn Saraçlı aşıq yaradıcılığında geniş yayılmış dastan janrına da həmişə böyük maraq göstərmişdir. O, yaxşı bilirdi ki, toy nişan məclislərində, ağır el yığnaqlarında xalqın bədii zövqünü oxşamaq, onun tarixi qəhrəmanlarından, ulu keçmişindən söhbət açmaq üçün dastan söyləmək daha uğurlu yoldur. Buna görə də, Hüseyn Saraçlı qədimdən bəri olan qəhrəmanlıq və məhəbbət dastanlarımızı - «Əsli və Kərəm», «Koroğlu», «Yusif və Züleyxa», «Qaçaq Nəbi» və s.-ni dərinlən mənimsəmiş, onların mahir ifadəsinə çevrilmişdi.

Tədqiqatçı Kərəm Nəbiyevin məqaləsində çox doğru olaraq qeyd edildiyi kimi, dastan danışmaqda, məclis aparmaqda Aşıq Hüseyn Saraçlı bənzərsiz sənətkar idi. O, elə güclü sənətkar idi ki, bildiyi dastanları heç vaxt olduğu kimi danışmazdı. Həmişə dastanın dilini şirinləşdirməyə çalışır, hətta yeri gələndə bəzən ona gözəl əlavələr də edərdi. Biz onun «Əsli-Kərəm» dastanına dəfələrlə qulaq asmışıq. O, dastanda Kərəm yanğısından danışarkən əlavə edərdi ki: Deməzsənmi bir gün Kərəmə deyirlər, sən haqq aşığısan, elə oxu ki, göydə gedən durna sənə ahından dayansın və qanadından bir lələk salsın. Kərəm götürüb elə qəmli və yanıqlı hava oxuyur ki, o saat durna dayanır və onun qanadından bir lələk düşür.

Aşıq Hüseyn Saraçlı «Koroğlu», «Qaçaq Nəbi» və başqa dastanları danışanda da uyarlı əlavələr edərdi. Bax, Aşıq Hüseyn Saraçlı belə yaradıcı sənətkar idi. O, nəinki özünəqədərki dastanların mahir ifadəsi idi, həm də dastan yazan sənətkar idi. Bunu ustadın kitabında özünə yer tapmış dastan və əhvalatlar da («Zərnişan xanımın Çənlibelə gətirilməsi», «Gürcü qızının Qaçaq Kərəm», «Aşıq Şenniyyə Borçalı səfəri», «Mehdi bəyin dastanı», «Cahangirnin Mələksima dastanı», «Şair Ağacının Ərzurum səfəri», «Aşıq Ələsgərin səfəri», «Aşıq Ələhvərnən şeyirdi Aşıq Qara əhvalatı») sübut edir. Onu da əlavə edək ki, Aşıq Hüseyn Bozalqanlı demişkən, dastan danışmaq, məclis aparmaq Aşıq Hüseyn Saraçlı boyuna biçilmişdi...

...1985-ci ilin yaz günlərinin birində Bağdaddan Aşıq Hüseyn Saraçlıya xurma göndərirlər. Xurmanın içindən iki qulac uzunluğunda qadın saç çıxır. Aşıq Hüseyn Saraçlı xurmanı götürüb sevimli eloğlusu, Borçalının istedadlı şairi Nizami Saraçlının yanına gətirir. Zaman-zaman Təbriz həsrətində qovrulan Nizami Saraçlının qəlbini od götürür. Dərdini, hicranını Araz, Güney niskilinə qatıb, üzünü Aşıq Hüseyn Saraçlıya tutur, «Bağdaddan gələn sovqat» (Dedim, dedi) sərlövhəli şeirini söyləyir. Sonralar «Qələbə bayrağı» (15.10.1985) qəzetində çap olunmuş həmin şeirdə oxuyuruq:

*Dedim: Aç boxçanı ay ustad görək,
Nə sovqat göndərib o Bağdad qızı?
Dedi: Öz saçını büküb xurmaya*

Bir damət göndərib o Bağdad qızı!

*Dedim: Ölçdüm saçı, iki qulacdı,
Dedi: On iki min dərdə əlacdı.
Dedim: Hüseyin əmi, bu necə saçdı, -
Bir sərvət göndərib o Bağdad qızı!*

*Dedi: Öz sazımın itmiş simiydi,
Gəzirdim mən onu necə iliydi.
Oğul, Hüseyin əmin ölha-ölüydü,
Bir möhlət göndərib o Bağdad qızı!*

*Dedim: Keçəmməzsən hayıf izindən,
Dedi: Qoy bir öpüm saçın üzündən.
Dedi: Sevir səni, öz sevgisindən,
Əlamət göndərib o Bağdad qızı!*

*Dedi: Yadımdadı o şux qəzəllər,
Dədə Füzulidən oxuyan dillər.
Mənim zinətsizdi sazım əzəllər,
Bir zinət göndərib o Bağdad qızı!*

*Dedim: Heç unutmaz el əməyini,
Dedi: Oğul bala, yaz diləyimi.
Dedim: Saç adıyla öz ürəyini,
Əmanət göndərib o Bağdad qızı!*

Nizami Saraçlı «Yalan ola ayrılıq...» poemasını da ustad Aşıq Hüseyin Saraçlıya ithaf etmiş və «Gürcüstan» qəzetinin 16 aprel 1988-ci il tarixli nömrəsində dərc etdirmişdir.

Gürcüstanın «Şərəf» ordenli Əməkdar jurnalisti, Borçalının el ağsaqqalı, tanınmış şair-tərcüməçi Dünyamalı Kərəm isə Ustad Aşıq Hüseyin Saraçlının xatirəsinə həsr etdiyi «Yaz vədəsində» sərlövhəli şeirini belə başlayır:

*Ozanlar ozanı, məclislər şahı,
Susmaq yaraşarmı yaz vədəsində?
Ağır yığnaqların, a söz sərrafı,
Qədrini bilmədik biz vədəsində.*

Ağır elli, qədim saz-söz diyarı Borçalı mahalının məşhur sənətkarı Aşıq Əmrəh Gülməmmədovun vəfatından düz 40 gün sonra, Gürcüstan Respublikasının Əməkdar mədəniyyət işçisi Aşıq Hüseyin Saraçlı 1987-ci il aprelin 19-da ömrünün 71-ci baharında dünyasını dəyişdi. Beş övladı, 24 nəvəsi, 9 nəticəsi qaldı. Saz-söz dünyamız bir ustad aşığını da itrdi...

Elə həmin gün Ustad aşığın Vida mərasimində sevimli şairimiz Zəlimxan Yaqub bu sətirləri söylədi:

*İstər alış, istər tutuş, istər yan,
Torpaq altıca çahan canlar apardı.
Çox oğullar köç elədi dünyadan,
Sinəsində çox dastanlar apardı.*

*Köç günüdü, ay obalar, ay ellər,
Çox sevdiyi bir havanı çaldırın.
Qoy boşalsın dolu gözlər, könüllər,
Onu yerdən «Mansırı»yla qaldırın.*

*Xəbər verin səs yetişsin hər yana,
Bizi Ləlvər, Lök, Ağlağan dinləsin.*

Saraçlıni tapşırıq torpağa,
Qoca dağlar qəmli dastan dinləsin.

Saraçlıni tapşırıq torpağa,
Dərə, ağla, tərə, ağla, düz, ağla.
Qaynar bulaq, dostun köçür dünyadan,
Göz yaşını daşdan-daşa süz, ağla.

Ozan baba, dünya qalan, sən gedən,
Ayrılıq «Ruhani»dən, «Cəngi»dən,
Yası görüb öz toyunu ləngidən,
Gəlin, ağla, oğul, ağla, qız, ağla.

Bəd xəbərlər biz-biz edər tükümü,
Dağ götürməz dağdan ağır yükümü,
Əcəl yaman baltaladı kökümü,
Könül, ağla, ürək, ağla, göz, ağla.

Teldən ayrı təzənələr nəm çəkər,
Duyan ürək dərd daşıyar, qəm çəkər,
Səndən ötrü min cür nazı kim çəkər?
Pərdə, ağla, sədəf, ağla, saz ağla.

Yüz dəfə çək, yersiz ahdan nə çıxar,
Qəlbi yasda saxlamaqdan nə çıxar,
Ay Zəlimxan, ağlamaqdan nə çıxar?
Az sızıl da, az inildə, az ağla,
Saraçlının taleyindən əsər yaz,
Saraçlının dastanını yaz, ağla!

Elə həmin gün ustad aşığın sevimli həmyerlisi, 3 dəfə Beynəlxalq poeziya müsabiqələrinin mükafatçısı, «Şərəf» ordenli, tanınmış şair Nizami Saraçlı «Dünya» şeirini yazdı və ölməz sənətkarın Vida mərasimində oxudu:

Saraçlı köç edir, mən ağlayıram,
Tale sırğa verib bir ona, Dünya!
Eşilib-burulub qara bığları,
O yenə dağ çəkir yamana, Dünya!

Aşıq eldən gedir, elin yasıdır,
Əyninə geydiyi toy libasıdır.
Çalın, ürəyimi onun sazıdır,
Bülbülə nə gərək virana, Dünya!

Tifaqım dağılıb, o yol üstədir,
Barmaq təzanədə, ürək səsdədir.
Ay ellər, eloğlum son nəfəsdədir,
Bürünüb çisginə-dumana Dünya!

Bu da qismətimə düşən yazıymış,
Xındıdan aldığım yara azıymış...
Yoxsa ki, yurduma Tanrı asıyımış,
Qəddim dönəsiymiş kamana, Dünya!

Təpəmdən çıxartdı Əmrah tüstümü,
Hüseynə çəkdiyim bu ah, tüstümü?!

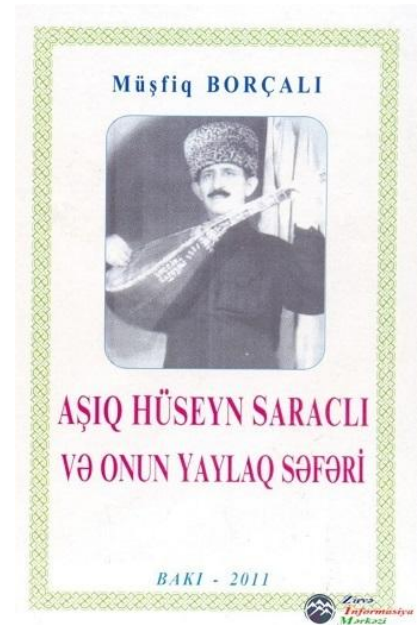
*Bu gün odumu gör, sabah tüstümü,
Qoy yansın atəşə pərvana Dünya!*

*O kimdir təklənən ər meydanında?-
Məni yalnız qoydu Şir meydanında.
Qorxuram dəfn edə balabanında,
Bu ulu sənəti zamana, Dünya!*

*O gedir sazını tapşırıb bizə,
Gedir həsrət gedir Hoya, Təbrizə.
Bu gediş dağ çəkir ürəyimizə,
Cəlməyir bir dinə-imana Dünya!*

*Boylanıb sahibsiz saza ağlaram,
Bürünüb bu vaxtsız yasa ağlaram.
Hərdən səsi gələr, ayaq saxlaram,
Bir də yolu düşməz bu yana, Dünya!*

*Nizami Saraçlı, olma bədgüman,
Gələr, bir də gələr su gələn arxdan.
Burada Şair Nəbi, Şenlik, Ağacan...
Dərin lövbər atıb ümmana, Dünya!*



Ustad Aşiq Hüseyn Saraçlının şəninə sonralar yüzlərlə şeirlər yazıldı, nəğmələr qoşuldu, dastanlar yarandı... Hamısının da mövzusu, dəst-xətti, üslubu müxtəlif olsa da, ünvanı bir idi. Həmin ünvan isə... Ustad Aşiq Hüseyn Saraçlı idi...

«Gürcüstan» qəzetinin 21 aprel 1987-ci il tarixli nömrəsində dərc olunmuş nekroloq bu cümlə ilə sona yetir: «Aşiq Hüseyn Saraçlının əziz xatirəsi, sənətkar siması qəlbimizdən silinən deyil!»

Nəticə

Bəli, Ustad Aşiq Hüseyn Saraçlının əziz və ölməz xatirəsi həmişə hörmətlə yad edilir. Onun 75, 80, 85, 90, 95, 100 illik yubileyləri 1991, 1996, 2001, 2006, 2011, 2016-cı illərdə Bakıda və Borçalıda böyük təntənə ilə qeyd edilmişdir.

2011-ci ildə Azərbaycan Respublikası «Təhsil» Mərkəzi Gürcüstan Azərbaycanlılarının Mədəniyyət Mərkəzi ilə birlikdə bu sətirlerin müəllifinin - filoloq-jurnalist Müşfiq Borçalının Ustad aşiq Hüseyn Saraçlının 95 illik Yubileyinə həsr olunmuş «Aşiq Hüseyn Saraçlı və onun yaylaq səfəri» adlı kitabını «Borçalı» nəşriyyatı vasitəsilə nəfis şəkildə oxucuların ixtiyarına vermişdir. (Kitabın məsləhətçi: Gürcüstan Azərbaycanlılarının Mədəniyyət Mərkəzi İdarə Heyətinin sədri Fazil Həsənov; Redaktor: Gürcüstan Mədəniyyət, İncəsənət və Aşıqlar Birliyinin sədri Dərviş Osman; Rəyçilər: Filologiya elmləri doktoru, professor Mahmud Allahmanlı və Filologiya elmləri doktoru Şakir Albaliyevdir.) 2016-cı ildə ustadın 100 illik yubileyi ərəfəsində təkrar çap olunmuş həmin kitabda görkəmli saz-söz ustası Aşiq Hüseyn Saraçlının həyatı və yaradıcılığı haqqında ətraflı məlumat verilmiş, aşığın böyük oğlu İsfəndiyar Həsənovdan əldə edilmiş və indiyə kimi heç yerdə çap olunmamış «Aşiq Hüseyn Saraçlının Yaylaq səfəri» adlı dastanı, Azərbaycan Aşıqlar Birliyinin sədri, Xalq şairi Zəlimxan Yaqubun «Aşiq Hüseyn Saraçlı» və şair Nizami Saraçlının Ustad aşığa həsr etdiyi «Yalan ola ayrılıq!» poemaları müəlliflərin dilinə toxunmadan oxuculara təqdim edilmişdir. Unudulmaz sənətkarımızın bir çox dastanları kimi, indiyədək heç yerdə çap olunmamış «Aşiq Hüseyn Saraçlının Yaylaq səfəri» adlı dastanı da, eləcə də, Ustad aşığın Yubileyinə həsr olunmuş bu kitab bütövlükdə oxucular tərəfindən böyük rəğbətlə qarşılanmış, respublika mətbuatında müsbət rəylər çap olunmuşdur.

Qarşıdan Ustad Aşiq Hüseyn Saraçlının 110 illik Yubileyi gəlir. Biz də bu kiçik yazımızı ölməz və həmişəyaşar sənətkarımızın anadan olmasının 110 illik Yubileyinə ərməğan edir və bir daha «Allah rəhmət eləsin! Ruhun şad olsun, Ustad!» - deyirik!...

Bəli, ulu Borçalımız əzəldən igidlər oylağı olduğu kimi, həm də saz-söz diyarı kimi məşhurlaşmışdır. Bu eldə kəhər atlara qamçı dəyəndə səsi o tayda, qədim Bolusun ətəyində dayanarmış. Qılınç şaqqıltısı saz havalarına, sazın səsi sözə, sözün ərməğanı saza, nərə səsinə qarışarmış. Bu diyar ədəbiyyat və incəsənətimizə bəxş elədiyi sənətkar övladları ilə öyünüb həmişə... Və bu ənənə bu gün də davam edir...

Bütün bunlar göstərir ki, bəli, doğrudan da, Borçalı aşiq sənətinin ən başlıca xüsusiyyəti onun milli

özünəməxsusluğudur və hörmətli professorumuz Şurəddin Məmmədli demişkən, "Azərbaycan xalqı ilə saz həmyaş" olduğu kimi, "Borçalı ilə də saz ekvivalentdirlər".

Və biz bu bənzətməyə daha bir əlavə etmək istəyirik: Bəli, Borçalı dedikdə saz-sözyada düşür, saz-söz dedikdə Borçalı... Nə qədər ki, Borçalı var, bir o qədər də Saz var, Söz var, nə qədər ki, Saz var, Söz var, bir o qədər də Borçalı var. Nə qədər ki, Borçalı var, nə qədər ki, saz-söz var, bir o qədər də Aşıq Hüseyn Saraçlı var və həmişə də var olacaq!...

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USE OF MASS MEDIA IN TEACHING ENGLISH

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This article is devoted to the study of the problem of teaching mass media in learning English. Using mass media for teaching in an authentic context is a double challenge for philologists. Instructional mass media is one of the important components of teaching the subject, especially for students learning English as a second language. The teacher needs mass media as a strategy to attract students to learn English and to achieve the goal of teaching.

What is the importance and what role do mass media play in the process of teaching oral foreign language communication to university students? Mass media create a good opportunity for English teachers to immerse students in a foreign language environment using authentic materials. Students hear native speakers, how they use their speech, construct sentences, their accent. It is important for a teacher to be able to use authentic material correctly, to select from all the mass media what will correspond to the program and bear fruit in teaching students. It is important to understand that mass media are also divided into different groups and all authentic materials play their own specific role. Mass media are usually divided into visual (periodical press, this includes: newspapers, magazines, etc.), auditory (radio) and audiovisual (this includes: television, documentaries, etc.).

Keywords: *influence, educational media, English language teaching, media literacy*

Introduction

Every year, there is an increase in business and cultural contacts, the level of economic, political and social integration is increasing. The consequence of such processes is the need for more specialists in medicine, science, IT and other fields who are distinguished by excellent language competence. In this case, new requirements for communication skills in a foreign language constantly arise. From this we can conclude that the need for new teaching methods that allow students not only to master basic competencies, but also to easily adapt to changes in the world, is relevant today.

Such a format will allow achieving both outstanding learning results and further development of students in the field of foreign language practice. In this article, we will consider the use of mass media as a teaching factor in English lessons. In my opinion, the formation of oral speech skills is not only an additional direction in comprehension of a foreign language. It plays a significant role in the development of mental activity of any kind. Raising the issue of teaching oral speech, it should be taken into account that oral speech is a complex two-way process. It is formed from the ability to speak English and the ability to correctly understand the speech of other people. Oral speech is integral to the creation and improvement of lexical and grammatical skills, the ability to use them to develop unprepared speech. I believe that without effective and accessible teaching tools, it is impossible to learn English and master oral English communication. The solution to the problem will be the use of mass media - TV, radio, newspapers and magazines. The media contribute to the formation of a global communication flow, thanks to the press and television broadcasts, the Russian-speaking audience receives information directly from the source, without intermediaries. Acquiring oral speech skills with the help of foreign-language media allows you to improve your knowledge of grammar and vocabulary, and, no less importantly, to understand the peculiarities of the culture and traditions of the country of the language being studied. How can reading an article, studying audio or video materials in a foreign language help:

[2]

*familiarization with new vocabulary;
improvement of phonetics through a "live" foreign language;
understanding the complexity of the context;
memorization of the lexical features of individual words;
study of the specifics of translating speech structures.*

You can also consider this approach from the point of view of stimulating students to study the language as an opportunity to immerse themselves in the real life of people living in England, the USA, Germany, France and other foreign countries. However, a problem may arise here - in foreign language lessons, students try to avoid such materials. They say that it is more difficult to work with authentic

texts and files. Later, the reluctance to study foreign-language media can lead to difficulties in work and everyday life. In my opinion, teaching oral speech is more productive if you use radio and video materials, information from printed publications. Therefore, for the 10th grade, I conducted lessons using newspaper articles and video materials, I pursued the goal of confirming the effectiveness of the method. The topic of the lesson is "The world of languages". As part of increasing students' conscious study of the English language and the formation of oral speech, the publication "Why is it important to learn a foreign language?" from the newspaper "The Daily Express" was chosen for consideration.

We believe that the development of oral speech skills is necessary not only as an incentive to increase motivation to study a foreign language, but it also plays a major role in the development of all types of mental activity.

When considering the issue of teaching oral speech, it should be taken into account that oral speech is a complex two-way process, consisting of the ability to speak English and the ability to understand the speech of other people, and is also closely related to the formation and improvement of lexical and grammatical skills, the ability to use them to develop unprepared speech [4].

It should be noted that mastering oral foreign language communication is impossible without the use of effective, high-tech, accessible teaching aids. These are currently the mass media (print, radio, television). Thanks to the mass media, a global communication space is being formed in the world, borders and distances are being overcome, and information is reaching a multilingual audience without intermediaries.

Modern requirements for a foreign language include not only knowledge of vocabulary and grammar of the language, but also knowledge of the cultural features and traditions of the country of the language being studied. That is why studying oral speech through English-language media is of particular value. Reading a newspaper article, listening to audio or video materials, students not only get acquainted with new vocabulary, improve their phonetic skills through a "live" foreign language, but also get acquainted with its features, understand the complexity of the context, the lexical features of individual words, and the specifics of translating speech structures. This approach is also very useful from the standpoint of motivating students to study the language through the opportunity to get acquainted with the realities of life in the country of the language being studied.

However, despite the relevance of using the media in foreign language lessons, teachers avoid this type of material, noting that authentic texts present certain difficulties for students. This is the main reason why many students are deprived of the opportunity to work with the press. We believe that newspaper, radio and video material plays an important role in teaching oral speech.[3]

We conducted lessons using newspaper articles and video materials in the 1th course. The lesson was held within the framework of the topic "World Languages: local or global". In order to increase motivation for learning a foreign language, as well as to develop oral skills, the article "Why learn a foreign language? Benefits of bilingualism" from the British newspaper "The Telegraph" was chosen for discussion.

Let us describe some techniques for working with this newspaper material.

At the first stage, when starting to work with the newspaper, we introduced the children to the general structure of newspapers, the placement of materials published in them, and listed the headings available in the newspapers with which they would have to work. The students learned to look through newspapers, paying attention to the article titles and blocks of text typed in bold font in order to get a general idea of the issue. We note that it is necessary to begin introducing students to newspaper material that is close to them in subject matter, select newspaper texts so that they contain few unfamiliar words and so that the information contained is already known to students from reports in Azerbaijani newspapers, radio and television.

At the second stage, we studied new vocabulary and performed exercises to activate it. We conducted the following types of exercises: translating sentences using new vocabulary, selecting synonyms or antonyms for a word, filling in gaps.

Then came the stage of reading the article. It should be noted that the main form of reading at the senior stage is silent reading, but reading aloud should not be completely excluded, so, during the preliminary work to remove difficulties, students read aloud and translated some headings, sentences that seemed the most difficult to understand. After reading, it is necessary to ensure verbal interaction between students, as well as bringing communication to the level of unprepared speech, therefore, at this stage we used the following types of exercises:

- discussion of the article based on leading questions;
- expression of personal opinion;

- summary of the article;
- addition of new ideas to the article.

As homework, students had to compose a dialogue based on the article they had read using new vocabulary. Thus, we managed to solve several problems: expand vocabulary, involve students in active speech activity, and increase motivation for learning the language.

As for audio and video materials in the English lesson, students were asked to watch the BBC Travel television program dedicated to London's attractions as part of the "Living in a global village" lesson.

Before watching the TV show, we motivated the students to watch it. Preparatory work was carried out with the students, during which they were asked to guess what the show would be about. Having previously asked the question "What sights of London do you know?", we discussed the TV show and introduced the children to new vocabulary. Then came the demonstration stage. Since the demonstration of the TV show should be accompanied by active learning activities, we gave the students tasks to fill in the blanks. After watching, we checked their understanding of the content, we asked the question about the sights again, comparing the answers before and after watching. Then, we checked the work proposed before watching the show, and also offered the following types of exercises: determining true and false statements, discussing the show in the form of a dialogue, expressing one's own opinion.

Thus, we have noted that authentic TV programs open up wide opportunities for active work in the process of developing students' oral speech.

Based on the above, we can conclude that the main purpose of a foreign language as a subject area of study is to help students master the ability to communicate in a foreign language, and the use of media in learning English is becoming increasingly popular. We believe that developing speaking skills using media is quite effective. In addition, the systematic use of newspaper, audio and video material contributes to understanding authentic speech, helps make learning a foreign language more interesting for students, reinforces speaking skills, and also contributes to the development of communicative competence, motivates students to conduct reasoned discussions and promotes independent study of various topics.

The above information allows us to conclude that the development of oral speech using foreign-language media is an effective method. Students who want to master the ability to express themselves in a foreign language do so much faster when studying foreign broadcasts, printed publications, and audio recordings. Systematic use of the media helps to understand authentic speech, makes the educational process more productive, and arouses interest. Video and audio materials, texts help to develop communicative competence, motivate students to conduct reasoned discussions and independently access foreign-language materials.

The study of information technology differs significantly from classes in any other academic discipline. The students' work on the computer is the most obvious argument for this. When studying information technology, only a triangle is possible: teacher - personal computer - student. The discipline "Information Technology" has an applied nature, and the personal computer in the classroom is, first of all, a tool and only partly an object of study. This is why laboratory work is the main form of organizing the educational activities of students in the computer class [1].

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Physical sciences

THE STRUCTURE AND MAGNETIC PROPERTIES OF $\text{Co}_{67}\text{Fe}_{6.1}\text{Ni}_{10}\text{Si}_{11}\text{B}_{15.9}$ SPLAT-QUENCHING FILMS

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Fast cooling methods make it possible to obtain new metastable structures (including an amorphous state), which characterized by a unique set of physical properties (mechanical, electrical, magnetic). Effect of the cooling rate on the structure and magnetic properties of $\text{Co}_{67}\text{Fe}_{6.1}\text{Si}_{11}\text{B}_{15.9}$ was investigated. The cooling rate was found based on the film thickness using experimental data.

The structure examination (X-ray analysis) showed that the films with thickness 100 -200 μm (the cooling rate $\sim 10^4$ K/s) had multiphase structure, consisted of $\beta\text{-Co}$ (the lattice parameter $a=0.3546$ nm), Co_2B and Co_2Si . The results of metallographic analysis indicated dendrite structure of this films. Increasing the cooling rate to $\sim 10^5$ K/s (film thickness 70 -80 μm) led to changes in the structure. There were the mixture of $\beta\text{-Co}$ crystals and metastable phase $(\text{Co,Si})_3\text{B}$. It is worth to note the lattice parameter of $\beta\text{-Co}$ was less than the equilibrium value, which indicated the formation of solid solution $\beta\text{-Co}(\text{B,Si})$. A further increase in the cooling rate to $\sim 10^6$ K/s (film thickness 60 μm) led to the formation of amorphous-crystalline structure, which consisted of $\beta\text{-Co}$ crystals ($a=0.3542$ nm) in an amorphous matrix. Metallographic analysis showed the presence of finely dispersed $\beta\text{-Co}$ crystals. In order to quantitatively evaluate the mean grain size of the crystals and crystallized volume fraction (X_c) the separation of contributions to the total intensity coming from the crystalline phases and the amorphous matrix was performed. The mean grain size of the crystals was derived from the Scherrer equation. It was found that the mean grain size of the $\beta\text{-Co}$ crystals and X_c were 30 nm and 13%, respectively. Increase the cooling rate to $3 \cdot 10^6$ K/s (films thickness 20-40 μm) led to the formation of amorphous structure. Thus, increasing the cooling rate from 10^4 K/s to $3 \cdot 10^6$ K/s makes it possible to change the structure of films from crystalline to amorphous one. It was found that the thermal stability of amorphous phase was up to the temperatures 450 $^\circ\text{C}$ -470 $^\circ\text{C}$. At the annealing at the temperature 480 $^\circ\text{C}$ occurred the formation of primary $\beta\text{-Co}(\text{B,Si})$ crystals with the lattice parameter $a=0.3572$ nm in residual amorphous matrix. Such changes in the structure allow to vary the magnetic characteristics of films in wide range. Thus, it was established that the coercivity of films decreased from 4000 A/m to 120 A/m at the changing in structure from crystalline to amorphous one.

Psychological sciences

THEORETICAL BASIS AND METHODS OF ART THERAPY

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ТЕОРЕТИЧЕСКИЕ ОСНОВАНИЯ И МЕТОДЫ АРТ-ТЕРАПИИ

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Abstract

In the context of increasing psycho-emotional stress and social instability, there is a growing need for effective and humanistic approaches to psychological assistance. One such approach is art therapy, which represents a form of psychotherapy based on the use of various types of artistic activity for the purposes of diagnosis, correction, and personal development. The relevance of art therapy is обусловлена its universality, non-verbal nature, and the possibility of its application in work with diverse age and clinical groups.

Аннотация

В условиях возрастания психоэмоциональных нагрузок и социальной нестабильности возрастает потребность в эффективных и гуманистически ориентированных методах психологической помощи. Одним из таких методов является арт-терапия, представляющая собой направление психотерапии, основанное на использовании различных видов художественной деятельности для диагностики, коррекции и развития личности. Актуальность арт-терапии обусловлена её универсальностью, невербальным характером и возможностью применения в работе с различными возрастными и клиническими группами.

Цель данной статьи — рассмотреть теоретические основания арт-терапии и проанализировать основные методы, используемые в современной психологической практике.

Ключевые слова: арт-терапия, психологическая помощь, психотерапия, творческая деятельность, невербальные методы, психоанализ, гуманистическая психология, когнитивно-поведенческий подход, изотерапия, музыкотерапия, драматерапия, танцевально-двигательная терапия, песочная терапия.

Арт-терапия сформировалась на стыке психологии, психотерапии, психоанализа, педагогики и искусства. Её теоретическая база опирается на несколько ключевых психологических подходов. Арт-педагогика является новым научным направлением, изучающим природу, закономерности, принципы, механизмы привлечения искусства к решению многообразных педагогических задач. Основные направления целевого назначения артпедагогики:

- а) создание благоприятных условий для выхода на иное, качественно новое восприятие, представление, понимание смысла содержания образования;*
- б) оптимизация условий педагогического взаимодействия;*
- в) вспомогательная диагностика.*

Арт-методы - это методы арт-педагогики, которая является особым направлением в педагогике, где обучение, развитие и воспитание личности ребенка осуществляется средствами искусства в любом преподаваемом предмете. Эти методы, в отличие от методов традиционной системы образования, трактуют непосредственное творческое

взаимодействие педагога, ученика и родителей. Ценно здесь то, что и педагог, и дети и родители являются носителями культуры, а артпедагогика позволяет плодотворно работать с различными категориями учеников: от одаренных до девиантных.

Артпедагогика формирует стремление к тому, чтобы обучение перешло в самообучение, воспитание - в самовоспитание, а развитие - непосредственно в саморазвитие.

Принципы артпедагогики опираются на традиционные классические общепедагогические принципы, принципы специальной подготовки, принципы художественно-эстетического развития: принцип гуманистической направленности педагогического процесса, социально-личностного развития личности, принцип дифференцированного и индивидуального подхода, учета возрастных особенностей ребенка, принцип образовательной рефлексии, личностного целеполагания, принцип выбора индивидуального маршрута, интегративной связи предметов, продуктивного обучения, креативности.

Одним из фундаментальных оснований арт-терапии является психоанализ (З. Фрейд, К. Юнг). Согласно психоаналитической теории, художественная деятельность рассматривается как способ символического выражения бессознательных конфликтов, вытесненных желаний и аффектов. Произведения искусства выступают в роли проективного материала, позволяющего выявить глубинные психические процессы.

К. Г. Юнг придавал особое значение архетипам и символам, которые спонтанно проявляются в творчестве. В арт-терапии это находит отражение в анализе образов, цветов и форм как выражений коллективного и индивидуального бессознательного.

Гуманистическая психология (К. Роджерс, А. Маслоу) рассматривает арт-терапию как средство самовыражения, самопознания и личностного роста. В центре внимания находится уникальный субъективный опыт клиента, а процесс творчества понимается как ресурс, способствующий раскрытию потенциала личности. Важным условием арт-терапевтической работы является безоценочная, принимающая атмосфера, способствующая развитию внутренней свободы и аутентичности.

В рамках когнитивно-поведенческой терапии арт-терапия используется как инструмент осознания и переработки дисфункциональных убеждений, эмоций и моделей поведения. Художественная деятельность помогает визуализировать внутренние переживания, снизить уровень тревоги и сформировать более адаптивные способы реагирования.

Современная арт-терапия часто носит интегративный характер, сочетая элементы различных теоретических направлений. В системном подходе творчество рассматривается в контексте межличностных и социальных взаимодействий, а арт-терапевтические методы применяются в работе с семьями, группами и сообществами.

Основные методы арт-терапии

Методы арт-терапии отличаются разнообразием и гибкостью, что позволяет адаптировать их к целям терапии и особенностям клиента.

Изотерапия

Изотерапия включает рисование, живопись, коллаж и другие формы изобразительного искусства. Данный метод широко используется для диагностики эмоционального состояния, работы с тревогой, страхами и внутренними конфликтами. Процесс создания изображения способствует катарсису и осознанию чувств. Изотерапия также используется при создании положительной мотивации, помогает преодолеть страхи детей перед трудностями, помогает создать ситуацию успеха, а также воспитывает чувство взаимопомощи, взаимовыручки, помогает детям развивать фантазию, используя различные цветовые гаммы, различные материалы для работы. Она имеет огромное коррекционное значение при развитии мелкой моторики пальцев рук. **Музыкотерапия**

Музыкотерапия предполагает использование музыки для регуляции эмоционального состояния и снятия психического напряжения. Она может быть активной (создание музыки, пение) и пассивной (прослушивание). Музыка оказывает влияние на эмоциональную сферу, способствует релаксации и улучшению настроения. Огромную роль играет, как активная, так и пассивная, индивидуальная и групповая музыкотерапия, которая своим влиянием на чувствительные зоны организма создает все условия для психических изменений организма, создаёт необходимую внешнюю и внутреннюю психологическую обстановку у ребенка. Музыка может использоваться для отдыха и релаксации и даже для концентрации внимания и активизации мыслительных процессов на уроках гуманитарных предметов и на уроках предметов естественно-научного цикла. Все знают о большом влиянии музыки на человека,

поэтому важно использование музыкотерапии - музыкальных фрагментов для концентрации внимания и для релаксации. Каждый учитель может найти такую музыку в Интернете: например, на видеохостинге YouTube можно найти «Сборник классической музыки для концентрации на учебе» [62] и музыку для релаксации. Сеанс проводится как в положении сидя, так и лежа. Важен психологический контакт перед проведением сеанса. Ребенку разъясняют цели, задачи, возможности занятия. Иногда используется живое исполнение музыки.

Драматерапия

Драматерапия основана на использовании ролевых игр, импровизации и театральных техник. Этот метод позволяет безопасно проигрывать жизненные ситуации, исследовать различные роли и способы поведения, развивать коммуникативные навыки и эмоциональную экспрессию. **Драмотерапия** - терапия с использованием театральных постановок на разную тематику, благоприятно влияющих на все познавательные психические процессы: память, волю, воображение, чувства, внимание, мышление. Занятия драмой помогают развить логику, владеть своим телом и не стесняться его, освободиться от внутренних зажимов, воплотить через игру несбывшиеся мечты. Чаще всего применяется при коррекции межличностных взаимодействий: я и друзья, я и родители, сильный и слабый, враг и друг. Метод драматерапии эффективен в индивидуальной и групповой работе с учащимися посредством творческой деятельности. Выбор темы сценария, постановка проблемы, создание сценария, кукол, постановка спектакля, обыгрывание ролей, проекция собственной социальной и личностной роли в спектакле, демонстрация спектакля - всё это даёт богатейший опыт для личности ребенка, возможности для его самореализации.

Цветотерапия - это лечение цветом. Еще в далекой древности люди заметили, что цвет оказывает мощное действие на человека. Специальная окраска, наносимая на тело воина и его доспехи, внушала противнику страх. Цвета, подбираемые для одежды царей и жрецов, говорили об их могуществе, вызывали восторг, поклонение или священный трепет.

В древнем Египте знали о силе и влиянии цвета и даже сооружали в некоторых храмах цветные залы. В них изучали применение цвета и учили врачеванию. Было доказано, что органы и системы тела чувствительны к определенным цветам, которые стимулируют или замедляют их действие. Зная это, можно использовать различные цвета с лечебной целью. Цвет может изменить функции некоторых систем человеческого организма. Например, оранжево-красный меняет частоту пульса, дыхания, давления крови и в общем оказывает возбуждающее действие; темно-синий цвет, напротив, приносит успокоение. По мнению психологов, язык цветов универсален, он действует независимо от религии и национальности.

Танцевально-двигательная терапия Данный метод опирается на связь телесных движений и эмоциональных состояний. Через движение происходит осознание телесных зажимов, выражение подавленных эмоций и восстановление психофизического равновесия.

Песочная терапия Песочная терапия использует создание композиций из песка и миниатюрных фигур. Метод способствует проявлению бессознательного материала, особенно эффективен в работе с детьми, а также со взрослыми, испытывающими трудности вербализации переживаний.

Фототерапия - набор психотехник, связанных с лечебно-коррекционным применением фотографии, её использования для решения психологических проблем, а также развития и гармонизации личности. Техники фототерапии: фотографии, созданные самим человеком; фотографии клиента, сделанные другими людьми, где клиент специально позирует, или снимки, сделанные спонтанно; автопортреты - любые фотографии самого себя; семейные альбомы. Фототерапия может предполагать, как работу с готовыми фотографиями, так и создание оригинальных авторских снимков. Основным содержанием фототерапии является создание и/или восприятие клиентом фотографических образов, дополняемое их обсуждением и разными видами творческой деятельности (рисование, коллажирование, инсталлирование готовых снимков в пространство, изготовление из фотографий фигур и последующая игра с ними, и т. д.). Метод фототерапии - метод использования продуктов фото-творчества, которые дают много информации, как для психолога, так и для самого ребенка - невербальной, яркой, понятной, объективной [41, с.79]. Процесс фотосъемки очень интересен для подростков, увлекает, побуждает к поиску новых идей и возможностей. Современная цифровая съемка и доступность фотоаппаратов, компьютерных программ для работы с фотоматериалом позволяет широко использовать данный метод. Особенно интересно и эффективно применение метода в индивидуальной и групповой работе с подростками.

Маскотерапия - известный метод психологической работы, основанный на переводе глубинных комплексов и проблем человека в неживую материю маски. Лицо - это проекция нашего психологического состояния и настроения, нашего тела, а также нашего прошлого и настоящего. Избавление от привычных, стереотипных ролей с помощью маскотерапии создает возможность освободиться от ненужного и изменить свою жизнь.

Гримотерапия - одно из направлений арт-терапии, которое является прекрасным способом организации внутреннего диалога между сознательным и бессознательным человека. Как актёр или актриса могут стать заложниками придуманного себе образа, которому должны соответствовать всегда и везде: иначе их не воспримет публика, - так и обычные люди могут стать заложниками своих «образов», масок. Но мы настоящие не всегда таковы, какими нас воспринимают окружающие [42, с.67].

Работа с гримом используется довольно широко - например, при неврозах, депрессиях, тревожных состояниях, фобиях, панических атаках. А также как весьма увлекательная техника раскрепощения или, скажем, освоения невербальных способов общения. Гримотерапия даёт клиенту богатый опыт развития навыка доверия к себе, погружает клиента в состояние творца, ответственно выполняющего свою работу. При работе в паре необходим высокий уровень доверия между людьми. Грим воздействует на глубинные процессы, имеет длительный эффект. Татьяна Колошина, одна из первых российских арт-терапевтов, работающая, в том числе, и с гримом, с высоты своего опыта заявляет: «Использование грима - это настоящая находка для практикующих психологов. Во-первых, метод позволяет в короткие сроки красиво и эстетично «вытащить» проблему, сделать предельно наглядной и понятной. Во-вторых, техника эта очень гибкая: клиент осознает свое поведение, ошибки и сразу же, без тяжелого «переваривания», имеет возможность с ними работать. И еще один плюс - по моему опыту, в большинстве случаев явное недовольство собой в гриме оборачивается для человека не поводом для расстройства, а мощным стимулом к дальнейшему личностному росту. Вот это я называю силой искусства» [43, с. 199].

Разрисовывать можно лицо (грим), лицо и тело или создавать любые варианты (например, одна рука и половина лица и т.п.). Для лица используется театральный грим и белила, декоративная косметика, для тела -грим, гуашь, акварель, декоративная косметика).

Заключение

Арт-терапия представляет собой многогранный и научно обоснованный метод психологической помощи, опирающийся на различные теоретические подходы и использующий широкий спектр методов. Её ценность заключается в возможности работы с глубинными психическими процессами через творческую деятельность, что делает арт-терапию эффективным инструментом в диагностике, коррекции и развитии личности. Перспективы дальнейших исследований связаны с эмпирической проверкой эффективности арт-терапевтических методов и их интеграцией в комплексные программы

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Sociological sciences

DIGITAL MENTAL HEALTH SOLUTIONS FOR RESIDENTS OF KAZAKHSTAN

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Цифровые решения в ментальном здоровье для жителей Казахстана*

ЦИФРОВЫЕ РЕШЕНИЯ В ОБЛАСТИ ПСИХИЧЕСКОГО ЗДОРОВЬЯ ДЛЯ ЖИТЕЛЕЙ КАЗАХСТАНА

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Психическое здоровье молодежи в Казахстане в кризисе. Более 70% молодых казахстанцев испытывают стресс, бессонницу или апатию. Депрессия встречается в 4-5 раз чаще, чем в среднем по миру (15-20% против 3,8%) [1].

Казахстан исторически входит в число стран с наивысшими показателями подростковых суицидов – около 18 случаев на 100 тысяч. При этом 71% молодых людей не знают, куда обратиться за помощью, а только 11% доходят до специалистов [2].

Наблюдается физическое и социальное выгорание молодежи и как результат:

- ожирение и малоподвижность. Каждый пятый ребенок младшего школьного возраста имеет избыточный вес. В 2024 году диагноз «ожирение» поставлен 9 122 гражданам, из них 27% дети до 14 лет [3].

- кризис семьи. Почти каждый второй брак в Казахстане заканчивается разводом – 61 тысяч разводов при 124 тысячи браков. Это усиливает стресс, тревожность и влияет на психологическое состояние детей [4].

- потеря жизненных ориентиров. Удовлетворенность карьерными перспективами – всего 3,3 из 5. Многие не видят возможностей для самореализации в стране, что приводит к апатии и внутренней миграции [5].

Современные вызовы, связанные с ростом уровня стресса, тревожности и информационной перегрузки, усилили потребность в цифровых решениях, направленных на поддержание психического здоровья, формирование полезных привычек и повышение осознанности.

Рынок digital-интервенций активно развивается, однако большинство приложений не обладают научной доказательностью и не учитывают индивидуальные особенности пользователя.

В этих условиях актуальным становится создание AI-ассистента, который объединяет технологии искусственного интеллекта с психологическими подходами и помогает людям понимать себя, управлять привычками и достигать внутреннего баланса.

Мировые практики в области цифровых психо-поведенческих интервенций (2015–2025 гг.), включают:

- ICBT (Internet-based Cognitive Behavioral Therapy) [6, 7] — интернет-программы когнитивно-поведенческой терапии;

- мобильные приложения для медитации, сна, управления стрессом и привычками [8, 9];

- чат-боты с элементами NLP и машинного обучения для самопомощи и эмоциональной поддержки [10, 11];

- VR/AR-программы для экспозиционной терапии и релаксации [12, 13];

- корпоративные well-being-платформы для профилактики выгорания [14, 15].

Исследования показывают, что такие решения дают умеренный клинический эффект при наличии персонализации, поддержки специалиста и встроенных аналитических модулей.

Проведён анализ существующих решений в области ментального здоровья и саморазвития, аналитический обзор существующих решений в области ментального здоровья и саморазвития (мобильные и веб-интервенции, цифровая терапия, телемедицина, VR/AR, чат-боты, workplace-решения и пр.), опирающийся на систематические обзоры и мета-анализы

(2015–2025).

Ландшафт цифровых решений

За последние десять лет рынок цифровых интервенций для психического здоровья вырос экспоненциально: мобильные приложения (медитация, CBT-техники, снабжение трекерами настроения), интернет-программы (ICBT — *internet-delivered CBT*), телетерапия, чат-боты, VR-программы для экспозиционной терапии, корпоративные платформы для *well-being*. Систематические обзоры показывают, что цифровые интервенции демонстрируют умеренную эффективность в снижении симптомов депрессии и тревоги — особенно когда они основаны на когнитивно-поведенческих подходах и/или включают поддержку терапевта [16].

Основные классы решений и доказательная база

1) *Internet-delivered CBT (ICBT)* и веб-программы. ICBT — наиболее изученный класс: рандомизированные исследования и мета-анализы регулярно показывают клинически значимое снижение симптомов депрессии и тревоги по сравнению с контрольными условиями, особенно при наличии терапевтической поддержки (*therapist-guided ICBT*). Рецензии также показывают сопоставимость эффекта ICBT с очной CBT в некоторых популяциях. Однако эффективность зависит от адекватной вовлечённости пользователей, дизайна интерфейса и интеграции мониторинга [17].

2) Мобильные приложения (*self-help apps*). Многообразие приложений: от *mindfulness* и медитаций до специализированных CBT-приложений для тревоги, депрессии, бессонницы. Обобщающие обзоры отмечают хорошую приемлемость и потенциал, но также — значительную неоднородность качества, отсутствие клинически валидированных RCT для большинства коммерческих приложений и проблемы с удержанием пользователей. В обзорах подчеркивается, что приложения дают наилучший эффект, когда они научно обоснованы, персонализированы и включают элементы взаимодействия/поддержки [18].

3) Полностью автоматизированные интервенции и чат-боты. Автоматизированные программы (без человеческой поддержки) имеют ограниченную, но растущую доказательную базу: ряд обзоров показывает умеренные улучшения благополучия, однако эффекты чаще меньше, чем у терапевтически поддерживаемых версий. Чат-боты (в т.ч. с элементами НЛП/ML) удобны для доступа 24/7, но требуют серьёзной проверки надёжности советов, управления рисками (суицидальные мысли) и ясных путей эскалации к человеку [19].

4) Телетерапия и гибридные модели. Телетерапия (видеосессии, телефон) доказала свою эффективность и приемлемость — особенно в пандемию COVID-19 — и часто является предпочтительным вариантом для клинических пациентов. Гибридные модели (комбинация цифровых модулей + удалённые сессии) сочетают масштабируемость цифровых программ и клиническую безопасность личной терапии [20].

5) VR/AR и когнитивно-поведенческие экспозиции. VR предлагает мощный инструмент для контролируемой экспозиционной терапии (фобии, PTSD, социал. тревога). Рандомизированные исследования и пилотные *trials* демонстрируют положительные результаты, но внедрение ограничено стоимостью оборудования и необходимостью клинического сопровождения [16].

6) *Workplace*-решения и платформы профилактики. Корпоративные платформы (*well-being*, стресс-менеджмент, EAP) растут; мета-исследования указывают на улучшение рабочего благополучия, но неоднозначное влияние на клинические исходы. Главные барьеры — стигма, конфиденциальность данных и низкий уровень вовлечённости [21].

Ключевые технологические тренды

1) Персонализация и адаптивность — таргетинг контента по профилю пользователя, машинное обучение для подбора модулей; исследования показывают, что персонализированные приложения имеют лучшие показатели удержания и эффективности [22].

2) Интеграция с *wearables* и биомаркер-данными — подключение данных о сне, активности, HRV для более точного мониторинга и триггеров вмешательства [23].

3) Гибридные модели (*digital + human*) — терапевтически поддерживаемые цифровые курсы достигают лучших клинических исходов по сравнению с полностью автоматизированными решениями [16].

4) Регуляция и доказательность — появляется спрос на CE маркировку / FDA-путь (для цифровых терапевтических продуктов — DTx) и на RCT-валидацию коммерческих приложений [24].

Проблемы и ограничения существующих решений

1) *Качество и доказательность* — большинство доступных приложений не проходили RCT; коммерческие маркеты насыщены нерелевантными или низкокачественными продуктами. Обзоры призывают к жесткой валидации и прозрачности методологии [18].

2) *Удержание и вовлечённость* — высокая начальная загрузка, но низкое долгосрочное использование; gamification и персонализация помогают, но не решают полностью проблему [21].

3) *Безопасность и управление рисками* — автоматизированные системы сталкиваются с риском неверной оценки серьёзности состояний (суицид), требуют встроенных протоколов эскалации к специалистам [25].

4) *Конфиденциальность данных и этика* — сбор чувствительных данных требует строгих гарантий; есть случаи ненадёжных политик приватности у популярных приложений [24].

5) *Доступ и неравенство* — цифровой разрыв (доступ к смартфонам, интернету) ограничивает reach в некоторых группах и регионах [21].

Из практики и исследований работает лучше всего:

- ICBT с терапевтической поддержкой: стабильно сильная доказательная база для депрессии и тревоги; эффект близок к очной терапии в ряде исследований [17].

- целевые мобильные приложения для специфических проблем (бессонница, стресс) — когда они научно обоснованы и интегрированы с краткой поддержкой, показывают эффект [26].

- гибридные схемы и программы в учреждениях (университеты, компании) — дают лучший охват и удержание при правильной интеграции со службами поддержки [21].

Перспективы и направления исследований

Ключевыми направлениями исследований выбраны: более качественные RCT коммерческих приложений; изучение долгосрочных эффектов и реального использования (real-world evidence); разработка этических стандартов для AI-поддерживаемых чат-ботов и генеративных систем; усиление регуляторной базы для цифровых терапевтических продуктов. Персонализация на базе ML и интеграция мультимедийных/биометрических маркеров обещают улучшить таргетинг, но требуют доказательной и этической проработки [22].

Имеющиеся цифровые решения в ментальном здоровье предлагают значительный потенциал для расширения доступа и персонализации помощи. Эффективность подтверждена для ряда форм (особенно ICBT и научно обоснованных приложений), но масштабное внедрение сопряжено с проблемами доказательности, удержания пользователей, безопасности и регуляции. Наиболее перспективны гибридные модели, строгая научная валидация (RCT) коммерческих продуктов и внедрение механизмов персонализации с учётом приватности и клинической безопасности.

Тем не менее, отмечаются проблемы удержания пользователей, низкая доказательность и риски конфиденциальности данных.

С учётом выявленных тенденций и ограничений направление разработки персонального AI-ассистента для привычек и понимания себя — цифровой экосистемы, которая сочетает:

- трекинг привычек и эмоциональных состояний;
- дневник и аналитическую статистику для самооценки прогресса;
- чат с AI-ассистентом для персональных сессий и рекомендаций;
- геймификацию и визуализацию достижений для повышения вовлечённости;
- механизмы монетизации и аналитики для устойчивости проекта будет **актуальным**.

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*PUBLIC RELATIONS AND THE ROLE OF MARKETING IN THE AGE OF NEW MEDIA**Elmira Karimova Faig**Master's student (MBA in Marketing) at the Azerbaijan State University of Economics***Abstract**

The rapid development of digital technologies and the transformation of internet platforms into the primary means of everyday communication have led to fundamental changes in the modern media environment. In this new media environment, information production and dissemination have shifted from the traditional one-way model to an interactive, multidirectional, and participatory process. This transformation has directly influenced public opinion, audience behavior, and organizational communication strategies, redefining the role of public relations and marketing. From this perspective, this article examines the essence, functional changes, and strategic significance of public relations and marketing in the new media era from a scientific and theoretical perspective.

The primary goal of this study is to analyze the transformation of public relations and marketing in the new media environment, determine their place in the modern communications system, and substantiate their role in shaping the long-term reputation and trust of organizations. This study conducted a systematic review of the scientific literature, using descriptive, analytical, and comparative methods. Drawing on international academic literature, theoretical models, and existing research findings, the key characteristics of the new media environment, changes in PR and marketing activities, and the causal relationships between these changes were analyzed.

The study's findings demonstrate that in the new media era, public relations is no longer limited to information transfer and image protection, but also performs strategic tasks such as building long-term relationships with audiences, fostering trust, effective reputation management, and crisis management. Marketing, on the other hand, has transformed from a traditional sales-focused approach to a value-based, emotional, and narrative communication model. Personalized content, interactive engagement, and an omnichannel approach are emerging as key elements of modern marketing strategies.

At the same time, the study demonstrates that in the new media environment, public relations and marketing perform complementary and integrated functions. A unified communications strategy, strategic alignment, and an ethical approach play a crucial role in building brand trust and public opinion. At the same time, challenges such as information overload, disinformation, and ethical and legal risks require more responsible, analytical, and flexible management of these areas. As a result, in the new media era, public relations and marketing are key strategic communications tools, ensuring competitive advantage, a strong reputation, and public trust in organizations.

Keywords: *New media, public relations, digital marketing, social media, reputation management, brand image, content marketing, influencer marketing, communications strategies, digital transformation.*

1. Introduction

In recent decades, the rapid development of information and communications technologies has led to fundamental changes in the media environment, as well as in all spheres of society. In particular, the widespread use of the internet and the emergence of mobile technologies as an integral part of everyday life have radically altered the mechanisms of information production, distribution, and consumption. While traditional media have long served as the primary shaper of public opinion, this role has gradually begun to weaken with the emergence of new media platforms. This process represents not only a technological change but also a socio-cultural transformation.

Scientific research shows that in the modern era, people obtain information primarily through digital channels, and these channels create greater opportunities for audience participation. According to research by the Pew Research Center, the overwhelming majority of young audiences follow news on social media platforms, and trust in traditional information sources is declining year after year. These statistics clearly demonstrate the scale and depth of the changes occurring in the information environment. As a result, communications institutions and brands are forced to adapt to the new media environment to connect with their audiences.

One of the key distinguishing features of the new media era is the non-unidirectional nature of the communication process. While in the traditional media era, information was transmitted primarily

through a "sender-receiver" model, in the modern era, this model has been replaced by interaction and dialogue. Users not only receive information but also interpret it, share it, and create alternative content. According to Manuel Castells's theory of the network society, in such a structure, power is distributed among networks and individual actors, rather than centralized institutions. This indicates that new media platforms play a decisive role in shaping public opinion.

In such an environment, the classic functions of public relations and marketing are no longer sufficient. The top priorities have become not simply promoting a product or idea, but building long-term relationships with audiences, building trust, and maintaining reputation. A study published in *Harvard Business Review* shows that emotional factors and brand trust can have a stronger influence on consumer decisions than price and performance. This fact further enhances the strategic importance of public relations and marketing in the new media era.

At the same time, as information spreads rapidly in the new media environment, reputational risks have also increased significantly. A single publication or user opinion can reach thousands, even millions, of people in a short time. This requires a more flexible, transparent, and proactive structuring of public relations activities. For this reason, PR and marketing in the new media era act not only as a communication tool but also as a strategic management mechanism.

In this regard, this article aims to analyze the role of public relations and marketing in the new media environment based on scientific, theoretical foundations and practical data, as well as to comprehensively explore the place and importance of these areas in the modern communications system. The article establishes a connection between theoretical approaches and real communication practice, and defines the basic principles of effective PR and marketing strategies in the era of new media.

2. Methodology

The aim of this study is to examine the transformation of public relations and marketing in the era of new media using a theoretical and analytical approach. The research is primarily based on a qualitative methodology and was conducted through a systematic analysis of existing scholarly literature. The methodological approach was formulated taking into account the conceptual nature of the research topic and the importance of theoretical models within communication sciences.

The first stage of the study involved a literature review. International academic sources, reputable scientific journals, monographs, and research reports on new media, digital communication, public relations, marketing, and integrated communications models were analyzed. Specifically, Castells's network society theory, Kaplan and Henlein's social network models, Kotler's modern marketing approaches, and the concept of integrated communications models were used as the methodological framework. The literature review aimed to define the theoretical foundation of the research topic and establish connections between existing scholarly approaches.

The study utilized descriptive and analytical methods. The descriptive method describes the key features of the new media environment, changes in PR and marketing, and the impact of these changes on communications processes. The analytical method allowed us to identify the cause-and-effect relationships of these changes, conduct a comparative assessment of existing theoretical approaches, and provide scientific substantiation of practical results. This approach systematically explains how the strategic role of PR and marketing has evolved in the new media environment.

Another important component of the methodology was comparative analysis. This analysis compared the functions of PR and marketing in the traditional media era with the roles of these areas in the new media era, and identified the main areas of the transformation process. The comparative approach allowed us to clearly identify the differences between communication models and provide scientific substantiation of the strategic advantages created by the new media environment.

The study also utilized secondary data analysis. Reports from international organizations, the results of academic research, and statistical results from empirical studies conducted in the field of digital communication were considered as additional evidence supporting the theoretical framework. These data were used to explain the formation of audience behavior, trust mechanisms, and communication strategies in the new media environment. The methodological approach was also focused on adherence to ethical principles. The study relied exclusively on open sources, academic publications, and publicly available information, and citation and referencing guidelines were strictly adhered to to prevent the risk of plagiarism and misinterpretation. When selecting sources, their scientific credibility and academic reputation were the primary criteria.

Thus, the methodology of this study is based on an interdisciplinary approach that allows for a comprehensive, systematic, and scholarly analysis of the transformation of public relations and marketing in the age of new media. The chosen methods ensured a comprehensive study of both

theoretical and practical aspects of the topic, in line with the research objectives.

3. Theoretical Foundations of the New Media Environment

The new media environment has emerged in response to the rapid development of information and communication technologies, and the development of theoretical foundations in this field has been a focus of attention for the past 20 years. New media are viewed not only as a technological innovation but also as a complex communication system with social, cultural, and economic impact. In the academic literature, new media are described as a decentralized, interactive, and multichannel information environment (Lieverou and Livingstone, 2023).

The theoretical foundations of the new media environment are studied in several areas:

1. *Reducing centralization and public participation:* Traditional media channels (television, radio, print media) played a centralized role in message transmission. New media, on the other hand, allow users to create and share their own content without centralizing the production and dissemination of information. This phenomenon is explained by the concept of "prosumer," meaning that users play the role of both consumers and producers (Toffler, 1980; Jenkins, 2021).

2. *Interactivity and Feedback Mechanisms:* New media allow users to respond to messages interactively rather than passively. This feature is crucial for PR and marketing activities, as mutual communication establishes an ongoing dialogue between the brand and the audience (Kaplan and Haenlein, 2010).

3. *Network Structure and Viral Spread:* New media operates on a network structure. Information is quickly transmitted from one user to another, thus allowing messages to go viral. The algorithmic principles of social media accelerate this spread, and each user becomes a potential transmitter of information (Castells, 2013).

4. *Data-driven decision making and analytics:* In the new media environment, brands and organizations track audience behavior using large volumes of data, define their goals, and tailor communications strategies accordingly. This approach is essential for personalization in marketing and for maintaining trust in PR (Chaffey & Ellis-Chadwick, 2019).

5. *Social and ethical aspects:* New media not only create technological opportunities but also raise social and ethical issues. Misinformation, privacy concerns, AI-generated content, and the risk of manipulation are hot topics in contemporary academic discourse (Wardle & Derakhshan, 2017).

The theoretical foundations of the new media environment require the development of new PR and marketing strategies. Modern communication theories demonstrate that information is not only a transmitted message but also a dynamic process shaped by interaction, social influence, and public opinion. This theoretical approach requires planning PR and marketing activities in both technological and social contexts (Kietzmann et al., 2011).

Table 3.1. Global statistics of the new media environment.

Indicator	Statistical Information	Year	Official Source
Number of Internet Users Globally	5.56 Billion (~68% of the World's Population)	2024	Statista
Number of Social Media Users Globally	5.24 Billion	2024	Statista
Daily Social Media Use (Average)	2 Hours 23 Minutes	2024	DataReportal
Young People Get Their News Mostly from Social Media	48% (Ages 18–29)	2023	Pew Research Center
Percentage of Users Sharing Their Own Content	Over 70%	2023	Pew Research Center

Source: compiled by the author based on available scientific literature.

4. The Transformation of Public Relations in the Age of New Media

The emergence of the new media environment has led to a radical transformation in the field of public relations (PR). Traditional understandings of PR focused primarily on protecting an organization's image, managing press relations, and building public trust. However, with the development of digital technologies, PR has moved beyond its role as a passive transmitter of messages; it has also become a strategic, interactive, and data-driven communication mechanism (Heath & Johansen, 2022).

In the age of new media, PR activity is transforming in two main directions:

1. *A user-centric and interactive approach:* Social media, blogs, forums, and other digital platforms create a direct, real-time dialogue between organizations and their audiences. This situation requires PR to go beyond simply transmitting messages and focus on managing audience interactions, collecting their opinions, and making strategic decisions (Smith, 2020). For example, on platforms like Twitter and Instagram, brands not only share information but also respond promptly to user complaints and inquiries.

2. *Data-driven decision making and analytics integration:* Effective PR in the new media

environment depends on monitoring user behavior, reactions, and trend analysis. Modern PR teams measure campaign effectiveness using real-time analytics, optimize messaging, and minimize reputational risks (Waters & Williams, 2021). This approach strengthens not only tactical but also strategic decision-making.

Another important aspect of PR's transformation in the new media era relates to reputation management and crisis communications. Information travels rapidly online, and incorrect or misunderstood information can quickly go viral. In this environment, PR professionals strive to protect reputation through proactive and responsive communication (Coombs, 2019). In times of crisis, prompt information sharing and transparent dialogue on social media platforms are crucial for maintaining brand trust.

Furthermore, in the era of new media, PR activities bring ethics and social responsibility to the forefront. The risk of misinformation and manipulative communications can undermine audience trust in a brand. Therefore, modern PR strategies are based on the principles of transparency, social responsibility, and respect for societal values (Tench & Yeomans, 2017).

New media also create the conditions for implementing large-scale projects, combining strategic and creative PR skills. Brands now share with the public not only their products and services, but also their values, mission, and social standing. This transformation transforms PR from a simple communication tool into a strategic and managerial tool.

As a result, in the era of new media, PR communications has evolved from simple press relations management to an interactive, data-driven, ethical, and strategic communications system. This transformation requires PR professionals to develop both technological, analytical and ethical skills and is key to protecting the long-term reputation of brands.

5. The Reshaping of Marketing in the New Media Era

The age of new media has radically changed marketing not only in terms of technological transformation but also in terms of strategic and communicative understanding. Traditional marketing focused on product advertising, sales growth, and market share expansion. However, with the development of digital platforms, consumers have ceased to be passive viewers and have become active participants and partners, playing a significant role in the decision-making process (Kotler et al., 2021).

New media has led to a rethinking of marketing in five key areas:

1. **Personalized Marketing:** Data analysis and user behavior tracking allow marketers to tailor messages to the target audience. Modern marketing strategies are not limited to reaching a broad audience but also adapt to the interests and behavior of each user (Chaffey & Ellis-Chadwick, 2019).

2. **Interactivity and Participation:** Social media and other digital channels have transformed marketing from a one-way communication activity into a two-way dialogue. Brands engage with users in real time, collect their feedback, and optimize their campaigns accordingly (Kaplan & Haenlein, 2010).

3. **Omnichannel:** In the age of new media, consumers interact with the same brand across multiple platforms. Marketing strategies must provide a consistent and connected experience across these channels, thereby increasing brand awareness and trust (Verhoef et al., 2021).

4. **Content Marketing and Storytelling:** Brands no longer simply offer products and services but also communicate their values, mission, and social status to their audiences. Storytelling and visual content have become key marketing tools and strengthen emotional connections with the brand (Pulizzi, 2020).

5. **Technological Adaptation and Data-Driven Decision Making:** Artificial intelligence, automation, and big data analytics tools enable marketers to track campaign effectiveness in real time, measure performance, and flexibly adjust strategy. This approach not only improves marketing ROI but also makes decision making more strategic (Chaffey & Ellis-Chadwick, 2019).

Reinventing marketing in the age of new media requires a combination of technological, analytical, and creative skills. Marketers not only organize product and service promotions but also engage with audiences continuously, communicate values-based communications, and make decisions based on real-time analytics. These changes are transforming marketing into a dynamic and strategic field, aligned with today's economic and social realities.

6. Integration and Synergy of PR and Marketing

In the new media environment, the boundaries between public relations (PR) and marketing are becoming increasingly blurred, and the synergy between these two areas further enhances the strategic communications function. While in the traditional approach, marketing primarily performed functions such as increasing sales and introducing products to the market, PR was aimed at protecting an organization's reputation and building public trust. However, in the new media environment, these two

areas are no longer perceived as separate activities, but as a single communications ecosystem, and this integration plays a crucial role in the sustainable success of organizations.

The theoretical basis for this integration is the integrated marketing communications (IMC) model. The IMC concept unites marketing, advertising, PR, and other communications channels to ensure the delivery of a unified and consistent message to the audience (Niemann Sturweg, Crystal & Grobler, 2022). This approach emphasizes the need for consistent brand messaging, especially across new media platforms. Therefore, a lack of harmony between social media, email campaigns, influencer collaboration, and PR campaigns can create confusion in a brand's image, which can lead to a decrease in audience trust.

Synergy between PR and marketing strategies is important for both brand promotion and reputation management. For example, while the marketing team increases brand awareness through social media advertising, the PR team establishes a dialogue with the public and responds to public opinion through this content. When these two functions are not coordinated, achieving campaign goals may be impossible. Therefore, working separately between PR and marketing leads to conflicting messages and fragmentation of a brand's communications strategy (The Comm Spot, 2025). For this reason, a unified messaging strategy and a frequently updated coordination plan are essential for strategic integration.

In the new media environment, synergy between PR and marketing is not limited to message consistency but also requires dynamic and flexible communication. Because information spreads so quickly online, PR and marketing teams must work together in real time to respond to every reaction that arises during a campaign. For example, when responding to a crisis, the PR team should not limit itself to simply responding to public outcry; the marketing team should use the lessons learned from these interactions to adjust the tone and message structure of future campaigns. This approach ensures that reputation management is aligned with sales and market performance.

One important element of integration in the new media environment is decision-making based on data and analytics. The data the marketing team collects when monitoring campaign performance can also determine the strategic direction of PR activities. For example, data obtained from user interactions on social media provides valuable information for measuring brand attitudes and shaping PR campaigns accordingly. Thus, digital marketing analytics and PR attitude management combine to create a more effective communications strategy. Furthermore, integrating public relations and marketing in the new media environment should also incorporate aspects of ethics and social responsibility. For example, when developing a strategy, it's important to effectively combine elements such as promoting social responsibility projects, transparent communication with users, and respect for community values. This approach not only serves the brand's commercial goals but also creates value for society.

Finally, integrating PR and marketing helps organizations better manage the complexity of communications in the new media environment. An integrated approach not only creates a unified brand story, a unified communications strategy, and sustainable relationships with audiences, but also ensures consistent and harmonious campaign execution across each platform. This approach is considered an important strategic step toward success in the modern information environment.

7.Challenges in the New Media Age

The new media age has created enormous opportunities for public relations and marketing, but it has also brought significant challenges to the structure of the digital communications environment. While the rapid dissemination of information, personalized communication, and real-time feedback on social media platforms offer a strategic advantage over traditional media, this dynamic also creates a number of complex challenges. Understanding these challenges and developing appropriate strategies to address them is a major challenge in modern communications.

The first and most important challenge is information overload and distraction. Billions of posts, videos, and content reach users daily on digital platforms, making it difficult for audiences to absorb messages. This challenge not only reduces brand awareness but also reduces the effectiveness of communication strategies in reaching target audiences. Research in social and digital marketing shows that content must be both creative and interactive to capture audience attention, as competition among viewers is quite high (Kumar, Krishna & NARENDRA, 2025). The second challenge is the rapid spread of disinformation and falsehoods. Information disseminated on new media platforms without editorial control, especially AI-generated content, can negatively influence public opinion. The disinformation phenomenon is amplified by social media algorithms' preference for fast-paced and emotionally charged content, a characteristic that demonstrates that fake news can be not only unsubstantiated but also harmful (Wikipedia, 2025). These issues not only affect public relations but also pose a real risk to brand

reputation management: if false information spreads virally, it can lead to reputational damage and real revenue losses.

A third important issue is protecting ethical and legal frameworks. Privacy issues related to the collection of user data on digital platforms, targeted advertising, and the use of personal data are high on the agenda. In this context, public relations and marketing professionals must not only communicate effectively but also adhere to ethical principles, which play a crucial role in maintaining digital trust (Hagelstein et al., 2025). This approach, in addition to ensuring legal compliance, also strengthens public trust.

The fourth challenge is the growing complexity of reputation and crisis management. In the digital media environment, public opinion can be influenced not only by real events but also by artificially created disinformation and manipulative trolling campaigns, creating additional reputational risks. For example, in a global context, the widespread dissemination of false content processed by AI has been observed to reduce audience trust. To combat such situations, PR teams need to adopt a more proactive, ethical, and analytical approach.

The fifth and most important challenge is the need to keep pace with technological developments. While AI, data analytics, and automation tools can improve the effectiveness of PR and marketing activities, they can also create ethical and operational confusion if used incorrectly. Academic literature shows that one of the greatest challenges for PR professionals is the effective integration of technological tools and their alignment with ethics (Matúšová & Gajdošová, 2025).

The combination of these challenges demonstrates that in the new media era, the sustainability of organizational communications requires not only technological skills but also ethical, strategic, and analytical approaches. Modern communications strategies must serve to maintain organizational trust, effectively engage with audiences, and build long-term reputational capital by overcoming these challenges.

8. Conclusion

The study demonstrates that in the new media era, public relations and marketing are not limited to technological innovations alone, but are also undergoing profound transformations in their nature, functions, and strategic role. The emergence of a digital communications environment has shifted information production and dissemination processes from centralized structures to a more open, interactive, and participatory model. These changes have redefined classical concepts of PR and marketing activities, making them integral to the strategic management mechanisms of organizations.

The study's findings demonstrate that in the new media environment, public relations no longer merely serves the function of protecting an organization's image and transmitting information, but also performs such important tasks as building long-term relationships with audiences, fostering trust, and managing reputational risks. The real-time communications environment created by social media platforms requires more flexible, transparent, and proactive PR planning. In this context, reputation management and crisis communications are emerging as key strategic areas of PR in the new media era.

At the same time, the study demonstrates that marketing in the new media environment has transformed from a sales-focused approach to a value-driven, emotional, and storytelling-based communications strategy. Personalized content, interactive engagement, and an omnichannel approach form the foundation of modern marketing activities. Data-driven marketing decision-making mechanisms enable campaign effectiveness to be measured and audience behavior to be understood more deeply.

One of the study's key findings is that in the new media environment, PR and marketing perform complementary and integrated functions. Within an integrated communications model, a unified messaging language, a consistent strategic approach, and ethically based activities are key factors in building brand trust and public opinion. A lack of effective coordination between PR and marketing can lead to communication conflicts, reputational risks, and the weakening of strategic objectives. The study also shows that the challenges associated with the new media environment—information overload, disinformation, ethical and legal risks, and demands for technological adaptation—require a more responsible, analytical, and strategic approach to structuring PR and marketing activities. Organizations that respond to these challenges have the opportunity not only to increase their visibility but also to build long-term trust and reputational capital in the new media environment.

Therefore, in the era of new media, public relations and marketing should be viewed not as a set of technical tools in an organization's communications strategies, but as strategic, social, and value-creating activities. Effective PR and marketing strategies should not be limited to a presence on digital platforms alone, but should be aimed at building meaningful relationships with audiences based on

ethical values and fostering a lasting reputation. This approach is key to ensuring competitive advantage and public trust in today's communications environment.

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Technical sciences

ENHANCING EFFICIENCY IN AUTOMATED PRODUCTION SYSTEMS

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Abstract

In modern production processes, automatic lines play an important role in increasing productivity. Methods and technologies used to improve the efficiency of automated production systems are analyzed in the article. The main attention is paid to technological modernization, optimization of operations, real-time data analysis and proper integration of human resources. The results obtained as a result of the application of the principles of Industry 4.0 and the integration of artificial intelligence and robotic technologies in production lines were also considered.

Keywords: Automatic lines, productivity improvement, industry 4.0, production optimization, large series.

Introduction. Automatic production lines are a set of mechanisms that ensure the sequential and continuous execution of pre-programmed technological operations without human intervention. In such systems, the function of the worker is mainly limited to the role of adjustment and technical control. The main executive elements used in such lines include metal-cutting machines, transport systems that ensure the transportation of materials and parts, as well as automatic control devices that control the process. Approximately 80 percent of the total output produced in the modern mechanical engineering industry falls on the share of multi-various production areas, which clearly demonstrates the complexity and technologically diverse structure of the industry. Multi-various production systems, as a rule, are characterized by the presence of a wide range of technological and auxiliary equipment. This equipment is distinguished by its large number, functional diversity, interconnectedness and diversification of its structure, a wide range of changes in the size and volume of manufactured products, as well as the complexity of management and control processes [1-6, 7-8, 28, 34-35, 37-39, 45-46, 49, 50-51, 52-53].

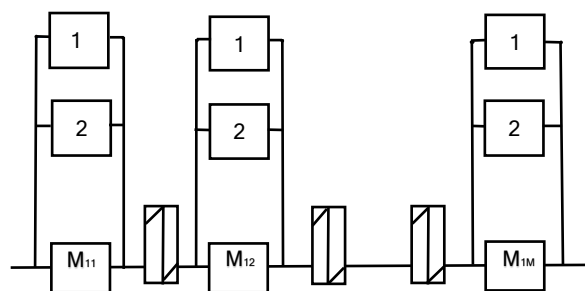


Figure 1. Structural layout of the adjustable automatic line system

One of the main priorities for the dynamic development of the machine-building industry and increasing its competitiveness is the establishment of highly efficient production systems. For this purpose, it is necessary to implement complex measures aimed at automating production, digitizing processes and optimizing management. Such an approach creates conditions for organizing technological processes in a way that meets modern requirements, improving product quality and optimizing costs [1-6, 9-27, 29-33].

Problem statement. Reconstruction (reconstruction) of industrial enterprises, technological modeling and technical equipment with innovative equipment are the main ways to increase the flexibility and productivity of production. The release of new types of products, increasing the production

volume of high-quality and competitive products in the same field with a smaller number of workers is one of the strategic goals in this area. Especially in machine-building enterprises producing mass and serial products, automatic lines (AL) act as the main technical means in the process of complex automation of production. These lines are not limited to metalworking machines; They also incorporate various units and devices that perform thermal processing, welding, assembly operations, and other auxiliary processes [1-6, 36, 40-44, 47-48, 50-51].

Problem statement. Despite the widespread implementation of automated production lines in machine-building and large-series manufacturing, a number of unresolved problems continue to limit their productivity and operational efficiency. In practice, many existing automated lines were designed for stable production conditions and demonstrate insufficient flexibility when product range, batch size, or technological requirements change. This results in increased downtime, unbalanced operations, and inefficient utilization of equipment. Another significant problem is the uneven distribution of technological operations along automated lines, which leads to bottlenecks and limits the overall productivity of the system. In many cases, modernization efforts focus primarily on replacing individual machines without comprehensive technological modeling and optimization of the entire production process, reducing the effectiveness of such upgrades[1-6]. In addition, insufficient use of real-time data, weak integration of digital monitoring systems, and limited application of Industry 4.0 tools hinder adaptive control and timely decision-making. The human factor also remains a critical issue, as inadequate qualification of personnel in managing and maintaining intelligent automated systems negatively affects reliability and performance.

Therefore, the key research problem addressed in this study is the identification and systematic analysis of factors that constrain productivity growth in automated production lines, as well as the development of approaches for their elimination through technological modernization, operational optimization, digitalization, and effective integration of human resources [1-6, 9-27].

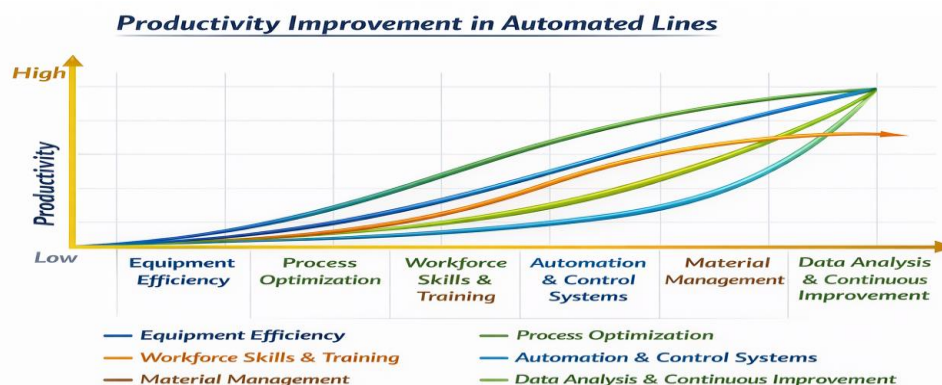


Figure 2. Impact of Key Factors on Automated Line Productivity

This graph illustrates how six major factors—**Equipment Efficiency**, **Process Optimization**, **Workforce Skills & Training**, **Automation & Control Systems**, **Material Management**, and **Data Analysis & Continuous Improvement**—affect productivity in automated production lines. Each factor is represented by a distinct curve showing its relationship with productivity. The curves vary in shape (linear, exponential, or parabolic) to indicate that different factors contribute to productivity growth at different rates. The X-axis represents the factors, while the Y-axis represents productivity level, ranging from low to high. This visualization helps to identify which factors have the strongest impact and how improvements in these areas can maximize overall line performance.

Conclusion

The analysis shows that automatic production lines are a key driver for increasing productivity and competitiveness in modern machine-building and large-series manufacturing. Comprehensive automation, supported by technological modernization, optimized operation sequencing, and real-time data analytics, enables stable process control, reduced cycle times, and improved product quality. The integration of Industry 4.0 principles particularly cyber-physical systems, artificial intelligence, and robotic technologies significantly enhances flexibility and adaptability, allowing enterprises to respond effectively to product variety and volume fluctuations while minimizing resource consumption.

Furthermore, the successful deployment of automatic lines requires not only advanced equipment but also effective system integration and competent human involvement focused on setup, monitoring,

and decision-making. Reconstruction and re-equipment of existing facilities with innovative technologies provide a practical pathway to increase output with fewer workers, lower costs, and higher reliability. Overall, the transition to intelligent, automated production systems creates sustainable conditions for technological development, operational efficiency, and long-term competitiveness of industrial enterprises. Do you like this personality.

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COMPUTER METHODS OF VISIBILITY ANALYSIS AND THEIR USE IN THE URBAN PLANNING PROCESS

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Abstract

Visibility analysis is an important analytical tool in many fields. For example, it is used in urban planning, urban design, real estate, construction, and military applications. In landscape architecture, visibility analysis investigates the visual organization of features in the landscape. Visibility is crucial because people interact with and interpret the landscape. People often define a place based on its visibility. Therefore, visibility analysis is a vital element in interpreting the landscape to understand past societies. Visibility analyses can help analyze the spatial distribution of features in the landscape or help answer the question of why a particular area is in a particular location.

Keywords: ArcGIS, visibility analysis, viewshed, line of sight analysis

Visibility analysis can be done along a line between two determined points and cover a certain area from a certain point of view. According to the determinations and determinations of some people, the position of the watch house, the width and length, using the digital length model, makes some determinations on the visible surface, taking into account the areas that the eye can see. The height, width, and diameter of the watch house are metric, and the area requested to be inquired is described in angular units. North is 90° , east is 0° , south is 270° , and west is 180° . The beginning and end of regional angles are presented in desired values. The values of the locations are given between different locations and the area between these two fields is requested to be searched (figure 1.). The result of Visibility Analysis is a raster map, each cell can consist of two values, if it is seen from the point of view, 1 value (Green) is given, if it is not visible, 0 value (Red) is given (Figure 1.) [1].

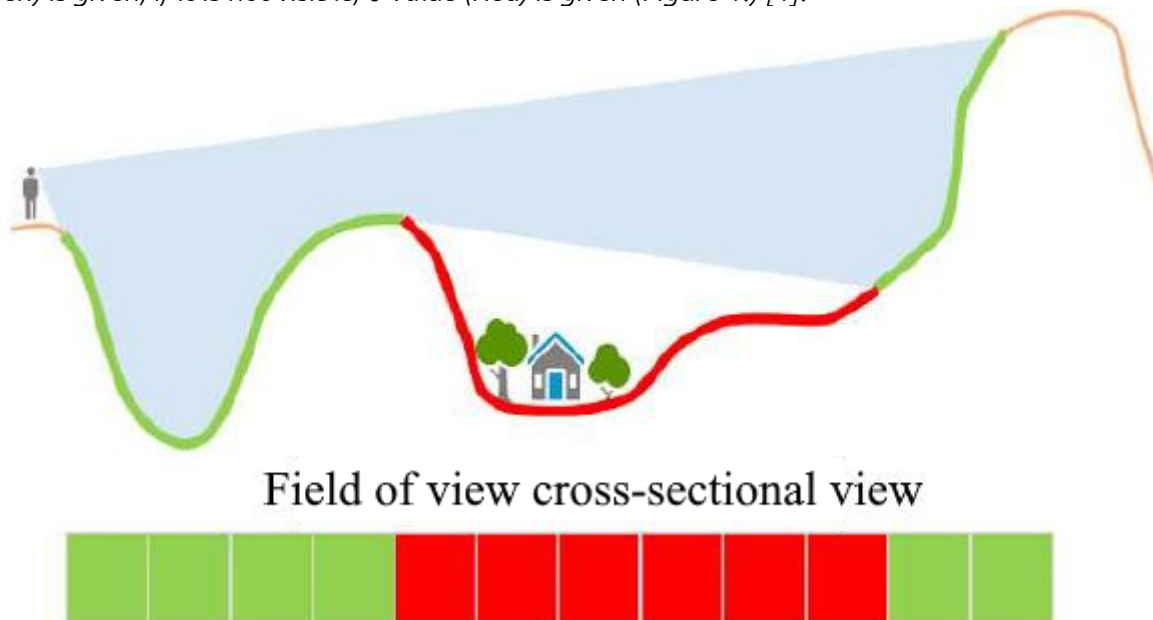


Figure 1. How visibility analysis works

Visibility analysis is designed for visual line scanning to environmental obstacle points surrounding a specific observation point or viewshed visibility analysis (especially the analysis of 3D urban mass or landscape form in which the urban built environment and land landscape are integrated and modeled in TIN or raster data) [11, 12].

Visibility analysis determines the parts of the landscape that can be seen. Therefore, visibility studies play a central role in most urban analyses.

Visibility analyzes in ArcGIS are often used to identify valuable visual resources and a potential threat to visual resources. In the development of spatial planning guidelines, information visibility is used

to improve positive visual features or reduce the negative effects of landscape features. Visibility analysis is widely used in landscape planning. This analysis is related not only to landscape planning, but also to aspects of perception and perception [3].

Although this analysis is more commonly applied in academic research, it has not been widely applied in spatial planning practice. Visibility analysis has been developed as a feature of some spatial analysis programs, one of which is ArcGIS. This analysis allows us to identify areas that can be seen at a certain distance from a certain point. To obtain the necessary information, a digital elevation model (DEM) of the contour map of the sample area is required. Then, by controlling the high position of the observation point, the observation radius and a wide observation angle, the visible and invisible data area is obtained [5].

Visibility Analysis Computer Methods

The GIS environment offers computer visibility analysis in several ways. ArcGIS functionality and terms are used in this study.

Line of Sight Analysis Method

Line-of-sight analysis determines whether two points in space are visible to each other [4]. It shows which parts of the surface are visible during the viewing time between the viewer and the viewed point. Meeting intervals towards a specific route, open area and greenery, coastline or a historical monument can be used as a tool for marking obstacles (Figure 2. a). The observer and target points are determined and the height of the observer is also determined. Some applications combine this method with the terrain profile, not only showing the line, but also the color differentiation of the curve representing this profile (Figure 2. b).

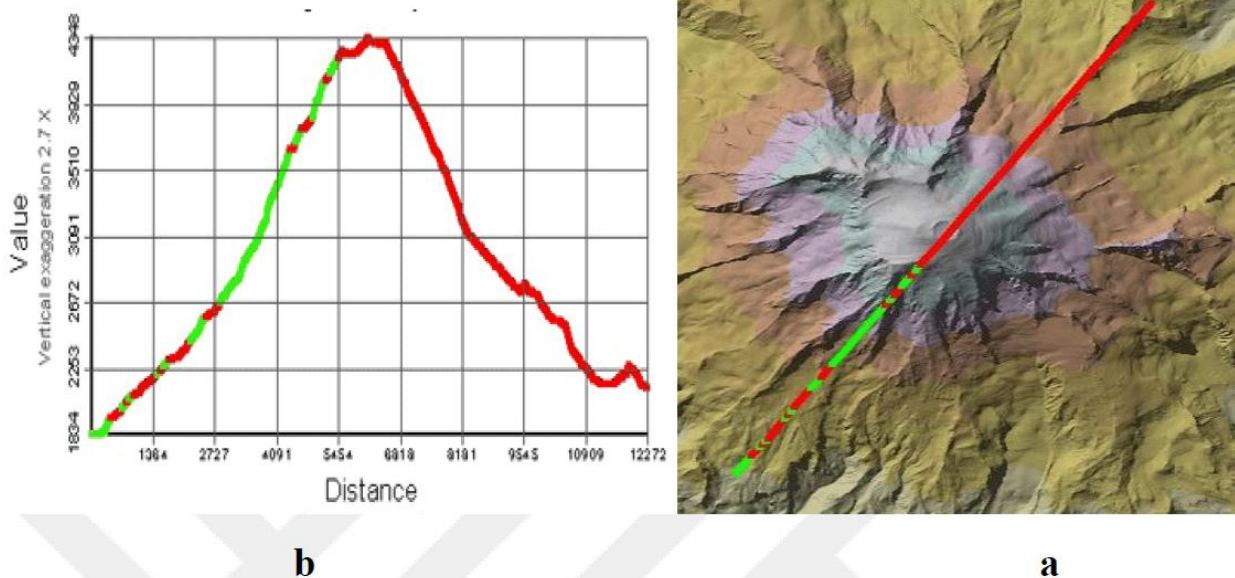


Figure 2. The perspective analysis shows [8]

Visible Area Analysis (Viewshed) Method

Visible area analysis takes into account all the areas that are visible from the point of view. Displays to cover all visible and invisible areas. It is useful in matters such as the correction of the areas between buildings from any visual point of view or the placement and arrangement of triangulation points. As a result of the results shown in Figure 3, visible regions are marked in green, and invisible regions are marked in red [1].



Figure 3. Shows visible field analysis.

In viewable field analysis, it is created over a DEM using an algorithm that estimates the height difference between the observer's cell and the target cell. To determine the visibility of the target cell, every cell extending to the line connecting the observer and the target must be examined by the Lookup. If there is a cell with a higher value between the observer and the target cell, it is blocked. In such a case, the target cell is marked as "Not Visible" [6].

Visibility Analysis (Visibility) Method

Visibility analysis is a method offered by ArcGIS. In other applications, this tool can be called multi-viewer. The visibility analysis function answers two basic questions: "What places are visible from a given observation point?" and "From how many observation points can the given object / place be seen?" We can show this functionality with an example: Several important buildings are analyzed (for example, mosques) and examined from the places where the largest number of these buildings can be seen at the same time in the specified area. The visibility command also provides a visibility analysis using a line theme [6].

If the visibility analysis method assumes two viewing angles, four possible outcomes are obtained where points A and B are determined. Figure 4.

1. Visible from A and B
2. Only A is visible
3. Not visible from A and B
- 4 Only B is visible

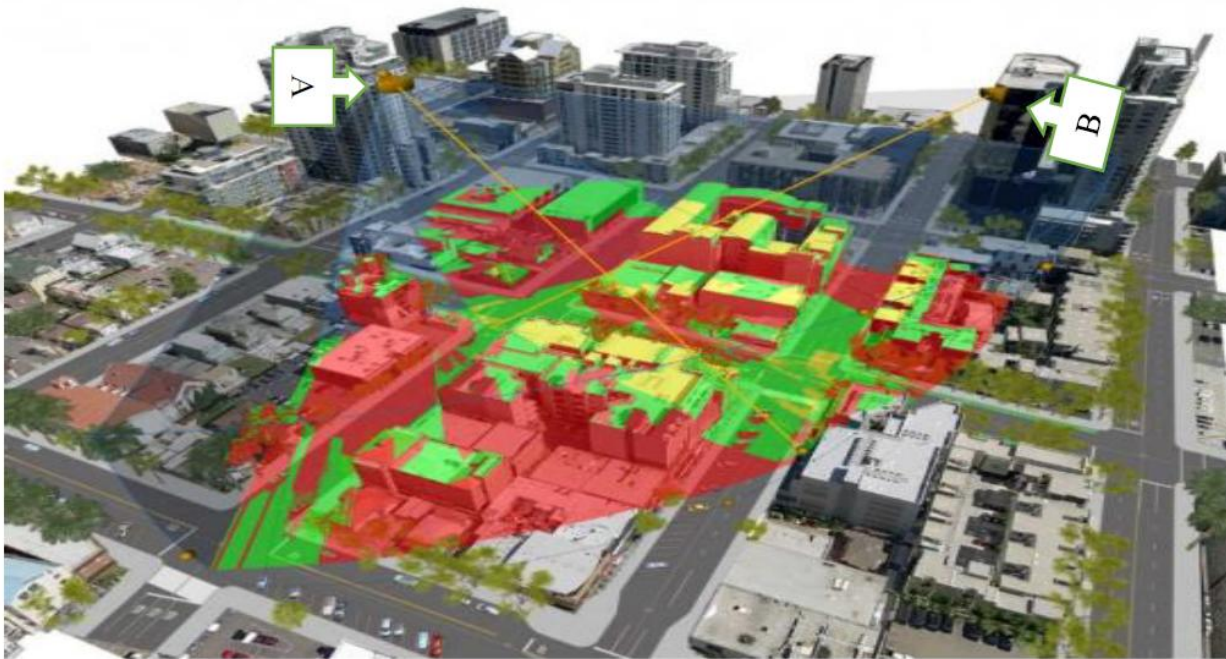


Figure 4. Assuming that there are two points of view, 4 possible results are obtained where points A and B are defined.

Visibility Analysis Control Method

There are a total of nine items to control visibility analysis of any region: SPOT, OFFSETA, OFFSETB, AZIMUTH1, AZIMUTH2, VERT1, VERT2, RADIUS1 and RADIUS2. (Figure 5.)

Below is a graphical representation of how a visibility analysis is controlled. The observation point is to the left of the mountain. The direction of the meeting is inside the right-facing cone. You can control how much the vantage point will be balanced (for example, the height of the tower), the direction of view, and how high and low you will look at the horizon.

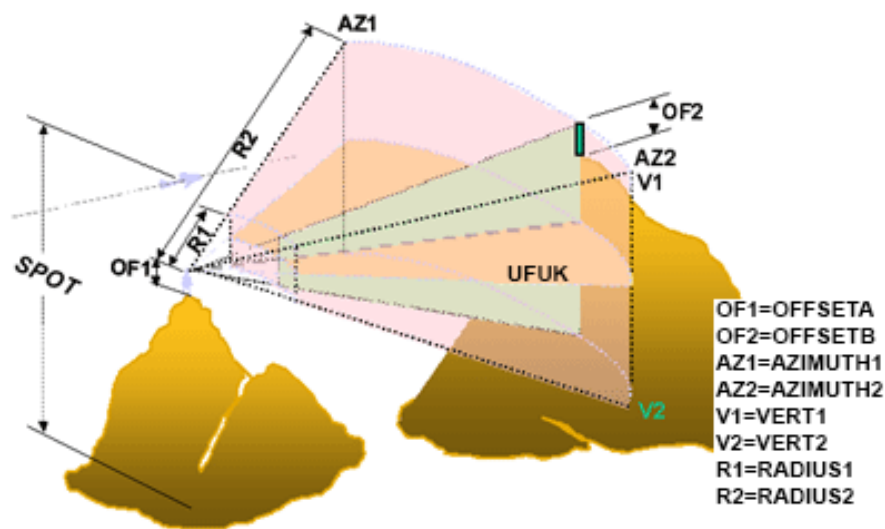


Figure 5. Control elements of visibility analysis

Visibility Analysis Control Elements

• SPOT

The SPOT element is used to define the surface elevation of the observation point.

• OFFSET

The OFFSET element is the vertical distance (in surface units) to be added to the z value of a location on the surface.

There are two OFFSET elements, OFFSET A specifies the height to add to the viewer's position OFFSET B specifies what to add to each cell to be considered visibility. Figure 6.

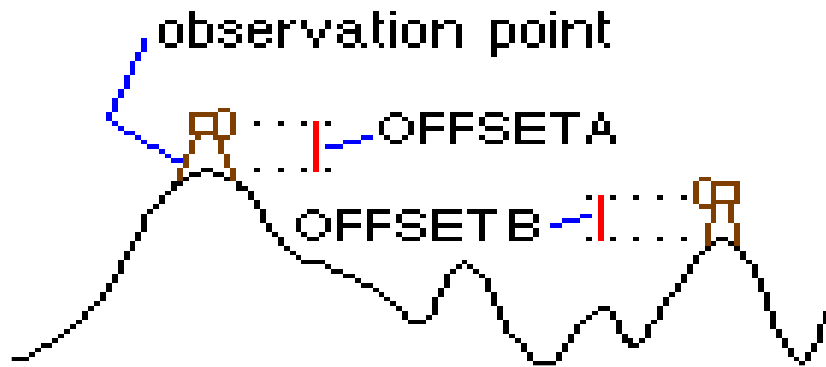


Figure 6. Shows the two OFFSET elements of the visibility analysis

• **AZIMUTH**

AZIMUTH defines the horizontal angle limits of the scan. The scan progresses clockwise from the first AZIMUTH to the second. Values for the angle are given from 0 to 360 degrees, 0 to the north. The AZIMUTH1 element defines the starting angle of the scan range. The AZIMUTH2 element defines the ending angle of the scan range. The AZIMUTH2 value must be greater than the AZIMUTH1 value.

• **VERTICAL ANGLE**

Vertical angle defines the vertical angle limits of the scan. Angles are expressed in degrees between +90 and -90 degrees, positive values represent angles above the horizontal plane and negative values represent angles below the horizontal plane. The horizontal plane (0 degrees) is defined by the z-value of the observation point plus the OFFSETA value. Both vertical angles can be negative [13].

The VERT1 element defines the upper horizontal angle limit of the scan. The VERT2 element defines the lower horizontal angle limit of the scan. The VERT2 value must be lower than the VERT1 value (Figure 7.).

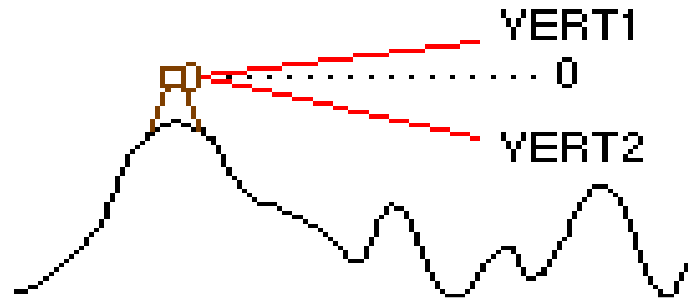


Figure 7. Shows the two VERTICAL ANGLE elements of the visibility analysis

• **RADIUS**

Radius ögesi, her gözlem noktasından görünen alanları tanımlarken arama mesafesini sınırlandırır. RADIUS1 RADIUS2 ögesinin Belli bir mesafenin ötesindeki hücreler analiz dışında bırakılabilir (Şekil 8.).

RADIUS1, görünürlüğü belirlendiği başlangıç mesafesini tanımlar. RADIUS2 için değer RADIUS1'den büyük olmalıdır. (Şekil 8.) [13].

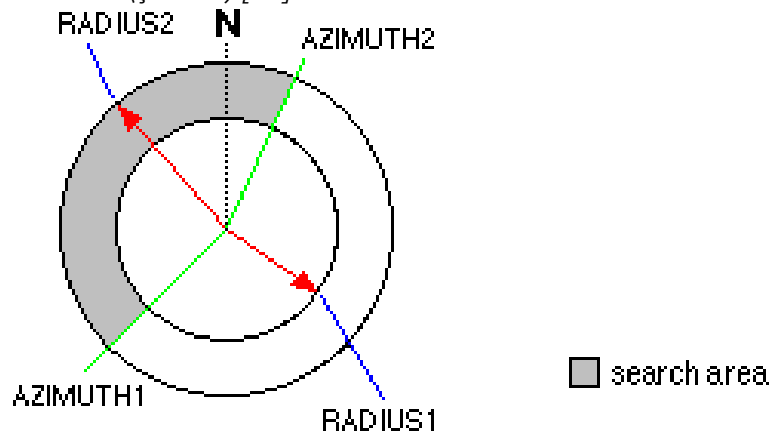


Figure 8. Shows two RADIUS elements of visibility analysis

The following table (Table 1.) shows the default settings of the options controlling the visibility analysis.

Table 1.

Default settings for options controlling visibility analysis

Domain Name	Description	Default Value
<i>SPOT</i>	<i>Surface height for an observation point</i>	<i>Estimated using bilinear interpolation</i>
<i>OFFSETA</i>	<i>Vertical length to be added to the observer position</i>	<i>1</i>
<i>OFFSETB</i>	<i>Vertical length to be added to the evaluated surface</i>	<i>0</i>
<i>AZIMUTH1</i>	<i>Starting angle of the scanning range</i>	<i>0</i>
<i>AZIMUTH2</i>	<i>End angle of the scanning range</i>	<i>360</i>
<i>VERT1</i>	<i>Upper horizontal angle limit</i>	<i>90</i>
<i>VERT2</i>	<i>Lower horizontal angle limit</i>	<i>-90</i>
<i>RADIUS1</i>	<i>Starting distance for specified visibility.</i>	<i>0</i>
<i>RADIUS2</i>	<i>End distance for increased visibility</i>	<i>Infinity</i>

Today, visibility analysis is an important analysis in many fields. For example, a planner can use visibility analysis to determine the best location to build a house on a slope with a good sea view.

The telecommunications industry uses visibility analysis to determine the best site locations for mobile phone towers that need to have an unobstructed view of other mobile phone towers for communication purposes.

The use of visibility analysis in urban planning applications: GBS technology and 3D modeling functions are used in many different studies to evaluate the urban environment. It has been shown that the three-dimensional model of the city represented by visibility analysis improves the results for users, helping them to understand and communicate the spatial relationship of the area to be monitored without having to go there [9, 10].

The use of visibility analysis can improve and enhance design processes in different ways. In particular, it allows for 2D and 3D research on a large number of spatial or non-spatial data in information management. Thus, designers save unnecessary time. Thus, designers can more effectively improve and make their designs more efficient [2].

In urban studies, visibility analysis is used to explore the visual characteristics of the space between buildings to examine the possibility of movement [4]. In scenarios, buildings interfering with the view corridor are automatically highlighted. This allows for a more appropriate design of the city model.

The use of visibility analysis in spatial analysis applications. Depending on the observation point's high position, observation radius, and wide observation angle, visible and invisible data fields can be obtained. These fields can then be converted into vector data in polygonal form, which is useful in the spatial analysis process. This is used in applications in spatial planning. As information providers for spatial planning, visibility analysis is currently facing the challenges of sustainable development, which combine social, economic, and ecological aspects. Sustainable development should go beyond goals that only consider physical development. It also optimizes distribution, allocation, and land use [5].

Visibility analyses are also used in urban design studies. They help integrate both land and building models into urban spaces. They are also addressed in environmental impact assessment procedures to suggest improvements and corrections in visual impact mitigation studies. By its nature, when it comes to objects whose visual impact cannot be completely mitigated (e.g., a skyscraper, as well as road viaducts), knowing how much and in what way these objects have changed affects the community's perception of space. Without getting into qualitative assessments such as "it's better now / it was better before," the spatial distribution of areas that will be visually affected by the new skyscraper has made this building a new landmark in the urban landscape. Also, the visual impact of the skyscraper in urban areas can be seen more than that of smaller buildings, and the visual impact of these smaller buildings in urban areas is not seen as much as that of the skyscraper [7, 8]. The use of visibility analyses in the quality assessment of the visual landscape; This affects the priority status during the planning and management of visual landscape units and the development of protection, reinforcement, and concealment solutions. Visibility analysis is one of the most frequently used analyses in expert assessments through Geographic Information System (GIS) software. Performing visibility analysis through GIS software is quick and easy. Visibility analysis can be used in applications to determine the extent to which different surfaces (water surface, vegetation, bare land, etc.) are visible from a viewpoint within the landscape unit.

Result. Here, a "Visibility Analysis Interface" proposal has been designed; the aim of this analysis proposal is to provide planners with the opportunity to quickly evaluate formal criteria in the protection of cultural heritage sites, urban planning, urban design processes, synthesis and decision-making stages. The system created is seen to be helpful in evaluating expected scenarios in the study area, evaluating existing plan decisions, determining the need for revision to produce alternative scenarios, and comparatively examining the results. The inputs of the visibility analysis interface create a contour map,

a results map, and an observer or observers map according to the number of observation points needed by the user. Then the program gives the results in two ways: firstly, a raster map showing the areas visible from the observer point, usually symbolized by the number (1), and secondly, a map showing the areas not visible from the control points, usually symbolized by the number (0).

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RESEARCH ON THE AREAS OF USE OF GEOTHERMAL ENERGY SOURCES IN THE REPUBLIC OF AZERBAIJAN

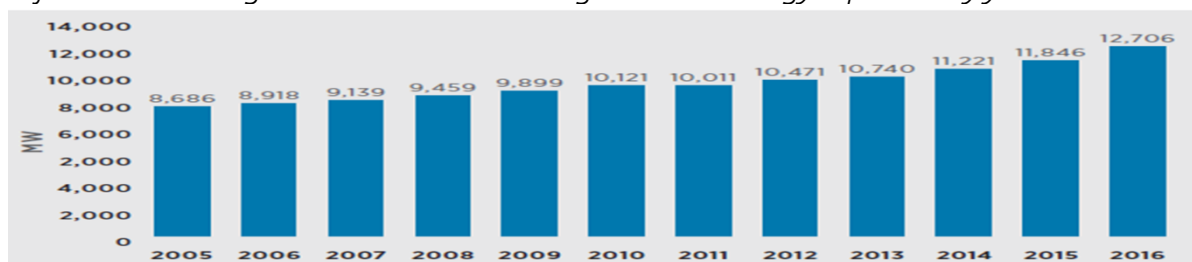
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Introduction. As a result of the global impact of society on nature, we observe the deterioration of the ecological state of the Earth and the depletion of traditional energy sources in modern times. The limitation of energy sources confronts every country with the problem of energy security. Recently, the use of geothermal energy sources has become relevant. Research into ways to use geothermal waters as an alternative energy source is one of the important directions of science. Depending on the origin and temperature of geothermal waters, there are 3 main directions of use: electricity generation (by driving a turbine with geothermal water vapor); thermal energy generation; use for balneological (treatment) purposes.

Geothermal energy refers to energy generated directly or indirectly from chemicals, hot water and steam formed as a result of various processes accumulated at different depths of the earth's crust, between rocks. Depending on the chemical and physical properties of geothermal waters, geothermal energy can be used for heating and cooling purposes or to produce clean electricity. Geothermal waters, which are underground thermal energy accumulators and have high thermal-energy capacity, are of particular importance as renewable energy sources and constitute strategic resources of the country. Geothermal energy: as electricity and heat energy, is used in heating residential, greenhouse and other areas, in the chemical industry, agriculture and other fields as a means of drying, aquaculture.

Geothermal energy sources include thermal waters with temperatures of low 20-70°C, medium 70-150°C and high >150°C. Geothermal electricity has been produced in the Larderello field in Italy since 1904 and in the Geyser field in California for 48 years. Since 1890, there has been a central heating source in Boise, Idaho (USA) and since 1934 in Reykjavik (the capital of Iceland). In addition, 85 thousand residential buildings around Paris are heated by geothermal energy. The top five countries in the world that use geothermal heat sources the most are: United States, Sweden, China, Iceland, Turkey. The largest geothermal power plants in the world are: Geysers Complex - USA, Lardello - Italy, Cerro Prieto - Mexico, Hellisheidi - Iceland, Malaya - Philippines, Olkaria - Kenya, Makban - Philippines, Saltonsea - USA, Darajat - Indonesia. Figure 1 shows the installed geothermal energy capacities by year in MW.



Source: IRENA, 2017a

Figure 1. World installed geothermal power capacity by year, MW

Table 1 shows the installed geothermal power plants in various countries in 2016.

Country	Capacity (MW)	Country	Capacity (MW)
USA	2 511	Turkey	821
Philippines	1 916	Iceland	665
Indonesia	1 534	Japan	533
Kenya	1 116	Costa Rica	207
New Zealand	986	El Salvador	204
Mexico	951	Nicaragua	155
Italy	824	Russian Federation	78

Source: IRENA, 2017a

Table 1. Geothermal power plants installed in various countries in 2016.

One of the countries that uses geothermal energy the most in the world is Turkey. There are about 1000 known hot and mineral geothermal water source wells in Turkey. The number of geothermal areas with temperatures above 40°C is 170. The first 11 of these are high-temperature places. Aydın-Germencik 232°C, Manisa Salihli-Göbekli 182°C, Çanakkale-Tuzla 174°C, Aydın-Salavatlı 171°C, Kütahya-Simav 162°C, İzmir-Seferihisar 153°C, Manisa-Salihli-Caferbey 150°C, Aydın-Yılmazköy 142°C, İzmir-Balçova 136°C, İzmir-Dikili 130°C. Figure 2 shows a diagram of a dual-circuit geothermal power plant.

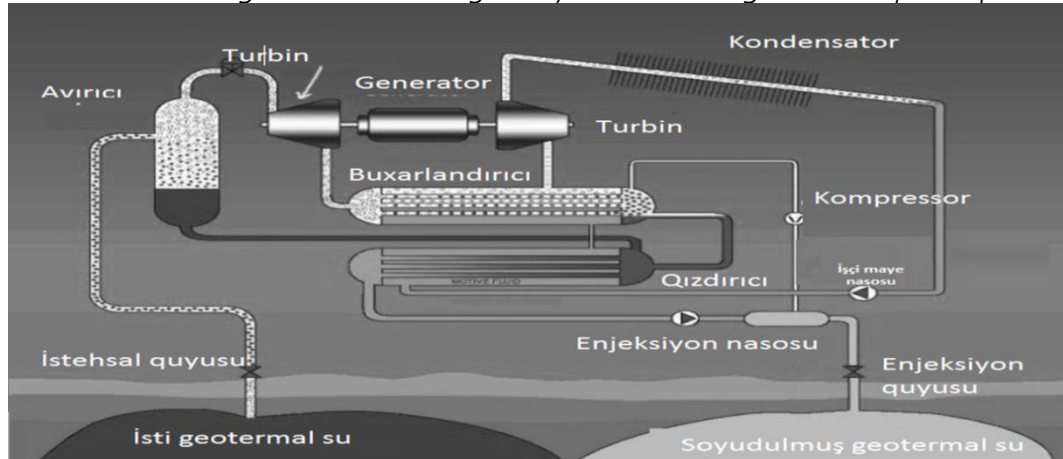


Figure 2. Double-circuit geothermal power plants.

The construction period of geothermal power plants is shorter than that of other power plants, and this period is on average three years. Geothermal energy technologies can be easily developed, especially in areas without electricity. Medium and low-temperature geothermal energy sources can be used directly in the residential and industrial sectors for the purpose of heat energy $T < 150^\circ\text{C}$. These sources can be used for heating homes and workplaces, greenhouses, fish farms and industrial processes.

The most common areas where low and medium-temperature geothermal resources are used are: district heating systems, ground heating, greenhouses and aquaculture farms. Geothermal regional heating systems are more economical than natural gas systems. In Turkey, a geothermal greenhouse was first applied in Denizli-Kızıldere in 1985. In Azerbaijan, geological exploration works were carried out in the Talish zone in Astara, Lankaran and Masalli regions to study thermal waters. For this purpose, 17 exploration wells were drilled and thermal waters with a temperature of 38-64°C were discovered in all of these wells. In order to use them as thermal energy, 10 greenhouses were created for growing winter vegetables (tomatoes, cucumbers) in the winter months, and the possibility of obtaining crops 2-3 times a year was determined. Increasing the efficiency of the use of geothermal energy sources available in the territory of the Republic of Azerbaijan makes it possible to make the use of thermal energy 80% more economical. Thanks to the use of geothermal energy, the amount of harmful waste emitted into the environment with fuels can be significantly reduced. Direct use systems generally consist of three main components:

1. Production section: bringing hot fluid from the well to the surface;
2. Mechanical installation: Pipes, heat exchangers, control units to transfer heat to any location.
3. Waste system: A well for returning the cooled geothermal fluid to the underground (injection)

area.

The economic feasibility of using the energy of geothermal water sources around the Istisu settlement of the Kalbajar region of the Republic of Azerbaijan has been determined. Information on the distribution of geothermal waters on some fields in the territory of the Republic of Azerbaijan is given in Table 2.

Bölgələr	Bölgələr. Geotermal su yatağı	Quyunun ağzında olan temperatur, °C	Ümumi su sərfi, m ³ /gün
Azərbaycan Respublikası	1. Böyük Qafqazın cənub yamacı	(t – 30-50°C)	2000 m ³ /gün;
	2. Quba-Xaçmaz zonası	(t – 40-85°C)	21000 m ³ /gün
	3. Abşeron yarımadası	(t – 40-90°C)	20000 m ³ /gün
	4. Kiçik Qafqazın dağlıq hissəsi	(t – 30-74°C)	4000-5000 m ³ /gün
	5. Naxçıvan MR	(t – 40-50°C)	3000 m ³ /gün
	6. Talış dağlıq bölgəsi	(t – 31-43°C)	15000 m ³ /gün
	7. Lənkəran düzənliyi	(t – 44-64°C)	7000-8000 m ³ /gün
	8. Kür çökəkliyi	(t – 30-71°C)	170000 m ³ /gün
	9. Kəlbəcər rayonu	(t – 58.8 70°C)	1000 m ³ /sutka
Respublika üzrə		(t – 30-90 °C)	250000 m ³ /gün.

Актив
источники

Table 2. Information on the distribution of geothermal waters in the territory of the Republic of Azerbaijan on some deposits.

The territory of the Republic of Azerbaijan is rich in thermal waters, known deposits are located in a number of regions of the Greater and Lesser Caucasus, on the Absheron Peninsula, and in Talysh. Istisu mineral springs are located in the western part of the Kalbajar region of the Republic of Azerbaijan - on the slopes of a range of mountains. Istisu mineral springs were formed as a result of the swelling and cracking of the earth during a strong earthquake in 1138. According to their chemical composition and physical properties, these waters are identical to the world-famous Karlovy Vary springs in the Czech Republic, and are unique in the world in many other properties. On November 25, 2020, as a result of successful operations by the Azerbaijani Armed Forces, they were liberated from occupation and returned to their homeland. Istisu geothermal sources are located at an altitude of 2225 meters above sea level. Istisu mineral spring water is hyperthermal, and its chemical composition is carbon dioxide, hydrocarbonate-chloride-sulfate-sodium. Natural Istisu mineral springs consist of 12 active springs. Istisu mineral waters located in the Kalbajar region are particularly distinguished by their favorable gas and chemical composition, high temperature, and large natural resources. Its waters can be used to treat both external and internal human diseases. A large resort and mineral water treatment plant was built on the Istisu spring in the 80s, producing 800 thousand liters of water per day. Thermal springs in the Lesser Caucasus are mainly grouped in the area of the Tartar and Arpachay rivers. Here, the Istisu and Bagirsag areas, up to 40 km long along the Istisu River, are distinguished. The geothermal step for the springs is 2-3m/°C. Measurements conducted in the Bagirsag area showed that the water temperature at a depth of 100 m is 80°C, at a depth of 60-70 m in the Istisu area is -62°C, and at a depth of 300-350 m is -75°C. The total water consumption in the Upper Istisu district is 800-900 m³/day, in the Lower Istisu - 25m³.../day. The carbonated, chloride-sulfite-hydrocarbonate-sodium waters of Istisu are widely used for balneological purposes. The temperature of Istisu is up to 58.80°C on the ground. One of these springs shoots a fountain up to 8 meters high. The data provided show that 3 billion 963 million liters of water flow from the Istisu sources every year. Two Istisu sanatoriums of All-Union significance operated in the former USSR in the Istisu settlement of the Kalbajar district, where 50 thousand people were treated and rested every year. Istisu mineral water is one of the natural resources that brings the most income to the district budget. The annual flow of Istisu, a natural spring, is 600 million liters. However, only 10% of this water was used as useful water. Currently, the use of Istisu geothermal waters as an alternative and renewable energy source is emerging as an urgent problem. The heat supply of settlements located around the Istisu springs and the newly created medical sanatorium can be provided from geothermal waters, a local alternative energy source. The study of the exploitation resources of the thermal water deposits of the Republic of Azerbaijan, the selection of types of heat supply with geothermal waters as an energy source, their load calculation, determination of heat losses from building elements, forecasting and planning of heat supply works, heat reporting of geothermal heating systems, the study of the compliance of the use of geothermal waters with the thermal-technical and economic principles, and the selection of schemes and equipment of geothermal heat supply systems have been considered. Determining the exact values of the thermal properties of geothermal saline waters is of great

importance in fundamental science. Taking into account the exploitation resources, chemical and physical properties of the thermal water deposits of the Republic of Azerbaijan, we can give a forecast of the use of geothermal energy for heating and cooling purposes. The economic feasibility of using the energy of geothermal water sources around the Istisu settlement of the Kalbajar region of the Republic of Azerbaijan has been determined.

Summary.

Despite the low temperature of geothermal waters in the world and in our republic, it is possible to produce electricity using double-circuit geothermal power plants. Geothermal water systems are widely used in steam generators of geothermal power plants, in hydrothermal synthesis, in seawater desalination processes and in other industrial operations occurring at high temperatures and high pressures.

The areas where low and medium-temperature geothermal resources are most often used are district heating systems, heating of territories, greenhouses and aquaculture farms. The expansion of the application of geothermal heat pumps in our country in social and public buildings, residential and industrial buildings, etc., and the relevant research in the areas of winter tourism from district heating. After horses, geothermal waters are used in greenhouse farms in various regions such as Shahdag, Tufandag, etc. in Lankaran, Khachmaz, etc. regions. In addition, aquaculture heat is used in breeding fish and other aquatic animals, drying agricultural products (fruit and vegetable drying, etc.), salt, cement, mud, etc. in industrial areas, and even for heating water in recreation centers and gyms.

Geothermal district heating systems provide at least 30% -50% savings compared to natural gas systems. Thanks to the use of geothermal energy, the amount of harmful waste and fuels discharged into the environment can be significantly reduced.

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DESIGNING THE FRAMEWORK OF A SMART CITY SPATIAL INFORMATION SYSTEM INFRASTRUCTURE

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Abstract

The infrastructure of spatial information systems needed by Smart Cities should have interactive experience, be able to react in real time, have mobility, control and autonomy skills. Smart cities need to provide real-time spatial and temporal data generated. Spatial information systems where spatial and temporal geographic information (temporal-spatial information) is produced, stored, processed, presented and information can be accessed in real time are called 4D Geographical Information Technologies (4B CBT).

Keywords: Smart City, building information model, LandXML, CityGML and IndoorGML

Entrance. (Setting Goals)

The effective integration of human, physical and digital systems improves the quality of life of city residents, enables the management of cities and the creation of well-being, inclusive, sustainable and resilient cities. Spatial data is an important foundation for providing smart city services and this data needs to be produced, processed, managed and presented according to specific open data standards. The Smart City Spatial Information Framework defined by the Open Geospatial Consortium (OGC) focuses on the following themes:

- High-density data and innovation are generated in smart cities.
- Spatial data enables the implementation of smart city technologies in cities.
- The benefits of smart city technology should be evaluated in terms of the benefits provided to the city's residents.

- Reusing resources for different purposes is important to increase the resilience of the city.
- The use of open data standards is necessary for interoperability, cost-effectiveness, efficiency and innovative applications [1, 6]. The Smart City Spatial Information Framework, developed by the Open Geospatial Consortium, is based on the ISO/IEC 10746 Information Technology Open Distributed Processing Reference Model.

According to the ISO/IEC 10746 standard, smart cities should provide residents with the opportunity to live in a sustainable, prosperous, and inclusive society by integrating physical, digital, and human systems within the city [2, 7]. Social policies and the use of smart city technologies for the benefit of citizens should be considered in smart city applications.

Most smart city applications focus on using a command and control approach for emergency response and resource management. While a command and control approach is a necessity, smart city technologies should enable citizens to access smart city resources. This smart city approach emphasizes the urban planning approach developed decades ago by Jane Jacobs [3], which focused on the value of community life and social networks in urban planning. According to Jane Jacobs [8], cities can offer opportunities that appeal to everyone if they are designed for everyone. When Jacobs' approach is adapted to the design of smart city information systems, it points to Open Information and Iterative Development. The principle of openness is one of the key principles of design when designing smart city information systems, and it helps developers and users see what works and what doesn't. Including low-cost, open-participatory iterative experiments, free and open-interface testbeds and pilot projects in the design of smart city systems encourages innovation and prevents the failure of high-budget ICT projects. For smart cities to be successful, citizens, civil society organizations and public institutions, which are the most important components of smart cities, need to make better choices.

Smart Cities City Services and Quality of Life Performance Indicators.

The standard used to measure city services and quality of life performance in smart cities is ISO/DIS 37120. This standard defines the methodology for how city services and quality of life performance can be measured [4].

ISO 37120 performance indicators are examined under the following themes:

- Economy

- Education
- Energy
- Environment
- Leisure and recreation
- Security
- Housing
- Solid waste
- Communication and Innovation
- Finance
- Fire and Emergency Response
- Administration
- Health
- Transportation
- City planning
- Wastewater
- Water and sanitation.

Generating and transmitting the data needed for most of the ISO 37120 indicators involves the use of geographic information technologies and spatially located sensors. Geographic information technologies play an important role not only in identifying indicators but also in planning, strategy development and decision-making processes in the development of these performance indicators. Examples of using geographic information technologies in calculating and improving City Services and Quality of Life Performance Indicators in Smart Cities are given below.

- Recreation and leisure area performance indicator (Recreation indicator: Outdoor recreation space).

Category 13.2 of the ISO 37120 standards includes outdoor recreation and leisure area per capita (m²). Data for this performance indicator can be obtained from the city planning department. If this data is not available, recreation and leisure area data in the city can be obtained using aerial photographs or land use maps. The identified recreation and leisure area data can be calculated with a low budget using geographic information technologies.

- Energy performance indicator: Renewable energy sources.

Category 7.4 of the ISO 37120 standards defines the energy performance indicator as the percentage of renewable energy sources in the total energy produced. The ISO 37120 standards recommend that this data be requested from energy providers and relevant government agencies. Within the scope of The Solar Atlas of Berlin project, carried out in Berlin, the renewable energy potential of Berlin was identified with the help of geographic information technologies, and energy performance indicators were improved. Within this project, it was determined that 220,000 roofs are compatible with solar panel systems and that property owners are unaware of this potential. With the solar panel systems to be installed on these roofs, 3 million megawatts of electricity can be produced annually [9].

- Environmental performance indicator: Noise pollution.

Category 8.7 of the ISO 37120 standards defines the noise pollution performance indicator. ISO 37120 recommends that noise pollution be measured and mapped in real-time. As stated in ISO 1996-2:1987, areas with a noise level of 55 dB(A) should be identified. According to the results, the number of citizens affected by this noise constitutes the noise pollution performance indicator. Within the scope of INSPIRE, a 3D noise map of cities in Europe was made with the help of geographic information technologies in accordance with OGC CityGML standards [5, 10].

Smart City Applications.

Although smart city applications differ according to different standardization organizations, the smart city applications covered by all standardization organizations are given below [11]:

- Public Services - Smart Grid, Smart Water Distribution, etc.
- Sanitation
- Smart Building
- Smart Transportation
- Healthcare
- Public Security and Safety
- Smart Environmental Protection
- Smart Emergency Services
- Education

- City Planning
- Open Data

Data Needs and Organization.

This section examines the data needs of Smart City initiatives and how this data is organized within the OGC Smart City Enterprise Framework. Smart cities need to create information systems based on the principle of interoperability. The components of the information systems of Smart City Initiatives are shown in Figure 38. In smart cities, the components of information systems are organized using layers. The layer approach was developed by the ITU Focus Group on Smart Sustainable Cities. [12].

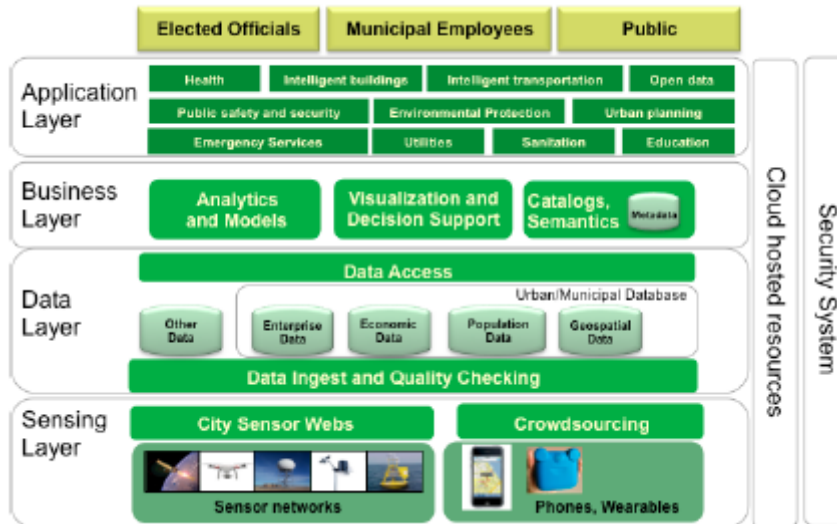


Figure 1. Layered Structure of a Smart City.

Spatial Data and Smart Cities.

Spatial data, along with pervasive spread throughout smart cities, forms the basis for the creation of smart city initiatives. The use of smart city data based on time and space forms the foundation of many services provided in smart cities. This approach supports the analysis of data obtained in cities and the decision-making process. CityGML, an open standard developed by OGC, facilitates the creation of smart spatial city infrastructure for developers and planners.

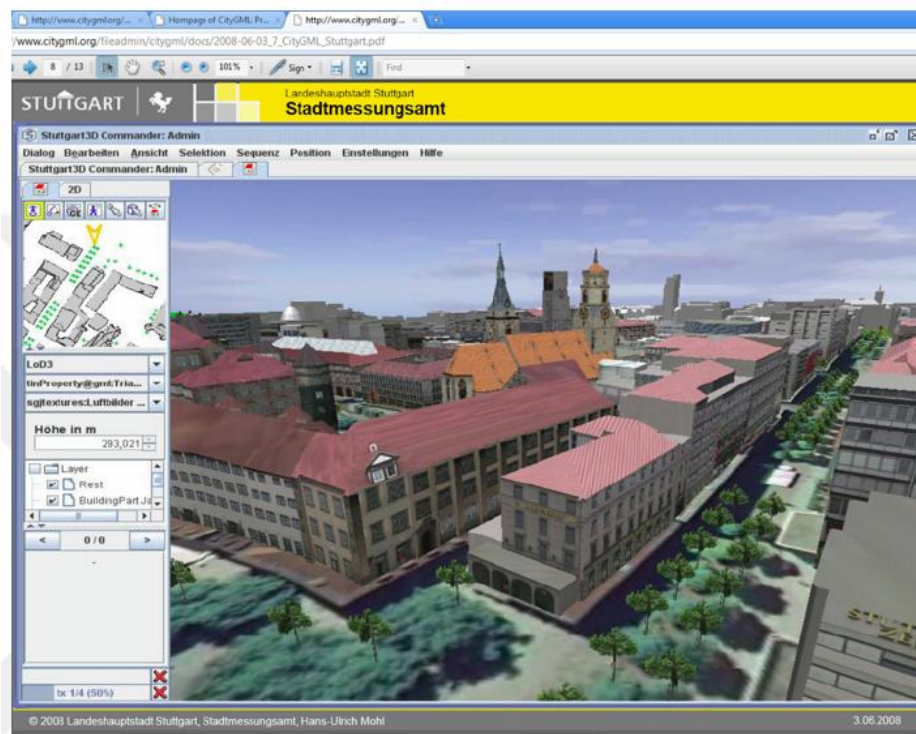


Figure 2. Visualization of the CityGML City Model.

The urban environment should be addressed at different spatial information scales.

The spatial information of Smart Cities has been addressed accurately and comprehensively using the Geographic Spatial Information Scale, Construction and Infrastructure Information Scale, and

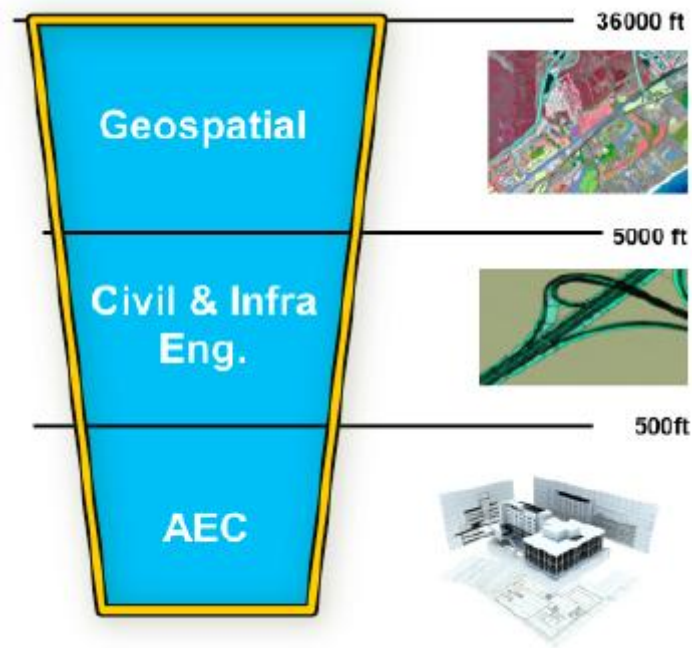
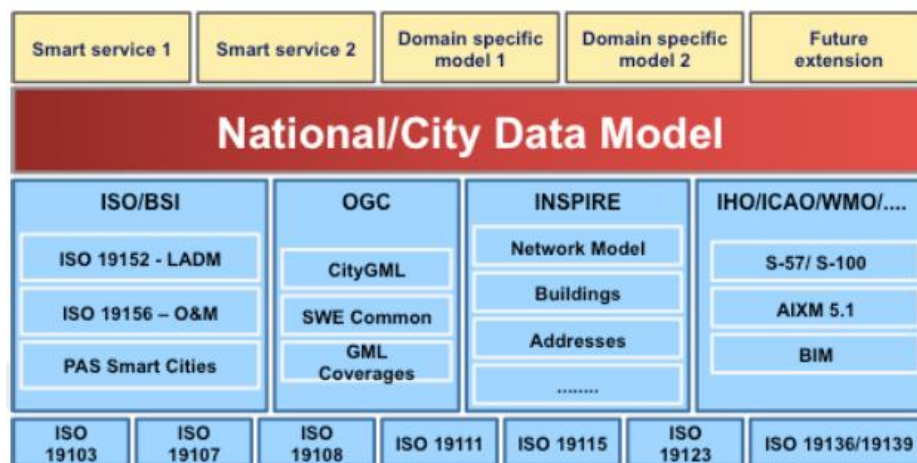
Building Information Scale.**Figure 3.** Spatial Information Scales

Figure 5 illustrates the alignment of some data model standards with the Open Data Information Technology Standards framework. OGC members have been involved in best practice studies for integrating different data models, and this best practice has led to the creation of the Smart City Spatial Information Framework.

**Figure 4.** Spatial Information Data Standards and technology standards used in Smart City Information Systems Design*CityGML and IndoorGML.*

Smart cities need data produced by reliable and authoritative institutions. Examples include 2D maps, 3D city models, address information systems, infrastructure (Building Information System, Smart Grid), and sensor data. Furthermore, openness to different data types such as voluntary data, big data, and connected data [6] is critically important for smart cities. The existence of different data types has created a need for a robust data integration platform. The City Geography Markup Language (CityGML) standard, developed by OGC, provides a standardization that enables the integration of different types of data produced by different sources. With CityGML, spatial data has become an "operating system" for the virtual version of the city.

Practical applications for optimizing transportation and using energy efficiently have been implemented with virtual models of the city produced according to CityGML standards. The Berlin City Model has made it possible to improve many services in the city, primarily in the areas of economic development and investment, real estate, marketing, and event management. For years, cities have used Geographic Information Technologies and spatial data to improve urban services.

Standards have been needed to ensure that the data generated in smart cities and smart city

applications can easily interoperate. Primarily, a 2D and 3D data model of the city should be developed, and spatial data obtained from different spatial data sources should be displayed on these models. This data model becomes the standard of the city, a common language through which all actors, data sets, and technologies in the city can interact.

Using CityGML, city models have been developed in many cities, primarily Berlin and Abu Dhabi. In the Netherlands, Bahrain, and Germany, 3D models have been developed nationwide based on CityGML standards. CityGML enables semantic modeling. The model includes the structure, relationships, and data of each element. • The Berlin City Model is considered the most comprehensive 3D city model in the world. The facades of the 560,000 building models in this model are detailed realistically at the LOD2 (Level of Detail 2) level. More than 200 buildings have been detailed to the LOD3 (Level of Detail 3) level.

This forms the infrastructure for the 3D Berlin City Model, Berlin Economic Atlas, and Berlin Solar Atlas projects [12].

- *Data specifications created within the scope of the INSPIRE program, in which the European Parliament determined the specifications of the spatial data infrastructure, were developed based on OGC CityGML standards.*

- *Within the scope of INSPIRE, a 3D noise map of cities in Europe was created using geographic information technologies with the help of OGC CityGML standards [12].*

- *The 3D Netherlands Model, developed by OGC using CityGML, is shown as one of the best examples of a country model.*

- *Other good examples:*

- *3D Finland*

- *3D Kingdom of Bahrain*

- *Malaysia 3D SDI20*

- *3D Singapore.*

Another OGC standard that Smart City initiatives should provide is IndoorGML. It is a data model used especially for modeling interior spaces and indoor spatial information systems.

LandXML

LandXML is a data standard used in the construction and transportation industries for storing and transferring construction and land measurement data files in XML (extensible Mark-up Language) format without copyright protection. LandXML is used by 650 institutions and organizations with 750 members in 40 different countries and more than 70 software products are compliant with this standard.

Building Information Model

To integrate the production, storage, processing and transfer of building data in smart cities, OGC and other standardization organizations have worked together to develop the ISO/TC 59 and buildingSMART standards. These standards enable the coordination of construction, spatial data and other data produced by buildings through the Building Information Model.

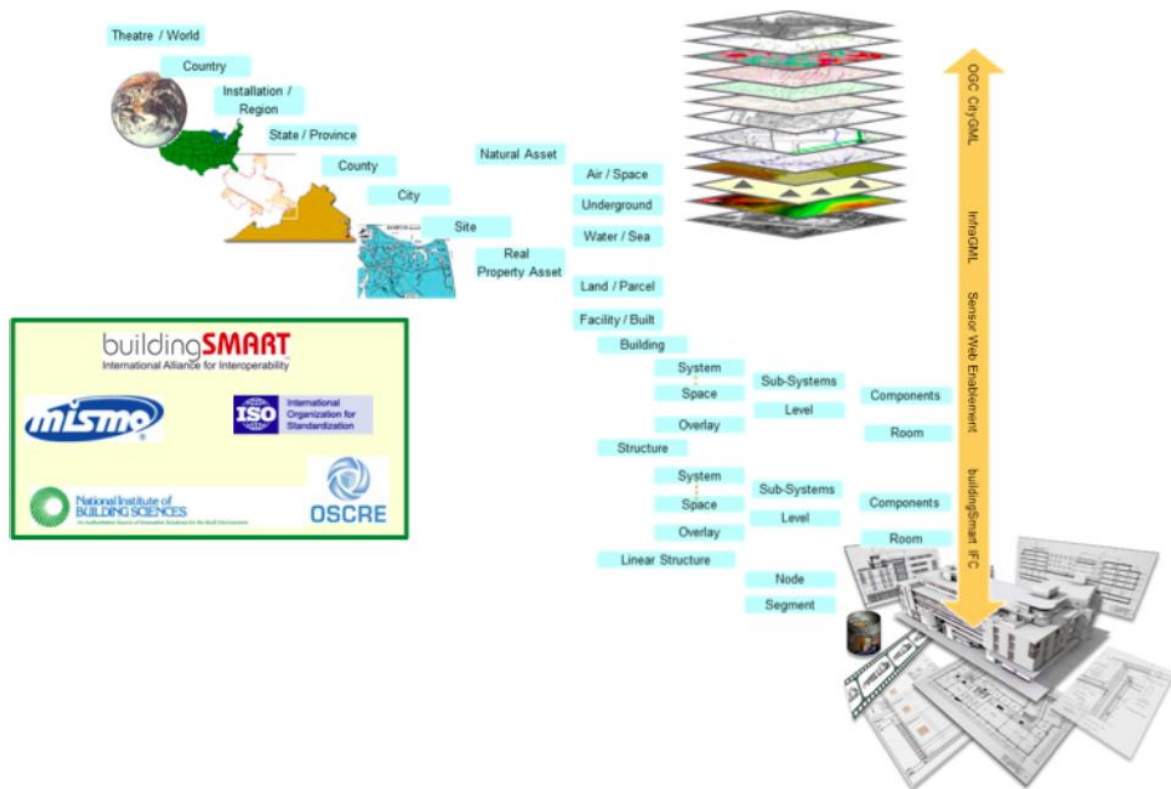


Figure 5. Spatial data models

Result. To ensure interoperability between systems and applications in Smart Cities, all systems within the city must operate in an integrated manner. Service-oriented architecture (SOA) should be used to provide access to and integrated processing of spatial data in Smart Cities. Using SOA will prevent the formation of data silos. Access to spatial data in Smart Cities should be achieved through service-oriented architecture and open standards developed by the OGC, ensuring the integration of different systems within the city. The Smart City Spatial Information System Infrastructure should include data retrieval services (CSW, OpenSearchGEO, eBRIM), data access services (WMS, WFS, WMTS, WCS, Simple Features Access), data processing services (WPS, TJS, WCPS, OpenMI), and a Sensor Web Enablement (SWE) service.

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